DISENGAGED AND NEARING DEPARTURE: STUDENTS AT RISK FOR DROPPING OUT IN THE AGE OF COVID-19

The purpose of this review article was to examine the turbulence of the current educational context in light of COVID-19 and the associated school closures, for disengaged high school students, often over-aged, who are nearing the end of their academic journeys. In this review, I provide a concise overview of the way that the high school dropout problem has been conceptualized, the theoretical framework of turbulence theory, and the relevant barriers that disengaged high school students, marginalized and subjected to pushout, are currently experiencing. I assert that even with established supports in place, more attention is needed to developing approaches that consider the turbulence that disengaged students experience nearing high school departure during this period of school closure and remote instruction. Next, I analyze the turbulence experienced by such students by using the turbulence gauge to assess the three drivers and the general level of turbulence. I conclude by offering recommendations for further supporting disengaged students at-risk for pushout or dropout.

Keywords: High school dropout, pushout, chronic absenteeism, turbulence theory, COVID-19

Introduction

High school dropout remains a critical concern for researchers, educators, policymakers, and community leaders, and with good reason. Well established in the literature is the litany of unfavorable quality of life outcomes that dropping out of high school is connected to, including increased criminal involvement and incarceration (Moretti, 2007; Backman, 2017), higher levels of unemployment (Sweeten, Bushway & Paternoster, 2009), lower lifetime earnings and income tax payments (Rouse, 2007) and increased risk of health conditions and mortality (Muenning, 2007). Indeed, dropping out of high school has a devastating impact on individuals, families, and communities, but it is also a painfully loud signal that a system, or set of systems, has failed.

In past work, dropping out of high school has been widely conceptualized as a decision that students make, related to either the investment of rewards and effort (Rosen, Warkentien & Rotermund, 2019; Lessard, Butler-Kisber, Fortin, Marcotte, Potvin & Royer, 2008) or a myopic individual disposition (Oreopoulos, 2007). In recent years, an alternate conception of the dropout phenomenon, the pushout, has emerged. Changing

the locus of control from the student to the system, researchers have begun to illuminate the complex structural processes school leaders use to push out students who are conventionally understood by school leaders as difficult. A substantial body of research on exclusionary practices documents the significant disparities in the rate of suspension between students of color and their white counterparts (Anderson & Ritter, 2020; Ritter & Anderson, 2018), as well as the deleterious effects of suspension and other exclusionary practices have on the graduation outcome (Chu & Ready, 2018; Noltenmayer, Ward, & McCoughlin, 2015).

Additionally, while an array of factors, such as students' failure to achieve acceptable levels of attendance and course credit or to comply with behavioral expectations, are well established early warning signs for high school dropout (Mireles-Rios, Rios, & Reyes, 2020; Lukes, 2014; Tuck, 2012, Battin-Pearson et al., 2002; Rumberger, 1995), other researchers have tried to contextualize these reasons, positing that dropping out of high school is better understood to be related to an array of domains: individual, family, school, and community factors (Atwell et al., 2019; Rumsey & Milson, 2017; Hammond et al., 2007), with multiple risk factors interacting in complex ways, with factors compounding (Hammond et al., 2007) over the course of a student's pathway to graduation.

Decades of research on early withdrawal from high school identifies chronic absenteeism as a primary early warning sign for student dropout and pushout (Rumberger, 1995; Battin-Pearson et al., 2002; Kearney, 2008; Gubbels, van der Put, & Assink, 2019). Related to how absenteeism contributes to the dropout process is the role that misbehavior, truancy, and suspensions play in the trajectories of students placed at risk for dropout. To this end, Lessard and colleagues (2008) found that students often utilize a pattern of stopping and restarting, only to stop again, on their pathway to high school dropout, or pushout positing dropout as a process, rather than an event. Specifically, Lessard et al. (2008) found that marginalized students placed at risk for dropout further disconnected and sabotaged their own educational journeys with the ways they responded to external factors like school policy and peer influence in a teering process over the course of weeks or months. With COVID 19 changing the type of instruction and the levels of academic and emotional support that students are receiving (Pesiero et. al, 2020; Lake, 2020), impacting two school years, the potential for students nearing the end of high school during this pandemic to teeter through the stages of disengagement represents a critically important warning system for educational leaders.

