

## **Themes: COVID-19 Disruption/Impact on Teaching, Learning, & Remote Learning, and Barriers for Racialized and Under-Resourced Communities**

### **Introduction**

COVID-19 related disruptions to education in Ontario and around the world have had an impact on nearly all members of society. The health measures implemented to curb the spread of the virus led to many school systems and community-based programs to make the difficult shift from in-person to emergency online classrooms and programming. A growing body of evidence suggests that individuals and communities have been impacted to varying degrees short term, and there is potential for harmful long-term psychological, social, and economic consequences (Adedoyin & Soykan, 2020; Bonal & González, 2020; Toronto District School Board, 2021a; Royal Society of Canada, 2021; Goforth, 2021; Toronto Foundation, 2021; People for Education, 2021; Tsoulou et al., 2021; UNICEF, 2021; Hanushek & Woessmann, 2020; Gallagher-Mackay et al., 2021). These disruptions started around March 2020 when news of the virus led to many countries going into states of emergency and being forced into lockdown orders (Bonal & González, 2020). A recent framework proposed by UNICEF (2021) claims that at the height of the lockdowns 90% of students worldwide were effected, and over one-third of schoolchildren didn't have the technology necessary to participate in remote education. As new information about the virus continues to emerge, classes have rotated between remote, in-person, and hybrid models of teaching and learning which ongoing demographic data suggests has led to major disruptions for teachers, students, parents, and communities in ways that have exacerbated systemic barriers and inequalities, and increased student learning loss and opportunity gaps between advantaged and disadvantaged families particularly with the intersection of race and poverty/socio-economic status (Bailey et al., 2021; Toronto District School Board, 2021a;

Toronto Foundation, 2021; Sandberg Patton & Reschly, 2013). In other words, racialized identities from lower socio-economic status were disadvantaged the most by pandemic conditions (Toronto Vital Signs Report, 2021).

The purpose of this literature review is to assess current and past data and reports detailing the ongoing impacts of COVID-related disruptions and discover the best strategies and interventions to decrease socio-economic and ethnic inequalities, support community-based organizations in discovering effective programming and pedagogies to help mitigate barriers to access and engagement with transitions between in-person, remote, and hybrid programs, and support with the improvement of mental health and well-being scores (Canadian Teachers Federation, 2020; Toronto District School Board, 2021c). Additionally, we want to highlight the strategies being researched to decrease the barriers contributing to the inequitable access to necessary information communication technologies (ICTs) and digital competencies, and ultimately increase educational opportunities and access to resources for the students and families that have been disproportionately disadvantaged by the circumstances created by the pandemic. Findings shared can serve as a framework for school systems, educators, community-based organizations, and key stakeholders in Canada and around the world who are also attempting to mitigate some of the overwhelming challenges being created by COVID-related disruptions.

A literature review was conducted to identify themes. This was initiated by searching through academic databases to find peer-reviewed journal articles using key search words (digital divide; learning loss; mental health impacts; remote learning; teacher training; supplementary education programs (SEPs); and parental engagement). We found local and international journal articles and reports that highlighted the inequitable learning opportunities

for students from different socioeconomic and ethnic backgrounds (Bonal & González, 2020; Toronto District School Board, 2021a; O’Keefe et al., 2020). The search was focused on literature within the past three years (2018-2021) to gather up-to-date data about the impacts of COVID-19, and a few sources from pre-pandemic to gather historical background of the issues being examined. Once the literature themes were identified, they were compared and contrasted in relation to the data collected from the teacher focus group and surveys with parents, students, and teachers as part of the Community School Initiative offered by *Youth Association for Academics, Athletics, and Charter Education (YAAACE)* in partnership with *Spirit of Math*. YAAACE is a non-profit organization in the Jane and Finch neighbourhood in Toronto, Canada. The data gathered from our study and from the literature review led to identification of five key challenges being experienced by racialized under-resourced communities as it relates to education.

**First**, due to socio-economic and digital inequalities that existed long before the pandemic (Chen, 2013), some students’ accessibility needs aren’t being met for them to be able to consistently participate in remote learning without disruption (e.g., financial constraints, lack of up-to-date technology, connectivity issues, having a quiet place to work, etc.) (Bonal & González, 2020; Royal Society of Canada, 2021), and the pandemic has “highlighted cracks in the education system” (Allen et al., 2020, p. 208). This has led to a reduction in instructional time and opportunities to learn, particularly for low-income, racialized, and socially disadvantaged students (Bonal & González, 2020). **Second**, there wasn’t enough time to properly train educators to teach, and students to learn remotely using effective, deliberate, and well-designed online methods and pedagogical strategies that are seen in high-quality online courses (O’Keefe et al., 2020; Morgan, 2020; Royal Society of Canada, 2021; Means et al, 2014).

Remote classrooms are not a new method of teaching and learning, with places like Australia having many decades of experience using remote instruction (Hidetoshi & Suk Ying, 1993, as cited in Ewing & Cooper, 2021). Recent data in the *COVID-19 Faculty Playbook* (O’Keefe et al., 2020), a concise guide to delivering high quality instruction online in response to COVID-19, has shown evidence of over a decade of steady growth in online enrollment in higher education. **Third**, building genuine relationships and emotional connections with and between students is much more difficult in an online setting (Hagerman & Kellam, 2020), with both teachers and students agreeing that they prefer in-person teaching and learning (Adedoyin & Soykan, 2020; Ewing & Cooper, 2021; Toronto District School Board, 2021a; Toronto District School Board, 2021b). **Fourth**, the drastic reduction in broader opportunities outside of the classroom such as extra-curricular activities and SEPs (People for Education, 2021; Eke & Okeke, 2019), which higher-income families can mitigate due to having less financial constraints, is creating a hidden gap that is further increasing traditional inequality. **Lastly**, remote education has led to many educators, students, and families experiencing feelings of social isolation and decreased mental health and well-being scores contributing to increases in the amount of people suffering from the “secondary pandemic of mental health” (Royal Society of Canada, 2021, p. 152).

