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Lack Of Access To Technology Among Youth Of Color: An Unbalanced Impact Of Covid-19

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Abstract

Throughout the world, people from all walks of life are enduring tremendous hardship and trauma amid one of the worst disasters noted in U.S. History, the COVID-19 pandemic. The United States reportedly lost over 500,000 citizens to the virus with variants lingering domestically and abroad [1]. Subsequently, the virus and overall global pandemic conditions have had unforeseen changes. These changes included disruptions in everyday life, from the way we work, play, and socialize with others at home and in outside settings. Suddenly society was faced with urgent needs to secure new means of delivering quality education primarily through virtual learning platforms. Learning Management Systems (LMS) were operationalized and entailed the implementation of delivering learning outcomes.

Unfortunately, youth and particularly young adults of color, found themselves on the losing end of the technology gap. They not only lacked necessary resources such as updated computer models, but also lacked highspeed internet service and/or proper knowledge for surviving the abrupt transition [2]. Key issues will be discussed related to student and faculty experiences. Specific discussions related to the digital divide of students by household social economic status, as is represented by K-12 data from the National Center for Education Statistics (NCES) and other sources. Additionally, the impact of COVID-19 on faculty and on college level youth and the impact of sudden change in educational deliverables as reflected in their qualitative responses and interactive experiences are explored.

Keywords: COVID-19, Digital Gap, Household Socioeconomic Status, Social Interactionist Approach, Learning Management Systems.

Introduction

Studies show that social causes of health are due to the disparate effect of COVID-19 on people of color. There is a notable difference in access to wealth, employment, housing, and access to health care between Caucasians and other race/ethnicity groups. Unfortunately, the COVID-19 pandemic exacerbated the prevailing adverse issues and their negative impact on black and brown citizens. For example, the unemployment rate reached 18.5% among blacks and 16.7% for the Latino community, while it is only 14.2% for their white counterparts. These differences are more pronounced in some areas. For example, the Public-School Forum of North Carolina observed that 72 percent of black and brown students in the state's public schools belonged to parents without secure employment in comparison to 21 percent of white students. Regrettably, children of color also experienced the effects of an economic depression as they lacked nutrition at home when schools were closed down and did not have access to school meals. Rental and mortgage payments were also a struggle for people of color at a much more alarming rate than the majority, and even before the crisis, there was a significant income gap between blacks and their white counterparts with the latter enjoying more economic wealth [3,4].

Historically Black Colleges and Universities (HBCUs) and Minority Serving Institutions (MSIs) experienced many economic challenges due to lack of adequate funding to educate the youth of color, who for most part, were from lower socioeconomic households and solely dependent on federal and other monetary assistance for educational expenses. . Consequently, HBCUs and MSIs not only faced difficulties with providing scholarship opportunities to attract more high performing students but also struggled to meet technological demands in classrooms to support current students [5].

Agreeably, the year 2020 caused unprecedented challenges even for affluent educational institutions as COVID-19 caused sudden

and abrupt shifts in instruction to fully online. Unfortunately, HBCUs and MSIs, which were already lagging economically in the pre-COVID era, experienced immense struggles with protecting their institutional stakeholders and meeting instructional requirements amid the pandemic. As Donna Rattley Washington, founder of Student Internet Equity Coalition, reportedly told the AFRO: "The COVID-19 pandemic laid bare the challenges digitally disconnected students face like nothing else…and the country's eyes have been opened to the reality that low-income, black, brown, rural and Native American students are disproportionately disconnected from the technology they need to learn, which has devastating consequences for their academic and workforce success" [6]. The preexisting disparities contribute to the widening of digital learning gaps between the youth of color and their white counterparts.