This disengagement process has begun to be documented in the early work looking at the impact COVID-19 related school closures have had on historically underserved students. When COVID-19 hit school systems less than a year ago, typically disengaged students were missing from remote and distance learning in record numbers (Boston Globe, 2020; Dorn et al., 2020), missing significant quantities of instructional time. Moreover, with COVID-19 forcing districts to start the current school year with

largely remote programs (United Nations, 2020; Ed Week, 2020), that can vacillate rapidly as COVID-19-related concerns and needs arise (Pensiero et al., 2020), over-aged and disengaged students nearing the end of their high school pathway are at particular risk for dropout now more than ever. In what follows, I briefly review the conception of turbulence that addresses how school systems can respond to inevitable turbulent forces such as a pandemic. After a concise discussion of methodology of this literature review, I examine key barriers that students placed at risk for dropping out encounter as they near the end of their high school journeys. The findings of this review suggest that there are important resources and supports that these marginalized students may easily miss out on during a pandemic. Based on these findings, I propose recommendations for ways to focus usage of the turbulence gauge to the special considerations that supporting these students will entail.

Theoretical Framework

The theoretical framework that informs my discussion of disengaged students nearing the end of their high school pathways during the pandemic rests on the notion of the ubiquity of turbulence as a driving force in the personal lives of students and families, the professional lives of teachers and educational leaders, and the organizational lives of schools and districts (Gross, 2020). Specifically, I use Gross's concepts of the four degrees of turbulence (light, moderate, severe, extreme) and the three forces (positionality, cascading, and stability) that impact the levels of turbulence experienced by a school system, stakeholder group, or person (Gross in Shapiro & Gross, 2013) to analyze the current challenges people and systems are experiencing, and to discuss possible solutions. As is the case with complex dynamic systems found within natural phenomena, and certainly when considering how a school system might address a pandemic involving a novel corona virus, small and thoughtful changes can yield important shifts, perhaps made possible by the very turbulence typically understood to be a threat to the system.

School Closures, Disengaged Students, and Turbulence

Turbulence theory can be applied to students, teachers, schools, districts, communities, and organizational systems. Designed to illuminate the contextual forces, degree of turbulence, and the ramifications associated with a changed level in turbulence, this model is applicable to the ways that disengaged students nearing the end of their high school journeys, often over-aged and under-credited, experience the school closure. Moreover, the model is also applicable to the educational leaders that serve these disengaged students, simultaneously subjected to heightened levels of turbulence as expert guidance, expectations, and constraints continue to change and swirl around them. To gain perspective on how

an organization or stakeholder is impacted by turbulence, Gross (2013, 2019, 2020) recommends looking at the contextual variables that influence any given situation with a "rapid, well-considered response" (Shapiro & Gross, 2013, p. 46).

In the case of closure related to COVID-19, the events that cascade including the rapidly changing guidance about COVID-19, community concerns about learning, engagement, and the emotional wellbeing of students, the economic devastation that families are experiencing in real time, and the ongoing discussion about how school will operate for the various stakeholders. A third force, degree of stability, varies by family, school, and community, keeping in mind that marginalized students pushed to drop out disproportionately experience poverty (Battin-Pearson et al., 2000), absenteeism (Balfanz & Byrnes, 2012), and student mobility (South, Haynie, & Bose, 2007). Equally important is establishing the degree of turbulence. When school closed unexpectedly and continue to struggle to fully reopen due to COVID-19, the turbulence level for many struggling students and families is severe to extreme, depicted by students' "feelings of crisis" and "damage to the institution's normal operation" (Shapiro & Gross, 2013, p. 55).

Methods

I employed a review of the literature, looking for any studies exploring attendance and graduation outcomes related to school closures associated with COVID-19, specifying the dates of March through December 2020, using Education Source, APA Psych Info, and ERIC databases. Because I wanted to review articles that investigated the dropout outcome during this current pandemic, I used the search term COVID-19 as the first search term, followed by educational attainment, student engagement and school closure, alternating as the second term. While there are a few studies estimating the percentage of students dropping out as a result of the pandemic, because graduation typically occurs at the end of the school year, the volume of research on this year's graduation rate has yet to occur. Lastly, I sought other sources (i.e., The Hurt Could Last a Lifetime, an educational leadership report from the Welty Center, Education Week articles, and newspaper articles and editorials from the Boston Globe and the New York Times) exploring how school closures and subsequent re-openings associated with COVID-19 influenced related student outcomes. In the next section, I detail current work exploring the barriers that marginalized students nearing the end of their high school journeys experience, including the digital divide and a lack of mental health support, while advancing the conversation on the emergent topic of special considerations for these students during a pandemic.

