

### HOW A YEAR OF COVID-19 PREPARES US FOR THE FUTURE

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### **ABSTRACT**

This brief summarizes the responses of pre-service candidates, in-service educators, and university teacher education faculty who completed the California Council on Teacher Education's Policy Committee Statewide Survey on distance learning experiences during the COVID-19 pandemic. Using the participant and responses and the professional expertise amongst CCTE membership, critical policy recommendations are identified.

### **BACKGROUND**

The COVID-19 crisis sent many districts and universities in a flurry grappling with the development and/or dissemination of distance learning plans. Essential to the development of these plans was the recognition that families from low-socioeconomic and racially/ethnically diverse backgrounds in the United States have been identified as less likely to have access to a computer and broadband Internet connection at home and also less likely to have the necessary skills and knowledge to use these resources 1. As devices and WiFi connectivity were made available to students, concerns about the design of the learning and levels of student engagement arose 2. According to initial reports in March 2020 3, 41% of 2,600 teachers and school district leaders surveyed indicated it was difficult to productively provide every child with e-learning and remote learning opportunities. Only 10% of districts surveyed provided curriculum and instruction, of which 5% also engaged in progress monitoring.

Challenges related to level one of the Digital Divide - device access and WiFi connectivity - persisted for educators and students in California, yet there are now greater concerns related to how distance learning impacts the social isolation and social emotional well-being of students as a result of the COVID-19 pandemic. What are the challenges faced by educators and credential candidates? What are the silver linings that bring a sense of hope in a pandemic? How should the experiences of educators and credential candidates inform future policy priorities?

These questions were addressed as part of a collaborative study by the California Council on Teacher Education's (CCTE) Policy Committee and the Race in Education Analytics Learning (REAL) Lab. Teacher educators from various universities across the state of California collaborated to construct survey questions designed to learn more about the distance learning experiences of current and future educators. The REAL Lab conducted preliminary analyses and shared initial results with CCTE members and California state legislators at the annual Spring Policy Action Network (SPAN) Conference, held on March 4-5, 2021 virtually.

### **ACKNOWLEDGEMENTS**

The authors (the REAL Lab team) acknowledge Darlene Bailey for her design work in the creation of this brief. We also recognize Emily Bogus, Kirk Kirkwood, Kimmy Liu, Debbie Meadows, and Allison Smith for their development of the original survey, and the Policy Committee Co-Chairs (Pia Wong, Cynthia Grutzik, and Nicol R. Howard) for leading the development team and providing supporting documents related to policy priorities. Special thanks to the entire California Council on Teacher Education's Policy Committee and Dean Mario Martinez for their support of the research project.

### **DESCRIPTION OF SURVEY**

An invitation for the Distance Learning Survey was shared with CCTE members and their partner institutions. A total of 387 current educators and 398 pre-service candidates responded. Among current educators, 40.9% had five or fewer years of experience, and 24.9% were well into their careers with more than 20 years. Among pre-service candidates, well over half (60.5%) were working on a multiple subject

credential, 21.1% were pursuing a single subject credential, 10.3% a special education credential, and the others were enrolled in counseling, school psychology, administrator services, and other educator preparation programs. Respondents were from 189 districts in 45 different counties (Figure 1), with a majority from five or more districts situated within 15 of the 45 counties (Figure 2).