Digital Teaching And Learning During Pandemic

When the COVID-19 pandemic prompted a historic shutdown during spring 2020, educational institutions at all levels throughout the nation began relying on digital tools for pedagogical purposes, forcing over 55 million students to transition to home-based, remote learning practically overnight. The use of computer-mediated communication in online learning is functional for synchronous as well as asynchronous learning environments. In some circumstances, online learning may provide flexibility, convenience for the working learner, and benefit for institutions with adequate technological infrastructure. However, there are many disadvantages and struggles for those without established technological settings, access, and skills. Areas of concern included: faceless teaching, teacher replacement by technology, faculty and students being digital immigrants, high costs of materials for an effective online experience, difficulty in navigating the learning management system itself, time constraints in trouble shooting technical difficulties, opposition to a new way of learning and teaching, and lack of technological assistance [7].

Regarding technology and student achievement, many institutions offered free wi-fi as a support incentive for virtual platforms such as Desire to Learn (D2L) and Canvas. This could lead to the premature assumption that because college students were provided with opportunities to access internet that they should not be a group of concern. However, the shift to virtual platforms may have inadvertently created other disadvantages, for learners who were not as computer savvy were for to interact with systems to complete assignments. As a result, these students performed lower academically because of their level of digital literacy. [8]. In some cases, even if students have the same hardware and software, their digital skills vary significantly (unbalanced impact) because of differences in teachers' responses to students by their race/ethnicity or economic statuses. For example, Rafalow found in his study of three southern California middle schools that: (1) teachers at the school with mostly wealthy and white students tended to see their pupils as "future innovators;" (2) teachers at the school with mostly middle-class and Asian American students tended to charge their tech-savvy students as "trouble makers;" and (3) teachers at the school with mostly working-class and Latino students tended to maintain the stereotype as "hard-working immigrants" and therefore, focused primarily on basic tech activities such as typing or other noncreative tech activities that were thought to be more conducive to low-ranking jobs that required bare minimum digital abilities [9].

The COVID-19 pandemic, which closed financial markets across the globe and contributed to chaos in numerous educational structures, also created unforeseen issues that expanded across societies and constrained businesses and academic institutions into the cyber realm [10]. For faculty, the major challenge while teaching online was unstable network connection. For example, if videos and audios of students were turned off, connections remained stable. This method however, only created more of a divide and less of a connection between the teacher and the student. Along with poor connection, some students lacked an appropriate personal computer and access to high-speed internet (as discussed in the following section), which pushed the digital divide further. Difficulties with online teaching are both technical and ideological. Some faculty, for example, voiced trouble over laboratory activities and the proper completion of a student's laboratory practicum [10]. This is particularly the case for STEM (Science, Technology, Engineering, and Math) disciplines which frequently require laboratory instruction with in-person use of physical apparatuses. A survey was administered to of 900 faculty members across 672 U.S. institutions, to assess changes to instructional delivery in the early weeks of the COVID-19 pandemic. Survey results revealed that a majority of faculty, regardless of their prior online teaching experience, implemented new teaching methods and made changes to their assignments or exams. It was also revealed that many faculty members were largely uncomfortable with transitioning their courses due to lack of training in online pedagogy and educational technology [11].

Due to the sudden shift to online learning amid pandemic, some seasoned educators did not have adequate time or training to adapt to the new teaching platforms. Further evidence shows that some academics lacked sufficient knowledge of information technology, and their understanding of online learning was deficient. These deficiencies included, lack of knowledge in organizing, teaching, and maintaining a quality learning experience in the online environment. All of these elements may cause a lack of retention and progression if learners are dissatisfied [12].

In sum, several challenges emerged as educational institutions rapidly pivoted from in-person classes to online course delivery in Spring 2020 amid the pandemic. Nearly 97% of institutions who moved to online courses had to call on faculty with no prior knowledge/experience in teaching online. Only one-in-two institutions (50%) could rely on at least some faculty with online teaching experience. Over 56% of faculty who moved courses online used teaching methods they had never used before. Roughly 17 percent of faculty reported having to make several adjustments to complete course-portions for the reminder of the semester online. These ad-

justments included changes in assignment types and changes in reading requirements. Such changes also contributed to significant reductions in faculty members' expectations of amounts and quality of student work. At least 57% of faculty rated additional support for their newly online student as their top concern. All faculty reported experiencing a sense of anxiety due to uncertainty about the upcoming fall semester. Apart from faculty, all others (administrators, instructional designers, online student service personnel) were impact by the change [13].