Discussion and Implications

School Closures, Disengaged Students, and Turbulence

While the devastating impact of COVID-19 to educational processes is only beginning to be explored by researchers, to date, there are some alarming trends that have begun to be documented regarding student engagement and learning after school systems quickly transitioned to distance and virtual learning in the Spring of 2020 and continuing through the subsequent summer and fall. In an effort to track the school closure and remote learning plans for the thirty largest districts across the nation, the Center on Reinventing Public Education (Lake, 2020) has identified a continuum of how much curriculum, instruction, and monitoring was occurring, at different points of time. Their analysis of the thirty largest districts' plans for closure and remote instruction, Seattle's Center on Reinventing Education (Lake, 2020) found that 90% of the thirty largest districts across the nation provided students varying levels of exposure to curriculum with no instruction or monitoring components when schools first closed in March 2020; by the end of May, that percentage was down to 34%, indicating that even by the end of Spring about a third of districts were not yet providing online instruction, monitoring, or attendance collection (Lake, 2020). Correspondingly, in May 2020, the Boston Globe reported that more than 20% of Boston's public-school students had not logged on to their online learning program or picked up their physical, paper assignments two months after schools had closed and switched to distance learning (Tonnes, 2020). Importantly, the district's African American and Latinx student groups are disproportionately represented in that number, as compared to their White counterparts. Likewise, according to a *New York Times* article from July, in Los Angeles, a third of students failed to participate in learning after school was closed, represented by student failure to log on or complete their physical work (New York Times Editorial Board, 2020). By the same token, a third large urban publicschool system, Washington D.C., a district with 80% of its students that are African American and Latinx and a similar majority who are economically disadvantaged, closed schools three weeks early (New York Times Editorial Board, 2020) amounting to significant loss in instructional time.

More recently, Dorn, Hancock, Sarakatsannis and Viruleg (2020) explored long term consequences to economic and racial disparities in student achievement using statistical models estimating the effects of school closures, based on prior investigating the efficacy of studies of remote learning (Woodworth et al., 2015). Importantly, Dorn et al. (2020) found that despite the quality level of the remote instructional program, across the board, all students progressed less through remote instruction than through face-to-face instruction, with students coming from low quality remote programs stagnating in their learning progress most significantly. Again, students from lower socio-economic backgrounds and students of

color experience the burden of low teaching and program quality related to remote instruction disproportionately (Toth, 2020; Dorn et al., 2020), with only 14% of Black students and zero percent of students from lower socio-economic backgrounds receiving high-quality remote instruction (Dorn et al., 2020), experiencing dips in learning that are markedly more severe versions of typical summer regressions (Toth, 2020). Pensiero et al. (2020) estimate similar losses of learning associated with quality of remote instruction and home and family factors including socioeconomic status, parental educational and professional backgrounds, and access to digital resources. Once again, students coming from marginalized backgrounds shoulder the burden of being provided less instruction, as well as diminished access to the home-based supports that their higher income counterparts access consistently, including computer ownership, one or more parents working from home, and adequate learning spaces (Pensiero et al., 2020).

While the practice of pushing out the struggling student is by no means new, with the turbulence that COVID-19 has brought to educational settings across the board, students who are vulnerable to the pushout phenomenon under typical circumstances seem to be facing even greater barriers to attainment of a high school diploma. For older students who struggle to attain high school graduation under typical circumstances, school closures can magnify the sense of disengagement and disconnection these students feel towards school. Although there have been no studies to date on how the COVID-19 closures have impacted graduation rates, recent work has illuminated the challenges that school, families and students are currently facing in terms of learning and engagement. Notably, Dorn and colleagues (2020) estimate that 2 to 9% of students could drop out of school as a result of COVID-19 and associated school closures, with total students estimated to be anywhere from 232,000 to 1.1 million. This study provides clues to what we may be facing, a secondary pandemic of sorts related to dropping out, or arguably, pushout efforts towards highly disengaged students from high schools that have physically closed due to COVID-19.