Figure 1. Counties Represented in this Study

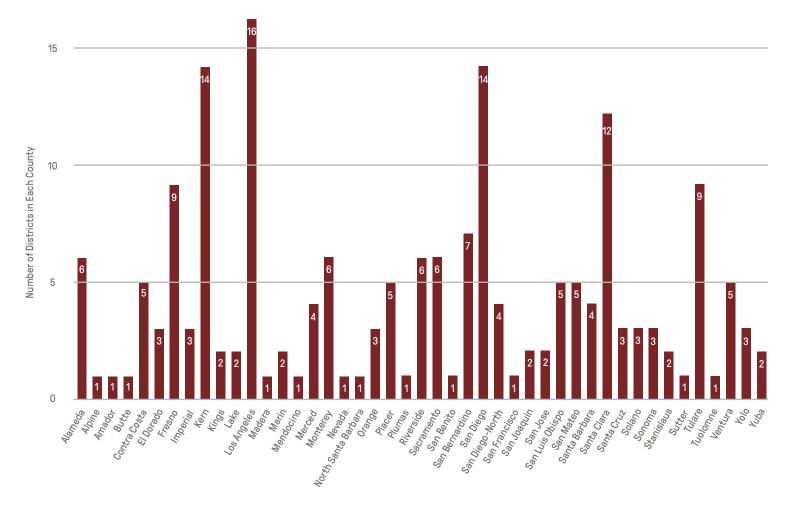
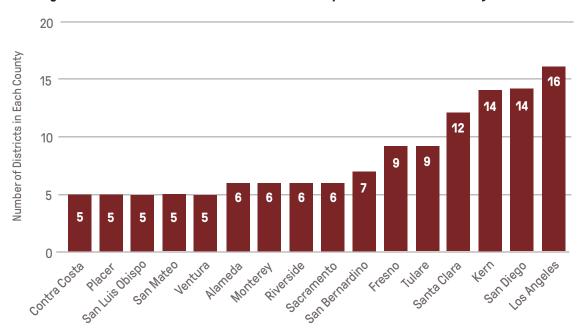


Figure 2. Counties with Five or More Districts Represented in this is Study



## CHALLENGES FACED BY EDUCATORS DURING THE SWITCH ONLINE

Only 12.1% of educators reported having extensive experience with distance learning tools prior to the abrupt switch online in March 2020, and 37.1% reported having no experience at all. It is not surprising, then, that adapting lessons and pedagogy to the new context proved challenging. More than three-quarters of educator respondents found engaging students with learning in its current format, the ability to redesign lessons, and getting access to the necessary resources to create effective lessons to be a challenge

or extreme challenge in what remained of the 2019-2020 academic year. In addition to getting access to and figuring out the technology themselves, a large majority (78%) of educators also reported being worried about students' ability to access the learning, in terms of having an appropriate device or proper connectivity. In the midst of it all, educators also reported finding students' social emotional wellbeing (78.3%) and social isolation (78%) to present a challenge to ensuring learning (Table 1).

Table 1. Challenges Faced by Educators Between March and June 2020 (n=387)	%
Students' ability to engage with the learning in its current format (e.g., navigate the applications, interfaces, stay on task)	79.6
Ability to redesign lessons for this context.	78.6
Access to necessary resources to create effective lessons for this context.	78.6
Students' social-emotional wellbeing	78.3
Students' ability to access the learning (e.g., having an appropriate device, having connectivity)	78.0
Students' social isolation	78.0
Lack of clear expectations from my (school, district, or university)	76.5
Loss of learning	76.0
Attending to the needs of each of my students, especially my students who are in poverty	72.9
Attending to the needs of each of my students, especially my students who needed special education services	72.1
Attending to the needs of each of my students, especially my students who are learning English as an additional language	68.5
Engaging parents/guardian and families	65.9

## A CONTINUED NEED TO ADDRESS STUDENTS' SOCIAL EMOTIONAL NEEDS

Most districts responded to students' need for access to devices and WiFi connectivity by distributing laptops and hotspots in the beginning months of the pandemic. Accordingly, educators' concern about students' ability to access the learning dropped considerably after the summer of 2020, from 78% before summer to 39% after. While this is a positive shift, it also suggests the digital divide continues to persist to a considerable degree.

The professional development and preparation that took place in the summer of 2020 was also not enough to offset the other challenges that distance learning presented, as educators still reported considerable challenges related to meeting students' social emotional needs in the 2020-2021 academic year (Table 2). Specifically, students' social isolation was the greatest concern reported by 61.2% of educators, while more than half (58.4%) also felt students' social-emotional wellbeing presented a challenge to learning, and 45.7% found it challenging to attend to the needs of students, especially those who need special education services. The degree of these concerns suggest schools must prioritize the social and emotional needs of students and educators as they return to in-person instruction.

