



Everybody Pulling in the Same Direction

The COVID-19 Shift to Online Delivery of Instruction and Student Services

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IN MARCH 2020, THE COVID-19 PANDEMIC forced California Community Colleges (CCCs), like higher education institutions nationwide, to move nearly all college operations fully online on a compressed and unprecedented timeline. During the initial transition,¹ colleges prioritized support for operations that were most urgently needed in order to quickly move instruction and student services online for what was anticipated to be a several-week interruption. As it became clear that operations would not return to normal for the 2020–21 academic year, colleges began to adopt more sustainable, long-term solutions for online learning and student support. The extent to which colleges have successfully managed this still unfolding transition may have depended on several factors, including resources in place prior to the pandemic as well as the intensity of their immediate responses to the pandemic.

This brief documents the frontline experiences of those who led necessary adaptations to sustain teaching, learning and student support when face-to-face interactions were no longer possible. Drawing on surveys and interviews with distance education leaders across the colleges, we detail the ways in which colleges supported instructors and students in an online space that was new territory for many. We document efforts—sometimes harried, sometimes heroic to provide technology and training to students and faculty, as well as the conversion of student services online. We detail multiple factors that impacted faculty training and highlight some successful approaches. Finally, we highlight the professional networks that distance education leaders identify as being particularly important in helping them address the challenges of moving instruction online during COVID-19.

TOPLINES

- Colleges worked to bridge the digital divide for students and faculty: The shift to remote learning depended on widespread distribution of technology to students and, to a lesser extent, instructors. Substantial barriers to learning including non-technological ones such as difficulty finding quiet study space—remain.
- Pre-existing assets and experience mattered: Many Distance Education (DE) leaders identified prior efforts at their campuses—such as student service "hubs" through Canvas, or existing faculty training initiatives for online pedagogy as particularly important in navigating the full transition online.
- Starting lines were not equal: Across the system, colleges had wide pre-pandemic variability in the distribution of online course offerings prior, which leaders identified as a factor impacting their transitions online.
- Faculty collaboration was vital: Many colleges adopted or scaled up programs to facilitate sharing content or best practices in online education, such as mentorship programs, sharing lesson plans through Canvas, or building communities of practice.
- > Systemwide resources and networks made a difference: DE leaders relied heavily on entities such as the California Virtual Campus-Online Education Initiative (CVC-OEI) to navigate the transition.



DATA AND METHODS

This brief draws from two data sources.

Quantitative data on pre-COVID online education resources and college responses to COVID are drawn from the COVID Distance Education Leaders Survey (CDELS). The survey was administered in fall 2020 to distance education leaders (college distance education coordinators or leaders in related roles such as distance education deans, leads of distance education faculty committees, or instructional designers) from all 114 physical community colleges operating as of Spring 2020. The variation in specific roles of respondents reflected the variation in composition of distance education teams in the system. For instance, some colleges lack a full-time distance education coordinator, while others have a fulltime distance education coordinator plus additional dedicated staff in roles such as instructional design or ensuring accessibility of course content for students with disabilities. Responses were received from 45 unique colleges, for a response rate of nearly 40%.²

Qualitative data come from semistructured interviews with 35 leaders from 26 unique colleges. Invitations to participate were sent to the full set of DE leaders from 114 colleges who received survey invitations. At some colleges, DE leaders suggested that we include colleagues in related roles, such as instructional or student service leaders. Leaders were interviewed over Zoom either individually or in groups of two to three. Interviews lasted roughly an hour on average and were transcribed for inductive coding. Field memos summarizing each conversation were sent to leaders to check for understanding. To preserve anonymity, the DE leaders we interviewed were given participant numbers; quotes from interviews are linked to those participant numbers.

Supporting Students for Online Learning

Helping Students Access Classes

The colleges we surveyed undertook massive efforts to enable students to connect to remote learning, starting with distribution of technology.³ Figure 1 details these efforts. All colleges surveyed reported distributing either laptops or Chromebooks. Over two-thirds distributed hotspots, reducing the likelihood that students would need to access WiFi in campus parking lots. Approximately one fifth of colleges distributed peripheral technology like webcams or headsets to support class participation through Zoom.

Figure 1: Technology Resources Offered to Students



Note: Responses from CDELS. Respondents from 44 colleges answered this question and were allowed to select multiple options.