While there have not been any published studies to date on this emergent phenomenon, educational leaders are beginning to identify critical barriers students are facing. One issue continues to be the digital divide and a host of closely related challenges. Across the United States, seven million school-aged children are currently living in homes without internet connectivity (Walters, 2020), with a reported 35% of low-income households with school aged children operating without a broadband internet connection (Anderson & Kumar, 2019). In a recent Federal Communications Commission (FCC) report (FCC, 2020), the FCC confirmed that significant income differences exist between households with broadband internet and their counterparts without this service, an inequity experienced most profoundly in rural and tribal communities but is also regularly experienced by people from lower socio-economic backgrounds in

urban areas as well. Related to the issue of access to a high-quality Internet connection, technological device (e.g., computer, tablet, smartphone) ownership is also increasingly associated with income, among other factors, with 26% of Americans with income under \$30,000 limited to the use of a smartphone for internet-based usage, a logistical constraint when the higher speeds associated with broadband Internet service or larger screens are needed for specific academic, personal or social tasks. (Anderson & Kumar, 2019). Similarly, in a recent survey of three thousand high school students, the Hispanic Heritage Foundation (2020) found that Latinx and African American students were more likely to use a smartphone to complete coursework than a computer. Most compelling, perhaps, was that nearly half of all students surveyed reported not being able to complete coursework, with a similar percentage reporting receipt of a diminished grade, because of a lack of access to adequate digital resources.

All things considered, many marginalized students still lack consistent access to the adequate speed for Internet connection and the appropriately size and type of device to launch conventional online learning programs and applications, culminating in what was known as a homework gap prior to the pandemic. Since face-to-face instruction was halted last spring and subsequently continues to be limited at the start of the current school year, this homework gap, created by unequal access to digital resources, may need to be re-conceptualized and more broadly understood as an overall student engagement gap that has serious, far-reaching implications for vulnerable students. In the next section, I explore some of the unique logistical barriers that students face that are often absent in discussions of the digital divide and the homework gap.

Beyond the Digital Divide

Beyond the digital divide, there are broader inequities that surface during an unprecedented school closure such as this. Students are without an array of support services that have traditionally been coupled to their physical school buildings (Lipari et al., 2016; Ali et al., 2019) and have been shown to support students who are placed at risk for dropping out (Chappell et al., 2015; Rumsey & Milsom, 2017). To enumerate, services that address the logistical and mental health needs of students by providing individualized instruction, trauma-informed intervention, family engagement, mentoring, and behavioral and career counseling are largely unaddressed during times of school closure but have been established to be important supports for students who are placed at risk for dropout (Chappell et al., 2015; Rumsey & Milsom, 2017). As has been noted, it is these unique and pervasive barriers, above and beyond those that exist in face-to-face programs, that require expedient attention in discussion and research so that existing disparities in the attainment of the high school diploma do not increase.

Logistical Barriers When Out of School Time is All Day

While the ongoing discussion regarding the digital divide experienced by marginalized students during the current pandemic, especially initially, tended to focus on the distribution of devices and accessories for connectivity (i.e., hot spots), this emphasis neglects some fundamental and logistical barriers that school leaders are often not aware of but exert a significant toll on their high school students' engagement with distance learning. Amongst other barriers, high school students are often tasked with additional responsibilities within the family unit that educational leaders may not adequately understand, both in terms of how the tasks may influence the student's learning and engagement and what the roles might mean in terms of the student's own role identity system. In recent work illuminating the perspectives of high school students learning from home after the pandemic closed schools, Marstaller (2020), for instance, provides a rare snapshot of how an under-credited and over-aged student, born and educated in a refugee camp prior to coming to her Utah school system, experiences her own schooling and senior year after schools closed in Spring 2020. Amongst other observations, one student describes the experience of assisting her younger siblings and cousins with their own academic and logistical challenges, while attending to her own senior year coursework in their shared home, often with limited space for the demands of multiple students engaged in home learning simultaneously.

During all of these study-at-home weeks, I am pretty busy, helping my siblings, making sure they are done with their work or meeting with their teacher. But also I like it because I am learning new things from them while we are studying together.