Similar to educators, only 16.8% of credential candidates reported having extensive experience with distance learning tools prior to March 2020, and 34% reported having no experience at all. Also similar to current educators, pre-service candidates reported students' social isolation (70.5%)

and their social-emotional wellbeing (63.9%) as the biggest challenges they faced working in a virtual setting. More than half of pre-service candidates also reported concern about being able to attend to the needs of each of their students, especially those who require special education services (62.9%), those who are English language learners (60.5%), and those who live in poverty (60.1%).

While both current and future educators also struggled with students' ability to engage the learning in its current format (49% educator; 60% pre-service candidate) and with their general loss of learning (43.7% educator; 61.8% pre-service candidate), there should be recognition that unfinished learning cannot be properly addressed with students until they are socially and emotionally ready to re-engage in learning activities. As schools return to in-person learning, educators should be provided with the tools and resources to help students become ready, tools that can help them re-establish healthy and pro-social classrooms and school communities that attend to students' social and emotional development. Moreover, funding should be allocated for extra support for the most vulnerable students that educators remain concerned about, including those with special needs, those who are English language learners, and those who are in poverty. High stakes testing and other measures that intensify academic pressure work against all of these needs4 and should be waived for at least the 2020-21 and 2021-2022 school years.

Table 2. Challenges Faced by Educators and Pre-Service Candidates in Virtual Environment During 2020-2021

Academic Year

	Educators (n=387) %	Candidates (n=398) %
Students' social isolation	61.2	70.5
Students' social-emotional wellbeing	58.4	63.9
Students' ability to engage with the learning in its current format (e.g., navigate the applications, interfaces, stay on task)	49.0	60.0
Attending to the needs of each of my students, especially my students who needed special education services	45.7	62.9
Loss of learning	43.7	61.8
Students' ability to access the learning (e.g., having an appropriate device, having connectivity)	39.0	44.3
Attending to the needs of each of my students, especially my students who are learning English as an additional language	38.2	60.5
Engaging parents/guardian and families	38.0	44.8
Attending to the needs of each of my students, especially my students who are in poverty	36.2	60.1
Ability to redesign lessons for this context.	29.5	31.6
Access to necessary resources to create effective lessons for this context.	22.0	29.2

# PRE-SERVICE CANDIDATES: TRANSLATING ONLINE LEARNING APPROACHES TO FACE-TO-FACE SETTINGS

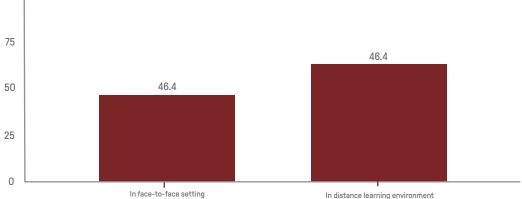
Fewer than half (46.4%) of credential candidates felt prepared or very prepared to assume the full responsibilities of their credential area in a face-to-face setting, whereas close to two-thirds (62.8%) felt prepared or very prepared to assume those responsibilities in a distance learning environment (Figure 3). Since a high proportion of their educator preparation was conducted in a virtual environment, it

will be critical for both local education agencies and teacher preparation programs to provide new in-service educators with coordinated systems of support and resources that will allow them to successfully transition from distance learning to in-person learning contexts. Intentional on-boarding and induction processes will be an important component of that system.

Figure 3. Credential Candidates' Level of Preparedenss to Assume Full Responsilibities of Credential Area

\*\*Responding "Prepared" or "Very Prepared"

100



### DISTANCE LEARNING PRACTICES TO MAINTAIN

The shift to distance learning forced educators to try new tools and pedagogies to engage their students, many of which they found will be valuable in the future. Thanks to these tools, educators do not necessarily frame this year as one of loss but rather as one where they did more differentiated instruction, had more one-on-one interactions with students, and supported students' social and emotional development. Both current educators (62%) and pre-service candidates (82.7%) reported the use of multimedia resources to differentiate instruction as the practice they adopted during distance learning that they most intend to continue post pandemic. Both groups also adopted more flexible assessments and grading, with 55.8% of current educators and 68.8% of credential candidates intending to continue with flexibility upon returning to an in-person setting. Close to half (49.6%) of current educators reported using technology to provide one-on-one personalized instruction, but fewer than one-third (30.1%) of pre-service candidates reported the same. However, more than half (55.8%) of pre-service candidates did use technology to connect and support students' social/emotional development, compared to 42.% of current educators.

