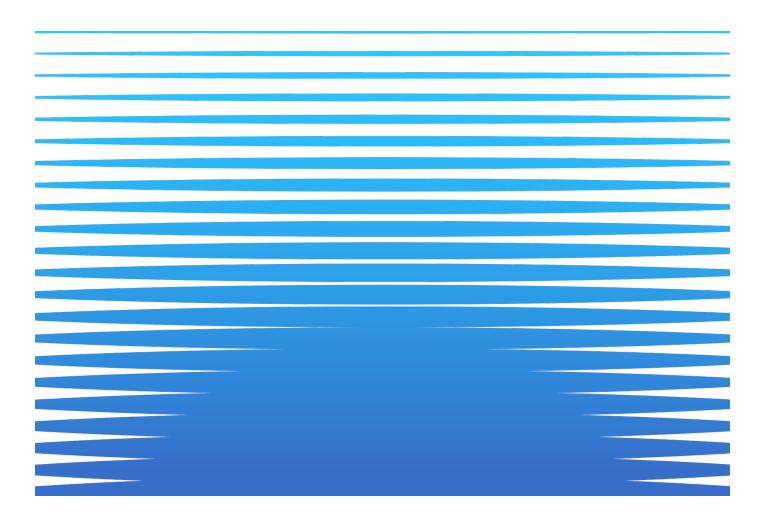
RESEARCH REPORT March 3, 2021

# Student Focused

Fostering Cross-Unit Collaboration to Meet the Changing Needs of Community College Students

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#### Introduction

Ensuring that community college students have access to academic and student support services requires more than simply understanding students' needs—it also requires relating those needs to actionable service models and organizational strategies. Community college students navigate ecosystems of services provided and supported by academic affairs departments, student affairs departments, libraries, and faculty. How can these ecosystems best be organized and developed to adapt to changing student needs—particularly amidst the disruptions of the COVID-19 pandemic?

The Community College Academic and Student Support Ecosystems (CCASSE) project examines how academic and student support services at not-for-profit associate-degree granting colleges are organized, funded, and staffed in order to most effectively advance student success. Between February and November 2020, we interviewed 37 chief academic officers, chief student affairs officers, library directors, faculty members, and students from community colleges across the United States. The interviews provide insight into the changing organizational strategies colleges are employing to align supports with student needs; challenges and success factors in connecting students with appropriate resources; the impact of COVID-19 on student support needs and service provision; and additional strategic considerations, such as the use of analytics and funding strategies, that affect how colleges make decisions and navigate change.

- Cross-functional collaboration. Despite differences of approach between community college student and academic affairs departments, there is broad support for increased collaboration between the two "sides of the house." Interviewees differed in their opinions on how best to achieve this, with some supporting "blended" leadership roles and others preferring separate departments connected by strong working relationships and shared goals.
- Role of the library. Senior administrators and library directors themselves often view the library's primary functions in supporting students as 1) providing access to appropriate collections, especially digital collections; 2) providing physical spaces for study, socializing, technology access, academic support; and 3) providing information literacy instruction. But some community college libraries are also fulfilling an important triage role, connecting students with other resources on campus.
- Student-centered services. Community colleges are implementing a variety of approaches to ensure their services meet their goals of being student-centered. This includes developing high-touch advising models and implementing campus-wide intervention tracking systems. Faculty and library staff can also play an important role in connecting students with resources.
- Leveraging analytics. Actively improving student success through analytics is a goal at many colleges but remains a challenge for many to effectively implement in practice. When asked to describe the use of analytics at their college, many interviewees described nascent programs or multi-year vision documents. Colleges that have effectively leveraged analytics have placed storytelling through data at the center of collaborative decision-making

- processes. For those that have not effectively leveraged analytics, staffing and technical skills capacity represent the greatest barriers to advancement.
- Campus service organization. Support for workforce students is usually separate from other services for other student categories, with the type of workforce program a significant determinant of the support needed. By contrast, college administrators generally do not view dual enrollment students as a group needing specific academic or student support beyond coordinating enrollment.
- Early impacts of COVID-19. During campus closures resulting from the COVID-19 pandemic, colleges employed an "everything but the kitchen sink" approach to communicating with students. Technology loan programs were widely implemented, with libraries the primary distributors of laptops, hotspots, and other equipment. But colleges have struggled to find ways to engage and support students who may be less prepared to undertake distance learning.
- Financial outlook. In an austere fiscal environment, community colleges are reliant on "soft money" sources—including, in 2020, CARES act funding—to fund both emergency support and innovative new services. Library directors in particular may undertake assessment activities, prepare detailed budget reports, or intentionally build professional relationships with administrative leadership in order to shore up their unit's political position and advocate for funding internally. The necessity of continuously advocating for funding has shaped staffing and other strategic priorities.

#### The CCASSE Project

This is the second report from an ongoing project generously funded by the Institute of Museum and Library Services. The project aims to understand the current provision and organization of academic and student support services by community colleges, how those services relate to student needs, and how the library can best position itself to support students within the broader organizational ecosystem. The first report, published in December 2019, detailed the findings of a survey of chief academic affairs and student affairs officers, including how these leaders measure success, what resource challenges and constraints they face, and their visions for future service provision.<sup>2</sup>

The next phase of the project is a national survey of community college library directors, launched in February 2021, which will have results later in this year. The survey explores perceptions of the library's role, priorities, resource allocations, and constraints within the community college, as well as how the library can best meet the needs of students in coordination with the services offered through academic and student affairs. The project will

<sup>&</sup>lt;sup>1</sup> Danielle Cooper and Christine Wolff-Eisenberg, "Community College Academic and Student Services Ecosystem: Ithaka S+R Launches New Research Project," Ithaka S+R, August 30, 2018, https://sr.ithaka.org/blog/community-college-academic-studentservices-ecosystems/.

<sup>&</sup>lt;sup>2</sup> Melissa Blankstein and Christine Wolff-Eisenberg, "Organizing Support for Success: Community College Academic and Student Support Ecosystems," Ithaka S+R, December 5, 2019, https://doi.org/10.18665/sr.312259.

culminate in a workshop attended by community college administrative and library leaders, funder representatives, and our student advisors, to discuss research findings and create evidence-based action agendas.

#### Background and Methods

The first phase of the project, a survey of academic affairs and student affairs leaders, identified two key factors driving the evolution of academic and student support services at community colleges:

- Shifts in student trajectories and pathways, such as distance learning, workforce training (including that which may be geared towards continuing education and/or towards specific certifications, and may be developed in partnership with local industries to meet local labor needs), and dual enrollment, necessitating responses to specific student needs.
- Experimentation with organizational structures, especially blending student and academic affairs leadership roles and collaborating cross-departmentally.

Following the survey, our original intention was to select five community colleges for site visits and engage closely with a range of stakeholders, including administrative leadership, librarians, faculty, and students.