The challenges that this student sparsely mentions are commonplace in households across the country. What is remarkable is her unique ability to understand these challenges as a mutually beneficial interaction, not taking away from, but rather contributing to her efficacy as a learner. While this snapshot provides but one marginalized student's experiences during her school's closure due to COVID-19, it serves to illuminate the unforeseen logistical challenges that engaging with remote instruction entails for historically underserved students.

Lack of Mental Health Supports

One of the most difficult, often unseen, barriers to learning and student engagement that vulnerable students face are related to the unmet emotional and mental health needs of the students and their families. During this pandemic, these challenges have been amplified. In a general review, Kontoangelos, Economoy and Papageirgiou (2020) looked at the psychological effects of COVID-19 pandemic on children, among other groups, across studies, finding that children are placed at risk for increased levels of anxiety and fear as responses to the COVID-19 pandemic. In-

herently, the ability for school professionals to engage in the existing identification process for students with mental health and behavioral needs are greatly limited when schools are closed. Unfortunately, identification is an essential to facilitate early steps in diagnosis and timely treatment and to aid in the prevention of an array of negative health and quality of life outcomes associated with untreated mental health issues (Golberstein, Wen & Miller, 2020).

Prior work documented the role school services have in the delivery of mental health and other forms of health care, for students (Ali, West, Teich, Lynch, Mutter, & Dubenitz, 2019; Lovenheim, Reback, & Wedenoja, 2016; Lipari, Hedden, Blau, & Rubenstein, 2016; Reback, 2010), with recent attention to how school-based health care services may be a promising avenue to address chronic absenteeism (Graves, Weisburd, & Salem, 2019). Data from a nation-wide survey, the *National Survey of Drug* Use and Health, documents that 3 million adolescents, or 13.2%, received mental health services at an educational setting (Lipari et al, 2016). Similarly, among all adolescents who received mental health services, 57% of students received some component through the school setting (Ali et al., 2019). A recent study found that school-based health centers, a more comprehensive, accessible, model than conventional school-based health services, reduced teen pregnancies (Lovenheim, Reback, & Wedenoja, 2016), while earlier work documented that access to school mental health services decrease student behaviors disruptive to learning (Reback, 2010).

Certainly, this discussion needs does not thoroughly cover all the unaddressed needs that students placed at risk for dropout are experiencing when schools are closed. Rather, they represent two common kinds of under-addressed needs that students experience. In the next section, I look at some of the efforts to address the barriers disproportionately experienced by low-income students and students of color.

Early Efforts to Address the Digital Divide

Together with multiple levels of government, technology companies, and nonprofits, districts have attempted to address this undisputed digital divide and provide digital resources to vulnerable students and families in several different ways. Early on, in an effort to expediently provide instruction to digitally stranded students immediately following the school closures, some districts opted to provide printed instructional materials for students, such as the Seattle Public Schools (Institute of Education Sciences, 2020). This stop gap measure did not suffice for long; by the middle of spring, and into the summer, the push, instead, was for devices and internet access for every student for the reopening in September (Seattle Public Schools, 2020). Other districts capitalized on partnerships with area companies to supplement instruction trying to sidestep the digital access gap. One unique illustration of this approach comes from Los Angeles's Unified School District, where the district is partnering with the

public broadcasting station, PBS SoCal/KCET, to provide instructional and extracurricular programming via television to students this fall. Utilizing three separate channels identified by developmental age, the approach also serves to comply with district's public health mandates concerning large gatherings with spectators (Kohli & Blume, 2020). While television as the platform is less than cutting edge considering the potential of internet-based learning applications, the approach provides an immediate solution for the inequities in access and is adaptable to be employed alongside print materials and online instructional options (Kohli & Blume, 2020; Institute of Education Sciences, 2020).

Other districts attempted to tackle the digital divide in-district while pursuing federal programming for funding broader efforts. For instance, in South Bend, Indiana, where 15 percent of students lack internet access, the district joined others like it (i.e., Austin Independent School District, Charleston County School district to name a few) by equipping their school busses with Wi-Fi. Broadening an initiative that the school board started pre-Corona virus, the busses are parked in neighborhoods where families experience the digital divide most significantly (ABC News, 2020), supporting the students living in the closest proximity and the students mobile enough to get to the locations. While not a complete solution, the district, to date, continues to pursue additional funding through the E-rate federal program so that more busses can be equipped with Wi-Fi and reach more students.

