What We Know About Online Education and How it Affects Equity in Hawai'i's Public Schools

Since March 2020, the COVID-19 pandemic has caused a significant shift in how PreK-12 curriculum and instruction is delivered to students. At that time, the vast majority of public and private schools in the United States halted face-to-face instruction and transitioned to remote education. Schools chose to do so in a variety of ways, but primarily via online instruction, using both synchronous and asynchronous approaches. In many cases, students and teachers were left to complete their educational tasks from home or wherever they could find reliable internet connectivity.

As of fall 2020, many schools did not physically reopen for in-person (face-to-face) instruction. Those that chose to open are experimenting with partial reopening for small groups of certain students (special education and very young students in particular), hybrid (sometimes in-person and sometimes online), or blended (simultaneously in-person and online) formats. Others are using small pod-oriented approaches such that groups of students remain in one classroom for the entire school day.

We are now in 2021 and the COVID-19 pandemic continues. Our public-school leaders and educators across Hawai'i and the United States continue to grapple with difficult decisions about how to proceed with the ongoing school year. Although people in Hawai'i hoped that communities would be safe for schools to reopen fully this fall, and many have been eager to return to in-person classrooms, others are seeing utility in online education, and some people are even using this opportunity to push for an expansion of online instruction.

As the Hawai'i Department of Education (HIDOE) and public-health experts make decisions related to reopening schools and instructional delivery, Hawai'i Scholars for Education and Social Justice (HSESJ) presents research on online education and its impact on educational equity and social justice.

In this brief, we present relevant scholarship in these areas and bring to light concerns regarding corporate interests seeking to expand their influence in public education. The dual impacts of corporate interests and educational inequities are major concerns that need to be addressed in the midst of continued online education. We present a number of nationwide studies on the effectiveness of online K-12 education and consider how this relates to Hawai'i schools. In particular, we are concerned with the effects of online education for students from culturally diverse and marginalized communities, many of whom have not had reliable access to the internet and the required technological hardware to fully participate in remote learning. Finally, we share some recommendations for policymakers, educators, and other educational stakeholders and community members in Hawai'i.

Our three primary questions are:

- What do we know about the efficacy of online education?

- How does online education impact issues of equity and social justice for underserved students and communities?

- Going forward, what are the risks of an overreliance on technology in public education?

The Efficacy of Online Schooling

Early empirical research on the effectiveness of online schooling investigated a variety of online K-12 delivery models. These studies were primarily small-scale and generally painted an overly optimistic picture. For example, in 2010, the U.S. Department of Education produced a meta-analysis of 44 mostly small-scale experimental or quasi-experimental studies comparing fully online with in-person and hybrid/blended delivery formats.[1] Five of the studies focused on the K-12 level; the rest focused on higher education. Of the five K-12 studies, one reported results that favored in-person; the other four favored online or hybrid/blended instruction by small effect sizes. An earlier review and meta-analysis of 14 mostly small-scale studies of web-delivered distance education programs found no significant differences in learning outcomes between those who experienced online learning versus in-person learning.[2] These two meta-analyses, reviewing mostly small-scale studies, suggested that shifting from in-person to online schooling would have limited effects on students' learning.

Since then, six large-scale studies have soundly refuted such a claim. These studies on the ineffectiveness of fully and partially online schools should raise red flags as school closures continue into spring 2021. These studies compared student learning in online charter schools with in-person charter schools and in one study, traditional public schools. For the most part, the online charters that were studied applied asynchronous formats, although a few schools used synchronous approaches for a few hours each week. Each of these studies had a much larger sample size and duration than many of the earlier studies. One study drew on seven years of data from Indiana's four online charter schools with a combined enrollment of 10,984 students.[3] A second study drew on four years of data of all students enrolled in Ohio's K-12 charters during which time online student enrollment grew from 22,173 to 35,512.[4] A third study compared data from 166 online charter schools with traditional charter schools and

traditional public schools in 17 states and the District of Columbia.[5] A fourth study analyzed data from online and hybrid/blended schools in 35 states in 2014-2015, whether charter or not.[6] A fifth study reported a randomized experiment involving 1,228 ninth graders learning algebra in 17 Chicago public high schools.[7] The sixth study by the National Education Policy Center (NEPC) analyzed data from online schools nationwide.[8]