Beginning in March 2020, the COVID-19 pandemic significantly disrupted both travel and the typical workings of community colleges, rendering the originally planned site visits impracticable. At the same time, we recognized that the pandemic was both creating new student support needs and bringing existing needs to the fore, and that community colleges were responding in innovative ways despite significant challenges. We therefore made the decision to conduct interviews for this phase of research remotely with representatives from a broader set of institutions. Conducting remote interviews enabled us to respond to the changing situation while remaining consistent with the data collection goals for the site visits, which was to gain a detailed picture of the challenges and opportunities associated with strategies for structuring academic and student support within a diverse group of community colleges. We also paused interviewee recruitment from late March through June in light of the enormous burden that rapid lockdowns placed on college staff, faculty, and students. We believe this methodological adaptation allowed us to achieve our goal of examining key success factors and trade-offs in the provision and organization of student and academic support services, while also capturing emerging insights from the singular phase of pandemic response.

We developed semi-structured interview guides informed by the findings of the academic and student affairs leaders survey with input from the project's advisory board: Braddlee, former dean of learning and technology resources and professor, Northern Virginia Community College; Rosemary A. Costigan, vice president for academic affairs (CAO), Community College of Rhode Island; Mark McBride, SUNY senior library strategist; Karen Stout, CEO and president of

Achieving the Dream; and Karen Reilly, dean for the school of business and advanced technology, Southwestern Michigan. We thank them for their thoughtful contributions. We modified these guides following the onset of COVID-19 to capture the impact of the pandemic on student needs and support provision. Using this guide, we conducted 30 interviews with chief academic officers (CAOs), student affairs officers (SAOs), library directors, and faculty members at not-for-profit two-year colleges and associate's dominant four-year institutions across the United States. Interview recruiting was based on convenience sampling with the aim of achieving maximum variation within the sample in terms of geography and college size (see Tables 1-3 in the Appendix). We also sought to interview several individuals from the same college wherever possible in order to develop more rounded pictures of the services offered at those colleges. With the exception of our student advisors (see below), we have kept our interviewees and their institutional affiliations anonymous to protect their privacy. We thank all our interviewees for their time and candor.

In order to ensure that we represented a variety of student voices in our research, we also recruited seven student advisors to contribute insights about their own experiences accessing student and academic support. We conducted brief initial interviews with these advisors, which included asking for their input on the issues that were emerging through the data analysis conducted for this report. Applications to serve as a student advisor were solicited via a call to the American Library Association's Community and Junior College Libraries Section listserv. Twelve applications were received, and we selected seven advisors based on geographical variation and the quality of their applications. We thank Angelika Bryan, Christina Hummell-Colla, Ibrahim Sackey, Jacob Bunch, Jennifer Fernandez-Miranda, Mitchell Fountain, and Segev Trevor Morgan for their ongoing contributions to the project.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> For more information about our student advisors, see Rebecca Springer, "Introducing our Student Advisors: Community College Academic and Student Support Ecosystems," Ithaka S+R, November 11, 2020, https://sr.ithaka.org/blog/introducing-our-studentadvisors/.

## **Organizational Strategies**

Community colleges are experimenting with a variety of organizational models and strategies to deliver student-centered academic and support services as efficiently as possible. Cross-campus coordination in particular is top of mind: most community college student and academic affairs leaders expect collaboration between college departments to increase over the next five years.4 This section also discusses strategic issues relating to the positionality of academic faculty and the library within the broader college support ecosystem.

#### Student and Academic Affairs Leadership

Traditionally, most community college support services fall under two administrative departments: student affairs and academic affairs. Typical areas of ownership for student affairs include enrollment and orientation, financial aid, personal counselling, activities and sports, opportunity programs for students from disadvantaged backgrounds, career services and transfer services. Typical areas of ownership for academic affairs include the library, instructional resources, tutoring and writing services, testing, and oversight of academic instruction.<sup>5</sup> In this model, each department is led by a vice president or equivalent figure who reports to the college president. In recent years some community colleges have created "blended" student and academic affairs leadership roles (see below). This trend reflects how many colleges are changing structures to support the student journey into and through their colleges. As a result, traditional "academic" functions like tutoring are often moved into a student experience bundle of functions that are part of student affairs.

Most interviewees spoke positively about the potential for cooperation between academic and student affairs departments on their own campuses. At colleges with separate academic and student affairs departments, strong working relationships between the leaders of the two departments are crucial to achieving effective collaboration. One chief academic officer (CAO) described how their friendship with their student affairs counterpart led to the creation of a campus-wide intervention system: "having the creative space to bounce ideas off one another over a coffee or glass of wine at happy hour." Another interviewee, a student affairs officer (SAO), described standing lunch meetings with their academic affairs counterpart in which the two talk candidly to raise issues the other leader may be unaware of and in order to troubleshoot collaboratively. Several leaders noted that they have built particularly strong relationships with colleagues who arrived at the college around the same time they did. These relatively informal and serendipitous approaches to building cooperation, however, are challenging to replicate and scale, which suggests the value of future research to identify more formalized strategies.

<sup>&</sup>lt;sup>4</sup> Melissa Blankstein and Christine Wolff-Eisenberg, "Organizing Support for Success: Community College Academic and Student Support Ecosystems," Ithaka S+R, December 5, 2019, https://doi.org/10.18665/sr.312259, 23-24.

<sup>&</sup>lt;sup>5</sup> Ibid. 19-20.

Although community college leaders are broadly in favor of increasing collaboration between student and academic affairs, the prospect of formally blending the two departments into a unit headed by a single vice president elicited a mix of responses from interviewees. Nevertheless, the majority of interviewees were at least mildly positive: for instance, some leaders from colleges with separate academic and student affairs departments believe that implementing a blended structure at their college would probably increase collaboration and administrative agility to respond to student needs. Others clarified that the goal of implementing a blended role should be about improving services, rather than simply reducing staffing. Vice presidents in blended roles compared their positions favorably to experiences at previous colleges where they had witnessed conflicts and siloing between student and academic affairs.

By contrast, a few interviewees voiced concerns about the blended model. Leaders in blended roles—whom one interviewee called "super VPs"—typically follow career trajectories that lead through academic affairs departments. According to interviewees, this may lead to student affairs getting "the short end of the stick." One interviewee, a vice president in a blended role who has a background in student affairs, said that her student affairs staff are grateful for the attention she gives to their work because the previous vice president never attended their meetings. Interviewees also suggested that the combination of academic and student affairs was simply too broad a responsibility for a single individual to execute successfully.

#### Building Informal Collaboration throughout the Organization

Although many academic and student affairs leaders view collaboration as a habit formed from the top down, interviewees also spoke about factors that facilitate or impede cross-campus coordination beneath the level of senior leadership.