These are the COVID-related disruptions to education that will be discussed in this literature review followed by some recommendations for next steps with efforts made to look through overcoming the aforementioned barriers through an asset-based approach. An asset-based lens is described by Broadley (2020) as a way to identify local strengths and capabilities of communities by, “shifting control over the design/development of actions from the state to individuals and communities” (p. 254). This contrasts with the more familiar ‘deficit’ approach that “focuses on problems, needs and deficiencies in a community” (Foot & Hopkins, 2010, p. 6,

as cited in Broadley, 2020), and can lead to communities feeling dependent on state and private profit-based organizations to fill gaps and fix problems leaving members of the community feeling disempowered passive recipients of services rather than active agents of change.

## **Literature Review**

### **Disproportionate Impacts on Grades and Achievement Levels**

The critical research, reports, and reflections emerging about the impacts of the pandemic are evolving daily, and findings are showing evidence of negative educational outcomes for newcomer students, students from lower socio-economic households, students with special education needs (SENs), Black Indigenous, and People of Colour (BIPOC) students, English language learners (ELL), girls, 2SLGBTQI+ students, students with Autism Spectrum Disorder (ASD), kinesthetic learners, and students with low digital competency (Adedoyin & Soykan, 2020; Toronto District School Board, 2021a; Toronto District School Board, 2021b; Ewing & Cooper, 2021; Royal Society of Canada, 2021; Allen et al., 2020; Enyon et al., 2020; Tsoulou et al., 2021). Evidence of this can be found in a TDSB (2021a) report called the *COVID-19 Pandemic Recovery Plan* that gathered course and survey data of 1000s of students to outline the long-term impacts that the pandemic may have on student learning for all ages and grade levels. In the report, there is a section that used demographic statistics to create a comparative graph showing the percentage of Grades 1 to 8 students that were at or above a level 3 on their report card for reading between January 2019 and January 2021. Statistics showed that average score improved, regardless of demographic factors, with Black students seeing an 8% increase in Reading (58% to 66%), low-income students seeing a 5% increase (63% to 68%), and students from single-parent households seeing a 6% increase (58% to 64%). Although these statistics show an improvement of grades for all students, the students who continue to have the most

favorable learning outcomes and scores are, White students (86% at or above reading level), students from two-parent households (78% at or above level 3), and students from high-income households (83% at or above level 3). These findings document the continued gaps in achievement observed between the most privileged and the most vulnerable students, which are gaps that many say are at risk of intensifying due to COVID-related disruptions and the intersection of race with socio-economic status (Toronto District School Board, 2021a; Gallagher-Mackay et al., 2021; Bailey et al., 2021). This speaks to the importance of investing in implementation of targeted intervention strategies for particular social group of students disadvantaged by systemic barriers to improve their educational outcomes. These are the same students who have historically been underserved and disadvantaged due to ways of being and learning that may not respond well to “normal” teaching strategies, being taught content that “ignores cultural experiences, perspectives, and knowledge” (Eizadirad, 2019, p. 58) of marginalized students (i.e. a culturally relevant and responsive pedagogy), not receiving the necessary accommodations, modifications, or interventions to support their learning (Pathways, 2020), and now COVID-related disruptions to schooling and community programs that have led to the services and spaces that they may have benefitted from in person being reduced, postponed, or cancelled (Royal Society of Canada, 2021). Dr. Carl James, a Canadian scholar with many years of experience conducting research on marginalized youth, with a particular focus on the experiences, interests, and needs of African Canadian youth, found that COVID-19 has “added to the social and educational inequities among people, [and] it has exacerbated the racial injustice with which racialized and Indigenous youth must contend” (James, 2020, p. 1, as cited in Royal Society of Canada, 2021, p. 32). These findings come from an essay he wrote titled *Racial Inequity, COVID-19 and the Education of Black and Other Marginalized Students*

(James, 2020), where he presented data that showed the way “COVID-19 serves to exacerbate the inseparable systems of embedded inequities – of which education is a major foundational pillar – thereby adding to the problems of the most vulnerable to its effects in educational, social, economic and other areas” (p. 38). This has contributed to the already rampant epidemic of racism that has negatively affected BIPOC communities for centuries.

These findings are a cause for concern because of the implications they have on the most vulnerable members of society who statistically experience more negative impacts during periods of crises like a global pandemic (Royal Society of Canada, 2021). If the necessary resources aren't allocated to fund initiatives and support strategies and interventions to mitigate losses during and post-pandemic, it could lead to devastating effects for racialized and under-resourced communities that can have significant social and economic ripple effects in a post-pandemic future (Toronto Foundation, 2021). The data in the *TDSB Pandemic Recovery Plan* (2021a) which showed an increase in grade scores across grades greatly differs from the data found in a February 2021 *Globe and Mail* article by Alphonso and Perreux (2021), a December 2020 *Washington Post* article by Strauss (2020), and a June 2021 science brief by Gallagher-Mackay et al. (2021) on the impacts of COVID-19 on education. All of these articles made claims that students' grades and achievement levels have been dropping compared to levels in the years preceding the pandemic. For example, Gallagher-Mackay et al. (2021) provides a detailed summary of a growing body of international evidence emerging from 14 large-scale studies from the US, England, Netherlands, and Belgium that indicate “the serious effects that school shutdowns have had on children” (p. 10), and “substantial increases in the number of students who started [Fall] 2020 well below grade level” (p. 10). A possible explanation for this variance in findings may be attributed to the differing methods of data collection and data sets

observed, with the *TDSB Pandemic Recovery Plan* only focused on Toronto schools compared to Gallagher-Mackay et al., (2021) who looks at a local and international perspective. What is clear, however, is that the impacts of the pandemic are varied.