All six studies documented lower achievement of students participating in online schooling than those in-person. The three charter-school studies found that students enrolled in online charters, with only a few exceptions, performed much worse academically and had lower graduation rates than those enrolled in-person (charter or not).[9, 10, 11] The study of 166 online charters found that 2% of the online charters outperformed their comparison schools, 32% performed no differently, and 67% had weaker growth overall.[12] In math, the percentage of online charters that had significantly weaker growth than their comparisons rose to 88%. The study of online and hybrid/blended schools in 35 states concluded that only a small percentage exceeded state average achievement levels, but most did not, and most produced graduation rates that were about half the state average.[13] Similarly, the Chicago study found students less likely to complete an algebra credit-recovery course online than those enrolled in-person.[14]

According to a NEPC report, in 2017-18, 501 fully online schools enrolled 297,712 students, and 300 blended schools enrolled 132,960; these included both charter and district-operated schools.[15] Many such schools did not have publicly available data on performance, but where available, 48.5% of fully online schools received acceptable performance ratings by the state (56.7% if district-operated, but only 40.8% if charter), and 44.6% for blended schools. Although the national average graduation

rate across all schools was 84%, that number fell to 61.5% for blended schools, and 50.1% for fully online schools. Overall, the single lowest-performing category of all schools (online or not; charter or not) were online charters operated by private, for-profit companies.

While it is difficult to compare the online schools referenced in these studies to the nearly-universal online delivery of curriculum and instruction that began in spring 2020, we can assume that schools designed to deliver online education are more likely to have the appropriate infrastructure and necessary expectations to guide teachers, students, and parents for fully online teaching and learning. In contrast, in-person schools, pre-pandemic, did not have the infrastructure capacity, but they had the in-person interpersonal relationships that likely eased the transition to fully-online education. The ability to foster in-person interpersonal relationships is something that online education does not provide.[16] The research is clear that online education should not constitute a panacea of educational solutions.

In Hawai'i, prior to the pandemic, researchers identified particular subgroups of students, including Native Hawaiians, Filipino Americans, those in special education, and in rural areas, as having fewer qualified teachers than other students. Thus, even before the pandemic, these groups were educationally disadvantaged compared to their peers.[17]

The Inequities and Injustices Exacerbated by Online Education

Technologies for online education can enhance teaching and learning, but the misuse of or overreliance on technology can exacerbate existing resource inequities. This has been called technology's "Law of Amplification." Educational technologies tend to build on the resources of high-

performing schools, but distract from the mission and compound the challenges of under-resourced schools.[18]

Some schools have resources to meet the needs for connectivity, including hardware (computers, laptops, tablets), software, internet access, technical support, and facilities, while others do not. Some students have homes with sufficient resources, while other students either live in under-resourced homes or experience housing instability. Some teachers, students, and students' caregivers have familiarity with navigating technologies for online education. Other students and families struggle to use or benefit from such technologies because of health, environmental, and learning challenges. Some schools and homes have mechanisms and resources—while some schools and homes do not—to protect students from the potential negative consequences of extensive screen time on literacy development; mental health problems, like ADHD, screen addiction, aggression, depression, anxiety, and psychosis;[19] and physical health problems, like motor skill development, eye strain, muscle strain, and lethargy. This is also true for inequities regarding protections from online bullying, sexual exploitation, and violations or intrusions of data and personal privacy.

On the latter point of data privacy: Federal laws and agencies are in place to protect copyright of online content and health data privacy. Hawaiʻi laws protect consumer data privacy, but protections for student users of technologies for online education is still an emerging legal field, and thus, far less specific and regulated. Demographic, health, identity, and behavioral data within schools that might have been confidential and secured under federal and State laws are being collected and archived on cloud-based learning management systems like Blackboard and Canvas, in addition to other platforms (whether authorized by schools or

not) on which teachers are interacting with students. Examples include video-conference platforms such as Zoom, WebEx and Google Meet and social-media platforms like Facebook, all of which are hosted outside of schools. Such platforms are more easily accessible by others for any number of uses, including for targeted marketing by corporations, censorship of free speech and expression, and even surveillance.