This distribution addressed high levels of perceived student need. Figure 2 shows the estimated share of students facing access barriers for each of the responding colleges. Blue circles indicate the estimated portion with barriers *before* technology distribution, and yellow circles indicate the estimated portion facing barriers *after* distribution at the same college. The direction of the shift is indicated by the dotted lines.⁴ Three findings stand out:

- On average, survey respondents estimated that, prior to distribution, 45% faced such barriers, with wide variability.
- Distribution efforts shrunk that need considerably. The responses almost all move closer to zero after technology distribution efforts.
- Despite these efforts, considerable barriers to access remained: On average, survey respondents estimated that 30% of students continued to face barriers in the spring even after technology distribution.



Figure 2: Change in Students Facing Barriers to Access, Before and After Distribution of Technology

Note: Responses from CDELS. Respondents estimated the share of students likely to face barriers to accessing classes before and after technology distribution efforts. Each line represents a single community college.

To some extent, these continued barriers may have stemmed from non-technological issues. Several DE leaders interviewed raised concerns about access issues that technology distribution alone could not solve. As one participant noted:

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"Some of our administrators and faculty will simply say, "Well, look, we have a computer loaner program. All students have to do is come on the campus and pick up a laptop, and then they can do the courses, and that's it: this problem is solved." They're not thinking of [the fact that some students] don't have anywhere private to Zoom in their house: They're Zooming out of the bathroom; you see shower curtains a lot. They're in the garage sometimes. And that is **if** they have a decent internet connection." – Participant 10

These insights echo responses from student surveys of CCC students that lack of quiet study spaces was a particular barrier for online learning.⁵ This suggests that colleges may have to continue to think creatively about how best to structure classes to minimize barriers that cannot be fully addressed through technology distribution programs.

DE leaders also recognized that even when students had technology to access classes, many lacked skills needed to learn effectively online, such as those listed in Figure 3 below. Colleges may have to continue to think creatively about how best to structure classes to minimize barriers that cannot be fully addressed through technology distribution programs.

To address this need, many colleges offered students training to support the development of online learning skills. The vast majority of colleges (over 70% of survey respondents) offered some form of training on Canvas—the learning management system used across the CCCs—and on accessing student services virtually.

One DE leader described college technology distribution efforts that incorporated training for students as well:

"We even had a [system where] ... students would drive in and have a Chromebook distributed to them, and they were asked a series of questions and if they had never used the technology before, they would branch off to another part of the parking lot and then a tech person would help them power it up, figure out how to open the browser and how to log in to Canvas." – Participant 1





Note: Responses from CDELS. Respondents from 44 colleges answered this question and were allowed to select multiple options. Examples of "Using Products" included tools such as Labster and Proctorio.

Relatively few counselors were trained in virtual meeting software prior to COVID: Only 21% had previously been trained on average, and in 62% of colleges, less than 20% had been trained pre-COVID.

Another DE leader recounted efforts to proactively reach out to students by phone or email to talk them through challenges they may face as new online learners, building on efforts the college had started pre-COVID:

"One thing ... we started doing last year that was really helpful. Our department ... got a list of all the students who are new to online ... We actually had our staff, on the first day of the classes, call them and send them an email saying, "Hey welcome [to the college. It's your] first time online? Here's some tips for you to get started." ... We started doing that Fall 2019 and it was definitely helpful. This time around, I will say our list grew quite a bit ... We had like 300 on the list last year and now we have like 900 ... So it's kind of a nice way to welcome [students new to online learning]." – Participant 21

The DE leaders who described such efforts felt they helped smooth students' transitions to online learning experiences that they might not have opted into by choice.

Sustaining Student Services

While there was a strong focus on shifting to remote instruction during spring 2020, institutions also transitioned a wide range of other student services online, such as tutoring, counseling and library services. As with class offerings, there was wide variation across colleges in the extent to which student services were previously available virtually. Almost all colleges surveyed had some form of virtual tutoring available, either through outside providers or (less commonly) their own tutoring centers, but fewer had established virtual counseling options. As two leaders related:

"I would say two or three years we've had NetTutor. So tutoring, students have had that [virtually] for a little while. [Our counseling department had] started using ConexED Cranium Café. I think they started training on that about I would say a year before we went completely online. So they were kind of slowly getting into their online ... I think once we went virtual, they kind of had to push that to make sure everybody was fully trained and well-versed in using it." – Participant 16 "We only had a handful of people who were doing online counseling. We only had a handful of people who were doing online tutoring. And then when [COVID hit], it just was crazy chaos because everyone was scrambling to try to figure out what to do online, and ... [there] were huge—and there still are—huge technology gaps and technology literacy gaps." – Participant 4

As these statements suggest, some colleges had to both acquire the technology to transition student support services online and train staff members, remotely, to use this technology effectively.

