The COVID-19 pandemic is the latest and by far the most severe of several pandemics (e.g., HIV, SARS, MERS, Ebola) global society has experienced in recent decades. COVID-19 has dramatically affected all sectors of education and society, including teaching and learning; how schools are structured; student, teacher, and parent/family relationships; and has thrust eLearning front and center in all aspects of education. In shuttering in-person learning at many schools and colleges and with students “sheltering in place,” COVID-19 transformed, at least in the short term, the trajectory of the decades long evolution of online and distance learning. As teachers scrambled to develop their classes online and schools struggled to make technology more widely available, families adjusted to new realities with children at home. The pandemic has significantly impacted work, leisure, and family life, not to mention jobs, careers, social organization, governance, international relations, and the global economy. The timing and magnitude of these changes are open to speculation, but it appears that at some level they will be long lasting, even as the duration of COVID-19 and the likelihood of future pandemics on our complex, highly interactive Earth society are unclear.

Within the above wider context this issue of the journal is focused more narrowly on COVID-19 implications, outcomes, lessons learned, new best practices, student identity and achievement, and the teaching profession itself, especially regarding immediate issues such as these:

- new models of teaching and learning, e.g., remote, in-person, “blended”
- pandemic impacts and educational equity
- priorities and content of pre-service teacher preparation programs
- the pandemic and the future of the teaching profession
- pandemic effects and student identity
- innovations in school organization, finance, and support for students
Table of Contents

Publisher’s Issue Overview 3
Dr. Jan Fitzsimmons

COVID-19 and Educational Equity 7
Dr. Stephanie Bernatoit

Lessons from the Pandemic 10
Kijuana Boulrece

The Importance of Rejecting Deficit Thinking 12
Dr. Michael Dieter

Chronic Absenteeism: Transportation as an Equitable Intervention 15
Mallori Sage

Identity Development: Girls and Students of Color in High School Physics 27
Marianna Ruggerio

No Matter the Modality: Science is a Verb 32
Dr. Erin M. Evans

Special Education Teachers Share Their Crisis Teaching Experiences 41
Gina Braun, Samantha Walte, Christopher Emerling, and Christerralyn Brown

The University of St. Francis Commitment to Equity and Social Justice 56
Dr. John Gambro

Fresh Innovations, Systems Reimagining, & New Opportunities – But Who Will Teach? 59
Pallavi Abraham

Call for Articles, Columns, and Reviews for Upcoming Journal Issues 63
Editor
Voices for Educational Equity
Publisher’s Column
Dr. Jan Fitzsimmons

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With this issue the Journal is pleased to announce a new name, Voices for Educational Equity, and with it, a broadening of its mission to become more national and international in scope with a newly established editorial board, an invitation to scholars and scholar practitioners to submit articles that will be refereed, and expanded content to include book and media reviews along with our established format of scholarly articles and opinion columns. The Journal’s new name, Voices for Educational Equity, better reflects contemporary educational priorities, including growing societal concerns about the impacts of inequity. The Journal will continue to highlight scholarly research and innovative ideas and practices on both emerging and longstanding issues as well as to continue promoting productive dialogue by engaging the perspectives of all stakeholders.

First meet our Editorial Board. Dr. Erica Davila comes to us from Lewis University where she directs the Educational Leadership Program. With a Ph.D. from the University of Illinois-Urbana Champaign, Erica’s research interests include Critical Race Theory in Education, Latina Studies and Critical Studies in Mathematics. Professor Annie Bado is the Master of Urban Education Program at Rockford University. A PK-20 teacher/professor and district and regional administrator, Annie is co-founder of Global Solutions Outreach, Inc. and an international speaker. She is dedicated to equity and culturally responsive teaching. Finally, our Editor in Chief, Jerry Berberet, Ph.D., has edited Voices for Educational Equity (formerly Success in High-Need Schools) since the journal was founded in 2003. He earned a doctorate in American History and began his career as a history professor at the State University of New York-Plattsburgh, where he later directed the SUNY environmental studies institute. After serving as dean of liberal arts at Willamette University in Oregon and vice president of academic affairs at North Central College in Illinois, he became vice president at the Associated Colleges of Illinois and later the founding executive director of the Associated New American Colleges. He has edited two books and a number of conference reports and proceedings.

As we launch the new name and mission for the Journal, this issue focuses on COVID-19 and issues of equity and also shares glimmers of reimagining education built on lessons learned. We see through multiple lenses the concerns, challenges, and failings regarding equity of opportunity and access that existed pre-COVID from PK-12 through higher education and how they have been exacerbated by the new pandemic.
COVID-19 and Educational Equity by Dr. Stephanie Bernoteit, examines “the equity imperative facing our postsecondary institutions” in teacher education and beyond. She raises the question how do we provide displaced working adults, people of color and underserved populations with equitable opportunity and access to new postsecondary education in cost effective and convenient ways in order for them to take on new, productive and meaningful roles that allow them to earn a living wage and advance life for both themselves and their families?

It is a fact, COVID-19 has ushered in experiences of loss, anxiety, frustration, isolation and racism. But Boulrece suggests in Lessons from The Pandemic that from those deeply felt experiences, lessons have been learned that require both personal and collective resolve. This article queries, “What has the Pandemic taught us?” “What has the Pandemic taught you?”

Similarly, Dieter in The Importance of Rejecting Deficit Thinking, focuses on the immense learning in which children have engaged as they learned to navigate the extraordinary changes and toxic effects COVID-19 thrust upon them with little warning. Dieter cautions that those toxic effects include a tremendous drain on mental health and well-being and that we must be careful not to saddle young people growing up in the shadows of COVID-19 with a label that stigmatizes them as somehow less than their predecessors and in so doing additionally burdens their well-being. Rather, he asks how we might nurture and support our children’s overall wellness and envision “a new normal” better than what was once thought to be “normal” by rejecting DEFICIT THINKING!

While COVID-19 has been a magnifying lens to many inequities, in Chronic Absenteeism: Transportation as an Equitable Intervention. Sage notes, as we know, that many of these “inequities were here before COVID-19.” Sage further argues that the “turbulence” of the times surrounding this pandemic created a perfect storm that illuminated these issues, but what will happen when the turbulence slows? Sage encourages us to take “collaborative action that intentionally removes barriers and empowers students to rise to their fullest potential.” In this article she explores chronic absenteeism, its correlation to academic success and the positive impact busing could have.

In Identity Development Among Girls and Students of Color in High School Physics, the author points to systemic inequities in STEM that existed before the pandemic and were exacerbated by the pandemic as well. And while the author illuminates the challenges brought to the classroom, she focuses on two key areas that have not had as much intentional air time: belonging and STEM identity. The author goes on to share a brief survey study that offers interesting insights to the possibilities for creating mirrors and windows for examining systemic inequities during a pandemic.
Just as PK-12 students were unexpectedly immersed in a different way of learning with the Pandemic, so, too, were preservice teacher candidates in colleges and universities “thrust into a modality for teaching that had not been fully utilized in the past if ever” reports Evans. In *No Matter the Modality, Science Is a Verb*, Evans reports how COVID-19 threw PK-12 teachers into “survival mode” and that in that mode, “many of the best practices for delivery of content went by the wayside.” Evans journals the move to ensure a deep understanding and practice of “science is a verb” in teacher preparation no matter the modality, and in so doing she reimagines science instruction in the elementary classroom.

In *The University of St. Francis Commitment to Equity and Social Justice*, Dean Gambro discusses the impact of COVID-19 on the world around us as day after day we learned of great and increasing suffering. The University, explains Gambro, is committed to four core values. Given the great suffering, Gambro’s College of Education committed to a year-long self-study and actualization around compassion. This led to meaningful action around racial equity and social justice that will impact faculty and candidates for years to come.

Pallavi Abraham’s *Fresh Innovations, Systems Reimagining and New Opportunities...But Who Will Teach?* acknowledges the issues, work and persistent challenges to equity in Chicago from 2008 to 2020 and then simply adds… “And then the pandemic happened.” That simple phrase strikes the equity chord like a sledge-hammer and one knows that without a doubt, whatever was problematic before is now doubly daunting! While Abraham then gives a shout out to innovative solutions, new technology and targeted support, she reminds us that while all of these things are important to student learning, teachers are still the most important factor driving student learning. “And,” says Abraham, “we are losing them at an alarming rate.” Abraham encourages us to consider and advance the benefits of teacher leadership to address equity and COVID-19 in education, but perhaps as important, teacher shortage.

Finally, this issue of the journal closes with the Call for contributions to our upcoming two issues on the themes of “Walking the Talk” and “Educational Partnerships.” The Call provides guidelines for submitting scholarly articles, opinion columns, and book and media reviews, along with deadlines for contributions to each upcoming issue.

Thank you for perusing our Journal; I hope you find the articles to be profoundly thought provoking, as well as a call to take intentional collective and individual action for the bettering of all of our children and the world in which they learn and grow. Please share any and all of the articles widely and think about contributing your own thoughts to a future issue of *Voices for Educational Equity*. Together, we have much to accomplish and working collaboratively, working persistently, and sharing our learnings, we will be able to make a profound and enduring difference.
Jan Fitzsimmons, Ph. D. has taught and administered programs at North Central College (NCC) since 1985. A former teacher, curriculum coordinator and principal, she is the founder and director of the NCC Junior/Senior Scholars Program, North Central College Promise Teacher Corps and the Urban Education Laboratory. Annually, the Junior/Senior Scholars program at North Central College provides direct service to 200 diverse students in grades K-12 from the under-resourced communities of East Aurora and Chicago’s North Lawndale. Additionally, the programs serve many more through one time all-school and family events in the same communities. She currently is the Founding Executive Director of the Center for Success for High Need Schools, Inc. The Center runs a statewide network of college and university partnerships to recruit, prepare and retain teachers and leaders for high-need schools and to support beginning teachers in these schools: www.center4success.com. Jan has given numerous state and national presentations on preparing teachers to succeed in high need schools, and assuring opportunity and access for historically underrepresented students to develop talents to their fullest intellectual, social and creative potential.
COVID-19 and Educational Equity
by Stephanie Bernoteit

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COVID-19 has underscored the equity imperative facing our postsecondary institutions. In the early days and weeks of the pandemic, colleges and universities across Illinois responded in significant ways to rapidly transition to remote learning and provide wrap-around assistance for students in the form of emergency grants to cover basic living needs, access to the Internet and technology, as well as supports for academic learning and overall health and well-being. Institutions of higher education also provided critical assistance to local communities and the state through donation of PPE supplies to area health care providers, use of their labs to create capacity for testing, training for contact tracers, and expertise to support modeling to inform agencies and policymakers. The contributions of Illinois higher education have extended to the nation and the world through groundbreaking innovations in testing, treatment, and vaccine development. This work, and more, was done with recognition that the global pandemic had, and continues to have, disparate impacts on persons of color and low-income populations.

Evidence of these disparate impacts as they relate to education and work are sobering. According to Jobs for the Future, of the 36 million Americans who have some college but no degree, approximately 28 million canceled their educational plans during the pandemic. A disproportionate number of these individuals are women, low-income, and persons from Black, and Latino or Hispanic populations. These are also the people who were most impacted by the Great Recession just over ten years ago. Anthony Carnevale with Georgetown University’s Center on Education and the Workforce reports, “47% of adults experienced a loss of employment income in their household between March 13, 2020 and February 2021.” Individuals – particularly women - from low-income households and who held jobs in sectors such as food service and hospitality were more likely to be impacted.

Trends evident before the pandemic about the changing nature of work and the need for individuals to up- and re-skill regularly over the course of their lifetimes have been accelerated. Jobs and core functions that have been automated in the past year are likely to remain so, meaning that the path to a family-sustaining economic future is increasingly tied to higher education. A critical part of the recovery will involve providing displaced working adults, persons of color, and other underserved populations with access to postsecondary learning for new jobs. According to national surveys conducted by Strada, these individuals want to believe in the value of postsecondary education, but they need to know how their learning will directly connect to employment opportunities. They are also concerned about the costs involved and their ability to successfully negotiate the higher education system.
Institutions of higher education have new challenges and opportunities as they navigate this inflection point. In Illinois, there are over 1.7 million adults with some college and no degree. Of these individuals, over 18% are African American, and 11% are LatinX. What are their on-ramps to higher education, and how can these on-ramps authentically validate the learning they have gained in their places of employment? How might this validation of prior learning inform the development of a more personalized path to completion? What shorter-term credentials of value to employers can be embedded within and on top of degree programs so that these adults have options to seek employment? What educational delivery models might allow individuals to progress more quickly where they demonstrate competence and focus time in areas that require more work to master, all while having the benefits of peer learning in cohorts and mentoring by faculty? What are the integrated, just-in-time supports of value for these students? What other flexibilities can be built in through HyFlex approaches, subscription pricing, and many more choices about when to start a program of study?