Before the pandemic and across the country, access to hardware and the internet was already inequitable, as was institutional capacity for online instruction, which in turn, widened existing inequities in student engagement and support. In 2018, about 30% of K-12 students lacked either high-speed internet or appropriate hardware, and this disproportionately impacted students in poverty, of color, and in rural areas.[20] Not surprisingly, when schools went online in spring 2020, students in low-income households were nearly ten times more likely to have engaged in little or no remote schooling than students from more affluent households.

Nationwide in spring 2020, households that earned $100,000 annually or more almost universally had home broadband internet access; whereas, only 40% of households earning under $30,000 had such internet access and were also less likely to have home computers.[21] School districts distributed millions of laptops or tablets and worked to expand internet access, but millions of other students still remained without either. School districts in high-poverty areas were less likely to offer online instruction to all of their students, and when offered, the instruction was less likely to be synchronous. Students in high-poverty districts were more likely to be unreachable or were not engaged online, and teachers frequently attributed these challenges to the lack of access to technology.[22]

Even though student achievement—test scores, grades—and attainment, such as graduation and postsecondary education, go down when students miss a significant amount of school, a concern associated with the challenging dynamics of online education is that there can be legal consequences for students who do not engage online. In both Michigan and Massachusetts, schools contacted authorities about students who repeatedly did not log into classes or complete online coursework.[23] This trend was most common in high-poverty Black and Latinx districts.[24] This approach exacerbates the pattern of students of color being introduced to the criminal justice system and then being continuously labeled, targeted, and surveilled for deviant behaviors, resulting in the over-incarceration of low-income youth of color.[25] This presents a cautionary tale for Hawai'i, where even before COVID-19, the statewide rate of chronic absenteeism had risen to 15%, with much higher rates among Native Hawaiians and Pacific Islanders, as well as students with disabilities and from low-income families.[26]

In Hawai'i, some private schools normally offer all incoming students tablets or laptops, but most public schools do not. By October 2020, over 49,000 devices and 17,000 mobile hotspots were distributed, but the extant needs were far from being met.[27] The Spring 2020 Panorama Surveys administered by the HIDOE[28] revealed that only 46% of respondents had a school-issued device in the Nanakuli-Waianae Complex; 26% in Campbell-Kapolei, and 23% in Leilehua-Mililani-Waialua. Students and families identifying as Native Hawaiian and Pacific Islander were less likely to have sufficient devices and reliable internet connectivity for distance learning. Furthermore, families who reported having children in foster care, living in shelters, living with other families due to economic hardships, or living in public housing reported having fewer devices available for their children's distance learning and access to a reliable internet connection.

Nearly half of all Hawai'i public school students are from economically disadvantaged households, as defined by their eligibility for free- and reduced-priced lunch,[29] and over 3,500 are considered homeless.[30] Educators in Hawai'i have worried that the lack of devices and internet has impacted not only students' access to curriculum materials, but also valuable face-to-face time with educators.[31] Teachers have reported difficulty reaching their students: 50% of elementary teachers and 25% of middle and high school teachers were able to reach all of their students; and only 10% of elementary teachers and 3% of middle and high school teachers responded that all of their students participated consistently in remote learning.[32] To reach students in isolated areas, the HIDOE reported that they were piloting "Microlearning Hubs" that were intended to provide project-based, hand-on lessons that included applied arts.[33] The State also has expanded WiFi access on neighbor islands, in Ka'ū and Pāhoa on Hawai'i Island, Hāna on Maui, Moloka'i and Kaua'i. Whether these efforts have effectively met the needs for all students in rural and remote areas has yet to be determined.