Significant losses were not only seen in racialized and under-resourced communities, but also in “populations with relatively low levels of income inequality” (Gallagher-Mackay et al., p. 10). However, continuously emerging findings of the pandemic's impacts on education show an unequal distribution of learning losses depending on measurement and context, and consistent patterns between schools and students show that the ones who have fallen furthest behind their peers are the racially and socio-economically marginalized students (Toronto District School Board, 2021a; James, 2020). These factors contribute to the perpetuation of systemic discrimination where as Eizadirad (2019) in his book titled *Decolonizing Educational Assessment* explains has been historically “embedded within the fabric of institutional policies and practices” (p. 42) in Canada. These statistics demonstrate the need for further ongoing research and analysis of COVID-related disruptions on education both short and long term.

Another report by the TDSB (2021b) on the “*Preliminary Findings on the Impact to Learning Due to the Pandemic*” found that the average mark range for all students in Grade 9-12 had gone up year over year, with the percentage points of students who received marks in the 80-100 range rising by 16 percentage points between 2016-17 to 2020-21. These findings, compared with other research that has reported the devastating impacts of learning loss and other negative impacts of COVID-related disruptions (Royal Society of Canada, 2021; Gallagher et al., 2021; Hanushek & Woessmann, 2020; Sandberg Patton & Reschly, 2013) show us why using grades as a metric for impacts on learning fails to capture the complexity and variance of the negative impacts created by the pandemic. Furthermore, it's important to note that the nature of grading,



teaching, and learning has drastically shifted during the pandemic which may greatly influence the way teachers assess their students. During the pandemic, many teachers were no longer giving the traditional 30% final cumulative exams to high school students, could not monitor if students were cheating during remote learning, and directed by central policies to support mental health of their students (Toronto District School Board, 2021b), all which when prioritized could have affected the increases in average marks.

The variances in experiences of the pandemic support the observation from a recent study on the Australian education system by Ewing and Cooper (2021) that claims, “no two participants’ are the same – the individual variances are large” (p. 13). In this study, Ewing and Cooper conducted 40 semi-structured interviews with Australian teachers (n=13), parents (n=12), and students (n=15) to gather narrative data about the “direct, indirect and unintended influences” (p. 4) that the pandemic had on learning experiences in term two (April-June 2020) during the ‘first wave’ of COVID-19. Students interviewed for the study ranged from year (i.e., grade) 5 and year 12, and the interview protocol consisted of 9 open-ended questions for the parents, and 10 questions for students and teachers. The data went through multiple levels of analysis through iterative readings of the thematic and structural aspects of the text to generate codes, find patterns, and define themes and underlying insights. Some key findings from this study were that: teachers had a hard time connecting with and engaging students and parents as “social isolation was a major challenge for students” (p. 13), and they found remote online learning to be less personalized which contributed to a lack of engagement where parents remained “largely unengaged with teachers” (p. 1). These findings strongly correlated and aligned with the data we collected through surveys and a focus group with teachers about their experiences in the Community School Initiative.

The research methods of Ewing and Cooper's (2021) study are similar to the mixed-methods approach (Cresswell & Plano Clark, 2017) used in our research project with YAAACE where we captured the lived experiences of educators (n=7), parents (n=33), and students (n=33) via surveys and a focus group, and analyzed the data by triangulation and via thematic analysis to identify challenges in program delivery created by COVID-related disruptions and aim to provide recommendations to mitigate learning loss and reduce the opportunity gap (Eizadirad, 2020). The 12-month partnership with YAAACE was initiated in response to the pandemic's impacts on YAAACE's capacity to deliver effective online, in-person, and hybrid programming. The student-athletes involved in the research project, their parents/guardians, and the teachers and coaches involved in our study are all members of YAAACE's *Community School Initiative* (CSI) which is an SEP partnered with *Spirit of Math* to deliver a structured math curriculum to students who are in grades two to eight aged eight to fourteen years old. The CSI is one of the many holistic and socio-culturally relevant and sustaining programs YAAACE offers in the Jane and Finch community.

Findings based on coding of the data we collected suggest that teacher-student engagement is a major concern during remote instruction. Teachers, students, and parents overwhelmingly preferred in-person over remote learning as parental engagement is low, and students suffered from social isolation. Extreme variances in access to technology and digital competence created barriers to engagement and contributed to a widening in the achievement gap. These are challenges being reported in many other studies recently published examining the impact of COVID-19 on various social groups in education (Toronto District School Board, 2021a; Royal Society of Canada, 2021; UNICEF, 2021; Tsoulou et al., 2021; Allen et al., 2021;

Adedoyin & Soykan, 2021; Bailey et al., 2021; Hanushek & Woessmann, 2020; People for Education, 2021).

### **Increased Learning Loss and Widening of Achievement Gaps**

In *Preliminary Findings on the Impacts on Learning Due to the Pandemic* by the TDSB (2021b), 84% of students reported that they learn better in-person compared to virtual learning. These findings are consistent with what we found in the parent/student and teacher surveys and focus group with YAAACE members, with all respondents overwhelmingly reporting that they prefer in-person to remote learning. Out of 29 student responses, 0% said they prefer online learning, about 72% (n=23) said they prefer in-person school, and 18.75% (n=6) said they prefer a hybrid model. In comparison, out of 32 parent responses, 0% said online best supports their child's needs, 62.5% (n=20) said in person, and 31.25% (n=10) said hybrid. Students reasons for their dislike of online learning was highlighted in quotes like, "it's boring, can't get one on one help", "it's easily distracting", and, "I miss being with my friends." Many parents were also critical of remote learning saying things like, "remote learning is not an ideal model for a child with ADHD", and, "virtual learning is tough for both students and parents. It's not as effective nor motivating as in-person learning." However, it's important to note that some students and parents do enjoy aspects of being online with one student claiming that CSI "made me like online learning", and one parent supporting online classes said she thought it was good for building their digital competence saying, "it's important for the boys to be familiar with different styles of learning and to be proficient with the tech involved." Finally, teacher's biggest concerns with online learning was difficulty with student engagement, collecting students work, the negative impacts on kinesthetic learners, and sporadic attendance which was a major challenge for teachers when trying to follow the Spirit of Math curriculum without falling behind. These

results show the difficulties that were experienced with remote learning, however results show promise for future implementation of hybrid learning and embedding digital technology into classrooms to support diverse learning needs.