Additionally, there has been a steady decline over time in the enrollment of African American high school graduates in Illinois colleges and universities – a drop of over 19% from 2013 to 2019. Across all sectors of Illinois higher education, there are equity issues in the postsecondary retention and completion rates of African American and LatinX students who do enroll. Nationwide and in Illinois, these trends were exacerbated by conditions associated with the pandemic. Currently enrolled students faced additional pressures through inadequate access to the Internet and technology, job loss, and challenges finding time and space to study. Recent high school graduates experienced similar issues coupled with disruption to traditional forms of support in helping them make postsecondary plans. What opportunities exist to grow access to high-quality, early college experiences? What introductory experiences help students find a sense of community and belonging? How can institutions of higher education become even more nimble in assessing and providing targeted support for specific areas of academic need such that students can progress? What indicators can help colleges and universities identify students at risk of not staying on track toward degree completion, and what timely interventions can be provided? How can we ensure equitable access to high-impact practices such as undergraduate research, internships, and study abroad? How can institutions plan for and monitor their own progress in supporting equity in access, retention, and completion for historically underserved students?

The Illinois Board of Higher Education, working in concert with the Illinois Community College Board and the Illinois Student Assistance Commission, is undertaking a strategic planning process to address these questions and chart a path forward for Illinois higher education. Embarking on this process during the pandemic reflects deliberate awareness of the concurrent and legacy equity issues that must be resolved. The equity imperative is central to this strategic planning process. Planning will continue through Spring 2021 with ongoing opportunities for stakeholder input. However, a strategic plan for Illinois higher education is really just the beginning. As we
move forward, achieving equitable outcomes will require the collective thought leadership, transformative action, and collaboration of faculty, staff, and administrators at all our institutions. The contributions of authors in this issue provide important insights for this path forward.

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Lessons from the Pandemic  
by Kijuana Boulrece

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What has the Pandemic Taught Us? The COVID-19 pandemic appeared as an invasion launched from a foreign entity that engulfed the seven continents and its inhabitants and seemingly threw the world into a chaos it had long forgotten—the so-called “Spanish Flu” pandemic of a hundred years ago in the aftermath of World War I. Uncertainties rang throughout the air as people cast seeds of despair. Covid-19 was the “Outbreak” that sent shockwaves through our economy with the United States leading the world in confirmed cases. It exacerbated the disparities among race, health, education, and socio-economic status, in the process once again revealing the impacts of systemic racism. To date, more than 500,00 deaths have occurred in America, a disproportionate rate affecting the elderly and Black and brown communities. The disparities are dismal. Covid-19 revealed that it was not discriminatory. It needed only one human host to inflict pain on the world. We have all felt the pain of loss, anxiety, isolation, and depression due to the Pandemic. In addition the world has experienced the pain and trauma of racial injustice with the death of George Floyd and other Black men, women, and children died under the knees and at hands of aggressive American policing.

Responses to the pandemic have have been paradoxical, a bittersweet duality—on the one hand deep reflections and remarkable resilience igniting a clarion call for racial justice and equity that has resonated widely. On the other our society has experienced significant COVID denial that appears to have been politically motivated, along with seemingly related violent White supremacy and racial intolerance against Black, brown, and Asian Americans. Yet, it is tempting to hope in the wake of the recent conviction of Derek Chauvin and the equity policies of the Biden Administration the dawn of a new era of compassion and empathy, an altruistic sociological construct overcoming the deep divisions of recent years and bring a greater communal sense at the core of our society.

The Pandemic has it positives. Some have named it “The Big Sit Down.” During the mandated quarantine, it has made us uncomfortable, providing time to reflect, to re-boot, to re-examine our priorities, to gain new insights, to innovate, i.e. to make changes. Has it built an awareness that allows you to look at life differently, perhaps with more gratitude? Think about how may have gained strength from the pandemic.

What I know for certain concerns the impact of the pandemic on families and education. In some families children are thriving and being supported outside the classroom, families strengthened through pandemic enforced connections between parents and children and among children.
These families have discovered the gift of increased time together to deepen connections, to better delegate responsibilities, to foster growth, and to come to understand human flexibility. For other families, however, the pandemic has exacerbated difficulties in balancing work and job loss, teaching their children, and managing mental wellness, while often feeling constrained and overwhelmed with pandemic-imposed family scheduling and the desire for some semblance of normalcy to return.

The human spirit is resilient, sometimes fractured facing the contingencies of life, but not easily broken. According to Abraham Maslow, a humanistic theorist, everyone possesses an internal drive to achieve their fullest potential—Self Actualization. This entails fulfilling the lowest of needs such as physiological well being, safety, sense of belonging, and love. These human drives help us to understand why we persist in the face of adversity.

The Pandemic does not define us, but it helps to reveal who we truly are. In the face of adversity our strengths have been revealed, as well as our fragilities. The Pandemic put on display our hidden fears, forcing a deeper awareness of our human identity. It forced us to grapple with existential survival matters and, often, to respond differently to every day matters than we did in the past. It threatened our physical and emotional security. It has caused us to clarify our values. Many of us have begun to take greater personal ownership in matters of safety and emotional stability. This has forged a sense of reflection, gratitude, and perspective in embracing those in our lives while giving hope for the future. This may be a silver lining from the Pandemic worth our reflections as we transition to “normalcy.”
The Importance of Rejecting Deficit Thinking
by Michael Dieter

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Introduction
In Huck’s Raft, Steven Mintz (2004) makes a rather bold claim - that the United States is not a particularly child friendly place. One of the ways in which Mintz’s claim can be seen is in the discourse surrounding student learning during the COVID-19 pandemic, and the pressure that has been placed on both teachers and students to prevent long-term losses due to the disruption in traditional learning. It is in the narrative of decline and fear of “learning-loss” throughout the pandemic that we can see a glimmer of Mintz’s argument, as well as the primary obstacle we must confront both now and in the post-pandemic world to ensure students receive a humane education that prioritizes their strengths over perceived deficits.

Fear of Decline Emerges
Unfortunately, it did not take long into the COVID-19 pandemic and the shift to remote instruction for discourse surrounding learning-loss and even lost wages over a student’s lifetime to emerge. One such example is the Washington Post’s March 27th 2020 Perspective titled “Homeschooling during the coronavirus will set back a generation of children” (Huffman, 2020). Written just a few weeks into the wide-ranging disruption to schooling, this piece is emblematic of the panic that emerged as “learning-loss” entered the American vernacular. A September 2020 report from Hanushek and Woessmann (2020) added to the anxiety contending that American students could potentially lose more than 3% of their lifetime earnings due to learning loss from the pandemic. With statistics like these, it is not difficult to see why so many educators have focused on the narrative of learning loss and in a difficult moment attempted to keep things as close to normal as possible. In focusing on learning loss, many educators are missing out on opportunities to meet their students where they are in navigating the pandemic and events of the last year.

Student Mental Health and the Pandemic
While coping with the switch to online learning that separated them from friends, family and other support systems, students also witnessed the continued targeting of people of color by police and the storming of the Capitol in Washington D.C. by domestic terrorists following the 2020 presidential election. Undoubtedly, those of us who have been working with students dur-
ing these times have seen their fear and confusion as students react to a seemingly endless bombardment of events around them. The effects of these events on students have been exacerbated due to lack of ready access to their support systems in the form of peers and teachers. The mental health toll that the pandemic and other events of this remote school year have had on students is alarming and should give all of us who have students entrusted to our care pause as we attempt to plan for a return to normal.

The impact of the pandemic on student mental health could be felt almost immediately through examining emergency room visits for American youth. From April to October 2020, the number of emergency department visits due to mental health concerns increased 24% for children aged 5-11 and 31% for children aged 12-17 compared to the same period in 2019 (Leeb et al., 2020). This staggering jump suggests that our students are struggling and are in need of our support. Currently suicide is the second leading cause of death for young people aged 15-24 (Becker, 2021). It is difficult to see how we as educators can be both the force putting pressure on students to “catch-up” as we attempt to move back to normal and also be the people they can turn to in their time of need as they navigate these uncertain times.

Gloria Ladson-Billings, in speaking about the dangers in using the phrase “at-risk” to describe youth notes, “We cannot saddle these babies at kindergarten with this label and expect them to proudly wear it for the next 13 years, and think, ‘Well, gee, I don't know why they aren't doing good’” (Ladson-Billings, 2017, para. 5). Although Ladson-Billings was not speaking of the group that has been labeled by some as the COVID-generation, her words ring true today. As noted by Bromley (2020), “Any talk of ‘loss’ is to adopt a deficit model” (para. 2). If educators focus on what their students are unable to do, instead of the skills they bring to the classroom on a daily basis, it is likely that school will continue to be a major stressor on student mental health and students will not be able to perform up to their fullest potential.

**Conclusion**

As the United States moves towards a new normal it is imperative that we consider what normal looks like in the classroom. As noted by Bromley (2020), “If we talk to pupils about their ‘lost learning,’ about their ‘lack of progress,’ and about ‘gaps’ in their knowledge – as well as about the devastating consequences of the pandemic – we only serve to heighten anxieties and thus delay their return to ‘normality’ and stunt their future progress” (para. 3). While it’s difficult to envision exactly what teaching in a post-COVID or a “new normal” might look like, one thing is certain- in order to put our students in position to succeed in the classroom we need to meet them where they are and reject the thinking that labels them as deficient. The strengths of our students have been on display during the pandemic as they have been able to quickly learn and integrate new technologies side-by-side with their teachers. Failure to combat the deficit thinking surrounding students during the COVID-19 pandemic will ensure a return to what was, as warned by Ladson-Billings, instead of ushering in a new era of what could be.
References


Chronic Absenteeism: Transportation as an Equitable Intervention
by Mallori Sage

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**Abstract**
Chronic absenteeism and attendance issues plague many schools. There is a strong correlation between attendance and academic success. Therefore, it is imperative that creative and equitable interventions are put into place to help counter this growing problem. This text explores the idea of providing bus transportation to elementary students which would not typically qualify as an intervention to absenteeism. A short-term research study was conducted at an urban-emergent elementary school putting this idea into practice. This study uses a quantitative approach to track the attendance of 90 students over a 10-week period while bus transportation was provided. The collected data was then analyzed and compared with previous data to look for correlations and outcomes. When looking at the students who struggled the most with absenteeism it was found that providing bus transportation did have a positive effect on attendance. Having access to bus transportation had the largest impact during the winter months when cold, snowy, and icy conditions made it increasingly difficult for students to get to school. This study was cut short due to the outbreak of COVID-19; however, the findings are still relevant and important. The hope is that this study will aid in the in the search for more equitable and actionable intervention methods.

**Introduction**
In this era of COVID-19 many inequities have been brought to light. However, it is important to note that these inequities have been present long before the COVID pandemic. They will sadly continue if intentional and collaborative action is not taken. The turbulent forces of 2020 have provided a unique opportunity to seriously examine the systems and structures in place and use an equitable lens to make necessary changes. The intention of this study is to do just that—to be one of many seeking innovative solutions that will lead to removing barriers and empowering all students to rise to their fullest potential.

**Statement of Problem**
Chronic absenteeism is a rampant issue in our schools across the country (Attendance Works, 2017; Bruner et al., 2011; Gottfried & Hutt, 2019; Hawkins, 2015; Sugru, 2016). Chronic absenteeism is defined as a student missing ten percent or more of the academic year for excused or
unexcused reasons (Hawkins, 2015). Attendance in school is critical for students’ educational and social-emotional well-being. Increasing the level of attendance should be at the forefront of conversations about improving our nation’s schools. There is ample research showing the correlation between attendance and student achievement (Hancock et al., 2018; London et al., 2016; Morrisey et al., 2014; Sugru, 2016). There is some research that concludes with suggestions for intervention (Braurer et al., 2018; Attendance Works, n.d.; Sheldon, 2004; Wallace & Epstein, 2008). However, studies showing direct data outcomes for specific interventions are limited. This study tracks the impact of providing transportation as an intervention on attendance and chronic absenteeism. This intervention was selected because research shows that students not having reliable transportation is one key factor in students missing school (Gottfriend, 2019; Wallace, 2018).