The Digital Gap[1] And Youth Of Color

As for the learning, youth of color were among the most impacted due to lack of home internet access and computers, which are necessary for online learning. Alliance for Excellent Education (2020) found the following: (a) 16.9 million children lacked the high-speed home internet—a phenomenon known as Homework Gap; (b) 7.3 million children did not have a desktop, laptop, or tablet computer; (c) one in three Black, Latino, and American Indian/Alaska Native families did not have high-speed home internet; (d) one in three families who earned less than $50,000 annually did not have high-speed home internet; and (e) two in five families in rural areas did not have high-seed home internet (see Tables 1 & 2).

Table 1: Lack of Internet and Device Access by Race and Ethnicity

	White	Asian	Black	Latino	American Indian/Alaska Native
Percentage of households without high-speed home internet	20.9%	12.3%	30.6%	31.2%	34.2%
Percentage of households without a computer	7.9%	3.5%	17.2%	17.0%	15.8%

Source: Alliance for Excellent Education [14]. *Students of Color Caught in Homework Gap*. Retrieved from HomeworkGap_FINAL8.06.2020.pdf (futureready.org)

Table 2: Lack of Internet and Device Access by Household Income

	All Households	Annual Income Below $25,000	Annual Income Between $25,000 and $50,000	Annual Income Between $50,000 and $75,000	Annual Income Between $75,000 and $150,000	Annual Income Above $150,000
Percentage of households without high-speed home internet	22.7%	44.5%	32.2%	23.6%	15.1%	8.4%
Percentage of households without a computer	9.8%	28.7%	15.9%	8.6%	3.5%	1.7%

Source: Alliance for Excellent Education . *Students of Color Caught in Homework Gap*. Retrieved from HomeworkGap_FINAL8.06.2020.pdf (futureready.org)

The digital gap is an even larger problem in economically distressed counties. For example, Alex Beene, an adult and high school teacher in Tennessee, stated in an interview with the National Newspaper Publishers Association (NNPA) that "in many economically distressed counties, over 60 percent of families don't have reliable internet access, and that disproportionately affects students of color. In one of my counties, over 70 percent do not" [3]. Some scholars have predicted that black and Hispanic students continue to face problems related to remote learning (i.e., lack of devices and internet access) which would translate into growing achievement gaps—causing them six to twelve months of potential learning loss. The potential for learning lost is estimated at four to eight months for white students. In other words, while all students tend to suffer during the pandemic, "those who came into the pandemic with the fewest academic opportunities" are the ones "to exit with the greatest learning loss." [15].

Digital Challenges For Youth Of Color

The sudden transition from in-person to online learning platforms ideally afforded academic courses to proceed in a safe and manageable manner. However, it proved to be no easy feat or modification, for the change was found to be abrupt and evidenced a lack in skills and resources from students and teachers alike. The transition was not only abrupt and sudden but was implemented in a toxic manner as students and faculty had no other choice in continuing instruction. Students also had to move out of campus housing which posed an issue for those lacking access to resources at home which were provided to underprivileged scholars by most universities and institutions prior to the pandemic. The mental and physical trauma of the entire experience proved to manifest a plethora of mental health concerns such as anxiety and depression, for scholars were unaware of how long the learning modifications would last as well as how long the crisis would linger [16].