Many interviewees from small colleges spoke positively about the benefits of a tight-knit, "everyone knows everyone" culture. A student described their college as a "second home" where they appreciate seeing the same faces every day. An administrator praised the high level of faculty involvement and creative problem-solving spirit on their small campus. Another leader said they preferred working at a small, "relational" college in contrast to a previous position at a larger institution where managing a large staff "just sucks the life out of you."

Creating committees with representation from different departments is another important strategy in building cross-campus relationships. In addition to providing opportunities for chief academic and student affairs officers to work together, these shared committee structures can also help senior administrators stay connected to departments, such as workforce training, which are often siloed from the rest of the college. Librarians and faculty may also participate. Goals of shared committees may include problems solving, idea generation, keeping up to speed on each other's work, and promoting an even balance of power among different departments. At

one college, several campus administrators belong to a book club which focuses on reading about and discussing equity in higher education.

Community college leaders also work intentionally to create relationship-building opportunities for faculty and staff—a task that has become difficult during the COVID-19 pandemic. At some colleges, senior administrators have intentionally co-located offices from different administrative or academic departments within the same building. (The synergies that result from co-locating different services, such as the library and tutoring, are discussed below.) A faculty member shared that they missed the opportunity to communicate with colleagues on an informal basis around campus. This interviewee believes that the opportunity to build emotional connections in person is crucial for building a "community of practice" around pedagogy and student support. By contrast, the need to respond to emergency pandemic measures and pressing social issues may have helped to bring staff together: interviewees cited high engagement with "virtual coffee breaks" in the early months of the pandemic and discussion groups focused on anti-racism.

#### Faculty Buy-In, Ownership, and Engagement

A number of CAOs and SAOs spoke forcefully about the need to cultivate faculty buy-in and ownership of, and engagement with, broader student and academic support strategies. There is considerable individual variation in "enthusiasm" among faculty members for student and academic support, as one interviewee put it. Senior administrators described faculty struggling to pivot their instruction to online formats or participating in data gathering and analysis toward campus analytics initiatives; one suggested that faculty had a tendency to exhibit a sense of superiority toward student services staff members in particular. Some interviewees characterized this issue as a generational one, speaking enthusiastically about the online teaching literacy of recently-hired instructors. Two mentioned that faculty unions had inhibited their ability to implement desired changes to pedagogical practices.

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By contrast, senior administrators who spoke positively about the role of faculty in implementing organizational changes to support students cited concerted outreach efforts and the importance of personal relationships. Interviewees described efforts to regularly advertise the support they offer to students to faculty by leveraging academic deans as mouthpieces and in one-on-one meetings. Both faculty and senior administrators believe that building personal relationships through informal interaction and discussing difficult issues face-to-face is crucial for building faculty buy-in. Because of this, the COVID-19 pandemic has made effectively communicating and implementing changes more difficult in many cases.

#### The Library's Role

Community college libraries vary significantly in available resources and ratios of staff relative to students. More than one library director reported that they were or had recently been the library's only full-time staff member. There are also variations in the organizational structure of community college libraries: many belong to "learning resource centers" (LRCs) which may also include testing centers, tutoring centers, instructional technology offices, or computer labs. At multi-campus colleges, library staff may rotate their physical work location between different campus libraries, sometimes several hours' drive apart.

In interviews, library directors generally spoke about the library's role on campus in terms of three main functions: providing access to appropriate collections, especially digital collections; providing physical spaces for study, socializing, technology access, academic support; and providing information literacy instruction. As discussed below, many libraries—especially those that enjoy a physical location close to the center of campus—also play an important role as de facto college front desks, directing students to other offices wherever needed. A few interviewees pointed to additional library functions, including providing instructional design support and LMS troubleshooting for faculty, hosting community cultural events, and providing childfriendly spaces for student parents. The central role of community college libraries in distributing technology during the COVID-19 pandemic is also described below.

It is important to note that despite the important role many libraries play in connecting students with needed resources and facilitating technology loans, many of the library directors interviewed discussed their library's contributions solely in terms of the curricular resources and facilities they provide until specifically asked about other functions. In other words, although these libraries are contributing significantly to student and academic support, they are not accustomed to celebrating their role and responsibilities through this lens and perhaps are not promoting their other services as effectively as they might.

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This perspective was shared by a number of the CAOs interviewed—to whom library and LRC directors typically report. In many cases, these college leaders were minimally informed about the work of the library, referring to it primarily as a provider of collections and especially digital collections. A number of CAOs focused on how the provision of digital resources is a marker of a modern or effective college library. One characterized their library staff as "old fashioned" and not sufficiently adapted to the digital age, while another felt that the term "library" connoted print collections and was at pains to highlight their campus's "learning resource center." By

contrast, a CAO who spoke more enthusiastically about their library referenced both the library's instructional programs and coordination of technology distribution during the COVID-19 closure; another mentioned open educational resources (OERs) as an important innovation area led by the library.

### Connecting Students with Resources

It is not sufficient for a college to offer support services to students: college and library leaders must think carefully about how organizational structures and one-to-one relationships can be leveraged to ensure that students understand and take advantage of the resources that will benefit them—and that those resources are continuously adapted to changing student needs. Numerous interviewees articulated, in one way or another, a conviction that the most powerful driver of effective cross-campus coordination was a shared focus on students: "Students are at the heart of everything we do." One CAO described this orienting philosophy as "clarity about mission and values"; another, a library director, maintained the basic goal of every collaboration should be "this is what we want to provide for the student. ... If you start there, you can come together." Community colleges are implementing a variety of approaches to better align services with their student-centered missions.

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#### Student and Academic Services

"Success coaches" represent one model for structuring proactive interventions and streamlining access to support. Often contrasted with traditional academic advising, this model is usually implemented by student services departments and assigns each student to a professional advisor or "success coach." Coaches support their students with a "high touch" mentality; one interviewee referenced an "intrusive advising" philosophy that appears to be resulting in higher retention rates at their college.<sup>6</sup> On some campuses—especially where resources are limited or the student body is large—success coaches may only be provided for a subset of the student population, such as through the TRIO program.7 Interviewees were virtually unanimous in the opinion that these coaching models, where possible, were likely to impact students positively. The advantage of these models, often referred to as "case management," may be that they provide dedicated staff capacity to spearhead the challenging work of staying in contact with students, instead of relying on the informal support of faculty or the library to direct students to resources they need.

<sup>&</sup>lt;sup>6</sup> Alison Herget, "Intrusive Academic Advising: A Proactive Approach to Student Success," *HigherEdJobs*, January 9, 2017, https://www.higheredjobs.com/Articles/articleDisplay.cfm?ID=1153.

<sup>&</sup>lt;sup>7</sup> See "Federal TRIO Programs," US Department of Education, https://www2.ed.gov/about/offices/list/ope/trio/index.html.