In particular, counselors had to be trained to conduct student counseling sessions virtually through meeting software like Cranium Café or Zoom. As Figure 4 shows, most colleges expanded their virtual counseling capacity considerably. For each of the responding colleges, the estimated portion of counselors trained in virtual student meetings pre-COVID is represented by blue circles; yellow circles represent the estimated share of counselors trained by Fall 2020. Dotted lines indicate the direction of the change. Two findings stand out:

- Relatively few counselors were trained in virtual meeting software prior to COVID: Only 23% had previously been trained on average, and in 61% of colleges, less than 20% had been trained pre-COVID.
- The majority of counselors (92% on average, and more than 80% at 82% of colleges) were trained in meeting by virtual software by the fall.



Figure 4. Share of Counselors Trained in Virtual Meeting Software, Pre- and Post-COVID

Note: Responses from CDELS. Respondents from 33 colleges answered this question. Each line represents a single community college.

A growing number of colleges made strides toward creating or expanding existing online student service "hubs" that allowed access to broad suites of student services from a single access point.

While colleges increased their capacity to conduct appointments using Zoom or other virtual meeting software, they adjusted on the fly to meet student preferences and technological limitations. As one leader described,

"... It's so interesting, but our students ... want phone appointments. We've done so much to ... have all of these ... virtual counseling tools and they ... keep insisting on phone appointments and [counselors say], "Oh, but we want to show you your ed plan, we want to...interact with you." [But many students] just want to do it over the phone. I mean, some of them are doing it in Zoom, but they have a lot of difficulty ... logging into these different things and figuring it out." – Participant 23

As this leader continued to note, staff had to adjust by adopting new technology and by providing new procedures and instructions to students to facilitate effective meetings, such as explicitly instructing them to be in front of a computer during appointments so that staff can email documents.

Other departments stretched to address student needs beyond those typically handled within the department:

"Both our library and our tutoring department were really good at reaching out to students and ... they realized that they were also getting questions [beyond their normal services] about Canvas or, you know, other things about what's going on in campus. So they did a great job ... [and] worked hard on trying to make sure that they knew who to connect [students] with for the resource or get some information to help with their students. I think that was a huge help for students [from] our tutoring and our library department." – Participant 35

Two respondents (Participants 16 and 17) described efforts by their colleagues in the tutoring center to supplement the center's standard subject-matter tutoring by establishing a group of students who acted as "tech navigators." These students answered peers' questions about Canvas or other applications. The program provided paid roles for students, an important benefit given that many students statewide have struggled financially during the pandemic. Finally, a growing number of colleges made strides toward creating or expanding existing online student service "hubs" that allowed access to broad suites of student services from a single access point (see Campus Spotlight). Most often, these hubs were integrated directly into the Canvas navigation menu —always displayed at the left hand side of the screen when a student is in Canvas—at an institutional level, so that students had a central portal where they could click and gain access to virtual appointments with tutoring, counseling, financial services or other student service departments.

"[Our online support hub] lives in Canvas ... It's in every single student's...global menu on the left side, so they don't have to go search for it ... Now faculty don't have to include ... a three-page attachment to their syllabus with [sections on] "Here's how to get to counseling. Here's how to find tutoring." All you do is direct your students to the hub, and then the hub is the central location that is updated and students have access to it." – Participant 11

DE leaders at multiple colleges spoke highly of how having such systems already in place minimized the challenges associated with moving a wide variety of student service functions online. They also noted that the hub model increased the ease of navigating online functions: Since students were all taking classes through Canvas, concentrating student services functions in the same space meant that students did not need to hunt for different services on the college website, but could access both class and non-class functions through a single point of contact.

самрия spotlight MiraCosta's Online Student Support Hub

In 2019, MiraCosta College launched the first online student services hub in the California Community Colleges system, serving as a model for other colleges' efforts. Working with the CVC-OEI, MiraCosta designed an action-oriented hub that "lived" in Canvas, the same learning management system that online students used to connect to their classes. The hub was designed to improve ease of access to student services for all students. While online students may face particular barriers in coming to campus for appointments, the team expected the hub would also benefit on-campus students whose service needs weren't easily accommodated during their on-campus hours.

Jim Julius, the Faculty Director for Online Education at MiraCosta emphasized several design principles that the CVC-OEI/ MiraCosta team kept in mind:

Action-Oriented. The hub is designed to address student problems efficiently, providing portals where students can perform specific tasks. For instance, the icon for career services might offer students the option to perform concrete actions (like scheduling appointments or uploading resumes for feedback), or chat live with career services staff to get help.