Data gathered by Bailey et al., (2021), based on 221 survey responses of education researchers asked to forecast predictions on the future impact of COVID-19 on learning gaps, found that researchers believe that “learning gaps are likely to increase sharply, and perhaps differentially for math and literacy” (p. 267). This is what makes programs such as CSI significant as it seeks to mitigate losses in math rooted in systemic opportunity gaps related to accessing educational support programs in a manner that is affordable. Prior to shifting from in-person to remote and/or hybrid learning models, many K-12 educators had limited to no experience in online facilitation, and this lack of adequate digital competency added another layer of difficulty and frustration for teachers, students, and parents (Adedoyin & Soykan, 2020; Morgan, 2020; Ewing & Cooper, 2021; Cavanaugh & Deweese, 2020; Ewing & Cooper, 2021). For example, for remote teaching educators had to take it upon themselves to alter their teaching practices. As one teacher stated, “I had to educate myself on how to engage students using new digital technologies and apps.” Having to take this upon themselves with little direction or planning from the Ministry (Canadian Teachers Federation, 2020) contributed to major increases in teacher stress, anxiety, and depression and other mental health concerns. To make things worse, teachers were often under the gaze of parents during online classes which led to some parents being critical and dissatisfied with some teachers’ perceived shortcomings with digital engagement skills (Ewing & Cooper, 2021).

To mitigate some of the aforementioned difficulties and ensure more equitable opportunities to succeed under new learning conditions, some schools decided to ban the use of

graded instruction during remote learning stating that graded virtual instruction would require that every student had equal access to technology (Morgan, 2020). Instead of grades, these schools focused on prioritizing social-emotional learning opportunities (Royal Society of Canada, 2021), interpersonal interactions, mental and physical well-being, non-academic conversations (Ewing & Cooper, 2021; Liu & Li, 2020), and student-centered learning strategies (Morgan, 2020; Toronto District School Board, 2021a). This led to a reduction of standardized testing and allowed for alternate learning opportunities such as the use of outdoor play, building relationships, and honoring skills/knowledge gained during the pandemic as outlined in TDSBs *COVID-19 Recovery Plan* (2021a). Although testing and grading is important for the assessment of knowledge and understanding, these alternate ways of education and innovative ways of assessment should be given consideration to support different learning styles and mitigate existing inequalities, particularly for marginalized social groups (Royal Society of Canada, 2021).

With such drastic changes and uncertainties around the teaching profession and a lack of consensus on the best pedagogical strategies to engage students, it's important that educators prioritize self-care for themselves and their students to prevent getting overwhelmed and experiencing burnout (Royal Society of Canada, 2021). This translates into remaining flexible and slowing down even if you know that you are "falling behind" on the curriculum. In the wake of a global pandemic that is leading to complex stressors and circumstances to varying degrees for everyone involved in education, it's important that teachers place their students and their own mental health and well-being ahead of rigid curriculum standards. In response to these varied experiences and identified learning loss during the pandemic, The TDSB's *COVID-19 Pandemic Recovery Plan* (2021a) suggests a 3-phase recovery plan that includes looking at demographic

data of students to gauge different socioeconomic backgrounds and strategize differentiated learning experiences to “implement targeted interventions after identifying which groups were most impacted in terms of learning loss” (p. 3). The objective of the plan is to identify outcomes resulting from the recovery plan by Spring 2023 to inform next steps. In preparation for the opening of schools in Fall 2021 the interventions included; honoring skills/knowledge gained during the pandemic, differentiated supports for those who have had greater impacts from the pandemic, digital tools for engaging family, and virtual learning 2021-2022. The document is a positive step towards reducing the negative outcomes for the most vulnerable students because they are acknowledging that there has been a learning loss and it will be disproportionate depending on the demographic markers that have been mentioned. In addition, the report recommends that educators put less of an emphasis on academics, course work, and grades, and instead focus on community and relationship building, outdoor play, differentiated forms of learning, and the principles of a Culturally Relevant and Responsive Pedagogy (CRRP) which all have the potential to create more equitable classroom experiences that celebrate a wide range of diverse identities, learning styles, and perspectives on life. This is where community-based organizations like YAAACE and their CSI comes in as it contributes to filling in the gap through accessible and affordable social services and programs for members from the Jane and Finch community. YAAACE operational framework for their programs and services is guided by a ‘social inclusions strategy’ which includes: outreach and wraparound supports; arts, athletics, and expanded opportunities; academic intervention and support; and research and curriculum development, specifically the creation of a curriculum that seeks to mitigate negative environmental factors that comprise academic engagement for students in racialized communities.

## **Systemic Barriers and Increased Inequality for Racialized and Under-Resourced Communities**

### **Loss of opportunity for participation in sports, extra-curricular activities, and supplementary education programs (SEPs)**

The prolonged nature of the lockdown didn't only impact students' ability to go into schools, but it also led to a massive reduction in co-curricular engagement opportunities and supplementary education programs (SEPs) (People for Education, 2021; Ekeh & Okeke, 2019), with some reports of a 90% decline in sports offered in schools since the start of the pandemic (Toronto Foundation, 2021). A supplemental education program can be described as “a combination of academic training with unconventional methods (e.g. sports, games, arts, discussions) in an organized program to increase the number of positive academic outcomes among students relative to negative ones” (Ekeh & Okeke, 2019, p. 5). For low-performing students in need of extra support, evidence has shown that SEPs can act as complementary academic training that can improve academic outcomes, and improve student's mental health and well-being (Royal Society of Canada, 2021; People for Education, 2021). By providing spaces that offer holistic and socio-culturally relevant and sustaining intentional programming, much like the CSI, SEPs help students strengthen their relationship with their peers and make new friends, explore different interests, and broaden opportunities that can help build skills and “develop their social, cultural and symbolic capital” (People for Education, 2021, p. 11) which are all vital components of student development.