In addition to implementing centralized advising models wherever possible, community colleges are also working to smooth coordination regarding student needs and interventions among faculty and administrative staff. Colleges frequently use purpose-built software, such as Starfish, to help identify and coordinate interventions for students who may be struggling.8 These systems allow faculty and staff to "flag" students who may need additional support for additional follow-up and keep a centralized record of interventions. Although one library director referred to their campus flagging system skeptically as "an enormously expensive piece of software," most interviewees expressed positive views about the affordances of this technology, especially for creating a permanent record of observations and interventions that outlives the tenure of individual staff members.

#### Faculty on the Front Lines

As they are among the college workers who typically have the most direct contact with students, faculty have an important role to play in connecting students to support resources. The most effective interventions appear to be proactive ones, in which a faculty member recognizes that a student is struggling with a particular issue and reaches out to learn more. Although the first indication is often a lag in attendance or assignment submission, some faculty interviewees also respond to information students share in assignments that have a personal reflection component. In particular, faculty interviewees described physically walking with students to the counselling office and remaining there until the student felt comfortable continuing with the counsellor on their own. According to one interviewee, it is not necessary for faculty to have already established a strong relationship with a student in order to intervene in this way rather, the intervention itself may help the student to identify the faculty member as a valuable resource for them in the future. In addition to reaching out to students directly, one interviewee described faculty walking into the student advising office to check in on a particular student's case. While it did not emerge as a theme in the interviews, it is important to acknowledge that these tactics raise issues related to privacy, which may warrant more targeted research in the future. Faculty interviewees also described proactively connecting students with scholarship and leadership opportunities and getting involved with student clubs and activities.

Not all faculty members are equally proactive in connecting students with resources, and the shift toward distance learning during the COVID-19 pandemic has made intervening effectively more difficult. Faculty interviewees described providing links to campus resources on their course websites, regularly emailing students to ask how they are doing, and attempting to connect students with support staff via email. In many cases, the faculty member receives no response or is unable to confirm whether the student accessed any of the suggested resources.

<sup>8</sup> Some institutions are finding technology that facilitates advising especially helpful during the pandemic. For an in-depth profile of how one four year college has successfully leveraged Starfish in this context, see Michael Fried and Christy McDaniel," Accelerating Advising Technology Implementation in Response to COVID-19," Ithaka S+R, December14, 2021, https://sr.ithaka.org/publications/accelerating-advising-technology-implementation-in-response-to-covid-19/.

Numerous interviewees suggested that students do not consistently check their school emails, while reports on the usefulness of text-message-based communication systems like Remind or EdSights were mixed.9 Another interviewee described a campus-wide initiative to train all faculty and staff members on the resources available to students and how to refer them for support.

#### The Library as Triage Center

At some colleges, the library's physical location near the center of campus results in the circulation desk becoming a de facto general information booth. Library staff, including student workers, provide students with guidance about which office can best help them, help direct them to online resources, or even physically walk them to the appropriate building. Although the volume of these requests can feel overwhelming given the small staff sizes at many libraries, in general library directors embrace the library's role of "friendly face." In particular, the colocation of the library and tutoring center on many campuses—particularly those that have adopted a "learning resource center" organizational model—allows librarians and tutors to work closely, referring students from one to the other as needed. One library director described plans (put on hold due to the pandemic) to designate a table in the library where students could ask for help with research papers from both tutors and librarians. Although librarians generally are not included in campus intervention tracking systems described below, they also direct students to financial resources or intervene if they observe a student struggling. One director described how her staff might "pick up the phone" and call student services: "So and so has mono-did you know about this?" This resonates with the informal practices faculty use which were described in the previous section. And similarly here, while it did not emerge as a theme in the interviews, it is important to acknowledge that these tactics raise issues related to privacy, which may warrant more targeted research in the future.

Despite creative efforts by some library directors, the community college library's role as a "friendly face" remains difficult to translate into a distance learning environment. During the spring and summer pandemic lockdowns, libraries adjusted their "ask a librarian" chat window to feature more prominently on their webpages and allocated extra staff hours to fielding email and chat reference requests. Additional research is warranted to evaluate the extent to which the volume of requests has changed over the course of the pandemic and experiences of libraries in navigating those changes. Many libraries are also working to optimize their classroom instruction sessions—which teach students how to access library resources, among other things—for integration into fully online courses. And, as described below, libraries have been central to community colleges' efforts to distribute computing and connectivity resources to students and faculty in response to COVID-19. But the role of helping students learn about and find resources they need more broadly remains closely related to the library's physical presence.

<sup>9</sup> More on Remind here: https://www.remind.com/; More on EdSights here: https://www.edsights.io/.

#### Connecting with Third-Party Supports

It is important to note that some student and academic affairs departments also work to connect students with resources provided externally to the college through outsourcing or co-sourcing. For example, one CAO described their college's Single Stop program, which provides a central access point to connect students with community partners who can assist them with housing, utilities, taxes, SNAP, TANF, and other basic needs. At another college, a student-run veterans club and federal Veterans Affairs office conducts call campaigns to check in on student veterans and, if needed, connect them with academic and other resources. The pandemic is also leading some colleges to experiment with outsourcing online tutoring, which is explored further in this report in the COVID-19 section.

#### Specific Student Groups

The survey of senior administrators conducted as part of this project highlighted the likely impact of shifting student trajectories on the delivery of support services. Seventy-seven percent of CAOs and SAOs expected workforce training course offerings to increase at their colleges in the coming years, while around half expected to see funding increases to support dual enrollment. We hypothesized that colleges would accordingly prioritize understanding students following these trajectories and connecting them with resources specific to their needs.

However, interviewees generally did not characterize workforce training or dual enrollment as meaningful categories for structuring support services. Instead, the nature of support offered to workforce students and dual enrollees—and the means by which students are connected with this support—is more commonly a byproduct of other college organizational structures. One faculty member emphasized that a finer-grained analysis—grouping students by their level of preparation for college-level academics, their racial or ethnic identity, their status as a single parent, or even a combination of factors—was more useful in understanding and meeting student support needs. There is also increased attention being paid to the divide between degree and non-degree programs, and this disjunction and the possibilities of blending between them has significant implications on student and academic affairs design, which could warrant further more explicit exploration.<sup>10</sup>

Workforce training in particular is usually siloed outside of community college student and academic support ecosystems.

Workforce training in particular is usually siloed outside of community college student and academic support ecosystems. Workforce training programs are often led by a director who reports directly to the college president. For this reason, many interviewees had little to say

<sup>&</sup>lt;sup>10</sup> Matthew Gandal, "Stackable Credits Aren't Enough," Inside Higher Education, January 22, 2021, https://www.insidehighered.com/views/2021/01/22/community-colleges-must-bridge-divide-between-noncredit-and-credit-programsopinion

about how support was provided specifically for workforce trainees. In general, academic support for workforce students is heavily focused on career guidance and job and internship placement, including connecting students with potential employers through partnerships and networking events and teaching students to market their skills effectively to employers. Workforce departments typically operate their own advising or success coach programs with dedicated staff in parallel to the academic advising or coaching offered to other students by student or academic service. One large college system is in the process of moving their career center organizationally from student services to the workforce department in order to refocus its support offerings on building corporate partnerships.