First-generation students tend to be from poor families and therefore, tend to family members and friends who lack technological skill and competence necessary for supporting online learning. As a result, these students are most likely to experience poor academ-

ic achievement and retention [17]. For students, the forced online learning added a burden as they were already facing difficulties in pre-pandemic face-to-face courses. They rely heavily on their faculty for their learning success. For example, a first-generation molecular-biology major at Lehigh said, "I kind of called them [professors] my college parents because they were always a resource. For low-income first-generation students, there is no safety net, no uncle who owns a car dealership you can work for if your studies go wrong. It's college or an Amazon factory job" (Kafka, 2021, p.8)[18]. Many low-income, first generation college students consider their faculty members as a vital resource to their success in college. The pandemic, unfortunately, limited their access to these vital supports.

The manner by which institutions clambered with their implantation of online learning transitions proved to be foundational amid the pandemic which caused instruction to lack well-planned and well-designed online learning. Online learning has proven to be a useful tool when one can embrace the components of the structure in a piecemeal fashion which was contrary to what was called for by the current crises. Also, planners and trainers of online learning found opportunities for professional development difficulty to implement. These trainings required adjustment to personalities and all disciplines, which unfortunately, showed that some faculty were still left behind and lacked the necessary tools to successfully implement their curriculum. This had an obvious and inevitable impact on the student learning experience—causing concern for effective teaching tools and ways to engage learners [19].

On the other hand, students have their own barriers to online learning. Muilenburg and Berge stated the following resulted in student barriers administrative issues, social interaction, academic skills, technical skills, learner motivation, time and support for studies, cost and access to the internet, and technical problems [20]. In addition, "findability," or the ease to navigate for locating a particular course component, was also of concern for the students' success of online learning because students cannot learn from what they cannot find. This resulted in student frustration and loss of motivation and self-efficacy [21].

Implementation Of Learning Management Systems

Learning Management Systems (LMS) are web-based application programs for managing online courses and sharing learning materials in order to facilitate collaboration between students as well as between students and teachers [22]. There are some advantages of LMS: (1) they can increase motivation of learners, promote learning, encourage interaction, provide feedback and support during the learning process; (2) they can support content in various formats, e.g., multimedia, video, and text; (3) access to course material is at any time, so that teachers can make changes any time to meet the students' students and students can see those changes almost immediately; (4) various activities can be offered to students to choose from; (5) learning activities and course content can be reused [23]. However, the disadvantages of LMS are: (1) they tend to be course centered rather than student centered; (2) requires knowledge and skills in information management on part of teachers along with knowledge in their course content and skills in developing learning activities; (3) it is easy to convert existing poor teaching practices to a LMS; (4) improvement in teaching methodology and the outcomes of learning are not guaranteed through LMS [23]. Despite these disadvantages, online learning through LMS became the only option for every educational institution when they had to shut down in the wake of COVID-19 epidemic. They resorted to such learning platforms as Canvas, Brightspace and Blackboard Collaborate. Teachers were asked to manage their expectations and focus on the things they could do well. STEM teachers were encouraged to implement project-based learning and problem-based learning to assist in simulating their practical/lab curriculum. Evidence-based practices were also introduced provided strategies on how to increase equity in the classroom. Emphasis was placed on instructor presence, for being present and reaching out in a multitude of ways would also stimulate learners in the hopes of propelling them to success. Teachers and professors were also encouraged by academic leaders of institutions to be flexible as the "old system" of education was likely to not return and that faculty could expect some permanent changes as a result of the pandemic. Instructors were in a fix to find a balance with engagement and sharing of that responsibility with students. While many K-12 institutions continued online instruction during Fall 2020, colleges and universities adopted a mixed approach—that is, a combination of synchronous, asynchronous, and blended-synchronous teaching methods. Synchronous methods of online instruction are instructor-led platform activities used for real-time online teaching to students. It requires both teachers and students to be present virtually on a video conference media (e.g., zoom or Microsoft teams) at a pre-scheduled day and time with active audio feedback, instant messaging, or chat so that teachers and students can exchange in dialogue. Asynchronous online instruction, on the other hand, is a self-paced learning method with or without the presence of teachers or students. Web and emails are used to deliver course materials and other learning activities. This flexible method not only allows students to download course materials and upload any pending task, but also improves their cognitive thinking levels, though some students may feel isolated when working on their own. Finally, blended-synchronous online instruction combines both approaches, where students are given choice (or assigned) to be placed in one of the two groups—one in-person and the other on-line learning groups. The classroom is equipped with an overhead camara and a microphone, and a computer. The teacher goes into the classroom at a scheduled day and time of the class, logs into the system (such as D2L/brightspace Collaborate Ultra) and turns on the camara and microphone. Students attending in-person see the teacher and learn in the traditional style while students attending on-line join the class in virtual setting to see the teacher and learn remotely. Teachers can also place course materials in the web as a backup strategy to allow students who missed the class for any reason to download and learn any missed materials from the class.