Since the start of the pandemic there has been an increased demand for social services that is far exceeding their capacity to provide them. In the report by Toronto Foundations (2021),

information gathered from respondents of their Toronto Nonprofit Survey found that 49% of social service organizations had a significant increase in demand, but only 19% reported that their capacity to provide services increased as well. Although demand has been increasing, only 44% of respondents saw a revenue increase which shows the need for these essential front-line service agencies to receive more resources, funding, and supports from private, public, and/or government sources to help scale up their organizations to meet the needs of communities they serve. When the teachers at YAAACE had a survey question that asked them what they would suggest to the government to help improve schools and SEPs outside of school hours one of the teachers wrote, “to invest more money in lower economic neighbourhoods and schools to have more access to equal opportunities, programming, extra-curricular activities and technology.” These are sentiments that were shared by other YAAACE teachers who all agreed that governments need to provide schools and communities that serve marginalized children and youth with more opportunities for proper training, resources, facilities, and funding to help reduce achievement gaps.

Emerging findings suggest that SEPs offered by non-profits is significant in helping reduce the opportunity gap and reduce the impact of learning loss from the pandemic, particularly for racialized and under-resourced students and communities (Toronto Foundation, 2021; Ekeh & Okeke, 2019). A pre-pandemic study by Ekeh and Okeke (2019) found strong evidence that supplementary education programs can be used as an intervention strategy that can reduce the achievement gaps seen in the public education system. In their study, which involved following a group of over 100 elementary and middle school YAAACE student-athletes through a 7-week small-group levelled learning intervention, results showed that 13% improved their average literacy scores. In math, 61% and 59% of the students improved their problem-solving



and computational skills, respectively. The report from *People for Education* (2021) aligns and supports these findings. The report analyzed a 2020/2021 annual school survey of principals from 1173 schools across Ontario, who were working in-person, online, or in a hybrid format, and were asked about the challenges their schools were facing due to COVID-19. These results demonstrate the potential SEPs have to be a valuable intervention strategy that can be used to support low-achieving schools and students. Black students in the TDSB are disproportionately below grade level with reading and math scores (Toronto District School Board, 2021a), they are disproportionately streamed to the lowest academic level classes (Toronto District School Board, 2017), and SEPs offered by community-based organizations such as YAAACE have the potential to provide Black youth with an opportunity to learn in a supportive environment where “the teachers and staff reflect the cultural backgrounds of the students” as one parent said, and gives students the opportunity to “fill in the gaps that are missed in school.” With reduced access to this type of community-based programming, and social services having trouble finding the resources to accommodate the increasing demand, the opportunity gap is more likely to increase and the common practice of academic streaming of students from racialized backgrounds into non-academic and applied courses is likely to continue.

In addition to the academic component of YAAACE’s CSI, the athletic component has proven to be just as beneficial. In the survey with YAAACE students many respondents stated that their hobbies were basketball and video games. YAAACE uses this love of sport as a tool to promote academic engagement. Many of the student-athletes are mainly interested in the basketball aspect of the CSI, but in order to play you need to attend the academic classes which ends up being an incentive for them to give more effort in class. This holistic approach to student development has led to coaches being involved with the student’s education which the parents

and teachers agree has been a great motivator for the kids in keeping them disciplined and reminding them that they are students first and then athletes. During the focus group with YAAACE teachers, one of the teachers described the impact of the coaches as “night and day in terms of the difference in terms of behaviour when the coaches got involved.” Another comment by a teacher, citing their frustrations with the lack of parental engagement by parents claimed that the coaches are “pretty much the YAAACE surrogate parents. They make sure the kids are engaged.” For the parents, they also shared immense praise for the presence of the coaches by describing the great respect that their children have for the coaches and the mentorship that they provide on and off the floor. This family-centered, community hub approach to programming as part of the CSI is an asset-based approach to community development.

There is strong evidence that the closing of SEPs where students could get meals through nutrition programs, connect with their peers, and engage in different activities and clubs is causing even further harm and contributing to increased mental health issues (Toronto Foundation 2021; People for Education, 2021; Ekeh & Okeke, 2019). Evidence of this is shown in a 2021 report by *People for Education* claiming that in 2020-2021, “64% of low-income elementary schools offered no clubs at all, as did 61% of high-income schools” (p. 1). As mentioned in a previous section, students from high-income schools and homes have families that can afford paying for educational opportunities outside of school (Pathways, 2020), but for students from less affluent backgrounds the reduction of these opportunities leads to students missing out on vital experiential opportunities to connect with other people outside of the classroom to support healthy socio-emotional development. The 2017 TDSB Census data (As cited in Vital Signs Report) points to significant gaps in participation in SEPs based on the neighbourhood income levels and students racial status.

## **Income Inequality**

There is an overwhelming body of research that documents the effects that income and ethnic status have on educational and social outcomes (Toronto Foundation, 2021; Bailey et al., 2021; Colour of Poverty, 2021; Royal Society of Canada, 2021). According to the Colour of Poverty (2019), based on census data the majority of people that are living in poverty are from racialized groups (62%) who are over-represented in part-time and precarious employment. During the pandemic racialized and low-income families have experienced higher rates of job loss, reduced hours, absence of benefits, and a higher chance of being frontline workers leading to increased exposure to the virus. Public Health data in Toronto shows that “while Black people make up 9 per cent of the population, they account for 21 per cent of COVID-19 cases” (FR24News, July 31, 2020, as cited in James, 2020, p. 37). The unprecedented wealth accumulation of the mostly non-racialized and wealthy Canadian homeowners between 2020-2021 compared to renters (+\$1.7 trillion vs +\$0.1 trillion, Toronto Foundation, 2021, p. 36), and the increase in hours and work from home opportunities for high-wage earners serves as systemic barriers leading to income inequality reaching all-time highs.