Minimal Text. Julius noted that MiraCosta's design emphasizes "keeping text very short, making it very understandable... winnowing away any detail that is extraneous to what a student might be looking for in terms of immediate help." Figure 5 shows the home page of MiraCosta's hub, which briefly highlights services available through each department.

Available through Canvas. MiraCosta's hub is available directly through Canvas, rather than through the campus website. As the red box added to the screenshot in Figure 5 shows, the "Student Support" link is embedded in the students' global navigation menus at the far left of the Canvas screen, which is visible to students at all times in Canvas. Julius emphasized the benefit of this approach: "We know our students are doing most of their work [in Canvas], and to jump out of Canvas onto the website when they need something may be an extra step that a lot of students wouldn't take."

Importantly, housing the hub in Canvas also allowed MiraCosta, the CVC-OEI, and other colleges that were early adopters of

Figure 5. MiraCosta's Student Support Hub Integrated into Canvas



student services hubs to easily share their designs with other colleges through Canvas Commons. The CVC-OEI also offers a guide for institutions interesting in developing student services hubs—including links to Canvas Commons sites that provide student service hub templates—on its website.*

* For additional information about the Student Services hub design, see California Virtual College-Online Education Initiative (n.d.) "Recommendations for Services within the Hub." Website accessed at https://ccconlineed.instructure.com/courses/3487/pages/what-is-the-online-student-support-hub-guide

Supporting Faculty in Online Teaching

Faculty Training Efforts

Immediate Faculty Preparation Efforts: Spring 2020.

Colleges engaged in massive, intensive efforts to equip faculty to quickly move online. DE leaders largely described this as occurring in two stages. In Spring 2020, the transition was sudden and emergent: Most colleges prioritized training faculty in the skills they needed most urgently to move online. One leader provided details on what was regarded as most critical but also feasible for instructors to cope with remote instruction.

"So I huddled up with the Vice President and one of our deans and we decided ... what do [our faculty] need to learn quickly, in order to get us going? So we offered a Canvas basics workshop, we offered [a workshop] on quizzes in Canvas, one on how to use the gradebook, one on how to use discussions tool, and then like every other college in the country, we did a Zoom session." – Participant 27

Most colleges prioritized instruction in Zoom and Canvas skills, since Zoom was used on most campuses to replace live instruction, and Canvas was the learning management system used to host classes. Canvas pages were used as a location to upload readings, post grades, administer assessments, and host discussions.

Colleges engaged in massive, intensive efforts to equip faculty to quickly move online.

As Figure 6 shows, colleges offered multiple approaches to training to move faculty online quickly in the spring. Popular options included synchronous training sessions by campus personnel; asynchronous tutorials created by campus personnel; one-on-one consultations with DE personnel; asynchronous tutorials offered by the CVC-OEI; and consultation with faculty mentors.

While DE leaders offered intensive training opportunities to prepare faculty to transition online, many also provided resources through Canvas to minimize faculty effort required. For instance, while individual faculty are responsible for posting course resources to the Canvas pages, some DE leaders described creating templates that faculty could adapt to ease this transition. Recounted two DE leaders:

"I provided a template to get everybody started with some basic settings and some basic formatting and [a] kind of skeleton that ... provided that template to go into that blank shell ... And I think it helped with a lot of our classes. A template for a homepage with instructions on "Here's a place you can put your picture. Here's some examples of [the type of content] you can put in here. Here's an example of where you can put ... your office hours." – Participant 18



PERCENT REPORTING THESE OFFERINGS

Figure 6. Training Offered to Faculty for Post-COVID Transition Online

"We provided [faculty] this basic course shell [in Canvas] ... and we populated it with sample [content] ... What we tried to do is model, from the way we created our modules and what we put in the modules. So, for example, we want everybody to have an orientation module [in their Canvas pages] ... We created a Canvas resource course, based on this with all the same modules and sample assignments that they can now download ... so they can use it for their students." – Participant 31

Creating Canvas shells with sample content both minimized the effort that faculty had to put into designing a logical Canvas page and—importantly—standardized the experience of students across classes, making it easier for students to navigate the pages.

In the meantime, institutions also distributed tools to faculty to address technological barriers, including laptops, webcams, hotspots, headsets, and Chromebooks (Figure 7).