Despite the organizational siloing of most workforce training departments from the rest of the colleges, some interviewees did articulate nuances in the support needs of workforce students. At many schools, workforce students may be more likely on average to benefit from basic needs support or textbook tuition aid than other students. Several colleges have undertaken curricular reforms to contextualize "barrier" subjects like algebra within workforce training course sequences, and one CAO noted that her college had recently received a Title V grant to support staff positions focused on retention in workforce training programs specifically.

The nature of the library's role in supporting workforce training students varies significantly based on the types of workforce programs offered. At some colleges, workforce students have limited access to digital library resources compared with other students. Library leaders also noted that the instruction they provide in information literacy and accessing digital information resources may be particularly important for workforce students, who often have less, or less recent, experience conducting research in educational settings.

In contrast to the organizational siloing of workforce training departments, dual enrollment programs are usually managed by CAOs. The structure of these programs, including how they are funded and whether students take courses on the high school or college campus, varies considerably among states. In general, senior administrators do not view dual enrollment students as a group needing specific academic or student support beyond the coordination of enrollment. In fact, many interviewees described dual enrollment students as more academically successful on average than other students, and any personal challenges dual enrollment students face are generally assumed to be the responsibility of high school counselors. A few CAOs described working with faculty to address the pedagogical challenges of teaching high school students, who may lack the practical skills or social maturity generally expected of college students. And one library director described working closely with high school librarians to ensure that students taking college-credit courses on high school campuses had access to the academic resources required. This points to a promising area to probe through future research: What alliances are being made between community college libraries, K-12 libraries, and even public libraries in communities, and what role might the community college play in building these partnerships?

### COVID-19: Supporting Students in a Pandemic

The rapid onset of the COVID-19 pandemic presented community colleges with an urgent challenge: understanding their students' needs and delivering services to support them in a nophysical-contact environment. Although these interventions in many cases represent extraordinary actions taken during an unprecedented crisis, understanding how they were implemented may shed light on opportunities for future service development—contingent, of course, on sufficient resources. Indeed, several interviewees mused about how COVID-19 had spurred changes that were long overdue.

#### Communicating with Students During the Pandemic

Colleges employed a variety of methods to understand student support needs—and communicate the availability of support resources—during the early months of the pandemic (approximately late March through June 2020). "Frontline" support staff and faculty supplied anecdotal information about student pain points. One college set up hotlines for several administrative departments, including student and academic affairs, and used a Google sheet to centrally log incoming calls and resulting action items. Another created a simple "I have a question" box using Form Stack. Still another focused on social media and automated text outreach campaigns. Most colleges adjusted their websites to feature information related to COVID-19 and emergency support prominently on the home page. 11 At some colleges, existing cycles of annual or twice-annual student surveys provided insight into the general mood on campus; one college that offered mostly in-person learning prior to the pandemic registered "lots of angst about having to be online" in their spring survey. Many colleges also ran student surveys or focus groups designed specifically to gather information about student needs during the pandemic.12

During the pandemic closures, over-communication, wherever possible, was the watchword.

Several colleges, particularly smaller colleges, initiated call campaigns in an attempt to proactively identify student needs and inform students about available resources—either targeting all students or those students identified as falling behind academically. These campaigns were often cross-departmental efforts, with faculty and staff from different academic offices participating. During the pandemic closures, over-communication, wherever possible, was the watchword: one chief academic officer said proudly that students had begun to complain that they were being contacted too often, while another reported that student

<sup>&</sup>lt;sup>11</sup> See Melissa Blankstein and Jennifer K. Frederick, "Communicating COVID-19 in Higher Ed: Student Edition," Ithaka S+R, March 20, 2020, https://sr.ithaka.org/blog/communicating-covid-19-in-higher-ed-student-edition/.

<sup>&</sup>lt;sup>12</sup> For findings from Ithaka S+R's survey of student experiences during the COVID-19 pandemic closures, see Melissa Blankstein, Jennifer K. Frederick, and Christine Wolff-Eisenberg, "Student Experiences During the Pandemic Pivot," Ithaka S+R, June 25, 2020, https://sr.ithaka.org/publications/student-experiences-during-the-pandemic-pivot/.

satisfaction marks on an annual survey actually improved during the pandemic lockdown as a result of increased communication. However, many call campaigns represented one-time, emergency efforts which left faculty feeling "overwhelmed" by the added workload.

There was a pervasive sense among interviewees that effective communication with students, particularly during the remote-only months of the pandemic, was a perpetually moving target: one senior administrator described how, despite extensive marketing and social media campaigns, they still regularly "stumble across" students who don't know about the college's COVID-19-related support offerings. Despite significant efforts by colleges around optimizing online messaging and other communication channels, word of mouth among peers—particularly speaking with other students who had received similar assistance—still played a substantial role in prompting students to seek out available resources.

#### **Distance Learning Support**

In our survey of senior administrators, 73 percent of respondents expected distance learning course offerings to increase at their colleges in the coming years. 13 Many interviewees echoed this sentiment, with a number of chief academic and student affairs officers predicting that the pandemic would accelerate existing trends toward increased distance learning options. However, the sudden onset of the pandemic and related closures also meant that many faculty members and community college leaders were limited in their ability to creatively transition student support ecosystems to a remote-only environment.

Technology loan programs were coordinated through the library. As one interviewee put it, "Who can get materials to people and track it all? The library."

As has been widely reported, community colleges undertook significant efforts to provide students and, in some cases, faculty and staff with the computing and connectivity equipment needed to allow them to engage in distance learning during the pandemic lockdowns.<sup>14</sup> Several senior administrators described the "technology gap" as a barrier to student success that existed before the pandemic and finally received the attention it deserved when COVID-19 struck. Most colleges loaned laptops to students who needed them. Many also loaned out hotspots and provided Wi-Fi in parking lots. Some provided webcams and other equipment for faculty.

<sup>&</sup>lt;sup>13</sup> Blankstein and Wolff-Eisenberg, "Organizing Support," 35.

<sup>&</sup>lt;sup>14</sup> See, for instance, Elissa Nadworny, "Need A Laptop? Colleges Boost Loaner Programs Amid Pandemic," NPR, August 15, 2020, https://www.npr.org/2020/08/15/902500905/need-a-laptop-colleges-boost-loaner-programs-amid-pandemic; Jacquelyn Bengfort, "How Community Colleges Solve Remote Learning Challenges," EdTech Magazine, May 12, 2020, https://edtechmagazine.com/higher/article/2020/05/how-community-colleges-solve-remote-learning-challenges.