Successful execution of online learning will require an effective strategy, especially in asynchronous and blended-synchronous methods of delivery. One such strategy has been to divide online learning content into smaller modules and packages of information, including shorter 10–20 minutes videos that better optimizes student interest and engagement; a shift from the typical 60 minute lecture. While these changes have been slowly developing over the last two decades, COVID-19 has been a stimulus for their rapid large-scale introduction, with lecture recordings being posted on mediums such as D2L/Brightspace and BlackBoard allowing students to review, pause, rewind and replay content [24]. Furthermore, educational institutions (K-12 as well as higher education sector) began increasingly relying on Quality Matters (QM) in recent years for improving the quality of education and student learning. In order to meet QM standards, course design should score at least 85% on a set of eight general standards. These standards include course overview and introduction, learning objectives/competencies, assessment and measurement, instructional materials, learning activities and learner interaction, course technology, learner support; and accessibility and usability as well as 42 specific review standards. The underlying assumption is that good online course design, with built-in provisions for student interaction and timely feedback, will reduce learner anxiety and promote learning.

Technological Challenges For Youth Of Color In K-12 And Resilience

Studies show benefits of online learning in the K-12 context, inclusive of malleable educational options for a diverse group of students such as those with physical and mental challenges as well as victims of bullying. Students are also allowed to learn at their own pace, are exposed to new technologies, and are given options to take courses not offered in their district. This opportunity helped students gain exposure to technologies that they may not have other gained exposure to as many districts can not afford to provide robust online learning experiences [25]. Apart from these benefits, lack of face-to-face relationship remains a concern of many, including parents. Other challenges involve varying levels of comfort with video, role playing and implementing practical experience, quality interaction), and abilities to facilitate engaging online discussions. Researchers were able to identify four gaps—homework gap, digital divide, mental wellness, and accessibility issues. The COVID-19 pandemic prompted sudden lack of face-to-face interactions between teachers and learners and a lack of support at home widened the homework gap. The homework gap is the phrase used to refer to the lack of the connectivity needed by students to complete schoolwork at home). The stress coming from a sudden change of routine and uncertainty about the effect of the pandemic, as well as economic and health concerns, created an increased concern in student and teachers mental wellness" [25].

Challenges related to student access to digital learning beyond the classroom existed even before COVID-19. In 2019, Asians (99%) ranked highest among the 3- to 18-year-olds with home internet access , followed by Whites (96%), Hispanics (92%), Blacks (91%), Pacific Islanders (90%), and lastly American Indian/Alaska Natives (83%). Parental educational attainment and family income played significant role in the 3- to 18-year-olds with home internet access. The lack of access to home internet made these youth rely on smartphones for internet access as an alternative: Asians (2%), Whites (4%), American Indian/Alaska Natives (10%), Hispanics (11%), and Pacific Islanders (13%). Parental educational attainment and family income once again played a key role in smartphone internet access among these youth. Thus, limited internet access through a smartphone is common among youth of color, who also have low rates of home internet, low income, and low parental attainment, [26]. Even after this access was bolstered by schools and districts during the pandemic year of 2020-21, the inequalities persisted [27].