**Importance of Study**

Chronic absenteeism starts as early as kindergarten. The earlier it starts, the more likely the trend will continue (Bruner et al., 2011). That is why it is critical to build the habit of good attendance at the elementary level. Large urban and urban-emergent districts are especially plagued with chronic absenteeism and low test scores. Chronic absenteeism is now being tracked for districts across the country. In recent years, Illinois has added chronic absenteeism rates to the Illinois School Report Card. As of the 2018-2019 school year, the state chronic absenteeism rate was 17%. The district average for the location of this study was 35%. The elementary school, where the study takes place, has an average of 29% (Illinois Report Card 2018-2019, 2019). Although research clearly shows the correlation between attendance and student’s success rates, far less data exists to provide actionable and tested interventions to help (Bruner et al., 2011). One possible intervention is transportation. Illinois state policy states that students who live 1.5 miles or farther away from their school are eligible for bus transportation (Illinois General Assembly, n.d.). Students who live within that 1.5 mile radius do not receive bussing. Busy streets, cold weather, dangerous neighborhoods, and unreliable transportation can prevent students within that zone from getting to school—especially for students at the elementary level. Therefore, the intention of this research was to determine if providing bus transportation to elementary students, living within that 1.5 mile radius, would help get students to school more consistently—that increasing the level of attendance and decreasing the rate of chronic absenteeism.

**Research Questions**

1. To what degree was students’ attendance impacted after receiving the intervention of bus transportation?
2. How did providing bus transportation impact the chronic absenteeism rate for the cohort of students receiving the bus intervention, as well as the school’s chronic absenteeism rate?
**Literature Review**

Although data clearly shows the correlation between attendance and student’s success rates, far less data exists to provide actionable and tested interventions to help. The literature agrees that chronic absenteeism is defined as a student missing 10% or more of school days with or without a documented excuse (Hawkins, 2015). Sources also agree that chronic absenteeism is a critical issue in our educational system. It is also an issue that has a clear and measurable negative impact on students (London et al., 2016). It was surprising to discover that research on chronic absenteeism has been taking place for many years, but only seems to have gained national attention in very recent years. Attendance Works put out an article in 2011 defining chronic absenteeism and provided ample quantitative data points to call attention to the issue (Bruner et al., 2011). In Illinois, it wasn’t until the 2017-2018 Illinois Report Card that chronic absenteeism rates were collected and reported (Illinois Report Card 2018-2019, 2019).

Studies show that chronic absenteeism has a negative correlation with students’ academic achievement rate: lower test scores, below grade level, and an increased likelihood of dropping out of high school before graduation (Morrissey et al., 2014). Dropping out of high school then has the potential of less employment opportunities and lower earning potential for that student. This lower earning potential can result in poverty and that cycle can continue on for future generations (London et al., 2016).

There have been many research studies conducted on the factors that lead to chronic absenteeism. Many studies have hypothesized about factors for chronic absenteeism (Gottfried et al., 2016; Morrissey et al., 2014; Sugru et al., 2016) and several have surveyed those impacted by chronic absenteeism directly for their perspective (Hancock et al., 2018; Wallace, 2018). A study done by Hutchinson and Winsler (2014) looked for a correlation between poverty level and chronic absenteeism. They were surprised to find that although chronic absenteeism rates tend to be higher in lower income districts, there is not a large correlation between poverty and attendance. The circumstances of poverty can factor into attendance but looking at the broad statistic of poverty based on Free and Reduced Lunch did not yield a statistically significant correlation (Morrissey et al., 2014). A study done by Sugure, Zuel, and LaLiberte (2016) used longitudinal data from the schools and county to disaggregate trends in factors leading to truancy and chronic absenteeism. These factors included homelessness, lack of transportation, mental health problems, school/parent of child issues, employment schedules, and poverty (Sugru et al., 2016). Each factor was unique to each family. Several research studies were conducted qualitatively by interviewing chronically absent families (Wallace, 2017; Hancock et al., 2018).

Several articles also discussed the need for early warning systems in order to more quickly and efficiently identify students who are chronically absent (Derian, 2016; Education, 2016; Attendance Works, 2017; Lara et al., 2018). This research aids in providing ideas for schools to combat absenteeism. A further innovation in overcoming chronic absenteeism is putting policies in place to help. Chronic absenteeism is not just an issue for individuals and schools; it is something the
whole community can help to remedy. One study suggested community support in the form of more sophisticated attendance tracking systems, a department in place to support principals in utilizing community resources, and government funding to help reduce chronic absenteeism (London et al., 2016). *Addressing Absenteeism: Lessons for Policy and Practice* by Gottfried and Hutt also explored the idea of utilizing policies that encourage community support and bring a collective focus to the issue of absenteeism. They also suggest ensuring “buy-in” from all the key players that interact with the student: guardian, teachers, and principals (Gottfried & Hutt, 2019). This report, along with a report by The Hamilton Project (2018), suggests zeroing in on reducing chronic absenteeism as a way to comply with the Every Student Succeeds Act (Braurer et al., 2018). Although these studies have taken different research routes and have gleaned a variety of information, one fact remains the same: chronic absenteeism is a nuanced and complex issue.

**Methodology**

This action research project relies on quantitative data previously collected by the school district and school where this study takes place. The purpose of this research is to determine the overall impact of providing bus transportation at the elementary level as an intervention for chronic absenteeism and overall attendance. This idea began in the winter 2019 when I learned that district policy states that students who live 1.5 miles away from the school are eligible for bus transportation. Students who live within that zone are not. This district level policy is based on the fact that the state of Illinois will provide funding for school districts to provide transportation beyond the 1.5 mile stipulation. Meaning, if school districts wanted to provide transportation to a smaller radius, they would have to pay the difference themselves. However, in my years working as an educator at the research site, I noticed that many students who missed school were ones who lived within that 1.5 mile zone. This realization led to a graduate studies project on hypothetical transportation policy change. That project led to discussions within the leadership team I serve on at my school and caused the building administrator to apply for and receive a grant that paid for two additional busses for students who live within the 1.5 mile radius of school. Building administration had full control over obtaining the grant, spending the funds, coordinating with the bus company, and communicating with families about this new transportation opportunity. All students in the school from .5 miles to 1.5 miles had the option of bus transportation starting in January 2020. A total of 90 students accepted. Bus routes ran from January 2020 to mid-March 2020 when school buildings were closed due to Covid-19. The origins of this research appear to be unique and its value lays in providing actionable insights in an area that has limited actionable information.

**Researcher Role and Research Site**

I am a teacher at the research site. My role as the researcher is to organize and study the quantitative data provided by the site school and school district to determine the impact of using transportation as an intervention. Data for this research project will be pulled from a large urban-
emergent school district. The data will specifically come from an elementary school that resides in a predominantly working-class neighborhood. This school enrolls approximately 600 students and includes a bilingual program. Based on the Illinois State Report Card, 72% of the student population is considered “low-income” and 9% are considered homeless. The racial/ethnic diversity of students includes Hispanic (46.2%), Black (20.3%), White (25%), Two or More Races (6.4%), Asian (1.5%), and American Indian (0.7%).

Scope of Research
This research analyzed attendance data collected from January 2019 through March of 2020. It was divided into three main time frames: January 2019-March 2019, September 2019-December 2019, and January 2020-March 2020. The research focused on two main groups—the school student population as a whole and the cohort of 90 students who received the bus intervention. The data was organized to conduct a statistical analysis and to observe trends in the data. Descriptive statistics and correlations were primary indicators used to determine the impact of bus transportation on student attendance.

Results
After a detailed statistical analysis of the attendance records, I discovered compelling results. First, when I compiled the attendance data from the three date ranges of all 90 students in the bus cohort, I did not initially see any significant differences in the overall attendance rate for the whole group. However, when looking closer it was evident that the data was being skewed. Many students who began riding the bus in January 2020 already had consistently good attendance; therefore, with access to the bus they maintained positive attendance. The newfound access to transportation helped relieve a burden for those families, but it did not impact their overall rate of attendance. After these initial findings, I dug deeper to examine those students who were most absent to school. I did this by targeting the lowest quartile of students in the cohort—those who were missing school the most—to analyze their attendance records.
When targeting the most absent students in the cohort, I was able to see a positive impact for many students. When comparing the same school year- September-December 2019 with no bus to January-March 2020 with a bus, 43% of students had a positive increase in attendance, 24% had no significant difference in their attendance, and 33% had a decrease in their attendance. This data shows that access to bus transportation made a positive impact on many students. It also shows that providing bus transportation does not work for everyone. Those students for whom the bus made no significant difference will need alternative intervention measures put in place to help increase their attendance. The students whose attendance declined with access to the bus will also need further support. There is the potential for transportation helping, but possibly there was sickness or extraneous circumstances that prevented them from utilizing the bus during the time of the study. Or perhaps they need a different intervention all together. Further conversations would be needed with those families to determine their specific needs.

When comparing the attendance from January-March 2019 with no bus to January-March 2020 with a bus, I observed an even greater impact. Of those students who were most absent at school, 63% of them had a positive increase in their attendance rate with bus transportation, 17% of them had no significant difference in attendance, and 20% had a decrease in attendance. This data shows a significant correlation between access to a bus during the winter months and attendance. During the winter months when roads are icy and the weather is cold, access to bus transportation made a large impact on student’s ability to consistently get to school. As previously noted, the bus intervention did not solve the problem for all students. However, 63% of our most absent students getting to school makes an significant difference in their lives and potential for academic success. Furthermore, it allows room to focus on the 37% of students from this group who still are not getting to school.

Overall, this data shows that access to bus transportation makes a significant impact on the attendance of many students who otherwise were not getting to school. It makes the most impact during the winter months. This data also shows that many students still need additional support.
beyond providing a bus. Further conversations are needed with those families to find out what supports they need to help get their children to school.

While analyzing growth in attendance, I was very encouraged to see the substantial impact this intervention had on some students. While comparing the overall percentage of positive growth in attendance across the date ranges, I extracted a handful of data sets that showed drastic improvement. Each of these students were missing school to the point they would be considered chronically absent. Each of them also had a significant improvement in their overall attendance rate after receiving the transportation intervention from January-March 2020. A fourth-grade student showed an 18% growth in attendance, moving from being at school 80% of the time without a bus to 98% of the time with a bus. A first-grade student showed a 27% growth in attendance, moving from being at school 53% of the time without a bus to 80% of the time with a bus. This first grade student is still missing too much school. Being at school 80% of the time would still be considered chronically absent. However, being at school 80% of the time compared to the previous 53% of the time is still a tremendous improvement. This growth can be celebrated while conversations continue with that family to discover what else they need to improve their child’s attendance rate. A third-grade student’s overall attendance rate increased 16% from 76% without a bus to 92% with a bus. A kindergarten student increased their overall attendance rate by 22%, going from 76% without a bus to 98% with a bus. This data set is particularly important because research shows that students who have attendance issues in kindergarten are likely to continue having attendance issues throughout their academic career (Bruner et al., 2011). It is important to change that trajectory early and help our students build healthy attendance habits. Lastly, a third-grade student went from being at school 61% of the time without a bus to 82% of the time with a bus. Similar to the first-grade student, this student is still missing too much school and needs further support, but the 21% increase in attendance rate is still reason to celebrate. Each of these
data sets represents individual students and the power that transportation has in getting our students to school.

The last portion of data I analyzed was the number of students who were considered chronically absent in the 2019-2020 school year. Within the cohort of ninety students who began riding the grant-funded buses in January 2020, eight of them were considered chronically absent in the fall 2019. After receiving access to a bus, that number dropped to only one student being chronically absent. When looking at the whole school, 45 students were chronically absent in the fall of
2019. After the bus program started, that number dropped to 17 students. Because not all of those students rode the grant-funded buses, it cannot be said that this program directly caused the decrease in chronic absenteeism. However, I believe we can correlate these findings. It is reasonable to infer that the grant-funded bus program helped bring the importance of attendance to the forefront for administration, staff, students, and families.

Conclusions and Implications
When analyzing data, it is easy to simply view it as a set of numbers. However, each number represents an individual student—an individual student with their own strengths and needs, a student with the potential for so much success with support and met needs. The educational system has structures in place to differentiate and support the unique needs of each student inside our school buildings. However, we need our students at school in order to empower them on their academic journey. Therefore, we need structures of differentiation and intervention in place to combat absenteeism. Removing the barrier of transportation has the potential to greatly impact our student’s lives and academic success.

Although it would be helpful to offer transportation to every student in the district, that would add a great expense to the district transportation budget. Providing transportation to students who most need it—and would use it—would be a good alternative. Just as we support students in the classroom with specific differentiated academic interventions, we can utilize targeted intervention measures when it comes to transportation. This also aligns with equity. By providing transportation, the district would be meeting a need for those families and help those students regularly get to school with their peers. Using transportation as an intervention would also help build trust with families. When students and families feel supported, there is the potential to build further trust and authentic relationships with those being served.

The greatest impact from this study comes when comparing winter attendance data. During the winter months when there is cold weather, snow, and ice it becomes increasingly difficult for our students to get to school—especially students who would typically walk to school. Even in this short study, a dramatic increase in attendance was observed in students who struggled with regular attendance from the winter of 2019, when they did not have access to a bus, to the winter of 2020 when they did have access to a bus. This information shows that there is a particular need
for bus transportation in the winter. This could be another option when trying to meet families’ transportation needs. Some families may not need a bus route all year long but would benefit from one during the winter months. If the district could invest in providing extra routes during those months that could further help meet families’ needs while remaining conscious of overall cost.