Lending context to the importance of the technology distribution efforts, one DE leader noted:

"I don't think we were alone in this, but we're a fairly rural college. Not [a highly] affluent area. So we had many faculty that didn't own a computer. A lot of our focus was on even getting people the basic tools. We had all sorts of faculty that didn't have internet access." – Participant 7

Longer-Term Faculty Preparation Efforts. Following the spring quarter, DE leaders formulated less reactive, more intentional plans to train faculty more thoroughly in online pedagogy for the fall. Many were able to draw on pre-existing campus resources for training online instructors. According to survey respondents, most of the colleges offered faculty training for online instruction prior to the onset of COVID-19, but there was considerable variation in the types of training offered and institutional requirements of certifying instructors for teaching an online course. Nearly 55% of the colleges required faculty to go through comprehensive training that incorporates development of skills in multiple areas relevant to online learning (such as Canvas skills, fostering interpersonal interactions, course organization etc.).

These comprehensive courses range from 20 to 120 hours to complete and often involve detailed guidance on creating (or revamping) a course to be taught online. For example, one leader mentioned that, "[Pre-COVID], I would teach 10 to 20 faculty at a time that... go through eight weeks of training with me. It was [over 100] hours of work...We have them really build the first four weeks of their course. It's deep instruction." (Participant 10). Colleges with extensive training systems in place were able to draw from those to quickly ramp up training for novice online instructors.



Figure 7. Technology Resources Offered to Faculty for Post-COVID Transition Online

Note: Responses from CDELS. Respondents from 44 colleges answered this question and were allowed to select multiple options.

In contrast to the comprehensive training requirements extant in some colleges prior to COVID, about a quarter of the colleges only had basic requirements and another 20% had no systematic campus wide requirements. The variations in pre-COVID training resources and readiness implies substantial variability in campus capacity to train faculty for the transition.

Across the board, DE leaders emphasized the huge challenges faced by institutions for faculty training. Given the large number of instructors who had never taught online courses or even used Canvas prior to COVID, many (though not all) colleges opted to modify existing training programs to reduce their intensity, or to differentiate training as a response to differential needs. One DE leader recounted:

"Beginning of May, or end of April, we basically said, 'holy cow, we're going to be online for the summer, how are we going to prepare all the faculty for the summer session?" So we took [our normal] nine week [training] and we condensed it down into four. We had to make some pretty difficult cuts and we kind of said what are the rock-star, all-star moments in this course that everyone needs to know?" – Participant 3

Across the board, DE leaders emphasized the huge challenges faced by institutions for faculty training. Other colleges created tiered training systems that differentiated training based on whether instructors were open to continuing to teach online, or whether they planned to teach remotely only on an emergency basis, with intent to return to solely face-to-face teaching when the crisis subsided. As one DE leader reported:

"We have two tiers [of training]. Normally, it's just tier one ... we had to add a tier two so ... just as an example, they don't have to go in and make sure that all the closed captioning is 100% to standard, they can go ahead and use the auto captioning ... If they go with the tier two, then we're not allowing them to teach online once we go back on the ground." – Participant 13

Regardless of the intensity, all of these trainings required substantial institutional resources, which often included stipends to compensate faculty members for the hours needed to go through the training processes. As one leader described:

"Our faculty union did some negotiations when campus closure happened to try to get a pot of money to provide some support to faculty that had never taught online that were going to need to do extra work to convert classes." – Participant 12

Due to the sudden surge in need, colleges also often invested in additional personnel to help with training—either hiring new DE personnel or providing faculty mentors with stipends to lead training groups. As mentioned by one leader:

"There are basically three of us that could offer training to 750 people in two weeks, and that caused all of us to panic. And so one suggestion that we came up with was hiring distance education coaches. So these would be sort of discipline experts ... And so we basically appointed ... 30 people [to act as coaches]." – Participant 25

All these efforts were reflected in great improvement in DE leaders' of overall faculty preparedness for distance instruction, as shown in Figure 8. DE leaders estimated that 77% of instructors would be trained on Canvas by the Fall 2020 term, which represented a 33% improvement compared to the average pre-COVID level of training on Canvas use (58% of the instructors pre-pandemic).

One major factor easing transitions online was the level of campus engagement in distance learning pre-COVID and the proportion of faculty who had prior experience teaching online.