Technological Challenges For Youth In Colleges And Resilience

Murphy, Eduljee, and Croteau (2020) surveyed 148 undergraduate students (44 males and 104 females) on their perceptions about transitions to virtual classes in Spring 2020 as a result of the COVID-19 outbreak (also referred to by some studies as Emergency Remote Learning) along with their emotional responses during that period. While the study showed that students in general perceived that professors utilized LMS for effective virtual learning of students in transition, their emotional responses about the transition to virtual classes included: nervousness (41%), anxiety (51%), sadness (37%), anger (28%), uncertainty (59%), comfortability (13%), fearfulness (24%), neutrality (16%), apprehensiveness (24%), disgustedness (6%), happiness (5%), and excitement (3%). Students suggested that professors make changes in areas such as classroom engagement and leveraging of technology to improve student experiences. There is a high level of consensus among student participants with two statements as: "I prefer that course grades are available on LMS," and "I prefer that changes in course content and assignments are communicated with me in a timely manner." Other studies also acknowledged the importance of understanding the emotional perspective of students in educational settings

In a similar vein, several college students of color demonstrated their resiliencies to us with hope and optimism, as reflected in the following examples:

An African American male freshman said, it wasn't easy for me to switch quickly to online because I forgot my password which prevented me to access my course material. After I reset my password the course content was unfamiliar in terms of the structure and expectations because my instructor passed away because of COVID, and the course was assigned to a new faculty member. It took some time to get adjusted, but in the end, I made a passing grade.

Another student shared, I didn't have computer or internet at home. I relied on my neighbor's computer for accessing course materials. But after a couple of weeks, he got COVID and I couldn't go

there. By the time his quarantine ended, and I got back I missed some deadlines and fell behind. I pleaded to my instructor to give me some extra time, which he finally granted. That helped me to complete my outstanding quizzes and discussions.

An African American female junior reported, my mother works in one of the essential jobs, as nurse assistant in local hospital. So, first she got sick with COVID, then I and my daughter got it. We all were sick. None of us could go out and get even food, couldn't call anyone. I sent an email to my professors for excuse from missing online classes, which was hard for me to begin with. I prayed God 'give us your Grace.' I do strongly believed God would do something, some miracle, because my mom always told me how many difficulties, she managed to overcome by reading bible, attending church, and believing in God throughout her life. With all that she never gave up on her education. That is what I am doing now, following her footsteps.

An African American STEM major espoused, I'm pretty good with computer. I work part-time and get some scholarship money which helped me to buy my own computer and have my internet connection. Having my own computer is important because I can't be on campus all the time for my homework because of my work schedule. But when I had to move back to my home in rural middle Georgia, I couldn't get the wi-fi signals. That is when I started having problem. After struggling for a while I went to my aunt in Atlanta, who is well known in her community. Once I got there, I had no problems. So I stayed there till the end of the semester and completed my courses.

An African American male majoring in criminal justice compared his COVID-19 issues with racism in the criminal justice system. He expressed: I know it is hard, it is hard to everyone out there because they lost jobs, they have no money, they are trying to make it because they need food, medicine, roof over their head. If you don't pay rent you get kicked out. I know all that. I also know it is hard to get around in this COVID times. But it is nothing new for black folks because they gone through it before. But the issue with me is, it bothers me when I hear the police killing innocent people, and locking them up because they are not whites, because they are black. You know what happened to George Floyd, Zimmerman, and guys like that. I know you can't change COVID. But we can change it. But no one wants to make any change when it comes to black kids. Same thing, when it comes to those racial stereotypes, they think we are dumb, we are troublemakers, we can't have no decent jobs, we just go around and mess with people. That is what needs to change and it needs to change now. I know COVID will go away this year, next year, five years from. But this racism has been here for centuries and will stay for centuries more. That's what concerns me more. This reaction resonates with what Brook Coley, a bioengineer and social justice scholar, said to the graduating class of 2021 at Arizona State University's Black African Convention. Coley stated, "The duality of being both Black and student in 2020 and 2021 was to live and navigate extreme environmental conditions" [28].