Further studies on the impact of providing transportation as an intervention would be beneficial. Due to COVID-19, this study only lasted approximately 10 weeks. It would be helpful to repeat this study for a longer period of time. It would also be beneficial to examine the correlation between bus intervention and student achievement. That was one of the initial intentions of this study, but due to COVID-19 it was not possible. More options for intervention should also be examined. Not all students who struggled with absenteeism used the bus. There were many students who maintained poor attendance. Those families need additional or alternative intervention measures put it place to help them get to school. Comparing attendance records of students before remote learning and during remote learning would also be an interesting angle for a future study to further pinpoint barriers to attendance.

Intervention costs monetary resources. Providing transportation would require a large investment. However, I believe it’s an investment that would be worth it. Avenues like Title I funding, Title IV funding, and grant opportunities could be options to explore. Advocating for a change in state level policy could also help minimize this barrier. If districts with high levels of absenteeism were given additional funding for transportation, that would provide more students the access to transportation that they need to get to school. Equitable funding at the state level would allow for equitable intervention at the local level.

Overall, absenteeism is a complex and nuanced problem. Chronic absenteeism and attendance issues are among the top barriers to success for many students in our country. Ample time and resources have been poured into research confirming this (Attendance Works, 2017; Bruner et al., 2011; Gottfried & Hutt, 2019; Hawkins, 2015; Sugru, 2016). It is time to move the conversation away from simply acknowledging chronic absenteeism being an issue to studying interventions that will help combat it. The intention of this research was to take a step in that direction. Although this was short term study, it showed promising evidence that supports the idea that providing transportation as an intervention measure can increase attendance for many of our most absent students and lower chronic absenteeism rates. As we invest in intervention measures that will support our students and remove barriers for them, we are investing in the lives of those students, their families, and our communities. Furthermore, by simply helping our students get to school each day, we are empowering them on their academic journey. To most of us, a yellow school bus is something we take for granted, but to others it is their vehicle to success.
References


Identity Development Among Girls and Students of Color in High School Physics
by Marianna Ruggerio

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Abstract
In a field such as physics known for being predominantly white and male, teachers have a greater than usual obligation and challenge to ensure students can see themselves as doers of physics. Starting from current research on STEM and physics identity development alongside Gholdy Muhammad's Historical Responsive Literacy framework, the identity encounters were formed. Rather than a focus on "inspiring" students, students are exposed to a diverse group of physicists and physics students in both live and pre-recorded formats. This article reviews the structure of these encounters and their impact on student identity.

Physics has been demonstrated to be as a gateway course to Science, Technology, Engineering and Mathematics (STEM) careers and an indicator of college success (National Alliance of Black School Educators Endorses Physics First, 2012). While enrollments in high school physics continue to increase nationally, they do so disproportionately. Generally, schools in rural or urban areas have few to no physics offerings. Rather than being the norm, taking physics becomes the exception and as such a picture of who does physics is created in the minds of teachers, counselors, students and parents. Part of the work examining underrepresented minorities (URMs) in physics relates to students having a sense of a physics or STEM identity. Having this identity seems to be a strong indication of tenacity in the field.

Teaching amidst a pandemic brought unique challenges to the classroom. Systemic inequities are exacerbated. Teachers are forced to critically rethink and reinvent every detail of their craft. It is easy for students to disengage during remote learning. What tenacity that might be built through positive relationships is now seemingly impossible. For these reasons I made a decision that it was more important than ever to incorporate an identity component into my physics classes. While I may not be able to get through all of my intended topics, or even cultivate the same classroom culture as I am used to, I do have control over how my students see themselves and see people like them in physics.
Much of the recent research in regard to retention and perseverance of students in STEM is focused on a sense of belonging. There are two areas related to sense of belonging. First is the lack of a STEM identity. Second is the role that racial identity plays within this context. In order to encourage more students to persist and succeed in rigorous STEM courses, such as physics, they must overcome stereotype threats and be able to view themselves as belonging. These factors are particularly notable in underrepresented minorities in physics.

Recently, there has been a body of work discussing the concept of having a STEM identity and how that identity plays into resilience and tenacity, or lack thereof of women who pursue STEM fields. Ann Kim et al posit that there are two aspects of this STEM identity. The first is having a sense of belonging, and the second is recognition or acceptance into the community by peers (Kim, Sinatra, & Seyranian, 2018). Seeing oneself belonging can present a challenge when you are the only _____ in the room. This presents a particular challenge when compounded with stereotype threat, which has been attributed to justifying lower success rates amongst minority groups even when students show every other indication of being equal to their non-minority peers. Kalender et al agree with this argument. They administered a physics motivational survey that asked students about these identities with the result that female students scored lower across the board.

The other critical aspect of this study was the importance of having someone such as a teaching assistant or faculty member see the student “as a physics person” (Kalender, Marshman, Schunn, Nokes-Malach, & Singh, 2019). Surely the second aspect is within a teacher’s control in their own classroom.

Identity is shaped by a large number of aspects. It includes the visible, such as race and sex, but also the unseen such as gender and family and social expectations. Constructing a STEM or Physics identity and a sense of belonging must then address all of these intersectionalities. The concept of looking beyond the gender gap and diving into intersectionalities is relatively new and much research is lacking that is specific to high school girls who are also underrepresented minority students (URMs) enrolled in physics. I recently sought to investigate this particular gap within the scope of my own classroom.

**Distribution of Physics Identity Survey**

At the beginning of the school year I distributed a publicly available Physics Identity survey developed by Hazari, Z., Sadler, P. M., and Sonnert, G. (2013) that I adapted for the high school setting and distributed to all my students. The results of the survey generally reflected the results already studied by Hazari, Sadler and Sonnert. Underrepresented minorities rated themselves lower in most categories, with the exception of students who identify as Asian. Students were
asked to participate in this survey again in November and once more in March in order to track changes over time. The results from November indicated that students who were “seen” as science persons by their science teacher prior to enrollment in physics, i.e., were highly encouraged to enroll in physics, saw significant gains in their identity scores.

**Identity Encounters in a Pandemic**

The identity encounters follow the premise of Gholdy Mohammad’s Historical Relevant Literacy framework in her book *Cultivating Genius: An Equity Framework for Culturally and Historically Responsive Literacy* (2020). In the framework, she identifies four critical components: identity, skill development, criticality, and intellectualism. Under the identity component students learn about someone else or themselves and their place within a topic related to the curriculum. Physicists and physics students from around the nation were featured in these assignments. Live or prerecorded interviews, generally lasting 30 minutes or less were shared with students. These included a Hispanic alumna of the high school in her senior year as a physics major, a Black undergraduate student double majoring in physics and dance, Dr. Jessica Esquivel, a lesbian Afro-Latinx post-doc at FermiLab, and Tamia Williams, a physics graduate and new teacher in New York Public Schools. After each of these encounters students were asked to write a simple reflection on the following:

1. Discuss a concept or theory that resonated with you
2. Discuss a concept or theory that challenged you
3. Discuss a concept or theory that left you wondering
4. Discuss a concept or theory that resulted in an “aha” moment for you.
5. Last, (if not included already), discuss how the concepts discussed might apply to you as a student.

Interesting themes emerged from students. Most notably, students were surprised and intrigued by the idea that physics is hard, even for physicists. While students were merely presented these encounters as an opportunity to hear from real physicists, many students who identify as Black and Latinx commented positively on seeing someone like them doing physics and reflected on the idea that, perhaps, even though they struggle they too might be able to be successful in physics. One student reflected, “[Olivia Lowe] really opened my eyes to see how not just physics in general but all types of sciences are competitive expertise and how some people really struggle with the subject and that it's ok to not get it right away. Her words were comforting for me and now I really have a different perspective and input on physics from listening to her.”

Students related to themes of stereotype threat and imposter syndrome as they reflected on their own experiences in school. Another student shared, “Most of the time I do ask whatever questions I have to those around me but I often hesitate in doing so [in front of the class] for fear of
sounding unintelligent. But like Olivia Lowe said, we’re all learning. No one in the class is an expert in physics. It’s likely everyone’s first course and even if it isn’t, physics is a difficult subject. It’s okay to be confused. No one should have a fear of getting the help they need.” Interestingly, some of the white male students also reflected on how they had never experienced stereotype threat and imposter syndrome and that it seemed odd that those would be barriers to a person pursuing their goals. One student commented “I think videos like this should be shown more often to high school students. It was inspiring to me so I know it will be to others as well.”

When I administered the physics motivational survey the final time in March I also asked students who had participated in the identity encounters to “Describe how those experiences influenced your perception of physics, if at all.” Student responses included the following:

- “It made it look more doable and that if I wanted I could pursue it as a career.”
- “It made me realize physics doesn't come naturally for a lot of people. I'm used to getting everything on the spot but with physics I have to think about how or why things work the way they do. In other classes it’s almost as though I've learned it already.”
- “That anyone from different backgrounds can feel comfortable in and doing Physics.”
- “That physics is hard, but you can learn it.”
- “There is someone like me in physics and they are doing more than just physics in college. They are still in the art and dance and different things like that.”

Discussion and Conclusion
Students were overwhelmingly positive in their response to the identity encounter opportunities. Many of their reflections showed shifts over time in the way they viewed physics, who does physics and their ability to succeed in a physics class. Furthermore, these positive shifts all occurred despite the pandemic, including at least three school day schedule changes and moving back and forth from an A/B schedule to fully remote from hybrid within this time frame. At a time when students nationwide may be losing motivation and excitement regarding their studies while in near-isolation these opportunities provided students a window into the world, as well as a mirror for themselves as they develop their own identities.

References


No Matter the Modality, Science is a VERB: Supporting Elementary Pre-Service Science Teachers During Remote Learning

by Erin M. Evans

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Abstract
The move to remote learning in 2020 due to the COVID-19 pandemic was a catalyst for finding a “new normal” for elementary teacher preparation programs. Pre-service teachers (PSTs) found themselves in field placements with diverse modalities: some were completely remote, some eventually moved back to socially-distanced in-person settings, and some were a hybrid modality. This article examines the steps taken by an elementary science methods professor to match the demands of the pandemic learning environments and to model for pre-service teachers the possibilities for integrating hands-on inquiry for elementary learners even when teaching in remote or socially-distanced environments. “Lab Bags” were created as a means for providing students with necessary, affordable, hands-on materials to be able to engage in cooperative learning and critical thinking in all settings. As a result, PSTs (n = 14) found new possibilities for teaching the Next Generation Science Standards (NGSS) within their existing curricula across all teaching settings.

Introduction
“Repeat after me: science is a verb!” As an associate professor of elementary education and the primary instructor of elementary science methods at my small, Midwestern university, I find myself repeating this statement over and over to my pre-service teacher (PST) candidates. This statement becomes especially important when preparing PSTs to develop their capacities for the three-dimensional teaching required within the Next Generation Science Standards (NGSS; Achieve, Inc, 2015) as recommended by the Framework for K-12 Education (National Research Council, 2012). The three dimensions call for teachers to teach performance expectations grounded in disciplinary core ideas, cross-cutting concepts, and scientific practices to fully engage in all components of science thinking and learning; however, due to the variation in the level of science exposure and instructional methodologies presented to PSTs throughout their P-12 experiences and beyond, their readiness to embrace “science as a verb” varies.

The notion that teachers tend to teach in ways that they were taught (Davis & Rose, 2020; Leonard & Shymansky, 2006) is not new, but it has become more apparent in the past year than ever before due to the COVID-19 crisis. Just like their cooperating teachers, PSTs found themselves unexpectedly thrust into a modality for teaching that had not been fully utilized in the past, if
ever, when in March 2020, the world went into isolation in an attempt to control the outbreak of COVID-19. Teachers, in many ways, were in survival mode, and as they began planning for delivery of content to P-12 students, many of the best-practices that are seen in the field fell by the wayside completely or had to be adapted for viewing through a completely new lens—that of the computer screens through which students would now be engaging with content. As such, teacher education programs began to alter their ways of preparing PSTs to help them navigate the tides of the new waters in which they found themselves in their student teaching placements.

The move to remote learning in 2020 was a catalyst for finding “a new normal” for elementary teacher preparation programs (Lucas, Nelson, & Sims, 2020), especially as fall 2020 drew nearer and it became evident that the pandemic was not going away. PSTs found themselves in field placements with diverse modalities: some were completely remote, some eventually moved back to in-person (socially distanced), and some were hybrid modality that combined aspects of in-person and remote. Student access to technology was not always consistent, teachers struggled to maintain social distancing standards in classrooms, and many were surprised by how changed the face of the 2020-2021 school year became.