Since middle-class families are able to fund far more educational opportunities for their children outside of school, the educational disparities that typically appear between working-class and middle-class students have been noticeable during the pandemic. Many parents have formed "learning pods" or "microschools" in which groups of families pool resources to support one another's children while learning at home or hire teachers to tutor or provide supplemental instruction—a trend that only widens educational inequities for those families that lack the resources to participate,[34] including in Hawai'i.[35]

In March 2020, the U.S. Department of Education[36] released guidance on complying with requirements of the federal Americans with Disabilities Act (ADA) and Individuals with Disabilities Education Act (IDEA) related to making online education accessible to students with disabilities, who did not have adequate resources for doing so. Court cases have already been filed in several states regarding the failure of public schools to adequately serve students with disabilities, including in Hawai'i, New York, and Pennsylvania.[37]

When schools transitioned to online education, some school districts, like the HIDOE, decided to outsource online education. When families in the Hawai'i public schools wanted an all-online option, the HIDOE contracted with Acellus Learning Accelerator, an unaccredited K-12 online curricula provided by a nonprofit organization in Missouri.[38] Prior to COVID-19, the HIDOE used Acellus for students who did not pass a class and were pursuing credit recovery. At the start of the 2020-2021 school year, approximately 80,000 students in 188 Hawai'i schools were using Acellus at a cost ranging from $25 to $100 per student. Although an early HIDOE review of some of the Acellus lessons determined that Acellus did not meet standards for an adequate education, the Department's leadership decided to offer Acellus as an option for students throughout the State.[39]

In August 2020, parents and students began complaining to the HIDOE about inappropriate and historically inaccurate content on Acellus, including, racist, sexist, religious materials. Numerous educators and family members testified about the discriminatory content, and the HIDOE released a comprehensive report by a 56-member panel that recommended the Acellus Learning Accelerator not be used. In response, the Board of Education unanimously voted to end the Acellus contract. The HIDOE announced that they would terminate the contract by the end of the academic year and allowed individual schools to decide whether or not they would immediately end its use, phase out its use over the rest of the year, or continue to use its services. Acellus announced that they had "fixed" all problems and claimed that the HIDOE would lose millions in State funds by ending their contract; however, they have not been able to provide details on both of these claims.[40]

The Risks of Further Technologizing Education

In May 2020, a survey of K-12 superintendents nationwide found that they felt unprepared for the sudden shift to deliver instruction online, and therefore, were interested in finding educational technologies—cost-free or not—to meet such goals.[41] However, they also expressed a resounding concern of being inundated with too-frequent, aggressive, even "unethical" sales tactics by educational technology companies. Without increased funding for education, technology purchases would require cutting other expenses, such as instructional staff, support-services staff, and the arts.[42] As school districts have braced themselves for anticipated, steep cuts to budgets, educational technology companies have set their sights on the federal CARES Act that has included over $13.5 billion for education.

The CARES Act money has provided so much leeway in spending to states and districts that it has raised concerns that as schools struggled with the sudden need to provide distance or remote instruction, much of the funding has been funneled into private companies and technology and related services. Hawai'i, for example, allocated $15 million—over one-third of its CARES ESSER funding—for devices and connectivity.[43]

Another troubling, but lesser known dynamic is that between $1-2 billion of federal COVID stimulus funding intended to support small businesses (through Paycheck Protection Program funds) has gone to charter schools—including online charters—even though traditional public schools have been ineligible for these same funds. [44] These PPP funds are in addition to schools' regular funding stream from taxpayers. This suggests that charter schools are treated both as small businesses and public schools, and are able to access public funds that are unavailable to regular public schools. This, in effect, creates a two-tiered system of federal funding for publicly supported schools.

The billions of federal stimulus dollars and the closing of campuses in spring 2020 followed a years-long push by some to technologize education. These conditions provided a perfect storm to technologize, privatize, and profiteer, increasing risks that funds do not benefit students equitably and in ways that are needed.