The recent report by the Toronto Foundation (2021) called the ‘*Toronto’s Vital Signs: 2021 Report*’ was compiled to analyze the impact of COVID-19 on Toronto’s quality of life. They did this through interpretive analysis of compiled data sources and raw data from numerous sources, including 10,000 Toronto residents, over 250 non-profits, and 50 community leaders. In the 182-page report released October 2021, statistics showed that the gap between rich and poor along demographic lines has intensified with 83% of Toronto residents that make under \$30,000 annually being worried about making ends meet (29% more than before the pandemic). These economic factors contribute to increased inequality of opportunity for under-resourced and

racialized students, families, and schools. The responsibility of supporting and teaching students shifted to the parents during remote learning, with many parents not having the resources, time, or educational level to adequately support their children (Bonal & González, 2020). Toronto has the most expensive childcare in Canada, and four in 10 parents “have reported having trouble finding [affordable] childcare during the pandemic” (Toronto Foundation, 2021, p.54) with an increased burden on women, and especially newcomer women, who are often the primary caregivers of their children. Further data from the Toronto Vital Signs Report shows that 45% of Black parents nationally and 52% of Indigenous parents have the added challenge of inadequate access to a computer and high-speed internet at home. These are some of the factors that have led to the executive director of the Boys and Girls Club of East Scarborough, Utcha Sawyers, observing an increase in calls from parents who are overwhelmed with the increased responsibilities stating that they are “close to having mental breakdowns” (p. 95) and “don’t feel like they have the skills to transfer to their children” (p. 95).

This burden of support was also captured in the surveys with YAAACE parents who were asked how comfortable they were with helping their child with math while they learned remotely at home. On a scale of 1-10, the mean answer was 6.82, and many parents expressed their lack of confidence to support their children with answers like, “never been shown this type of math”, “the math is way too complicated for me”, and, “out of the curriculum for too long.” With the Jane and Finch community being identified as one of the 31 “Neighbourhood Improvement Areas” (NIAs) (City of Toronto, 2016, as cited in Eizadirad, 2020), and having demographics that consist of a high percentage of visible minorities, single-parent families, and unemployment, these statistics highlight the increasing importance of investing in these communities to prevent the rapidly rising income inequality. An NIA in Toronto is identified by

gauging a neighborhoods well-being through five different domains (City of Toronto, n.d.), in an effort to achieve equitable outcomes across all of the Toronto neighbourhoods. The five domains are:

1. *Economic opportunities*: including income levels and quality job opportunities.
2. *Social development*: including opportunities for education, literacy, and access to social services.
3. *Participation in decision making*: Opportunities for residents to get involved in making local and city-wide decision.
4. *Healthy lives*: The physical and mental health of residents.
5. *Physical surroundings*: Including access to transportation, parks and green space, and public meeting spaces.

### **Digital divide and inequitable access to resources and opportunities**

The accelerated shift to online learning has increased reliance on the use of information communication technologies (ICTs) in education, and exposed the growing digital divide experienced by families and schools (Bonal & González, 2020; Bailey et al., 2021; Toronto Foundation, 2021; Royal Society of Canada, 2021). This divide is seen along lines of age, income, race, and other demographic markers with “low-income, newcomer, single parents and people of colour most likely to be worried” (Andrey et al., 2021, p. 25). The digital divide, as outlined in a January 2021 report by the Ryerson Leadership Lab, can be described as “the gap that exists between individuals who have affordable internet access and the skills to use modern information and communication technology and those who do not” (Andrey et al., 2021, p. 6). In the report titled *Mapping Toronto’s Digital Divide* (Andrey et al., 2021), which conducted online and phone surveys of 2,500 Toronto residents, they found “noteworthy parts of the City with lower rates of connectivity include the Humber Summit/Jane and Finch area” (p. 4). This is impacting families’ ability to access critical services and consistent participation in remote learning for students, and reinforcing the need for increased resources and programs to close these gaps in access. When families, communities, and schools are unable to provide students

with the devices and internet capabilities that are needed to ensure equitable access for remote engagement for learning, more students will be at risk of falling further behind in key areas such as reading, writing, math, and social-emotional learning skills (Toronto Foundation, 2021; Royal Society of Canada, 2021).

Further evidence of this digital divide is found in the Toronto Vital Signs Report (Toronto Foundation, 2021) which found that 73% of Indigenous, 43% of racialized, and 26% of white residents in the Greater Toronto Area had unreliable internet access and worried about being able to pay for high-speed internet at home. Comparison of these findings with a Spanish study on the impacts of lockdowns on learning by Bonal and González (2020), who found that 61% of the highest income families had at least one device per person compared to less than 30% of the lowest income families, provides evidence that the disparities in access to information communication technologies and equitable learning opportunities along racial and economic lines is not just a local problem, but a global phenomenon contributing to increasing inequality. Both of these studies are consistent with data collected from the YAAACE survey with parents which found that over 20% of respondents (n=7) reported that their child/children had access to a device for learning only sometimes (n=5) or rarely (n=2), with some parents citing issues with connectivity, not having enough devices leading to children sharing laptops, and one parent stating that their child needs to use a cellphone to attend classes when they have appointments outside of the house. We see further evidence of the impacts of the digital divide from a quote by a parent who explained, “the challenge of having children attend additional online school is hard especially when all the boys do not have equal access to equipment (experience, laptop, internet speeds, etc...)”.