**Teacher Preparation: The New Era of COVID-19**

Along with the shifts in instruction that P-12 teachers faced came a need for teacher education programs to also adjust due to the demands of the pandemic. Many teacher education programs were already preparing teachers for utilizing technology within the primarily in-person setting, but the level to which teachers were being prepared for teaching virtually—and in many cases from home—was scant (Lucas, Nelson, & Sims, 2020). Thus, as teaching demands in the field evolved, so, too, did teacher preparation. While support for the immediate future was needed, it also became important to recognize that virtual learning experiences may continue into the future beyond the pandemic for a variety of reasons, including chronically absent students who may not be able to attend in-person school, school closures related to weather events, or continuing to embrace positive aspects of remote modalities within the face-to-face school day, such as individualized supports or access to professionals from other schools (Davis & Rose, 2020). This is not to say that the future isn’t rife with implications. Access to technology in low-income communities or equity in resource allocations are important factors to consider, but in an ever-growing technological society, the world seems to be waxing technological.

**Practice What We Preach**

Put simply, methods instructors must practice what we preach. As I strove to keep my finger on the pulse of the field throughout 2020, reflections from candidates indicated that science was falling by the wayside in many of their field placements. In face-to-face settings, science has long been integrated with the English language arts curriculum, often being implemented minimally through the representation of science in non-fiction texts followed by reading comprehen-
sion activities. The representation of “science as a verb”—students doing science through inquiry—was practically non-existent in some settings, and in classrooms where teachers were attempting to push science instruction beyond reading and discussion, science was often being shown through demonstrations more so than hands-on inquiry. The reasons for this are many, but can be attributed mostly to lack of time, lack of resources, and lack of teacher efficacy (Leonard & Shymanksy, 2006). Naturally, then, as COVID-19 took hold and teaching and learning switched to remote modality, the added implication of the pandemic only worsened science learning in many contexts.

The best way to encourage PSTs to implement best practices in science is to model those practices in methods courses and to require those practices in the plans being created by PSTs for use in the field. If we want teachers to continue building capacity for inquiry-based learning in its most authentic state via remote learning, we must model the structure and procedures of remote science learning accordingly. So, when it came time to prepare for the Fall 2020 semester, I planned to do just that. My course modality had changed from completely face-to-face to synchronous remote sessions, just as the field placements occurred for nearly all of my PSTs. I knew I had to find a way to model that even in a remote environment, science can still be hands-on, inquiry-based, and collaborative to help build students’ capacities for 3-D science learning.

**Supporting 3-D Teaching in Virtual Environments**

**Live Demonstrations**
I knew that I could integrate demonstrations into my teaching on Zoom very similarly to how I would normally do so in the face-to-face environment. The main issue would be students being able to see what I was doing. Similar to how I typically use an Elmo projector in my methods classroom, I created the same set-up in my home-based classroom. I was able to change the position of my external camera to show PSTs what I was doing and engage in discussion leading into the application activities that normally followed.

**Lab Bags and Cooperative Learning**
Students learn best when they are able to do so through hands-on experience (Bybee, 2015; National Research Council, 2012). Thus, despite class sessions being held online, I created “Lab Bags” for PSTs to use during our methods sessions that were picked up from campus (see Figure 1). Materials were organized for each class session throughout the semester in individual bags labeled with the activity name. Over the years, I have found that even as schools transition to NGSS and develop curriculum aligned to the performance expectations, the materials that elementary teachers in particular have access to are quite scarce (National Research Council, 2012). Many elementary teachers have navigated this lack of adequate resources as well as lack of funds by teaching science using household materials that are readily available at the grocery store, such as plastic cups instead of beakers or using basic kitchen ingredients as investigative materials. Thus, I made every effort to utilize inexpensive, readily-available materials in the Lab Bags, not
only to mirror the types of materials that are most-utilized in elementary classrooms, but also to keep costs down. For my class of fourteen PSTs, the lab bags cost me around $30 for the entire semester. I also made sure that the materials in the Lab Bags were ones that didn’t conflict with any student allergies that may be present (information I had to glean prior to the semester beginning), and I made sure to use materials that students would not have to return. Finally, the Lab Bags came with a warning label – students must store them away from the reach of members of their household, particularly pets who tend to destroy anything that smells like food!

Figure 1: Lab Bags

Figure 2: Lab Bag Contents
To illustrate how the Lab Bags support the three dimensions of the NGSS, Figure 3 below shows a sampling of activities and materials that were utilized at two different points in our methods course:
Figure 3: Sampling of Lab Bag Activities, Materials, and NGSS Connectivity

<table>
<thead>
<tr>
<th>Activity</th>
<th>*Where found?</th>
<th>Contents</th>
<th>NGSS 3-D Connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Preserver Challenge</td>
<td>(Moyer &amp; Everett, 2012)</td>
<td>Lab Bag:</td>
<td><strong>5-PS1</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Two small action figures (small green soldiers with weapons snipped away)</td>
<td>DCI:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Two small strips of foam (cut up pool noodle)</td>
<td>• PS1A: Properties &amp; Structures of Matter</td>
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<tr>
<td></td>
<td></td>
<td>• Paper towels to catch drips</td>
<td>Practices:</td>
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<tr>
<td></td>
<td></td>
<td>• Rubber bands</td>
<td>• Developing &amp; Using Models</td>
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<td></td>
<td></td>
<td>• Plastic cup pre-marked with volume measurements</td>
<td>• Planning &amp; Carrying out Investigations</td>
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<tr>
<td></td>
<td></td>
<td>Students supply:</td>
<td>• Using Math &amp; Computational Thinking</td>
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<tr>
<td></td>
<td></td>
<td>• A bowl at least the size of their hand that will hold 3” water</td>
<td>XCutting Concepts:</td>
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<tr>
<td></td>
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<td>For teacher demo:</td>
<td>• Cause &amp; Effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Two oranges to illustrate how life preservers work</td>
<td>Scale, Proportion, &amp; Quantity</td>
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<tr>
<td></td>
<td></td>
<td>• Work samples to analyze during “Engage” phase of 5E (Bybee, 2015).</td>
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</tbody>
</table>
Core Sampling

(Contant et al., 2018)

Lab Bag:
• Individually wrapped cupcake (with filling)
• Six pcs clear drinking straw (two straws total, pre-cut into thirds)
• Paper towel
• Small paper plate
• Popsicle stick

Students supply:
• Coloring supplies

5-ESS2

DCI:
• ESS2.A: Earth Materials & Systems
Practices:
• Developing & Using Models
• Planning & Carrying out Investigations
• Using Math & Computational Thinking

XCutting Concepts:
• Systems & System Models
• Scale, Proportion, & Quantity

*Handouts and lab sheets may also be needed for the above activities and are included in the “where found” for each resource. Also, the color-coding in the NGSS column aligns with that in the NGSS performance expectations for DCI, Practices, and Cross-Cutting Concepts.

It was important to be able to transition smoothly from one activity to another or between whole group and small group discussions, so I started each class session by showing a materials list that PSTs used to gather materials for that day’s lesson. They were able to complete the lab activities in Zoom breakout rooms, with me moving in and out of each room as they were working in the same way that I would move throughout the in person classroom. PSTs were able to share ideas with each other, have individual roles in solving the problems presented, and analyze their results to explain the results that their data showed. We would then come back together as a whole group to discuss their results and apply them to the larger, whole class data set to draw conclusions about the phenomena being investigated.

Socially-Distanced Classrooms

The Lab Bags helped to make the learning experiences feel more “normal” and aligned to best practices than we could have otherwise experienced had I relied on demonstrations only. As PSTs began to transition to hybrid modalities in the field, we discussed how the Lab Bags were also the perfect addition to socially-distanced settings because everyone had access to their own materials without being in direct contact with each other. In person, students would be able to sit far enough apart while still engaging with the materials, and those who were tuning in from
home would also be able to participate. As long as each student could see what the other students in their group were doing and hear their groupmate during discussions, the activities could function as normally as they would within the remote learning setting.

Results
After utilizing the lab bags for the 16-week duration of the science methods course, PSTs filled out course evaluations that later told the story of what was gleaned from the experience. When reviewing the qualitative data from Fall 2020 (n = 14), Lab Bags were cited over a dozen times as being the single most important resource in the methods course as well as being a best practice that candidates could see themselves taking with them into their future classrooms. PSTs noted that while it might be difficult to get materials to their students if no materials pick-ups were available at the school, since all students live within reasonable driving distance from their schools, PSTs noted that they could possibly deliver materials to their students. This would also be an opportunity to build relationships with families, one candidate noting that their cooperating teacher had begun to do just that by delivering necessary materials and incentive rewards to students’ doorsteps. Other qualitative comments include statements like, “having the Lab Bags made the class so much more engaging [while learning remotely]” and “having the hands-on material was so helpful to my learning. Breaking into Zoom groups to talk about what we were thinking helped me think of questions that I might ask as a teacher and also gave me ideas about how the content can be taught [remotely],” and “Lab Bags with interactive components really helped me connect to the methods [we were learning about].”

Quantitative evaluation data indicates that PSTs still found a great deal of value in the learning experiences of the course despite the online modality. 100% of evaluations indicate that the instructor used a variety of instructional strategies and modeled best practices “frequently” or “almost always.” 93% of students felt that the course encouraged a community of learners by allowing students to work collaboratively during learning experiences. Tying this to qualitative feedback, “the Lab Bags and small group activities helped me to see that even on Zoom, students are still able to work together and DO science” (anonymous). Additionally, 86% of students felt that the course materials related to real-life situations; one student said qualitatively, “I feel like I have lots of ideas on how to make science a verb even though I don’t have my students with me in the classroom.”

Conclusion
For as long as the pandemic continues, and potentially beyond, it is important that schools work toward restoring as much of the curriculum as possible via remote teaching and learning. Specifically, expanding the capacity for active forms of teaching and learning is essential to boost student engagement and develop critical thinking skills that are essential to the 3-D learning process that is outlined in the Framework for K-12 Science Education (National Research Council, 2012). While most of us would agree that in-person learning and allowing students direct access
to each other provide the best possible learning environment, as I remind my candidates frequently, the quality of teaching is more important than the modality of teaching. When the reality of the classroom does not align with what we believe is best in terms of modality, it is essential that PSTs are prepared to make the necessary adjustments to help students not just survive, but to adapt to unexpected situations and thrive.

References


Special Education Teachers Share Their Crisis Teaching Experiences

By Gina Braun, Samantha Walte, Christopher Emerling, and Christerralyn Brown

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Abstract
In response to the COVID-19 pandemic, schools worldwide shifted the way they provided instruction to their students in March of 2020. Distance learning caused stress on teachers as they grappled with figuring out ways to provide education to their students. Students with disabilities often require accommodations to access instructional content which often must be implemented within proximity to their teachers and paraprofessionals. Thus, special education teachers had additional layers of challenges when providing their students with equitable access to education, even more so for students in underrepresented communities. In this phenomenological study, we interviewed Illinois urban special educators to learn about their experiences and perceptions of facilitating distance learning during crises. While there were many unexpected challenges, the teachers shared success through support, collaboration, and resources.

Keywords: distance learning, special education, COVID-19

Introduction
Traditional distance learning is primarily an alternative instructional method for secondary and post-secondary schools that have existed since the early 1990s (Barbour & Reeves, 2009). Over the last two decades, distance learning has become more prevalent across the country (Hawkins et al., 2012). While most students enrolled in distance learning are post-secondary, it has grown in popularity across K-12 students. For example, during the 2009-2010 school year, 1.5 million students were enrolled in K-12 distance learning across the United States; during the 2013-2014
school year, 2.7 million students were enrolled (Connections Academy, n.d.). Distance learning has been a valuable alternative to traditional schooling for various reasons, including facilitating access to education in areas with substantial teacher shortages (Hannum et al., 2009) and reaching students at risk of school dropout (Spitler et al., 2013).

There is no single prescribed method for distance learning, though most methods require the student to be in front of a computer (Carnahan & Fulton, 2013). The meaning of distance learning and what it looks like has shifted since the beginning of COVID-19. When schools first shut down and teachers shifted to "distance learning," the term truly meant “crisis teaching” (Fisher et al., 2020). Distance learning takes planning, supportive infrastructure, and participant buy-in and typically occurs in an otherwise typical school year. In contrast, crisis teaching was characterized by the immediacy of the shift to virtual platforms, without training for teachers or students, amid a global pandemic. As teachers moved into the 2020-2021 school year, having necessarily accumulated knowledge over the spring and summer, instruction moved closer to what would be traditionally considered distance learning. For this study, the researchers focused on the early days of school shutdowns in the spring and summer of 2020. Thus, distance learning is defined as any instructional practice where teachers and students are not located in the same space. This might be over the internet, phone, or tangible documents.