Tapping Faculty Expertise

Distance education leaders reported that one major factor easing transitions online was the level of campus engagement in distance learning pre-COVID and the proportion of faculty who had prior experience teaching online. In particular, if a specific course had already been taught online for at least one section at a given college, the experienced online instructor could directly share resources with her colleagues to help them transition. As one DE leader described:

"[One] thing that we ended up doing and facilitating...was entire course sharing. So for example, with ... [the introductory-level course I teach], I mean, I had the whole course built ... I added everybody to the class and [told the other instructors for the same class], "Take what you want." And [another class] that I'm teaching right now ... there's three of us and boy, we met up at the beginning of the summer and we divided out the work and we all contributed to a master course to build our ideas. And then we're pulling from that to teach our own individual classes. So we really encouraged the sharing of the content that everyone's building ... It was definitely helpful to have everybody ... pulling in the same direction."

– Participant 30

Another leader described a similar process:

"The math faculty, for instance, we had champions—that's one of the largest departments on campus: math and English. And so both of those departments had a critical mass of online instructors, and they just got together as a cohort and helped each other, which was amazing. So they were copying other people's Canvas shells into their Canvas shell and then customizing it, so they didn't have to rebuild something, getting tips and ideas." – Participant 1



Figure 8. Percent of Faculty Trained Pre- and Post- COVID Transition Online

Note: Responses from CDELS. Respondents from 41 colleges answered this question and were allowed to select multiple options.

The reliance on prior online instructors meant that colleges and departments that had a greater representation of online courses pre-pandemic had advantages going into the crisis. For instance, on average, 24% of each college's courses had at least one section that had been taught online pre-pandemic systemwide. However, this figure ranged from about 7% to 74% across the system.⁶ Similarly, certain departments tended to have a more pronounced online presence. For instance, one DE leader noted that at his institution, "the classes that had more traction [in terms of pre-COVID offerings] were the humanities classes," whereas it had been an "uphill battle" convincing science departments to back online classes (Participant 29). This suggests variability in how well-positioned departments were to transition to remote instruction. Some DE leaders noted that instructors

with prior experience in online instruction were a great resource to the rest of their campuses in general:

"...[We] had faculty who are ready, who are confident, who had no issues moving their classes to online, [and] we had faculty that were really stressed and anxious and nervous and just scared about the process. So we weren't only providing training from a technical perspective, but we were also, honestly ... providing emotional support ... "This is going to be okay, we're going to get through this. How can I help?" And ... [Participant 8] and her team with the Canvas faculty mentors would pair people together....So it's almost like we had a buddy system for Canvas." – Participant 9 "The other thing that ended up being very valuable was we have a DE mentor program, so people who have been through certification and are teaching online mentor those who are just coming into it. When the pandemic hit, we quickly retooled that mentor program to help faculty who were face-to-face and now needed to teach remotely. We were able to grow that very quickly. We just kind of ramped it up. Changed the focus a little bit. Changed the structure a little bit as well. Faculty have said that that has been especially helpful." – Participant 6

While several campuses had mentor programs that paired novice instructors with experienced online experts for one-onone support, others tapped into instructor expertise to create resources for broader distribution.

"So some faculty and [a campus program administrator] developed a quick tips webinar...where faculty would come together every week or every other week and give quick tips on teaching online. And so the whole idea is that it's just 20 minutes, so it's fast, and then there's a [short] chat, question and answer period afterward. [The Q&A is] not recorded but the 20-minute part is...Each one would have, say, four faculty members, or five, sharing their tips on whatever the topic is: if it's for live Zoom sessions or quick tips for making them fun or quick tips for this or quick tips for that. They've been, I think, really good." – Participant 17

Other colleges similarly activated instructor knowledge across campus. For instance, one DE leader described a virtual lounge created by one college in her district that provided both asynchronous content and synchronous support for instructors:

"[One campus in our district] decided to take both the community of inquiry and community of practice ideas and scale them up.... We built a [virtual] lounge for synchronous and asynchronous interactions. We lead weekly meetups that have ... mini webinar topics. And then the rest was just, "Let's talk. How are you doing, what's going on in your classes, what challenges you're facing." So it was truly the community aspect of it. [Asynchronously, we] built out modules of content ... [For instance, we] created a two-hour presentation on RSI [regular substantive interaction] topics with actual screenshot RSI examples in all of the different disciplines....It grew ... into this true sense of community of practice and now we have 99-point-something percent of our ... faculty enrolled in the shell, engaged in the content, coming to our weekly meetups....We have ... created a true community of practice at the college level, where everyone can come together and commune." – Participant 32

This college explicitly activated instructor knowledge, both in helping generate ideas around how to promote regular substantive interaction between faculty and students across a range of disciplines, and in helping to facilitate synchronous discussions in the virtual lounge space.