Not surprisingly, increasing access to digital technology for students and families has relied on a variety of funding sources. One such source has been internet aind wireless providers, mostly in the form of short-term and piecemeal solutions. In the immediate aftermath of the outbreak, Comcast and AT&T offered free Wi-Fi, and Charter offered free broadband to families with students. In terms of data, T Mobile and Comcast offered additional smartphone data, while Verizon provided economic relief in the form of moratoriums on late fees and disconnections (Associated Press, 2020).

A second funding source for improving access to digital technology has been government-funded and nonprofit programs. Lifeline, a federal government program, brings higher cost broadband services to low-income families if they qualify for programs such as Medicaid, Supplemental Nutrition Assistance Program (SNAP), Supplemental Security Income (SSI), Headstart, the Food Distribution Program on Indian Reservations and others (Reviews.com, 2020). Moreover, nonprofits like EveryoneOn, partnering with Frontier, offered affordable and accessible broadband, while another nonprofit, Human I-T reused donated technology and offered discounted internet connection for those who qualify for federal assistance programs (i.e., SNAP) (Reviews.com, 2020).

While these programs aid with connecting low-income people (of color) to important digital resources, the reality is that it may still not be adequate to re-engage struggling students when schools are closed and

truly close the homework gap, especially when coupled with other substantive barriers that over-aged students and their families are facing. In a recent advocacy paper, the United Nations Educational, Scientific and Cultural Organization (2020) estimated a 3% increase in secondary students not returning to education institutions in 2020 due to COVID-19 using an estimation model covering 180 countries, citing socioeconomic barriers, including the need to generate income, increased familial responsibilities, and fear of the virus. Not surprisingly, students of color and students who live in poverty are hit the hardest by school closures, with estimates ranging from a loss of ten months of learning for Black students (Dorn et al., 2020) to a full year of learning for impoverished students (Pensiero et al. 2020; Dorn et al., 2020) who disproportionately experience a lack of teaching and program quality associated with remote instruction (Toth, 2020; Dorn et al., 2020). While the reasons for the "lost COVID-19 generation" (Toth, 2020, p. 10) are numerous and exceedingly complex, the fact remains that barriers to learning and engagement for students placed at risk for dropout continue to exist, and seem to be magnified, according to estimates, when schools are bound to remote instruction. In the next section, I look at the degree to which attendance intervention and support have been adapted during school closures and remote instruction.

Attendance Collection and Intervention: More than Just a Ubiquitous Practice

Although attendance practices during the pandemic have received little research attention to date, attendance collection represents one of the basic school processes that had to be quickly adapted following the initial school closures. As widely used attendance practices such as routinized calls, letters and emails to parents, as well as discussions and meetings about student and chronic absenteeism were quickly realized to be ill adapted to school systems that were closed. These practices, not to mention related supports, were largely halted after schools closed due to COVID-19.

Moreover, changes in leadership practices concerning attendance and absenteeism were not limited to less precise and regular collection and subsequent communication. How districts responded to and intervened with chronically absent students also changed. Prior to the COV-ID-19 closures, accountability around absenteeism had increased in importance in recent years, fueled by the passage of Every Student Succeeds Act of 2015 which allowed for a broader scope for accountability systems that could include absenteeism as a key component (Rafa, 2017; Bauer et al., 2018). Adopted by thirty-six states and the District of Columbia as of 2020 as a school quality or student success indicator (Attendance Works, 2020), ESSA required states to collect and report absenteeism data on state report cards (Attendance Works, 2020). Districts were also required to develop interventions to improve attendance which typically entailed fam-

ily engagement and student mentoring components designed to increase the schoolwide attendance rate. Unfortunately, much of this intervention work was ill adapted to schools that were closed for the pandemic.

Well established to be a problem disproportionately experienced by low income students and students of color, peaking during a student's last year of school (Hough, 2019; Balfanz & Byrnes, 2012), chronic absenteeism conventionally requires a host of intervention choices from schools including engagement with families, incentives for students, case management services, peer mentoring, schoolwide positive behavior systems, and in the most severe absentee cases, referral to applicable community agencies including Mobile Response Services and Child Protective Services. In these cases, referrals such as these can yield additional intervention and support services for students and families struggling with compliance with attending school. Moreover, agencies who receive reports from sources outside the school rely on background information provided by school officials to monitor existing cases. Without adapted school processes that consider attendance, absenteeism, and engagement during school closures, students may be missing critical services and supports from agencies, in addition to those from schools. In the next section, I analyze the turbulence experienced by historically underserved students nearing the end of their school journeys by assessing the three drivers of turbulence, followed by the general level of turbulence.