The foregoing challenges and methods of resilience are consistent with those found on other college campuses. For example, Edwards, a junior at Paul Quinn college, said: During the pandemic I actually lost my grandfather, grandmother and my uncle. I literally just didn't know what to do. I was panicking. I was depressed for a short period of time. It was like life was hitting me with right hooks, left and right, left and right, left and right. … I know that quitting is never an option, so I had to use my inner determination and my self-discipline to keep going. [29].

Graham et al. (2020) observed in their study based on 5,500 respondents from all 50 U.S. states between April 27 and May 12, 2020, that African Americans, despite the disproportionate impact of COVID-19, displayed high levels of hope and resilience for the following reasons: historical trajectory of overcoming adversity, strong community ties, and continued belief in the promise of education [30]. We agree with their conclusion:

While this is not a well-known story, it is one with potential lessons for those coping with COVID 19-related uncertainty and other challenges. And at a time that U.S. society is facing unprecedented challenges due to the dual "pandemics" of COVID-19 and racial injustice, it is time to better understand the roots of African American resilience, as those, in turn, will play a vital role in healing our deeply divided society going forward.

Conclusion And Recommendations

Several questions continue to linger in the minds of all citizens and youth of color are no exception. When will the pandemic end and when will schools resume normal activities? When will masks come off? When will asymptomatic people stop interrupting their lives because of a COVID exposure? Above all, when will digital learning struggles end? While no one has clear answer with any degree of certainty, we can continue to do something, as teachers and professors, to promote youth education while keeping their anxiety and stress low. The following are some suggestions regarding best ways to accomplish this feat

1. Know the warning signs of distress in students. Parents and teachers should know that a disruption of normalcy at this scale has the potential to increase stress, anxiety, and apathy levels among students. Any sudden or extreme changes in behavior, mood, and activities that are harmful to students and others should be reconciled by connecting with resources for assistance [31].
2. Build a healthy relationship with students. earn from student strengths. Do not view them from their past negative experiences and mistrust toward educators. Cultivate a strong positive relationship to motivate students [31,32].
3. Give the student opportunities to make mistakes. Use empathy and compassion and give opportunities for students to learn again where they failed previously. This will help students to take more risks and develop a growth mindset that inspires learning because mistakes build new synapses in a student's brain [33].
4. Encourage students to continue learning. Encourage students to learn by giving multiple changes to correct their past mistakes,

thereby they can overcome anxiety, remain engaged, and persevere to achieve success. When teachers provide affirmation to students of color and make them feel valued, they will flourish [32].

5. Celebrate students' small victories. Embark on students' journeys of success and cheer them on every step of the way by making positive verbal statements of encouragement to motivate, praising for effort and for improvement to build self-confidence, and by emphasizing his or her performance so that he or she can feel seen and "gotten," which helps them to stay on path of their success [34].

6. Use QM standards for course design. It will help to alleviate students' anxiety when the course's general purpose is described, the course outcomes are clearly defined and aligned with assignments. When students are informed of each assignment's purpose and valuation criteria, they are more likely to understand expectations and work to achieve them and obtain knowledge at a higher level. QM standards also enable instructors to ensure that assessments and evaluations appropriately measure student learning outcomes [35].

The goal is to help stabilize the education community until the crisis is over and allow access to quality education to continue. We are not attempting to recreate a new learning environment, but to support students in developing their abilities to learn by identifying which strategies work best for them. Educators and administrators should set the context, create hospitable space, explore questions that matter, encourage everyone's contribution, share collective discoveries, listen together for insights, and connect diverse perspectives [36]. At least for some time, remote learning will continue partly or fully, synchronously or asynchronously, therefore, it is important the online learning is introduced in a healthier, methodical, and effective manner[37-42].

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