Overall, the research on traditional distance learning for K-12 students shows positive outcomes, though there is limited research examining the effects for students with disabilities. However, statistics show that the proportion of students with disabilities enrolled in distance learning mirrors typical face-to-face schools (Carnahan, & Fulton, 2013), so more research is needed to serve students with disabilities best in non-traditional settings. To provide adequate individualized instruction to students, distance learning requires a unique and varied skill set compared to face-to-face schools. Furthermore, teachers must ensure they provide an equitable education to all students, especially students from historically marginalized communities. Special education demands on teachers in urban settings reveal unique obstacles in facilitating distance learning for their students successfully.

**Special Education and Equitable Distance Learning**

Distance learning can be challenging for students with and without disabilities, often due to the level of independence it requires. Furthermore, distance learning usually requires a high level of parental involvement, a level of support that many families are not equipped to provide (Levesque & Reid, 2017). Research that focuses on special education teachers' instructional practices, accommodations, and modifications for student success in distance learning is needed (Carnahan & Fulton, 2013). The additional layers of poverty and traditional obstacles that Black and Indigenous People of Color (BIPOC) face in this country makes accessing quality and equitable instruction even more complex.
Though there has been some scholarly attention to distance learning in recent years, there is little research specifically related to special education students (Carnahan & Fulton, 2013). Much of what we know about distance learning for students with disabilities is connected to secondary students at risk for dropout (i.e., Repetto & Spitler, 2014; Spitler et al., 2013). Yet, similar to the national average, students with disabilities make up roughly 13% of those enrolled in full-time online learning programs (Miron et al., 2018). All students are required to have a free and appropriate public education, including access to the grade-level curriculum in the least restrictive environment (Individual with Disabilities Education Act, 2004). Public school distance learning programs require equitable access to all learners, just as they do in traditional face-to-face public schools (Rhim, & Kowal, 2008). Therefore, research is needed that explicitly targets special education instruction for distance learning. Likewise, more research and support for teachers' preparation to provide high-quality instruction for students with disabilities is needed (Moore-Adams et al., 2016).

Historically, marginalized students do not have access to an equitable education; thus, moving to distance learning has increased the risk of inequitable education access. For example, in the United States, BIPOC students are one-third less likely to have access to high-speed internet and computers in their homes than their white peers (Ujifisa, 2020). Without access to the high-speed internet and computers, students cannot successfully participate in distance learning or even communicate with their teachers, leaving educators to come up with unique ways to access their students and provide equitable teaching during a national crisis. The complex and varied layers of teacher knowledge and skills for distance learning has created a challenge for which few could have prepared.

**Teacher Preparation and Distance Learning**

Teachers who typically instruct students with disabilities through distance learning often work for organizations that utilize a blended approach, meaning they divide their time between facilitating instruction online and meeting with students face-to-face (Ferdig & Kennedy, 2014). While most distance educators receive their teaching credentials in the same manner as their face-to-face colleagues, there is some evidence that distance learning educators receive additional training to provide adequate and tailored instruction. For example, several private online learning organizations offer professional development or mentors (e.g., K-12 International Academy, OBRIDGE Academy, The Keystone School). Little is known or available related to public online schools and their teacher support or training.

Since the beginning of COVID-19, there has been an influx of online resources available to teachers via email, social media, and company websites. Resources such as blogs and opinion pieces with lists of online strategies, free memberships to learning management systems, and online academic programs (e.g., Google Classroom, IXL, Reading A to Z) are more aligned with general education. Agencies such as the Council for Exceptional Children and the adapted curriculum company N2Y have provided strategies specifically for students with disabilities. Despite
these resources being available, their sheer number can be overwhelming and not every strategy or tool has been proven to be effective. Since the beginning of COVID-19, teachers were rushed into making important decisions about resources and practices to choose with little to no time, proper support or training. Moreover, they were expected to combine their face-to-face knowledge of content, pedagogy, and technology with crisis teaching in a virtual space with their students at home.

**Purpose**
Within the context of this crisis, teachers still functioned as educators regarding the content and pedagogical practices tied to their jobs. With the shift to distance learning, they also needed to use technology to support their practices and students in a way they had never been prepared for. For the first time, teachers were expected to build on their technological, pedagogical, and content knowledge for classroom practice and integrate it with skills for supporting students through crisis, while also navigating the fears and uncertainties of the pandemic for themselves. The intersection of these three types of knowledge (i.e., technological, pedagogical, and content) is represented by the TPACK framework described by Mishra and Koehler (2006) and sets the groundwork for our study.

For decades as technology has advanced, teachers have been expected to take their expertise in content and pedagogy and use technology to enhance their instruction and keep their students engaged. Adding the layers of a pandemic shifted this framework because teachers first had to take their knowledge in the classroom and shift to virtual spaces. Furthermore, they had to take the additional component of knowledge or skills they may have about trauma-informed teaching to support their students academically and, more importantly, socially and emotionally. Fisher et al. (2020) called this time crisis teaching because, whereas trauma typically affects one student or maybe a group, the global pandemic affected everyone. In addition to this time crisis students experienced varied traumatic events separate from school (e.g., parent or guardian unemployment, death of a family member, loss of access to food and other necessities, absence of social interaction). Lack of preparation for such developments sets the context for our study.

Due to schools’ immediate transition to distance learning in the wake of COVID-19, all teachers were expected to make a quick adjustment to with limited resources and time to prepare. Teachers of students with disabilities were particularly challenged to find unique ways to support and instruct their students. The purpose of this study is to examine the experiences and perceptions of special education teachers who transitioned from in-person teaching to distance learning due to COVID-19 before the 2020-2021 school year. The research team sought to answer the following research question: What are special education teacher experiences and perceptions in providing instruction and services to their students with individualized education programs (IEPs) during COVID-19?
Methods

Research Methodology
In this phenomenological study we sought to discover what urban special education teachers experienced in providing distance learning for their students with IEPs during the COVID-19 pandemic. In the Christensen et al. definition (2010), phenomenology has the primary objective of eliciting the meaning of and giving structure to the lived experience shared by the study target populations. Our research is focused on the wholeness of the experience—where our participants' perceptions inform their behavior and actions (Moustakas, 1994). We were interested in understanding impacts of the abrupt shift in providing instruction and services to students with IEPs. In-depth interviews were used to understand the teachers' experiences and perspectives during this unique time (Creswell, 2014).

Participants
We interviewed 16 special education teachers in the state of Illinois for this study. All of the teachers identified their schools as urban settings. All of the teachers hold current professional educator licenses with a special education endorsement, and all had their masters in special education. The average number of years of teaching was nine, ranging from one to 15. Teachers had students from pre-kindergarten up to high school. Three teachers worked with students in pre-kindergarten through second grade, six had third through fifth graders, four taught middle schoolers, two worked with high schoolers, and one served transition-aged students. During the typical school year, all of the teachers provided instruction to students with IEPs, and all continued to provide services to those students during the spring of the 2020 school year through distance learning. While all of the teachers had knowledge and experiences integrating technology in their classrooms, none of the teachers had previous experience or preparation for instructing students through distance learning models.

Data Collection
Following Institutional Review Board (IRB) approval, the researchers used a semi-structured interview to allow for a natural conversation with the teachers, all of which occurred during the spring and summer of 2020. The interviews lasted about an hour and consisted of 25 predetermined questions with clarifying probes. The entire research team developed questions derived from both prior experiences as special education teachers and current teacher educators and research on distance learning. The questions enabled the participants to reflect on programs and platforms they used, the amount of time spent planning, support strategies they utilized, areas of confidence, and areas in which they struggled. Teachers also discussed what supports would benefit them in teaching their students with IEPs via distance learning in the future. The interviews concluded with general demographic information, including the number of years they had been teaching, the grade levels they were currently teaching, and any former preparation they had for distance learning (i.e., professional development, schooling).
Data Analysis
After the interviews were transcribed, the team followed Tesch's eight steps to qualitative coding (1990). First, we read through all the transcripts to begin to develop impressions of the data as a whole. Each of the researchers then chose particular interviews to read in depth and take notes about their preliminary conclusions. After this, the research team met to discuss the topics and meanings they discovered in the interviews. During this meeting, we developed a preliminary codebook based on the large categories identified in the initial reviews, in addition to provisional codes born out of our own experiences with special education and distance learning. The TPACK framework, resulting in codes identifying where teachers described their content knowledge, pedagogy, and use of technology, also informed codes. Each team member then used the preliminary codebook to code the same interview, continue to memo about additional ideas, and then reconvened to compare their experiences and coded documents. The group compiled their list of codes and memos, discussed which categories could be collapsed or expanded, and ultimately decided upon a final draft of the codebook to be used on the remainder of the interviews (Creswell, 2014). This final codebook consisted of structural and theoretical codes (Saldana, 2016).

Findings
Through our analysis, three large buckets emerged related to the teachers' experiences: (a) evolution of the job, (b) roles of the job, and (c) building unexpected and new relationships with families.

Evolution of the Job
Some teachers said they were given specific expectations about times they needed to be working and the activities expected during certain days. Other teachers, however, shared that they were not given any structure, the guidelines were unclear, or the expectations were changing too quickly to be feasible. P04 said she was told to "[host] daily learning on a Google hangout platform...and then reading instruction and some daily enrichment activity." She then added, "The district kept coming up with more and more regulations as the semester went on." Some districts provided guidelines to their educators about when they should be working but did not always make available the guidance or resources to carry out those plans effectively. Some districts required daily virtual office hours that limited accessibility for some students and families if technology access was also a concern.

For many teachers, students, and families, the sudden need to master new technology to maintain any connection to normalcy was overwhelming. In a typical, face-to-face, pre-COVID-19 educational setting, teachers often knew how to deliver their content knowledge traditionally and sought technology to enhance the accessibility, engagement, and efficiency of their instruction (Swallow & Olofson, 2017). Starting in March of 2020, that world flipped. Teachers suddenly had the multilayered challenge of learning to use the very mechanisms that would transfer their content to their students while simultaneously making sure students and their families also knew
how to use those systems. "I tried the best I could, but I am not a technician," P04 shared when describing her experience assisting a family in getting connected to the internet. Trying to teach students how to use platforms like Google Meet via Google Meet is reminiscent of defining a word using the word itself, which any good teacher knows not to do.

Some teachers were fortunate to have already been using virtual platforms like Google Classroom. In contrast, others were accustomed to paper copies and physical books and had a more difficult time shifting to the digital world of distance learning. Even those who had used online learning management systems before had generally used them only as a space to post assignments, not as the backbone of their classroom with live video meetings. P10, for example, said that she had used Google forms for entry and exit slips in her face-to-face classroom before the pandemic, so her students were somewhat familiar with the platform. She was quick to add, "Not that the transition was easy because it was not. It was tough to transition to remote learning, but I did not have to teach my students how to use Google classroom."

In addition to changing how they taught, what teachers taught was also changed due to distance learning. Scheduling was difficult, with some students having IEP meetings scheduled during the first few months of distance learning, which also posed a complex challenge for teams. Some shared that they felt the data they collected virtually was not a valid representation of their students’ progress on their IEP goals. Others discussed the logistical nightmare of coordinating multiple professionals' schedules with caregivers to find a time to hold the virtual meeting at all. Others, like P06, were instructed by their schools to make pandemic-friendly versions of their students' IEPs, "We had to create remote learning plans for every student...So instead of using the IEP during remote learning, we use the remote learning plan because it is hard to implement the entire IEP remotely." At some point, all of the teachers mentioned the frustration of not being able to provide the instructional support they knew their students needed. They felt that the plan to create "COVID IEPs" was a "band aid" to fix the problem and did not provide support to meet their students' needs.

Like many who made the shift to working from home during the pandemic, teachers also reported struggling with balancing their work lives and personal lives or, as P12 coined it, there was "no separation of church and state." Physically, teachers faced the challenge of finding or creating space in their homes where they could work as uninterrupted as possible, especially critical for those who held live sessions with their students throughout the day. Mentally, teachers shared stories that conveyed the endless hours they were working but did not share any frustration beyond making sure their students had what they needed.

Before the 2020 school year, it was not uncommon for educators to regularly bring work home with them (e.g., grading, lesson planning, assignments, or material creation tasks). However, leaving the school building had always been a physical indication that it was at least time for a
break, even if work continued later in the evening at home. With that visual boundary blurred or non-existent, teachers shared that they were "working more than [they] ever had" (P11). Beyond the curricular demands of the job, the teaching profession has consistently called on its educators to give more of themselves emotionally than many other vocations. Good teachers care deeply for their students and their families, and a global pandemic fostered constant worry for many. Some teachers gained new insights into troubling home situations they otherwise would not have known their students endured, like P06, who saw firsthand how many times her student moved from one homeless shelter to another. While teachers must know what their students bring to class, this added depth of knowledge was complex for teachers to bear during a time of ongoing crisis and uncertainty.