For years, efforts have been underway to technologize education, sometimes by educational technology companies and sometimes by industry-related leaders, philanthropists, and advocacy organizations. This resulted in the growth of online platforms for homeschooling, virtual schools and degree programs, and eventually, Massive Online Open Courses (MOOCs). Amplify Education, Inc., led by billionaires Rupert Murdoch and successively Laurene Powell Jobs, for example, injected hardware, software, platforms, and other resources and services into schools.[45] The goals of Amplify and others like them aligned with the dominant narrative among Republicans and Democrats alike that blamed low test scores on mediocre teachers. The goals also aligned with the recent trend of billionaire philanthropists foisting educational reform initiatives onto poorer

communities of color that widened disparities, but were nonetheless profitable to investors.[46] Technology companies and philanthropists pushed a narrative that proffered technology as a primary lever for change, not merely to enhance teaching, but to be the primary source of or platform for teaching—as well as a means for profit that was forecasted to grow exponentially.

As noted in the previous section, the empirical research is clear that technologies for online education overall have not improved education. But that does not mean that every product is necessarily ineffective, and therefore, some educational technology companies highlight in their marketing that their products are proven effective. Unfortunately, even there, the research does not justify such claims. Since 2002, schools have been required by federal law to spend federal dollars only on products that are research-based, but the federal government does not provide oversight over what constitutes that research. A recent review found dozens of companies presented "little or shoddy evidence" that was cultivated in self-designed or self-commissioned studies; the review warned that "This problem has only been exacerbated by the coronavirus, as widespread school closures have forced districts to turn to online learning. Many educators have been making quick decisions about what products to lean on as they try to provide remote learning options for students during school closures."[47]

The global online education market was valued at $188 billion in 2019, and as of February 2020, it was expected to grow to $319 billion by 2025.[48] That is now likely a vast under-projection, given how schools and universities were shuttered worldwide by March and have gone virtual. *In the United States, school districts spent about $12 billion on educational technologies in 2019, and much of that went wasted:* In a

study of 26 schools, districts, and networks reaching almost 70,000 students, nearly one-third of technology spending went towards licenses (to use products and services), of which over one-fourth reached 0% of usage goals, which translates to approximately $1 billion nationwide spent on licenses never used.[49]

Profits for education-related technology corporations have soared during the pandemic. For example, mainly because of increased subscriptions since the start of the pandemic, Zoom—which is quickly becoming one of the most popular video-conferencing platforms for schools—expects to triple its profits this year,[50] and Google saw stock values climb through spring 2020, despite drops in ad revenue.[51] By summer 2020, a number of technology industry leaders, including tech CEOs, increased their personal wealth by tens of billions of dollars each.[52] In August 2020, Apple became the first-ever corporation to be valued at $2 trillion.

In addition to concerns about the research-based effectiveness of educational technologies and the profiteering of corporate entities within public education, *we risk dehumanizing education when we over-rely on technology.* The relationships teachers build with their students affect students' engagement and learning.[53] Many children, particularly young ones, miss daily face-to-face contact with their teachers and peers and feel lonely, frustrated, and angry during long online sessions.[54] Parents for Public Schools of Hawai'i conducted a survey of families in public schools and found that among the 585 family members who responded, the top concern cited was children's social and emotional needs while learning at home.[55] Having a warm, caring relationship with a teacher is particularly important to struggling students. The fear of "falling behind" and subsequent emphasis on content delivery and continued testing can detract from what some

students need most in order to be healthy, safe, and able to study and learn, including social and emotional support.

Research indicates that the quality of teachers has 2-3 times more influence on student outcomes, compared to other school-based factors, including facilities, services, and leadership.[56] An over-reliance on technology can lead to problems when a teacher is not available to guide student learning and to help students make sense of the curriculum. The recent problems with the Acellus Learning Accelerator in Hawai'i shows how teacher instruction cannot simply be replaced by an online program, particularly when the curriculum was developed by those who are not familiar with our local communities and may have different values and priorities. HIDOE's choice of Acellus Learning Accelerator is a prime example of the negative consequences that result from contracting with companies that aim to profit, but do not have adequate or trustworthy credentials.

Recommendations for Hawai'I and Our Schools

Considering the research reviewed above, we make the following recommendations for policy makers and other community members regarding decisions about the increased use of technology and online delivery of education.