In contrast, many studies have found that students from higher-income and White families are more likely to mitigate these issues by being able to afford digital devices, adequate internet, tutors, and educational and extra-curricular activities and SEPs that will have positive effects on their academic and social development. (Pathways to Education, 2020; Royal Society of Canada, 2021; Gallagher et al., 2021; Bonal & Gonzalez, 2020; Bailey et al., 2021). A finding highlighting inequitable access to resources is found in the *People for Education* (2021) report which discusses the cost of losing extra-curricular activities rooted in financial inequalities between high and low SES schools. When comparing fundraising efforts in 2020-2021 they found that high-income elementary schools raised an average of \$15,197 compared to low-income elementary schools who raised \$6,879 (p. 8). Furthermore, the impacts of COVID-19 on low SES families compared to high SES families changed the way that fundraising was used with “one school [raising] funds to provide food to community families who were struggling, others [buying] technology to make learning possible” (p. 2). This documented variance in resources to support social and educational development is one of the reasons why there is such a large gap between learning outcomes of high-income and low-income students.

### **Impacts on Mental Health and Well-Being**

The pandemic has impacted young people and lower-income residents particularly hard with rising mental health challenges due to COVID-19. These challenges have been made worse with increased feelings of social isolation and loneliness, weakened systems of support, housing stress and economic hardship, and the threat of further disenfranchisement to name a few stressors (Royal Society of Canada, 2021). As difficult as the pandemic has been on students, research from the Canadian Teacher Federation (2020) and the Toronto District School Board (2021c) suggests that the detrimental impacts of COVID-related disruptions have been

overwhelmingly felt by parents and teachers as well which can lead to further negative outcomes for students. Parents and teachers are often the people who provide students with the encouragement, guidance, and support in their learning and personal development that improves their chances for social and economic success and well-being. For parents, the impact of COVID-19 on levels of parental engagement vary. The Australian study by Ewing and Cooper (2021) found that “parents were not engaged with teachers unless there was a specific reason to” (p. 9). These findings differ from the *Royal Canadian Society* (2021) report that found “many parents and teachers have been closer than ever before” (p. 39). In the case of YAAACE’s CSI, the former is true, and teachers expressed their concerns that “not all parents buy into the program”, and, “the lack of parental engagement can be frustrating at times.” The teacher’s comments are in direct opposition with the parent’s survey responses, with 27 parents responding that they support their child’s learning through “communication with teachers.” Further evidence of this lack of parental engagement was gathered during focus groups with YAAACE teachers with one teacher claiming that they have not met 1 parent for the Grade 5s they teach, and another teacher citing their frustrations with getting in contact with parents around tests and assignments, with some parents not responding at all. This is where the support of the coaches was greatly appreciated and provided much needed support, with teachers claiming “coaches were a better incentive than the incentive program”, and, “Coaches show up, make sure the kids are engaged, and talk to [the students] if they don’t do homework” which is what the teachers were hoping to get from the parents. This is not to be interpreted from a deficit lens (e.g. parents not caring) but rather rooted in systemic barriers such as parents not being able to access technology consistently or not being available at home to support their student learning due to financial barriers.



The differences in perceptions of adequate levels of communication between parent and teacher reflect a disconnect between the two. Further strategies to improve communication should be explored because studies have shown that students with highly engaged parents are more likely to have better learning outcomes compared to students whose parents are less engaged (Bonal & González, 2020). Throughout this pandemic, many parents found it difficult to play the role of teacher, parent, and balance a job, and this is especially true for parents of children with special education needs, disabilities, from low-income homes or neighbourhoods, BIPOC families, and single-parent households (Toronto District School Board, 2021a; Royal Society of Canada, 2021). Most of the respondents of the YAAACE survey identify as “Black” or “African Caribbean”, and over 45% (n=15) of the parents who responded to the survey are single-parents. The increased responsibilities and stressors caused by the pandemic may be a factor in the low levels of parental engagement.

For teachers who were left with very little time to implement effective online learning strategies using instructional and equitable course design and delivery (O’Keefe et al., 2020), engaging students was a challenge (Ewing & Cooper, 2021; Bailey et al., 2021; Tsoulou et al., 2021). Many teachers in under-resourced schools were reporting experiencing feelings of “secondary trauma” (Royal Canadian Society, 2021, p. 153) for feeling powerless when they suspected their students might be experiencing trauma. The changing landscape of teaching and learning in education has created a new importance and understanding of the role that educators and policy makers have on creating equitable outcomes for students (Carter et al., 2020) in reducing the impacts of disproportionate learning losses (Royal Society of Canada, 2021), and supporting students social, moral, and personal development amongst many other things (Morgan, 2020). This presents a unique challenge for educators who most likely will be working

from home, have their own family demands, and are distant from the socially and morally supportive environment between teachers and staff when in schools. This contribute to teachers having difficulties with their own mental health and well-being (Royal Society of Canada, 2021).

In a recent study by the *Canadian Teachers Federation* (CTF) (2020) involving over 1300 members from the Ottawa Carleton District School Board (OCDSB), statistics show that between June and October 2020 the percentage of teachers who were concerned about their mental health and well-being jumped by 25% (from 44% to 69%). Of those teachers, 37% claimed that they were “barely coping” (n=4,644, 32.7%) or “not coping at all” (n=621, 4.4%) (p. 12). In the same survey, teachers were asked to identify their top two concerns about their health and well-being in relation to the pandemic. The top answers were fearing a return to school because of a lack of Ministry planning and direction (n=539, 98.9%) and experiencing stress, anxiety, and depression (n=369, 67.7%) (p. 37). The report was based on a Mental Health Check-in Survey where teachers across Canada were asked to answer 10 closed-ended questions related to their personal health and well-being. If teachers are not well, the chances that their students will get high-quality instruction will be low. Some useful recommendations by the CTF (2020) report were to increase funding for teacher and student mental health services, adjust work expectations, and increase funding for decreased classroom sizes. These are all strategies that can support the health and well-being of teachers which will improve the chances for positive learning outcomes for students.