Teachers shared that their students also struggled to separate their personal lives and school lives, and only some of that struggle was within the students' control. For example, some students had other siblings or family members at home, making it hard to find a quiet space. In comparison, other students began setting alarms and setting themselves up for perhaps the first time in their lives, as their caregivers were juggling their new responsibilities. These circumstances led teachers to focus on skills they had either never taught before or had not prioritized such as time management and organization. The level of autonomy that March 2020 suddenly introduced into teachers' lives, their students, and their students' families was unprecedented, and, for many, teaching felt like a completely new job.

The Roles of the Job
One of the most prevalent complaints all of the teachers expressed was the frustration of newfound job uncertainties. Specifically, the roles and responsibilities they once knew about their job changed significantly. Many of the teachers felt similarly to this teacher: "I just felt like a first-year teacher all over again, I had to re-learn how to do my job" (P01). When reflecting on new roles, another teacher said, "We just never could have been prepared for this" (P15). Across all of the teachers interviewed, four common themes about their new roles emerged, (a) teachers became social workers; (b) shifts in meeting IEP goals and supporting individual needs; (c) collaboration with colleagues; (d) feeling successful at work.

Almost all teachers discussed their students' various social and emotional needs throughout the first few months of distance learning with COVID-19. While many of the teachers said they always supported students' social-emotional learning (SEL) needs regardless of COVID, these needs greatly increased during this time. The teachers felt in many ways like their first, and sometimes primary, purpose was to support their students' social-emotional needs. The teachers repeatedly spoke about how their students missed the interactions and engagement with their peers and that they were struggling because many felt isolated from the world. When discussing
strategies to help her students engage with their peers, one teacher mentioned implementing activities such as, "call a friend or write a letter to someone...I gave them templates to help them feel confident reaching out to peers" (P12).

Perhaps one of the most challenging scenarios for teachers was giving students social-emotional support to help them feel confident in joining the virtual spaces and engage. Many students do not live in comfortable sharing environments with their classmates; it was even an eye-opener for the teachers. One teacher mentioned,

I have a large homeless population that lives across the street, and though I have been working there for more than five years, I have never been in the shelter. Seeing the conditions for their remote learning was heartbreaking as they were on cots in large rooms…. I had to find ways to help build their confidence and adjust my expectations not to feel embarrassed and continue to join us (P06).

Another teacher said, "After the George Floyd murder and the riots occurring in our neighborhood, I could not get students to come to class at all." She then went on to say, "Parents even told me, ‘School is not important right now’" (P13). During this time, many of the teachers discussed spending a significant amount of time on the phone or in class checking in with their students to ensure they felt safe and had what they needed, such as access to food. One teacher reflected, "I just wish I could be with them, hug them, and provide support the way I normally would" (P04). Finally, building the confidence of their students who typically received extensive support and no longer had access to it was something that many teachers discussed. "Some of the kids were able to come online by themselves after they figured things out and everything. And they were able to show up…other kids who were more low functioning did not think they could do it without someone's help. And those are kids where they were not showing up regularly" (P14).

As special educators, the participants needed both to meet their individual needs and adhere to the IEPs for each student. Still, how to accomplish both was never made clear and expectations continued to change. Some teachers took it upon themselves to make decisions before waiting for their school or district, such as reviewing the components of their students’ IEPs and figuring out what accommodations and modifications could translate to a remote setting. As the semester went on, many teachers discussed how their districts began to set stricter expectations. For example, many had to "rewrite the IEPs to support the current environment" and then provide parents with a "COVID plan" (P06).

The teachers all spoke about how they did their best to adapt and find new and creative ways to differentiate and support learners over time. Perhaps one of the most successful pieces was the level of collaboration they maintained or increased with their colleagues. Many of the teachers used platforms such as Google Classroom or Seesaw to differentiate. They were able to assign
differentiated assignments to their students; however, they still felt they were not getting the students' the instructional time they needed. While some students could manage independent differentiated work independently, others required more intensive supports to participate in school successfully. Educators needed to address the specific communication needs of each student. As one teacher mentioned, "The kids need their AAC devices and all of the visuals in my classroom, so I made individual packets with as many visuals as I could and dropped them off at the school for parents to pick up" (P01).

Though mostly stressful, all of the teachers found positives in the experience of shifting to distance learning. When discussing what worked, they stated the level of collaboration they had with their colleagues increased, leading to the "small moments" of success they felt over time. To do so, most teachers mentioned they had dedicated meeting times weekly with their co-teachers, grade-level partners, and paraprofessionals. When reflecting on what made distance learning successful, one teacher said, "Honestly, the weekly meetings with my co-teacher and grade level team made a big difference" (P02). Another teacher, brand new to the profession, said, "Meeting weekly with my grade level team helped me create a direction on where to go." The teachers who were engaged in inclusion felt they could support their students’ needs because they could collaborate with their general education teacher and then break into small student groups. One teacher mentioned, "We stuck to our inclusion model; sometimes I taught the whole group, sometimes I pulled small groups of my students to differentiate instruction" (P07). Though, there were challenges and teachers often felt frustrated, they also recognized and accepted their sometimes differing priorities.

Because there was limited direction from districts and schools, especially in the beginning, teachers relied on each other to find ways to support their students and achieve success. One teacher mentioned, "We took it into our own hands. I set up meetings with my grade level partners, and we started to make decisions on how to best engage the students in learning and support them" (P05). Many teachers also described how they were expected to use Google Classroom but were not familiar with all of its features, especially add-ons. One teacher shared, "I re-searched ways to engage students remotely, and I found Pear-deck. I tried it out, and it was great...I shared it with my principal, and she purchased it for the whole school, then I gave remote professional developments" (P06).

Teachers had to redefine "doing a good job" and if they were actually "making a difference." They previously spent hours searching for resources and instructional strategies to enhance their classroom teaching during remote learning. They had to start from scratch to find resources and instructional strategies that could teach. Many of the teachers felt the same way as the one who mentioned, "I spent hours searching for resources that could work" (P04). They all felt they had worked harder during those few months than they had ever worked before. It was difficult for them to accept that their jobs were not what they were used to, but they "persevered" through all
of the challenges. Similar to what many of their students felt, they battled with whether or not they had technology that worked; they had to recreate spaces in their homes, as classroom “corners.” Some teachers felt they did not have the privilege of having a private working space with a "cute" background. Instead, they were at their messy kitchen tables with their children trying to manage it all at once. One teacher admitted, "I was embarrassed that I didn't have a separate space like some of my colleagues, but I made it work" (P02).

Building unexpected and new relationships with families
As we have come to learn over the last year, the pandemic posed an acute threat to the wellbeing of families through the disruption of routines, physical and mental health concerns, financial insecurity, and long-term impacts we have yet to understand fully. However, the immediate shift in learning environments also created an opportunity where the family and caregivers' role evolved into an educator for their children. This shift refocused attention on the importance of a coordinated response from schools and families in educating children. Our findings describe the different paths these home and school relationships took and how they became vital to students' learning processes. We saw two distinct patterns emerge: (a) strong relationships increased, and (b) remote learning tested family/educator relationships.

Within the "Relationships grew stronger" category, our educators reported that certain established relationships grew even more substantial and collaborative. While this was not the experience for every educator with every family, it is essential to note that our educators described a solid communication foundation with parents who sustained communication over these extreme circumstances. We learned from the data that because they had already established working relationships with families before the pandemic, they found it easier to identify communication needs and barriers that those families experienced (e.g., preferred language, using the phone more than email). If educators had already developed a close relationship to know which communication method was optimal for each family, collaboration flourished.

The pandemic also created the opportunity for new parent and teacher relationships to develop. Remote learning may have required families who otherwise never communicated to reach out to schools and educators. One participant described encouraging parents to become more active during remote learning by saying,

"I think that by talking to parents more and like encouraging them that it is okay to let your kids cook in the kitchen without you right there. Or let your kid clean their room without you standing there telling them what to do. Just that little nudge for parents of like, no, they did this at school."

To echo this point, one teacher described her parent relationship pre-pandemic as virtually non-existent and how that shifted once remote learning started.
"I'm shocked because, during a typical school year, there are parents I've never even met or talked to other than at the IEP meeting….So the fact that I had family members, whether it was a sibling, a cousin, and a parent showing up with not all the kids, but some of them, I thought it was incredible."

This evolution of parent-teacher relationships benefitted both the student and the educator.

Our participants described this experience of individual caregivers that they had previously had limited contact with reaching out to support at-home learning environments for the duration of remote learning. One participant detailed helping a grandpa set up the learning system in their home so his grandchild could access distance learning. After being called repeatedly by the grandfather, the educator went to the house outside of school hours to troubleshoot with him and to support the family and student's access to the online platform. Across the data, we saw instances of parents reaching out to educators as a source of validation and as an outlet to express their concerns. Our teachers described families calling, emailing, or texting to let them know they were struggling but trying to implement everything they could to support their children. Our participants reported that when they observed students becoming disengaged and lacking motivation, they could reach out to families directly to support their children's engagement. One participant described it as such:

"I had a great relationship with some families that responded right away. Like there were families that I would tell them: Okay, so your child is behind in their work, and you, please make sure that they know that this is homework, or can you make sure that tomorrow they log into my class, their general ed class...I had a lot of support."

Participants did clarify that they could only do this with families with whom they had previously developed a strong working relationship.

The second category we identified was that "Remote learning tested the family/educator relationships," and, within this category, we looked for points of tension between educators and families. The tensions described led to fewer family/educator interactions as the pandemic progressed. All participants described having at least one family that they lost complete contact with at the time of data collection. One participant described one family's transition to remote education by saying, "The emotional turmoil that's been going on the last few weeks and how it's as if the school doesn't seem to be a priority." Our participants described that many of the students and families they served had concerns over basic survival needs. At the beginning of distance learning, families expressed that they were overwhelmed and that school was not a priority for them at that time.

While adult facilitation was vital for many students, many educators understood they could not expect every family to become surrogate teachers in the process. Participants acknowledged that they overestimated potential parent involvement and had to remember the limitations created...
from distance learning. Furthermore, some families' limited technology access was a significant barrier to communication and parent/educator relationships. One participant described the length she went to support parents, "I started having the parents take pictures of their work and sending them to me. So that was when like the fourth quarter (spring 2020). I would be getting it through pictures because I guess everybody does have cell phones." Some families did not have access to the technology before the pandemic's start and did not have a dedicated computer for students to complete their work with, so educators created paper packets to send home.

**Conclusion**

Since the beginning of COVID-19 and the immediate shut down of in-person learning, several researchers began to explore teacher experiences related to providing instruction and supporting their students. While many are more general teacher experiences (Alea et al., 2020; Marek et al., 2021), others like this study focused specifically on special education (i.e., Toquero, 2021). Across studies, similar findings emerged, one of the biggest across all was the amount of stress the pandemic put on teachers. Like the teachers we interviewed, Alea et al. (2020) found that the uncertainties, new roles, and providing support to students were more stressful than usual. Teachers were expected to support their students socially and emotionally while also finding new ways to adapt instruction and support their students with little guidance. Mare et al.'s (2021) survey of teachers' experiences found that teachers felt to make learning work they had to find their own resources and adapt what they already knew. Similarly, Toquero (2021) found that teachers felt a lot of apprehension with their new roles and were unsure how to make them work for their students, specifically developing distance learning that supported their students' individual and intensive needs. With little to no training, the teachers in our study felt more support would have helped; this is similar to the findings and recommendations of other researchers (i.e., Zhang et al., 2020)

With the continued uncertainties of COVID-19 and distance learning continuing for many districts well into the current school year, the insights from these teachers highlight the immediate needs of special educators and their students and the capacities of schools and districts to meet the needs of all students flexibly. The results of this study also provide additional information related to significantly important components of education that did not emerge until now, such as equitable access to technology and uniquely differentiated learning environments. Many schools already use virtual tools to post and submit assignments; communicate with parents, and more. The educators in this study shared that it became obvious that students and families had long been excluded from these opportunities due to lack of access to equipment and consistent Wi-Fi. Lastly, special educators have been pushed to expand their repertoire of differentiated learning strategies. Some students do well with live, synchronous video lessons, while others do better when they can complete lessons and work in smaller chunks on their own time. Some students have ample support at home, while others require work they can complete independently. While
we are in the middle of the 2020-2021 school year and many districts continue with learning virtually, this research team believes that special educators, with their unparalleled flexibility and ingenuity, will be key in meeting the needs of all students.

References


The University of St. Francis Commitment to Equity and Social Justice
by John Gambro

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The University of St. Francis encourages all its members to embrace our four Franciscan values – respect, service, compassion, and integrity and incorporate these values into our life and work. Each academic year the College of Education (COE) focuses on one of these values in order to explore how we might more fully integrate it into our programs. The value designated for the 2020-21 academic year was compassion. During the summer of 2020, members of the COE gathered to discuss how we might “unpack” the Year of Compassion and how we could make it meaningful and impactful to all of our community members. As everyone will recall, the summer of 2020 was filled with tremendous suffering due to the COVID-19 pandemic and the odious effects that systemic and structural racism continues to have on our families, communities, and country. As a Franciscan institution whose patron was committed to radical inclusivity and reaching out to the marginalized, we knew we needed to respond, but we struggled to come to terms with what form that response should take.