Close to half of both groups also engaged in more intentional planning, a practice that 45.2% of current educators and 51.8% of pre-service candidates intend to maintain (Table 3).

To capitalize on what educators learned during the pandemic, local education agencies can proactively provide resources and bring educators together to create an inventory and curate the most effective distance learning tools for continued use. The tools adopted during the pandemic should not be dropped with the return to in-person learning -- they can be integrated into and used to supplement classroom lessons.

Continued access to digital platforms and technological tools will be necessary for students to maintain the innovative and personalized learning experiences that were created by their teachers during the past year. Resources should also be invested into providing training for families to continue supporting the use of technology at home. Families have played a critical role in students' education over the past year and should continue to be valued and supported as partners.

Table 3. Practices Adopted During the Pandemic that Educators and Pre-service Candidates Intend to Maintain
Post-pandemic

Use of multimedia resources to differentiate instruction  More flexible assessments and grading  Use of technology to provide one-on-one, personalized instruction  More intentional planning  Use of technology to connect and support students' social/emotional development  Pared down, more focused curriculum  42.6  Flipped classroom (i.e., asynchronous/pre-recorded direct instruction, with increased emphasis on synchronous group work or critical thinking exercises)  Online assessments   48.0		Educators	Candidates
Use of multimedia resources to differentiate instruction  More flexible assessments and grading  Use of technology to provide one-on-one, personalized instruction  More intentional planning  45.2  Use of technology to connect and support students' social/emotional development  42.6  Pared down, more focused curriculum  42.3  Flipped classroom (i.e., asynchronous/pre-recorded direct instruction, with increased emphasis on synchronous group work or critical thinking exercises)  34.9		(n=387)	(n=398)
More flexible assessments and grading 55.8 68.8  Use of technology to provide one-on-one, personalized instruction 49.6 30.1  More intentional planning 45.2 51.8  Use of technology to connect and support students' social/emotional development 42.6 55.8  Pared down, more focused curriculum 42.3 35.7  Flipped classroom (i.e., asynchronous/pre-recorded direct instruction, with increased emphasis on synchronous group work or critical thinking exercises)		<del>%</del>	<del></del> %
Use of technology to provide one-on-one, personalized instruction  More intentional planning  45.2  Use of technology to connect and support students' social/emotional development  42.6  Pared down, more focused curriculum  42.3  Flipped classroom (i.e., asynchronous/pre-recorded direct instruction, with increased emphasis on synchronous group work or critical thinking exercises)  25.6  34.9	Use of multimedia resources to differentiate instruction	62.0	82.7
More intentional planning 45.2 51.8  Use of technology to connect and support students' social/emotional development 42.6 55.8  Pared down, more focused curriculum 42.3 35.7  Flipped classroom (i.e., asynchronous/pre-recorded direct instruction, with increased emphasis on synchronous group work or critical thinking exercises)  34.9	More flexible assessments and grading	55.8	68.8
Use of technology to connect and support students' social/emotional development 42.6 55.8  Pared down, more focused curriculum 42.3 35.7  Flipped classroom (i.e., asynchronous/pre-recorded direct instruction, with increased emphasis on synchronous group work or critical thinking exercises) 25.6 34.9	Use of technology to provide one-on-one, personalized instruction	49.6	30.1
Pared down, more focused curriculum  42.3  Flipped classroom (i.e., asynchronous/pre-recorded direct instruction, with increased emphasis on synchronous group work or critical thinking exercises)  25.6  34.9	More intentional planning	45.2	51.8
Flipped classroom (i.e., asynchronous/pre-recorded direct instruction, with increased emphasis on synchronous group work or critical thinking exercises)  25.6  34.9	Use of technology to connect and support students' social/emotional development	42.6	55.8
emphasis on synchronous group work or critical thinking exercises)	Pared down, more focused curriculum	42.3	35.7
Online assessments 48.0		25.6	34.9
	Online assessments		48.0
Tele-health sessions 9.5	Tele-health sessions		9.5