In almost every case, these technology loan programs were coordinated through the library: as one interviewee put it, "Who can get materials to people and track it all? The library." This is a noteworthy discrepancy from the findings from the Academic Library Response to COVID-19 survey, which found both in spring and fall 2020 about one-third of libraries were not loaning out any kind of technology to users despite the increased need and demand. 15 The discrepancy may be due to the survey sample skewing towards four year institutions, or due to this project relying on a relatively smaller sample by virtue of being exploratory and interview based. The findings here suggest that continued investigation of evolving trends in technology loan programs in the community college space is necessary.

In the interviews for this project we learned about how libraries faced challenges in mediating requests for laptops on students' behalf from a variety of faculty and administrative staff and in physically delivering technology to students, especially in rural areas. One interviewee described librarians meeting students in the middle of the night to give them laptops because the students had to travel several hours to reach campus after work. This leader is working to set up a "smart locker" system in the library atrium to facilitate technology lending programs in the future.

Another early priority for many colleges, and particularly for CAOs, was ensuring that faculty and instructors were equipped to deliver their courses via the learning management system (LMS). A number of interviewees expressed pride or relief that their colleges had already required instructors to establish course "shells" within the LMS prior to the pandemic. One college which had focused primarily on in-person teaching prior to the pandemic provided all faculty with up to forty hours of professional development to equip them to teach effectively online. Another set minimum standards for faculty: each distance course must use the LMS's discussion feature, include two interactive activities, and include instruction about how to navigate the online course shell. Although several interviewees praised the adaptivity of their colleges' instructors, faculty themselves expressed an inability to develop a robust online pedagogy within the chaotic and personally taxing pandemic environment. When asked whether they talk with colleagues about how to better engage distance learners, one faculty member said no: "It's more about, 'How in the hell am I going to get through this week?"

better engage distance learners, one faculty member said no: "It's more about, 'How in the hell am I going to get through this week?"

Helping students adapt to learning online proved to be an even greater challenge. Senior administrators, library directors, faculty, and students all described how many students

<sup>15</sup> Lisa Janicke Hinchliffe and Christine Wolff-Eisenberg, "Indications of the New Normal: A (Farewell) Fall Update From the Academic Library Response to COVID-19 Survey," Ithaka S+R, October 8, 2021, https://sr.ithaka.org/blog/indications-of-the-new-

struggled to attend class regularly, stay on top of assignments, and monitor communications from instructors. While many interviewees acknowledged the challenges students faced in caring for family, navigating work and housing insecurity, accessing the internet, and finding appropriate study spaces during the pandemic, they also described a gap in student knowledge of "how to learn online." In the minds of interviewees, some students are not well prepared to regulate their work rhythms without the social incentives provided by in-class instruction. They may also struggle with basic technological skills, such as navigating the LMS and converting files to the correct format. Several senior administrators noted that students who were already taking online courses prior to the pandemic fared better during campus closures—both because they had already established the habits required and because students who had *chosen* distance learning were likely among the subset already better positioned to succeed. Another noted that students previously may have engaged in remote learning that was delivered ineffectively, rendering their experience unhelpful. This suggests that colleges should have a well-designed approach to distance learning that all faculty must adopt. For their part, students described the experience of learning online as self-directed learning: "I'm teaching myself this content."

Community colleges are struggling to support students in acquiring the skills needed to engage in distance learning successfully.

Despite widespread acknowledgement of these challenges—and the growing trend toward distance learning even prior to the pandemic—community colleges are struggling to support students in acquiring the skills needed to engage in distance learning successfully. One area of focus is the orientation or "College 101" courses which many colleges require students to take early in their program of study. These courses often provide guidance on navigating the LMS and highlight the services offered by different administrative departments. Some colleges are working to adapt these courses to make them more effective for distance learners. One college contracted a third-party vendor to create an engaging online enrollment and orientation program, while another purchased a service that helps staff create video workshops to take the place of in-person tour visits to campus offices. Faculty also view it as their responsibility to orient students to their LMS course websites and, when organizing materials online, to keep things as simple as possible and communicate the same information repeatedly or via multiple channels. Several interviewees expressed a desire for greater standardization of course shell formats.

Community college libraries are also important providers of instruction within a variety of courses, typically focused on how to use library resources, how to conduct research and cite sources, and other information literacy topics. The library directors interviewed for this project did not describe significant challenges in converting their typical instructional sessions to synchronous or asynchronous videos delivered through the LMS. Conscious of the online attention economy, one enterprising librarian is creating video games to teach students research skills such as Boolean search terms. Nevertheless, community college libraries do not appear to have extended their role in supporting distance learners beyond translating their previous instructional program to the online format. One library director mused that the library might be able to support students in navigating online learning if they were able to connect with them: "They may not be walking into campus, so it's more difficult to reach them."

One area of experimentation is online tutoring. In addition to moving traditional tutoring appointments with staff or tutors to videoconferencing during the pandemic, some colleges have either begun offering or offered expanded access to third-party tutoring services, such as Tutor.com, BrainFuse, Smart Thinking, and Upswing. Several interviewees cited the 24/7 availability of third-party tutoring services as an advantage over in-person tutoring, which is generally confined to traditional working hours; other affordances of these services include tutoring in languages other than English and scheduling facilitation for college staff and peer tutors. By contrast, other colleges focused on home-grown solutions during the pandemic lockdowns, such as offering small group tutoring sessions on frequently-requested topics via video conference. A few interviewees indicated that the real challenge was encouraging students to make use of available tutoring options, particularly in an online environment—either due to an implicit "stigma" or because students who are struggling academically are also less likely to seek extra help. One reported that when given the choice between third-party tutors, staff tutors, and peer tutors, students tended to prefer the latter.

## Decision-Making, Change, and Constraints

It is becoming a truism of higher education that community colleges are among the most "agile" of higher education institutions in adapting to changing student needs. However, community colleges are implementing decision-making processes and organizational changes in an environment of limited resources, necessitating compromise and creativity. This section describes how college leaders are implementing—or trying to implement—funding and analytics strategies to enable continuity and innovation in student support.

Community colleges are implementing decision-making processes and organizational changes in an environment of limited resources, necessitating compromise and creativity.

#### **Funding**

The combination of the pandemic's disastrous impact on state budgets and an already austere fiscal environment for publicly-funded higher education has meant that many community college leaders are looking with apprehension toward their states' upcoming legislative budget processes.<sup>16</sup> Many were already impacted by how CARES funding was allocated to two year institutions and are concerned that the 2021 fiscal year will see significant funding cuts. 17 A number of interviewees also cited decreased enrollment, either overall or with particular reference to dual enrollment, for Fall 2020, as cause for concern.

"Soft money" sources can allow colleges to innovate in ways that would otherwise be impossible—but they are continually at risk of being defunded.