Given Hawai'i's highly diverse student population, the persistent disadvantages for marginalized groups of students regarding educational opportunities, and concerns that corporate interventions widen inequities and injustices, *our overall recommendation is to exercise utmost caution with regard to the technologizing of public education.*

Although we raise a number of apprehensions about online education, we do not recommend rushing to reopen schools in the midst of the COVID-19 pandemic because decisions about when and how to reopen should be guided by public-health and educational research. While the safety of reopening schools depends on many variables that are context-specific, there are a number of ways that schools can better use online platforms. Therefore, we recommend the following policies and practices for engaging in online education that place priority on remedying the inequities and injustices that have worsened during the pandemic.

We recommend that the federal government provide funding to states that supplant all lost tax revenue and that offset the additional educational costs related to pandemic. We also recommend that the State legislature close tax loopholes, end subsidies for profitable corporations, and substantially increase taxes on the wealthy and on investors in order to adequately and equitably fund education.

Policymakers Need to Ensure Adequate and Equitable Funding. According to the Center for Budget and Policy Priorities,[57] the pandemic has caused income and sales taxes to nosedive, sparking a revenue crisis at both the state and local levels—across the nation, about $555 billion through 2022 at the state level and far more when including the local level. To meet balanced-budget requirements, states are slashing budgets. Given that on average, states allocate 26% of their budgets to education, cuts to education are a primary target. Following the Great Recession of 2008-09, funding cuts widened disparities, particularly as federal aid to states ended after two years.

In December 2020, the Hawai'i Board of Education reluctantly approved "draconian" cuts to the HIDOE budget for the 2021-2023 school years,[58] which the Hawai'i's teachers' union reported that such cuts could result in a loss of 1,000 teachers.[59] At this time, as we await policy and funding measures enacted by the new presidential administration, State lawmakers should prioritize finding budgetary solutions that do not include such drastic cuts to the HIDOE, especially those that impact the staffing and support of children who have been struggling in school and families who are in greatest need.[60]

State and County Policymakers Need to Support Fair and Diverse Taxation Strategies. States are facing massive education deficits caused by the pandemic. State budgets would not be so impoverished if taxing were more fair. Hawai'i is the only state in the country that does not use income from property taxes to fund public education. In our 2018 research brief, *The Underfunding of Hawai'i's Public Schools and Proposed Supplemental Funding from Property Taxes,* HSESJ argued that the rapidly growing number and value of investment property statewide should be more fairly taxed to support public education.[61] Such a revenue stream is needed to sustain and improve equitable education for all children in our State.

We recommend that federal, state, and local governments should provide access to technologies for online education, including internet access, software, and platforms.

Policymakers Need to Develop Public Access to Technology. Even when schools negotiate discounted rates for hardware, internet access, and educational platforms, and even when tax dollars subsidize expenses for students, technology companies are still profiting, and education is still being privatized. If all 50 million K-12 students, as well as millions of K-12 educators and higher education students and educators, need high-speed internet access, then such access should be considered a right and could be provided via "municipal broadband" as a public utility. This already exists in some places and could be happening more widespread were it not banned by 22 states in municipalities where corporate providers exist. Software and educational platforms should also be in the public domain; such models already exist in countries like Italy where the government works with open-source software or platform developers to develop systems specifically for school systems.

We recommend that all schools support teachers in building humanizing relationships with students and communities; that all schools function as community schools, whether in-person or online; and that they receive adequate and equitable funding and support to do so.

Educators & School Leaders Should Build Humanizing Relationships with Students, Families, and Communities. Online schooling does not preclude building community, but it does require proactive effort to do so. Teachers may need to reach out to students through multiple formats, including phone calls, to increase personal interactions with students. Teachers may also need

to provide multiple opportunities for students to share something of themselves, such as images and stories, and to engage and interact with each other online in personally meaningful ways.[62] Families should recognize that children may need more social and emotional support than they did when they were attending school in person and may want to schedule times for children to talk about their feelings and interact informally with peers in safe ways. Family members and teachers can reassure children that things will change eventually once the pandemic is under control. Educational leaders should listen to the perspectives of families and labor unions regarding needs and concerns. During the pandemic, schools can and must function as community schools.