Two similar reports created by the TDSB called the *Student and Parent Winter Check-in Survey* (TDSB, 2021c) and *Students’ Voices* (TDSB, 2021d) invited thousands of students in Grade 6-12 and their parents to complete an online survey about their mental health and well-being. Respondents were grouped by ward, and results from the parents showed that families

with elementary age children were having more difficulties managing and coping than families with older children. Issues around food security were also a concern for some of the families with results showing racialized and low-income wards had higher percentages of families experiencing food insecurity. The Humber River-Black Creek area, the area that Jane and Finch is situated in that is made up of mainly racialized people, 62% of parents were concerned that they would run out of food before being able to buy more food for their family (Toronto Foundation, 2021, p. 102). Other statistics from the same studies claim that learning loss has been much greater for primary students than secondary students, which may be contributing to additional stress for parents of young children.

### **Conclusion**

The findings from the literature review and our research study show that the disparities in academic achievement and opportunities for learning are at risk of growing, furthering inequality and a socio-economic divide (UNICEF, 2021; Toronto District School Board, 2021a; Toronto District School Board, 2021b; Ewing & Cooper, 2021; Tsoulou et al., 2021; Allen et al., 2020; Hanushek & Woessmann, 2020; Royal Society of Canada, 2021). Mental health and well-being concerns have reached crisis levels, income inequality is projected to increase (Toronto Foundation, 2021), the access to extra-curricular opportunities and SEPs is still inequitable (People for Education, 2021). The combined impacts of these realities have left racialized and under-resourced individuals, families, and communities in need of increased access to social services and community-based programs in a manner that is accessible and affordable to help mitigate some of the losses caused by the pandemic. In the context of our partnership with YAAACE, CSI, and the *Spirit of Math*, these findings are a cause for concern, but also

encouraging because they back up the findings from our surveys about the major gaps in achievement and opportunities along socio-economic lines.

The findings shared highlight the importance of connecting students with holistic and socio-culturally relevant and responsive community organizations such as YAAACE not as “educational frill, but as part of vital components of students’ development, their well-being, health, achievement, and their capacity for continued success” (People for Education, 2021, p. 12). *YAAACE* is in a great position to reduce systemic barriers to access and help the most vulnerable children and youth by providing extra support and services during and post-pandemic. Further research on the positive impacts and importance of co-curricular engagement for improving students mental and physical health and well-being, socio-emotional skill building, and learning outcomes could encourage key stakeholders and funding bodies to provide targeted support to community organizations like *YAAACE* (Ewing & Cooper, 2021; Royal Society of Canada, 2021; Toronto District School Board, 2021a). Organizations like *YAAACE* do their part to minimize academic attrition, keep young people busy and active with intentional programming, and provide them with opportunities to help community members reach their potential.

It has been more than a year into the pandemic, and key education data on the ongoing impacts of COVID-related disruptions on student learning will continue to be released. The ongoing findings show that strategies and interventions need to be proactively prepared to mitigate any losses in learning and development. These strategies need to be intentional, place-based, and address the root causes. Further research into the impacts of COVID-related disruptions to students, parents, and educators can look at international best practices for keeping schools open during different levels of disruption, and the best pedagogical strategies to educate

using in-person, online, and/or hybrid teaching. Another area for future research to consider would be to analyze and compare different teacher training programs that would educate teachers to increase their digital proficiency and reduce the chances of them getting overwhelmed if/when asked to teach online again. Using recommendations gained by looking at parent responses when asked about ways they would suggest the government could improve schools and SEPs like CSI, parents said they think there should be more funding to create programs like the CSI, smaller class sizes and more opportunities for one on one sessions, and earlier interventions for students who are already underperforming academically.

Before the pandemic, online education enrollment was steadily increasing (O’Keefe et al., 2020), and it is expected to continue to increase as schools become increasingly reliant on embedding technology into schools and classrooms. Evidence from decades of studies on effective online education suggest that with careful instructional design and development, teaching online can be a pivotal tool that educators can use to engage students and mitigate some inequities related to access. As discussed, this can prove to be beneficial for some students, and detrimental for others, and further studies on the best pedagogical practices, pre-service teacher training and professional development programs, and student interventions are needed to ensure that these changes don’t continue to increase inequality in education, but instead broaden opportunities for learning in new and diverse ways. It will take collaboration and innovative thinking across disciplines to get through this pandemic and responses will vary, but a top priority for all countries should be to try to reduce the barriers to learning for the most vulnerable and disadvantaged members of society to reduce inequality.

The arguments for the importance of community-based programs such as the CSI serving predominantly racialized members are strong. Extra-curricular programs have shown evidence of

improving academic scores for BIPOC youth (Ekeh & Okeke, 2019), something the TDSB has struggled to do (Toronto District School Board, 2021a). The impacts of COVID-related disruptions to these programs has led to students missing out on experiential opportunities that are vital to many components of students' development "and their capacity for continued success" (p. 2). They support students' socio-emotional skill development, health, and well-being through their holistic and socio-culturally relevant and responsive programs that include both academic and non-academic activities. Furthermore, they provide wrap-around supports, expanded opportunities, and mentorship to the most vulnerable youth who are living through a pandemic that has led to significant physical and mental health declines (Toronto, Foundation, 2021). As one parent in the YAAACE survey commented, when asked about her reasons for attending YAAACE, "the academic portion is just as (if not more) important for obvious reasons... the public school system often does not provide this, especially in lower income/predominantly black communities." This is what makes programs such as YAAACE and the CSI such an important component in closing the educational opportunity gaps that can help mitigate the negative impacts of rising inequality. Investing in these kinds of community programs and social services, amidst huge surges in demand, is a proactive approach to mitigate the inequities that are being documented through an asset-based approach (Broadley, 2020) that shifts the power from state and private organizations to communities and their members.

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