After several difficult but honest discussions, we agreed that we would appoint a task force to draft a statement – but only on the condition that statement would be followed by concrete action. The task force decided that the statement would consist of a series of “recognitions” that describe the current state of affairs and a series of commitments or actions that we would dedicate our college to implement in the near future.

The statement begins, “During this Year of Compassion, in response to recent events regarding institutional and structural racism and the heinous effects that systemic abuse of power continues to have on students, families, communities, and the entire educational process, the College of Education has developed a set of statements that acknowledge our current standing and affirm our commitments to the principles of equity and social justice.”

The recognitions included affirmations of what we believe are positive foundations upon which we can build, followed by acknowledgment of areas that require attention and development. For example:

We recognize that the College of Education...

1. affirms kindness as foundational to our Franciscan heritage, rooted in our values of service, respect, compassion, and integrity.

2. values and has initiated conversations regarding social and racial justice.
3. strives to model inclusive and culturally responsive practices.

*However, we also recognize that...*

- all people carry biases and it is necessary to reflect on our own bias and dispositions concerning equity and social justice.
- the institution of education has a long standing history of systemic discrimination and racial inequities.
- as educators, we have the obligation to study the issue of systemic racism and deepen our understanding of issues related to equity and social justice.

Finally, the statement lists a series of commitments. For example:

*Therefore, we are committed to...*

- examining our own biases and considering where they may have originated.
- having courageous conversations with each other and with candidates to uncover and better understand the depth of racism and how it affects us and our students.
- providing candidates with the knowledge, skills, and dispositions required to advocate for equity and establish culturally responsive, inclusive, and antiracist learning environments.
- enhancing programs to intentionally address the advancement of human dignity, equality, justice, and educational equity.

The statement concludes with an acknowledgement that it is only a first step toward being more proactive and intentional in striving to more fully actualize the Franciscan ideals of inclusion and antiracism.

In the fall semester, the full COE unanimously ratified the statement. It was agreed that the COE would spend the first year examining where we were individually and commit ourselves to self-reflection. As a source of common content, we selected the website Project Ready which hosts a series of free professional development modules about race and racism, racial equity, and culturally sustaining pedagogy. Based on the modules, we held monthly college-wide difficult, awkward, personal, challenging, but always honest conversations about the content. The discussions proved to be a forum for sharing personal experiences, embarrassing pasts, traumatic events, and hopes for the future. Of course, as individuals we have applied this content and taught about them in our courses over the years; however, the modules and discussion provided a common vocabulary and shared experience that have proved extremely useful as we consider how to integrate additional content into our programs.
The plan for next year is to apply what we have learned and integrate additional content, practices, and experiences into our programs. We believe that the newly adopted Illinois Culturally Responsive Teaching and Leading Standards will serve as a helpful framework for a systemic and comprehensive integration. It is our hope that our recognitions, commitments, discussions, plans and action will have a positive impact as we strive to create a more compassionate, equitable, and just world.
Fresh Innovations, Systems Reimagining, & New Opportunities

… But who will teach?

by Pallavi Abraham

Author Bio: (Ed - Please insert a short bio which says something about your education, degrees, professional background and current position—perhaps two sentences. Many thanks!) She may be reached at pabraham@supportingteachers.org

In 2008, the Chicago Urban League filed a lawsuit against ISBE declaring the current system of public education in Illinois to be unconstitutional: “a violation to the IL Civil Rights Act, and a system that disparately impacts racial and ethnic minority students.” Since 2008, Chicago has worked to identify and begin to address the many factors that contribute to disparities in outcomes for racial minorities. Even after 12+ years of work and significant improvements, the 2020 ISBE report card shows the city has work left to do in order to offer its Black and LatinX students equitable access to opportunity (ISBE, 2020). And then the pandemic happened.

Research from (Ed - give full name, then abbreviate in parentheses) NWEA (Kuhfeld, 2020) and McKinsey & Co. is predicting significantly lower levels of academic achievement and long-lasting socio-emotional impacts due to the year of remote learning. When students returned to school in Fall 2020, they arrived with only 70% of normal learning gains in reading and 50% of normal learning gains in math when compared to a typical school year. Just like the health effects of the COVID-19 virus, these negative outcomes are not distributed equally. Our Black and LatinX students are predicted to see the largest gap in learning, negatively affecting their educational and potentially career trajectories (Dorn et. al, 2020).

Countless organizations are working to provide innovative solutions to this learning loss, such as new technology, virtual curriculums, and 1:1 targeted support for students. But the studies are explicitly clear: TEACHERS are and will continue to be the primary in-school influence on student achievement (Darling-Hammond, L., 2000). Despite the overwhelming research on the importance of educators nationwide, we are losing 50% of teachers within the first five years, negatively affecting student outcomes. Furthermore, we are seeing that urban schools, predominantly serving students of color, are 50% more likely to experience high rates of teacher attrition (Ingersoll, 2018).

Illinois schools reflect these national statistics, as well. Across the state, we are on the brink of a critical teacher shortage (ISBE, 2020) with classrooms filled with substitutes and support staff instead of experienced teachers. For example, Chicago Public Schools saw a dramatic dip in their retention rates from 85% in 2017 to 77% in 2018, and has yet to fully recover. While it is well established that all teacher turnover is detrimental to student achievement, low retention rates become especially problematic when they involve a school’s best teachers. (Carroll, 2007).
Additionally, today, roughly half of Illinois public school students are students of color, yet the teaching force remains 85% white. We know that teacher-student demographic congruence for BIPOC (Black, Indigenous & People of Color) students can positively impact several outcomes, including raised educational expectations of academic achievement, improved student attendance, decreased school suspensions and reduced discipline referrals, increased referrals for gifted and talented services, and decreased likelihood of school dropout (Rafa, 2020). Despite all of the positive impacts of BIPOC teachers, these teachers of color move schools or leave the profession at a higher annual rate than do white teachers, much of which is due to the poor working conditions of schools in which BIPOC teachers are placed (Carver-Thomas, 2018).

While highly concerning during a normal school year, these statistics prove catastrophic in combination with the intersectional effects of the pandemic, poverty and racial injustice. According to a survey from Advance Illinois, most hiring managers agree that they are expecting a large increase in attrition due to educator exhaustion this year. Our BIPOC students, who are already experiencing the highest rates of learning loss, are looking into a future in which they cannot count on their classroom to be filled with an experienced teacher.

As a result, at the state-level we are searching desperately for ways to bring fresh and diverse people to the field. This strategy fails to address the retention issue, as our schools already have many excellent educators, who are leaving the field at alarming rates. In order to retain these top performing teachers, we must be prepared to invest in their working conditions, autonomy, and access to professional growth opportunities.

The groundbreaking “Irreplaceables” study discovered that <30% of high performing teachers were given opportunities for leadership roles. Even more concerning was the discovery that <40% of these “irreplaceable teachers” were even encouraged to remain teaching at their school (TNTP, 2012). Furthermore, (Ed -give full name before abbreviation in parentheses) E4E found that 92% of all teachers surveyed desired more opportunities to further their careers and professional skills while staying in the classroom (E4E, 2018).

By empowering teachers to lead alongside a school’s administrator, we can build a school-wide distributed leadership philosophy that increases the overall capacity within a school (Fullam, 2005). When we bring the school’s staff together, collectively pulling in the same direction and guided by the same vision and values with a common set of goals, students benefit (Solly, 2019). Also, investment in teacher leaders is a key predictor of not only school effectiveness, but also whether teachers stay in their building and the profession.
Especially this year, we know the weight of a Chicago school is far too heavy for a single school leader to bear. Addressing the pandemic learning loss and maintaining the organizational stability of our schools will require a collective effort of principals and effective teacher leaders to bring new ideas to the ground level, accelerate student learning, and build a culture of collective responsibility. Today, we are presented with a dual opportunity:

**By investing in teacher leadership, we will simultaneously be able to retain our schools most effective teachers and empower them to lead pandemic recovery efforts.**

Our schools, which have consistently struggled to provide *every* student and equitable education, cannot rely on a new technology, revamped curriculums, or a single school leader to bridge the gap in achievement this year. The collective effort of principals and highly effective teacher leaders bringing new ideas to the ground level will accelerate student gains. We must urgently invest in retaining a diverse cohort of our city’s top-performing teachers and empower them to enact change.

**References:**


Call for Articles, Columns, & Reviews

*Voices for Educational Equity* (formerly *Success in High-Need Schools Journal*)

**Volume 17, Number 2: “Walking the Talk”**

**Volume 18, Number 1: “Partnerships: Teacher Shortages, Affordability, Competency, and Equity”**

With this issue the journal is pleased to announce a broadening of its mission to become more national and international in scope. With a newly established editorial board, scholars and scholar practitioners are invited to submit articles that will be refereed. In addition to our established format of scholarly articles and opinion columns, expanded content is encouraged including book and media reviews. Editorial board members review all issues for final editorial approval before they are posted. The journal’s new name, *Voices for Educational Equity*, better reflects contemporary educational priorities, including growing societal concerns about impacts of inequity. The journal will continue to highlight scholarly research and innovative ideas and practices on emerging as well as persistent longtime issues, and to invite the perspectives of all stakeholders in order to promote a productive dialogue. The journal will continue in its “open access” format and be posted twice each year.

The COVID-19 pandemic exacerbated longstanding issues that educators have grappled with for decades: chronic teacher shortages, rising educational costs which combined with high student debt and modest educator salaries reduce the career attractiveness of the teaching profession, and inequities in school funding between wealthy and poor districts, as well as persistent racial inequities. It appears that the Biden administration may provide leadership in addressing such problems. Consequently, the journal invites authors to contribute pieces for upcoming issues of the journal on the themes, “Walking the Talk” and “Partnerships.”

*Walking the Talk* invites presenters and participants at the Center for Success annual conference, June 11, 2021, to submit their presentations and perceptions in the form of scholarly articles or opinion columns to the journal by September 1, 2021. This Call seeks all scholarly proposals that describe successful programs or practices implementing policy goals in areas such as the following:

- diversity, equity, structural injustices and student achievement
- teacher leadership and professional development
- reimagining education including lessons learned (in-person, remote, and hybrid teaching)
- student social and emotional learning.
The second Call, authentic **Partnerships**, are born out of opportunities to create “win/win” outcomes. For example, university stakeholders in education who want to increase the number of teacher leaders in their programs might partner with a school district to improve teacher retention by creating career pathways via teacher leader endorsements educators earn in Teacher Leader programs. As well, a third “win” may occur as teacher longevity increases their effectiveness bringing about higher student achievement. Partnerships might also increase both efficiency and effectiveness in preparing teachers while inspiring and building a PK-12 pipeline to college in minority, urban and rural communities, or might result in using educational resources more productively nationally and internationally. In addition to featuring innovative partnerships between schools and colleges at all levels, the journal invites ways that governments, foundations, and non-profits, plus stakeholders such as parents, communities, and businesses might become partners. **The deadline for submissions is January 15, 2022.**

Articles and columns should be submitted as Word document email attachments to Jerry Berberet, editor ([wgberberet@aol.com](mailto:wgberberet@aol.com)). Case studies examining equity from a variety of perspectives are especially welcomed. Articles and case studies should be 2,500-5,000 words and include a short author bio, an abstract of 100-150 words, a brief review of relevant research literature bearing on the article subject, and a reference bibliography. Columns are opinion pieces, ordinarily of 500-1,000 words, reflecting the views of the author. Book reviews should be 500-750 words in length. Authors are invited to email Jerry Berberet or call (850-766-2656) to discuss a potential submission or to ask questions. Past issues of “Success in High-Need Schools Journal” can be accessed at [www.center4success.com](http://www.center4success.com).

**Aspiring Authors**

Aspiring authors are also invited to attend one of the Center’s Professional Development Network Academies that focus on writing for publication in **Voices for Educational Equity.**

**June 25 at 4 pm**

Please register for **Writing For Publication In Voices for Educational Equity** on Jun 25, 2021 4:00 PM CDT at: [https://attendee.gotowebinar.com/register/4772063398750226445](https://attendee.gotowebinar.com/register/4772063398750226445) After registering, you will receive a confirmation email containing information about joining the webinar.

**September 14 at 7 pm**

Please register for **Writing For Publication In Voices for Educational Equity** on Sep 14, 2021 7:00 PM CDT at: [https://attendee.gotowebinar.com/register/3444527353024754445](https://attendee.gotowebinar.com/register/3444527353024754445) After registering, you will receive a confirmation email containing information about joining the webinar.