The Importance of System-wide Support Networks

In addition to activating expertise within their colleges, DE leaders also described drawing on expertise of other DE leaders throughout the system. They valued being able to tap into the networks of expertise available through bodies like the California Virtual Campus-Online Education Initiative (CVC-OEI), a collaborative organization sponsored by the Foothill-DeAnza Community College district as part of a grant by the California Community Colleges Chancellor's Office⁷ that supports online learning at colleges across the state. The CVC-OEI was praised by DE leaders for its leadership in coordinating the system-wide purchase of software, as well as its training arm, the Online Network of Educators (@ONE). Several DE leaders noted the specific areas of support from the CVC-OEI:

"I think in terms of resources, always the CVC for us ... is critical.... I know I can email [them] now and they're going to point me in the right direction. And then the Online Network of Educators, which is the professional development arm of [the CVC-OEI, means] that we have an instructional designer at that state level, helping us with our review process." – Participant 15

"The [CVC-OEI] ... put in motion so many pieces. It paid for [supports] systemically. You know ... it paid for things like Pronto, which is the text messaging technology through Canvas. It paid for Blackboard Ally, which is [a program that acts as an] accessibility checker....The staff who were working [at the CVC-OEI] had already thought through some of the things that [the colleges] needed and that they had paid for..." – Participant 8

A survey respondent added in open-ended comments: "We were tapping into as many [CVC]- OEI programs as possible and ... attending as many statewide meetings to stay informed as possible....Greatly value all of the [CVC]-OEI and @ONE resources that have been available." The CCCCO and TechConnect, a digital support and solutions organization funded by the CCCCO and hosted through Palomar College, also sponsor an annual Online Teaching Conference as an opportunity to share information and new ideas to support online teaching, learning, and student support within the CCC system. Information shared at this event was particularly useful during the transition to online student services. Multiple leaders noted that their adoption of student services hubs had been inspired by a model first shared by MiraCosta college leaders at the Online Teaching Conference.

Other networks within the California Community Colleges system provide opportunities for the sharing of distance education expertise and support for DE leaders, such as the Distance Education Coordinators Organization (DECO), a member-supported nonprofit focused on providing support and professional development for CCC DE personnel. One DE leader related:

"I lean on [DECO] so much...We are in these monthly meetings together, which was really helpful because it kind of [helps you hone] in on "Okay, what's important. This month, what are we talking about?" [It's] a great way to network ... and just help each other out....We just share everything, like the [list of] recommendations for Zoom teaching that was curated from another college and [the DE coordinator from that college] sent it out to the entire [DECO] listserv in the summer. And I'm like, "Yep, we're taking that [to use in my college]" ... So I think it's actually wonderful because then it brings more unison across the colleges, so that it's not like one college is doing this and another college is doing something completely different." – Participant 33

Other DE leaders reported that DECO and the CVC-OEI had been helpful in disseminating information regarding new policies and efforts from the state Chancellor's Office. Distance education leaders' responses suggested that the investments that the system has made over many years laid the groundwork for a strong set of professional networks among campus DE leaders systemwide that helped the colleges better meet the COVID-19 crisis.

Investments that the system has made over many years laid the groundwork for a strong set of professional networks among campus DE leaders systemwide that helped the colleges better meet the COVID-19 crisis.

Conclusion

This brief captures efforts to adapt program delivery to the demands of an extraordinary time. The COVID-19 pandemic forced a rapid period of adjustment during which DE leaders supported their colleagues in moving operations online. While the pandemic posed a massively challenging set of circumstances, colleges adapted with a number of creative approaches that tapped into both existing college-level expertise, as well as professional networks built across the system as a whole.

DE leaders acknowledged that colleges' efforts to transition operations online—including both training efforts and provision of technology to students and faculty—were costly. They emphasized the importance of emergency funding (e.g., through the federal CARES Act) in helping them to meet these challenges. This funding was crucial particularly because many leaders emphasized that they would have been unable to provide the support needed to move operations online without being able to hire additional personnel or compensate existing staff and faculty members for taking on new roles.

As DE leaders noted, the rapid transition online brought several major challenges for California Community Colleges to light. Many described persistent inequities and accessibility issues with online learning both across campuses and among students. While the technology distribution and training efforts for students improved access overall, students still had differential access to quiet space for learning. This underscores the importance for online course instructors to recognize, in course design and delivery, the broader constraints students may face.