Community schools work in solidarity with communities and draw on local resources to educate the whole child while also helping to build the capacity of those communities, such as by providing wrap-around services to support the many needs of students and their families—nutrition, physical and mental health, social-emotional learning, parenting, employment, and so on. Examples include those described in "Reimagining Remote Learning" by the Logan Square Neighborhood Association in Illinois,[63] and as modeled by RISE After School's Student Learning Centers in California.[64] Such examples of blended community schools and programs can be partially or fully in-person for students with acute needs that cannot be adequately addressed if fully online, and Hawai'i has authorized schools to provide such accommodation for instruction, assessment, and other support.[65] Community schools recognize that education works best when seen as part of a well-functioning system, which requires that schools have strong relationships with communities, and that students have strong relationships with teachers.

Educators & School Leaders Should Encourage the Teaching of a Just Curriculum (whether Online, Blended, or In-Person). The California Alliance of Researchers for Equity in Education described how curriculum is never racially neutral, and how advancing democracy in schools and society requires ethnic studies and critical multicultural education throughout K-12 curriculum.[66] In the current moment of racialized rhetoric about the pandemic, increasing visibility of white nationalism and supremacy, demonizing of immigrants, persecution of Indigenous peoples, and global uprisings against anti-Black racism—such curriculum is even more imperative, and is no less doable simply because of the temporary restrictions to in-person instruction. The New York University Metro Center suggests a framework for "culturally sustaining distance learning" that makes education accessible and empowering for all students, by affirming racial and cultural identities to foster positive academic outcomes.[67] The framework is co-constructed by students, families, community, and schools; develops students' abilities to connect across cultures; and cultivates meaningful conversations and activities. Such student-centered, locally relevant, project-based curricula can be academically rigorous and standards-aligned.[68] A just curriculum also aligns with more authentic and holistic assessment of student learning and suggests a retreat from standardized, high-stakes testing—online or not.[69]

We recommend that all schools provide the resources and support needed—including partnerships with teacher unions, district personnel, community and youth educators, parents and families, professional associations, and colleges of education—to develop and engage justice-oriented curriculum online; and that they receive adequate and equitable funding and support to do so.

Educators & School Leaders Should Avoid Over-Reliance on Technology. With a shift to remote schooling comes the possibility to over-use—and misuse—technology. Educators and school leaders must continually examine when and for whom teaching through educational technologies makes sense, and when other modes of teaching and learning make more sense. Students can read books as easily as they can read the screen, and they tend to retain more when reading books while avoiding problems associated with too much screen time.[70] Even within those school districts where most students are able to access online learning, some categories of students—such as students with disabilities or PK-3 students—may have a greater need for face-to-face instruction; there is not a single format (online or face-to-face) that serves all students.

Schools that choose to employ online platforms must critically evaluate the impact on culturally, linguistically, and socioeconomically diverse learners. Educators and school leaders must continually examine how curricular, pedagogical, and technological choices affect the various issues highlighted throughout this brief that contribute to educational inequities and injustices. Schools that continue to

require online education should provide professional development to educators so that they can provide online education in humanizing and effective ways.

The over-reliance on technology risks transferring significant funding, student data, and curricular decision-making authority to externally and privately operated, for-profit entities. Products and services may be marketed as cost-effective or pedagogically effective, but they are not always so. Subscription-based products and services may be offered initially at no cost but with fees for ongoing or full access; eye-catching and entertaining programs might be overly gamified with artificial and external motivators for student engagement. Packaged, user-friendly curricula might be monolingual and monocultural in perspective and lack the elements of a just curriculum mentioned earlier. Curricular decisions must be driven by educators, not technology corporations or the philanthropists who proffer technologies as the panacea.

CONCLUSION

We recommend that schools use technologies for online education as thoughtfully and sparingly as possible and guard against any move to replace the expertise of educators with such technology.

Notes

This brief is adapted, with permission, from: California Alliance of Researchers for Equity in Education (CARE-ED). (2020). *The shift to online education during and beyond the COVID-19 pandemic: Concerns and recommendations for California*. http://www.care-ed.org

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