Analyzing the Degree of Turbulence

This turbulent moment in school systems while clearly a crisis, can also be understood as an opportunity to advance toward more equitable outcomes (Gross, 2020). The turbulence gauge, a simple tool to identify degree of turbulence in any situation, is utilized to analyze the cascading events, positionality, stability, and finally, the general level of turbulence. This tool can be adapted to specific situation or case from a specific school community or can be used to generally assess the turbulence of a widespread issue, as is the case in this paper.

In considering positionality, school and district leaders are tasked with assessing if people are seeing the situation in shared or factious ways. Examples of such questions can include: Have teachers been made aware of which students lack adequate digital resources? Has the district provided any support in how to use new learning management systems? What resources have been provided to over-aged students who perceive the utility in working as opposed to engaging in distance learning?

Cascading entails looking at the forces that are elevating or reducing the feeling of turbulence experienced by students struggling to attain graduation. Here, leaders may find it useful to assess how prior supports that have shown to help to prevent dropout, such as mentoring, counseling, individualized instructional support, and credit recovery (Rumson & Milsn, 2017; Chappell et al., 2015; Atwell et al., 2019) have been adapted

to – or stripped away from – students at risk for dropout, and these events may drive up the turbulence that such students feel, above and beyond what may be happening in their own families and communities due to the pandemic (e.g., closures of outside agencies servicing families, job loss, food insecurity, homelessness).

Lastly, stability relates to the belief of stability permeated through the school community. Questions that guide the analysis of stability include: What has the community shared about how they are perceiving school closing or reopening in an adjusted way? What processes related to accountability measures like high school exit exams or attendance policies have changed and how has this been shared with students and parents disproportionately impacted by such measures?

While the answers to these questions will certainly vary by school community and may be related to factors such as the socioeconomic need of the school or district, percentage of mobility and absenteeism among students, and teacher and principal effectiveness, a general analysis of the degree of turbulence for marginalized students for dropout, based on Gross's (2013; 2019) model of the turbulence gauge is shown in Table 1.

Table 1Turbulence Gauge for Students Placed at Risk for Dropout During the Pandemic

Degree of turbulence	General Definition	Turbulence as applied to students placed at risk for dropout or pushout
Light	Ongoing issue, with minimal dis- ruption to normal environment	
Moderate	Widespread awareness of the issues and origins	
Severe	Fear for entire enterprise, a feeling of cirsis	Communication with and from students at-risk for dropping out may be minimal or non-existent. Students may be minimally performing in classes, experiencing increased levels of absenteeism. Parents of disengaged students may be expressing feelings of being overwhelmed, confused and angry at what they perceive as teacher and leadership's expectations.
Extreme	Structural damage to normal operation likely	

Recommendations

Deeply committed to providing tools for educational leaders to gain perspective in trying situations, Gross (2019) provided the turbulence gauge, a simple table that can be applied to multiple situations across a setting, and optimally completed from a variety of stakeholder perspectives. The tool allows leaders to be both collaborative and reflective in the throes of sweeping turbulence and change. While the tool can be applied to systems experiencing problems in complex, interrelated ways, as is the case with the emergence of COVID-19 on school districts, the tool can also be applied to specific components of larger problems as well.

Thus, one recommendation is for educational leaders to use the turbulence gauge to advance an equitable understanding of engagement, attendance, and absenteeism in hybrid or remote programs for students atrisk for dropping out and other vulnerable students (Gross, 2019). This review of the literature on disparities in quality of remote instruction for marginalized students (Toth, 2020) and the subsequent student disengagement and absenteeism during the pandemic (Toth, 2020; Dorn et al., 2020; Pensiero et al, 2020) offers support for rethinking existing programming with an increased emphasis on student disengagement and absenteeism for a variety of stakeholders on the frontlines of chronic absenteeism: teachers, parents, and the students themselves. For central office and schoolbased leaders, asking critical questions presents an opportunity to reformulate what is currently in place for marginalized students with the highest rates of chronic absenteeism as compared with their younger counterparts (Balfanz & Byrnes, 2012). Key questions can be used to evaluate the turbulence experienced by marginalized students nearing the end of their academic journeys. Considering what the expectations were just a few short months ago – when the pandemic began and schools first closed - how are different groups of students experiencing the shift from asynchronous to synchronous instruction? What are the students' feelings of self-efficacy as it relates to engaging in online learning? The families? Certainly, ubiquitous notions of what it means to attend, be absent from, and engage in school have changed so substantively even from the start of the pandemic to now (Lake, 2020). Hence, a closer look into what different stakeholder groups' experiences and beliefs about attending and engaging with school, using the turbulence gauge, is warranted.