In this challenging environment, many colleges are relying on grants and other temporary funding sources to provide support for students. These "soft money" sources can allow colleges to innovate in ways that would otherwise be impossible—but they are continually at risk of being defunded. During the COVID-19 pandemic, community colleges relied heavily on CARES Act funding to meet the demand for increased technology access and other student support programs.<sup>18</sup> They also helped eligible students apply for personal financial assistance through the CARES Act. In many cases, colleges saw spikes in uptake of already-available support, such as emergency grants to support students experiencing housing instability, food insecurity, or disruptions to other basic needs. In these cases, financial resources were often diverted from other sources and supplemented with CARES funding to meet the increased demand. Colleges may also rely on grants from the Department of Education or state funding programs to pay for specific programs. College foundations—nonprofit organizations that raise funds for scholarships and other support—may also be called on to provide emergency financial aid, help purchasing textbooks, or funding for basic needs support such as food banks.

The need to demonstrate a good return on investment for student success programs has driven the development of more sophisticated analytics practices.

The need to secure grants and donations can have direct implications for staffing and organizational strategy. One library director revealed that a significant factor in why she was hired was her fundraising acumen; another interviewee, a vice president of student and academic affairs, described how the need to demonstrate a good return on investment for student success programs has driven the development of more sophisticated analytics practices.

<sup>&</sup>lt;sup>16</sup> William R. Doyle, "Higher Education's Nightmare Scenario," Chronicle of Higher Education, October 12, 2020, https://www.chronicle.com/article/higher-educations-nightmare-scenario; Shawn Hubler, "Freshman Enrollment Drops Significantly at U.S. Universities and Community Colleges," The New York Times, October 15, 2020,

https://www.nytimes.com/2020/10/15/world/freshman-enrollment-drops-significantly-at-us-universities-and-community-colleges.html.

<sup>&</sup>lt;sup>17</sup> Christine Wolff-Eisenberg and Michelle Dimino, "Community Colleges Are Helping Students More Than Ever During the Pandemic," The Hechinger Report, November 23, 2020, https://hechingerreport.org/opinion-community-colleges-are-helpingstudents-more-than-ever-in-the-pandemic/.

<sup>&</sup>lt;sup>18</sup> See Office of Postsecondary Education, "CARES Act: Higher Education Emergency Relief Fund," US Department of Education, https://www2.ed.gov/about/offices/list/ope/caresact.html.

Library directors in particular may undertake assessment activities, prepare detailed budget reports, or intentionally build professional relationships with administrative leadership in order to shore up their unit's political position and advocate for funding internally.

#### Analytics

In practice, the term "analytics" can refer to a range of data gathering and quantitative assessment activities at community colleges. On the most basic level, colleges are required to gather and report standard metrics relating to demographics, enrollment, financial aid, and course completion. Many colleges go a step further, parsing these metrics more finely to, for instance, identify a required mathematics sequence with low pass-through rates or study the progress of a subset of students within the Guided Pathways framework.<sup>19</sup> More unusual is the use of predictive analytics, such as measuring a student's likelihood of retention to inform personalized interventions, or collecting data through the LMS about how students engage with course content.

Actively improving student success through analytics is a goal at many colleges but a reality at few.

According to the survey conducted for this project in 2019, around eight in ten community college CAOs and SAOs expected the use of learning analytics tools to increase at their colleges in the coming years. Interviews confirmed that this stance is widespread, but also revealed significant challenges to implementation. Actively improving student success through analytics is a goal at many colleges but a reality at few. When asked to describe the use of analytics at their college, many interviewees described nascent programs or multi-year vision documents. Several described a new college president being appointed and making efforts to create a more datadriven culture—or, in the words of one interviewee, to "run the college more like a business." Others said that their college had recently acquired or implemented analytics tools but had not yet worked through the best ways to leverage these tools as an organization: "It's like, 'Great, now we have this...what do we do with it?" In these cases, interviewees generally were not able to articulate specific goals for their analytics programs.

For the most part, community college libraries are not significantly involved in campus analytics programs; they may conduct assessments of their own services, such as surveys and resource usage data analyses, on a fairly limited basis. In an exception that proves the rule, one library director with a strong technical bent described their personal effort to combine library proxy log data with other campus data sources in order to understand what factors predict a greater need for library support. This suggests that it would be helpful for colleges to think more

<sup>&</sup>lt;sup>19</sup> Thomas R. Bailey, "Guided Pathways at Community Colleges: From Theory to Practice," Diversity & Democracy (2017) 20:4, https://www.aacu.org/diversitydemocracy/2017/fall/bailey.

systematically about what the strategic library KPIs might be and to put them into their larger effectiveness frameworks.

For community colleges, one of the most significant barriers to implementing a robust analytics program—or perhaps the most significant—is staffing. Interviewees generally considered an institutional research staff of three, or two for a small college, to be a luxury. Colleges struggle to recruit staff with the technical skills and domain expertise necessary to carry out analysis to inform decision making because these skills are in high demand—and are highly compensated in the private sector. One interviewee expressed hope that their college's new degree program in data analytics might help them hire instructors whose expertise could also be leveraged to support the institutional research office. Another described how their college supports a relatively sophisticated analytics program despite having only a single staff member in the office of institutional research: the vice president of student and academic affairs, dean of students, and lead student success coach are each awarded "data coordinator" stipends in exchange for devoting some of their time to data collection and analysis. On some campuses, faculty members may be involved in committees that have oversight of analytics processes.

Colleges that appear to be leveraging analytics effectively have often done so by intentionally placing data at the center of collaborative decision-making processes. Some have built regular reporting on key metrics or reviewing data "dashboards" into committee workflows, performance review processes, and other administrative rhythms as a way to increase focus on problem solving and continuous improvement and achieve buy-in for upcoming changes. At one college, institutional researchers present key findings to staff and faculty on a designated "data day." At another college, faculty must review and report on a set of core metrics annually and create performance plans in response to any metrics falling below certain levels. The senior administrator who leads this process described it as potentially being "quite uncomfortable" by design.

Community college administrators and faculty are wrestling with not only how to leverage analytics to gain valuable predictive insights, but with the most effective and ethical ways to act on those insights.

When asked about the use of analytics at their colleges, most interviewees spoke positively about the potential for data to be used toward better supporting students. However, a few sounded notes of caution. One library director noted concern about student privacy as the source of skepticism toward learning analytics in library circles. A faculty member who is broadly optimistic about the potential of analytics to support evidence-based improvements noted that it is equally important to recognize its limitations and avoid de-humanizing students: "people are not data points." Another faculty member shared a cautionary tale from their personal experience. After examining factors that predict student performance in their algebra course,

this instructor explained to his students that a grade below 75 percent in the first exam was strongly correlated with failing the semester, hoping that students who had earned lower scores would be motivated to seek additional help. Instead, a student revealed they had been deeply discouraged by this information. Community college administrators and faculty are wrestling with not only how to leverage analytics to gain valuable predictive insights, but with the most effective and ethical ways to act on those insights.