### **SILVER LININGS**

Despite a host of challenges the pandemic created in the education system, the educators and credential candidates that participated in the distance learning survey noted some silver linings. These include: the virtual environment reducing the degree to which students compare themselves to one another, allowing some who previously lacked confidence to make gains; the ability for teachers to discover tools that can enhance in-person lessons; the

ability to bring engaging guests to class; and the innovative use of existing resources. Credential candidates also shared that they were able to establish a community of cohort peers in their programs. For many, the pandemic also shined a light on the inequities in the education system that students, families, and educators all have to deal with, and which policymakers and districts should collectively work to address.

### **GUIDANCE FOR POLICYMAKERS**

The term Digital Divide first came into existence in the late 1990s. Since then, researchers and organizations have examined its impact within public school districts primarily in terms of access to devices and the Internet. It was not until the 2016 National Education Technology Plan (NETP), that educators and policymakers first identified the existence of a Digital Use Divide. Policymakers play a crucial role in pushing forward policies that ensure digital equity for all. Although this study does not focus primarily on device distribution and WiFi connectivity, it is worth mentioning that policymakers should support national technology plans and efforts that focus on strengthening the technological infrastructures in local communities and on school campuses. Survey results in this study demonstrate the need to move beyond level one of the Digital Divide (e.g., device and WiFi access) in order to address the recommendations offered throughout this research brief related to educator supports in their use of technology. Policymakers have a responsibility to consider how the COVID-19 context exacerbated issues related to levels two (purpose of use) and three (empowerment benefits) of the Digital Divide.

What is clear through the survey results is that now is the time for policymakers to revive and/or support bills such as the Digital Equity Act of 2019 and the Accessible and the Affordable Internet for All Act. In order to move forward efficiently, whether online or in face-to-face settings, there is no better time than now to acknowledge that the COVID-19 pandemic highlighted the fact that members of historically overlooked and underserved communities still lack access to the technologies and reliable broadband needed to take advantage of digital learning opportunities. While policymakers advocating for such a bill addresses level one of the Digital Divide, it further supports educators' and credential candidates' purposeful efforts in utilizing innovative technologies in their classrooms (level two) as they seek to empower students in their learning (level three).

### FOR MORE INFORMATION

For more information about the research in this brief, the co-directors of the Race in Education Analytics Learning Lab (Nicol R. Howard, PhD and Adriana Ruiz Alvarado, PhD) can be reached at real\_lab@redlands.edu.

### **ENDNOTES**





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https://www.redlands.edu/study/schools-and-centers/school-of-education/center-for-educational-justice/real-lab/

<sup>&</sup>lt;sup>1</sup>Schaffhauser, D. (2020, May 14). Poverty, Race Linked to Lack of Internet for Students. *The Journal*. https://thejournal.com/Articles/2020/05/14/Poverty-Race-Linked-to-Lack-of-Internet-for-Students.aspx?p=1

<sup>&</sup>lt;sup>2</sup> Chambers, D., Scala, J., English, D. (2020). *Promising Practices Brief: Improving Student Engagement and Attendance During COVID-19 School Closures*. [Policy brief]. insight Policy Research. https://insightpolicyresearch.com/wp-content/uploads/2020/08/NSAES\_COVID19\_Whitepaper\_Final\_508.pdf

<sup>&</sup>lt;sup>3</sup> EdWeek Research Center (2020). https://www.edweek.org/research-center/data-driven-journalism

<sup>&</sup>lt;sup>4</sup> Au, W. (2020, October 27). High-Stakes Testing, Standardization, and Inequality in the United States. *Oxford Research Encyclopedia of Education*. https://oxfordre.com/education/view/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-1123.