A second recommendation is for educational leaders to gain a nuanced understanding of how the current pandemic shifts or adds to what are widely known to be high school dropout risk factors (Atwell et al., 2019; Rumsey & Milson, 2017; Chappell et al., 2015; Hammond et al., 2007) and the way these risk factors cascade and combine to create higher levels of dropout risk for the students experiencing them (Rumsey & Milson, 2017; Hammond et al., 2007). With attention to the pandemic exerting an influence over an array of risk factors in the individual, family, and

school domains, there remains the need to reformulate existing dropout prevention programming to address the critical needs of students nearing the end of their academic journeys. This may entail district and school leaders to better personalize programs for students (Chappell et al., 2015) that can still achieve behavioral support and engagement with family during the pandemic, key strategies for dropout prevention (Chappell et al., 2015; Hammond et al., 2007). Therefore, questions to be considered using the turbulence gauge include: Which neighborhoods are disproportionately experiencing additional trauma, a well-established risk factor for dropout (Rumsey & Milson, 2017) related to COVID-19? What student groups are inequitably shouldering the burden of the digital divide which relates not only to student engagement and attendance but also to access to medical care (Bakhtiar et al., 2020) and mental health care (Liang et al., 2020)? What do the district's existing divides look like broken down by grade level? As Krueger (2015) notes, an assessment regarding digital inequity experienced by students is ironically simple to implement and incurs no additional cost to educational leaders but has the potential to yield so much valuable insight into parent and students lived experiences.

Certainly, the pandemic has shown school systems to be ill-adapted to providing education equitably during this turbulent time, a bleak reverberation of what has come before COVID-19. A final recommendation relates to the supports needed for disengaged students nearing the need of their high school journeys during a school year where systems are relying on hybrid or remote delivery of instruction. As is the case during a conventional school year, students placed at risk for dropping out need specific supports that address the stop-and-start nature that characterize those final months. In a pandemic, these students and their families are even harder to engage. School leaders need a plan for how to address common barriers to attaining graduation for at-risk students nearing the end that considers the hybrid, remote, and shifting nature of the programs with which students are contending, Such considerations include students maximizing time during a school closure to work, taking care of familial responsibilities, and students and their families struggling with mental health and wellness. It may require different ways to communicate with families about attendance, financial incentives for to boost attendance, and more personnel dedicated to case management to address some of the cascading events in the lives of historically underserved students at risk for dropout during a pandemic.

Conclusion

In severely turbulent times, leaders have a choice to utilize an increased awareness about what their students, families, and communities are experiencing to strategically improve the ways they engage with atrisk students or to muddle through without a strategy on how to gain per-

spective from the turbulence. Grappling with the contextual forces, drivers, and level of turbulence that the COVID-19 pandemic has ushered in for disengaged students affords school leaders the opportunity to gain understanding of our students' unique, complex barriers to engaging with school. Indeed, the school closure has exacted a host of tolls on high school students that are placed at risk for dropout that relate to learning, attendance, attainment, and other quality of life outcomes. While some leadership practices have yielded important gains in addressing the digital divide and other areas of need, more work is clearly needed to address the specialized needs of older students reaching the end of their high school journeys during this pandemic. Lastly, student absenteeism continues to be a problem with far-reaching implications, and perhaps especially during times of school closures. Absent an effort to reconceptualize intervention efforts for student absenteeism that considers what disengagement and absenteeism means once schools are closed, educational leaders are certainly missing an important component to the addressing the personal, social, and academic problems of disengaged students. While much of the portrait of what this pandemic will leave behind in its wake will be fleshed out in the months and years to come, it is imperative that research and policy attention include those students that are nearing departure, often too quickly and quietly, to alter their trajectories.

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