While many of our interviews occurred before enrollment data was available for fall quarter, recent reports have also made clear that community colleges in California and across the nation have seen declines in enrollment.⁸ While the exact reasons for the decline need to be better understood, psychological distress associated with natural disasters such as a pandemic has been shown to have a significant impact on post-disaster enrollment decisions.⁹ It may be that institutional support does not sufficiently mediate external sources of stress during extraordinary periods of crisis. Moreover, reports based on spring 2020 student surveys in both the CCC system¹⁰ and the broader population of California college students¹¹ suggest that lack of enthusiasm for taking online classes was a major reason for reluctance to re-enroll in fall, along with concerns about distractions at home.

Despite these challenges, DE leaders expressed substantial pride in their teams and their colleagues for their ability to rise to the challenge. Raising a theme that resonated across interviews, one respondent related that "...our faculty, they just really pulled Wheelhouse: The Center for Community College Leadership and Research

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Wheelhouse was established in 2016 to support California community college leaders through annual professional learning institutes and independent, actionable research. Wheelhouse is supported by College Futures Foundation, the Bill & Melinda Gates Foundation, the Institutional Effectiveness Partnership Initiative (California Community Colleges Chancellor's Office) and UC Davis.

Join our email list at: education.ucdavis.edu/ wheelhouse-mail-list together and helped each other and were so supportive and it wasn't easy. You know, it doesn't mean there wasn't anxiety and it doesn't mean that tension wasn't high, but they really did an incredible job" (Participant 9). DE leaders in the CCCs looked forward to building on those efforts and using lessons learned in the pandemic to continue to improve online options for students, even as they recognized the challenges ahead. Our goal for the next phase of this research is to capture leaders' perceptions of the future of online learning as colleges implement pandemic lessons learned to improve access, quality and equity in distance education.

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Endnotes

- ¹ Hodges et al. (2020) suggest that the emergency remote teaching taking place at colleges during the COVID-19 pandemic differs from courses that have been purposefully developed for online delivery using online instructional strategies supported through research-based and best-practice approaches. See Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020, March 27). The difference between emergency remote teaching and online learning. Educause. https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning
- ² For additional detail on the survey administration, see Hart, C.M.D., Xu, D., Hill, M., & Alonso, E. (2021). COVID-19 and Community College Instructional Responses. *Online Learning Journal*, 25(1): 41-69. http://dx.doi.org/10.24059/ olj.v25i1.2568
- ³ These efforts are also discussed in Cooper, S., Hart, C., Kurlaender, M., Rios-Aguilar, C., Rodriguez, F.C., & Sublett, C. (2020). *Turning on a dime: California Community College transformation in response to COVID-19.* Wheelhouse: The Center for Community College Leadership and Research 5(2). https://education.ucdavis.edu/sites/main/files/ucdavis_wheelhouse_research_brief_vol5no2_final.pdf
- ⁴ We eliminated one observation that had implausible pre-distribution need values (i.e., a reported value of 0% of students facing barriers to access pre-distribution and 72% facing barriers to need following distribution).
- ⁵ California Community Colleges and the RP Group. (2020). Statewide COVID-19 Impact Surveys of Students and Employees: Spring 2020 Results. https://rpgroup.org/Portals/0/Documents/Projects/CCC_Guided_Pathways/Statewide_ COVID_Survey_Results_FINAL_20201211.pdf?ver=2020-12-21-083003-637
- ⁶ Cooper et al. (2020).
- ⁷ For more information on the CVC-OEI, see: https://cvc.edu/about-the-oei
- ⁸ For detailed report, see California Community College Chancellor's Office. (2021, March 22). Agenda Item 6.5: Vision for Success Spotlight: Laying the Foundation for the Post-COVID-19 Recovery. https://go.boarddocs.com/ca/cccchan/ Board.nsf/goto?open&id=BYS2LK02B713
- ⁹ Lowe, S.R., & Rhodes, J.E. (2012). Community college re-enrollment after Hurricane Katrina. *Journal of College Student Retention: Research, Theory, & Practice, 14*(2): 227-249. https://doi.org/10.2190/CS.14.2.e
- ¹⁰ California Community Colleges and the RP Group. (2020). Statewide COVID-19 Impact Surveys of Students and Employees: Spring 2020 Results. https://rpgroup.org/Portals/0/Documents/Projects/CCC_Guided_Pathways/Statewide_ COVID_Survey_Results_FINAL_20201211.pdf?ver=2020-12-21-083003-637
- ¹¹ For additional detail on the California Student Aid Commission COVID-19 Student Survey, see California Student Aid Commission. (2020, July). COVID-19 Student Survey. https://www.csac.ca.gov/sites/main/files/file-attachments/2020_ covid19_student_survey.pdf?1594172054