#### Conclusion

There is broad appetite for increased collaboration and coordination between—or, in some cases, consolidation of—student and academic services, especially as the COVID-19 pandemic brings the inextricable relationship between academic and other student support needs to the fore. 20 But amid enthusiasm, our interviewees also sounded notes of caution. Organizational strategies must be undertaken with sensitivity toward legacy power structures and implicit prejudices that stem from traditional differences of approach between academic and student affairs. Intentionally creating opportunities for staff to build personal relationships across departmental boundaries is not a nice-to-have culture issue, but rather an essential part of facilitating creative and robust responses to student needs.

In order to successfully understand and meet student needs, services must be organized to maximally leverage key connection points. These connection points include faculty in synchronous online or in-person classes, success coaches, and, for in-person students, the library reference desk. Faculty and staff who connect with students must recognize, embrace, and be empowered in their responsibilities as liaisons between students and services; they must also have a robust knowledge of what services the college provides. Achieving crossdepartmental buy-in for support initiatives is crucial to keeping these lines of communication open.

One way to achieve widespread buy-in is to align college staff and faculty around data that tell clear stories about problems and potential solutions. The promise of analytics to transform community college support is only partially fulfilled. In the absence of changes to the current budget climate, the effective use of analytics to inform student and academic services at a broader range of community colleges will require concerted investment from funders to enable professional development and skilled staff recruitment. There are also reasons to proceed with caution: community colleges must ensure that analytics are being used ethically and in ways that empower students.

<sup>&</sup>lt;sup>20</sup> Melissa Blankstein, Christine Wolff-Eisenberg, and Braddlee, "Student Needs Are Academic Needs: Community College Libraries and Academic Support for Student Success," Ithaka S+R, September 30, 2019, https://sr.ithaka.org/publications/student-needs-areacademic-needs/.

Finally, the community college library is at a crossroads. On many campuses, the library's perceived role has been eroded to little more than a purveyor of electronic textbooks. Yet libraries are often performing informal and unrecognized—yet crucial—functions as "friendly faces" as mediators between students and a variety of campus resources. During the COVID-19 pandemic, they have also stepped into a prominent role as coordinators of one of the most essential emergency support services: expanded technology loan programs. Library leaders have an opportunity to leverage a number of intersecting trends—increased interest in cross-campus collaboration, experimentation with different models of student-centered service organization, and the heightened urgency of the pandemic—to articulate and increase their value within the support service ecosystem through strategic partnerships with other departments.

#### **Future Research Directions**

Based on the findings of this report, it is possible to envision future research efforts that would deepen and broaden community understanding of the best ways to structure and implement student and academic support services toward the goal of student success. We recommend the following as topics for further investigation:

- Targeted study of community college faculty to understand their support needs to ensure they can meet evolving institutional priorities. Senior administrators especially described faculty struggling to pivot their instruction to online formats or participating in data gathering and analysis toward campus analytics initiatives. Faculty also struggle in proactively connecting students with resources, which warrants further support given how critical this is to improving student success rates. Some senior administrators cited concerted outreach efforts and the importance of personal relationships as tactics for ensuring faculty buy-in towards ensuring greater faculty success in these areas but these approaches are difficult to formalize and scale. Further research is warranted to identify patterns among faculty in terms of who is experiencing these gaps and how to best ameliorate them, such as through a survey or targeted interviews. This would include gathering additional evidence on the influence of faculty governance systems or unions, including examples of those that effectively build "buy-in." This data gathering would ideally be paired with a partnership with a cohort of senior administrators to identify, co-develop, and pilot possible initiatives to better support their faculty as they seek to implement online teaching or contribute to campus analytics initiatives.
- Case studies of academic and student support ecosystems at specific colleges to enable insight into implementation. Although the COVID-19 pandemic made it impractical to seek interviews with larger numbers of stakeholders from the same institution via site visits, the broader scope taken in this research report brought to light ways in which staff at other organizational levels could provide important insight into the delivery of student and academic support. While the senior administrators we spoke with were able to articulate high-level vision and strategy, directors and deans of units such as workforce training, instructional technology, enrollment, and institutional research—as well as frontline employees across academic and student services and the library, such as student

- advisors, tutors, and librarians—would be able to describe the barriers and success factors for implementing support services on a more granular level. Conducting case studies of specific colleges would facilitate triangulation across these interviews.
- Focused study of organizational structures, funding allocations, and data **collection and reporting processes.** This report has underscored the importance of organizational structures as an enablement of or barrier to collaborative, student-centered support. The allocation of funding, including emergency funding and soft money, and the availability and quality of data and analytics tools are directly related to this organizational issue. In an environment of both experimentation and external pressure, a systematic study of the organizational structures, budget allocation mechanisms, and data collection and reporting processes of community colleges would provide crucial context for understanding constraints and opportunities in service provision.
- Investigation of staffing, labor, and professional development issues in academic departments' key support areas, such as libraries and institutional **research offices.** The interviews conducted for this project indicated that issues pertaining to staffing are key determinants in the success of student and academic support services. These issues include the under-staffing of many community college libraries, the challenge of recruiting staff with in-demand technical skills to take on analytics projects, the importance of building cross-departmental staff relationships, and the potential for improvement in faculty buy-in for student support initiatives through training. Understanding current challenges and best practices relating to staffing is particularly important now as colleges brace for potential budget reductions in the coming years.

One interviewee asserted, "I firmly believe that college education will never be the same." On one hand, the COVID-19 pandemic has spurred rapid expansions of colleges' capacity to provide students with technology, meet basic needs, and deliver courses and supports online. On the other, the ongoing disruption and budget impacts of the pandemic have necessitated diverting resources away from planned projects and ongoing service areas. In this singular environment, predictions about the future are perhaps less useful than knowledge-sharing about the present. Several interviewees expressed an interest in better understanding the strategies other colleges are undertaking and the success factors and pain points they are observing. One voiced gratitude for the opportunity simply to step back and talk through their college's support system as a whole. It is our hope that this report, along with the other outputs from the project, will help to facilitate reflection and community dialogue among community college staff, faculty, students, and other stakeholders.

## Appendix: Characteristics of Interviewees

Table 1: Interviewee Role	
Chief Academic Officer (CAO)	8
Vice President of Student and Academic Affairs (CAO/SAO)	3
Faculty	7
Library Director	7
Student	7
Student Affairs Officer (SAO)	5
Total	37
Table 2: Geographical Region	
Midwest	14
Northeast	4
South	10
West	9
Total	37
Table 3: College Size	
Small (up to 1999 FTE)	16
Medium (2000-4999 FTE)	12
Large (5000 FTE and up)	9
Total	37