1 MARK ROSENBAUM (CA SBN 59940) **ELECTRONICALLY FILED** mrosenbaum@publiccounsel.org 2 Superior Court of California, **PUBLIC COUNSEL** County of Alameda 610 S. Ardmore Avenue 3 Los Angeles, California 90005 07/17/2023 at 12:07:27 PM Telephone: 213.385.2977 4 By: Tanisha Wordlow, Facsimile: 213.385.9089 Deputy Clerk 5 MICHAEL A. JACOBS (CA SBN 111664) 6 MJacobs@mofo.com MORRISON & FOERSTER LLP 7 425 Market Street 8 San Francisco, California 94105 Telephone: 415.268.7000 9 Facsimile: 415.268.7522 10 Attorneys for Plaintiffs (Additional counsel on next page) 11 SUPERIOR COURT OF THE STATE OF CALIFORNIA 12 COUNTY OF ALAMEDA 13 CAYLA J., KAI J., AND ELLORI J., through their Case No. RG20084386 14 guardian ad litem ANGELA J., MEGAN O. AND UNLIMITED JURISDICTION MATILDA O., through their guardian ad litem 15 MARIA O., ALEX R. AND BELLA R., through **DECLARATION OF** their guardian ad litem KELLY R., ISAAC I., AND 16 ELIZABETH B. MOJE, PH.D. IN JOSHUA I., through their guardian ad litem SUPPORT OF PLAINTIFFS' 17 SUSAN I., **OPPOSITION TO DEFENDANTS'** 18 MOTION FOR SUMMARY Plaintiffs, JUDGEMENT OR, IN THE 19 **ALTERNATIVE, SUMMARY** v. **ADJUDICATION** 20 STATE OF CALIFORNIA, STATE BOARD OF EDUCATION, STATE DEPARTMENT OF Date: August 4, 2023 21 EDUCATION, TONY THURMOND, in his Time: 10:00 am official capacity as State Superintendent of Public 22 Dept: 23 Instruction, and DOES 1-100, Judge: Hon. Brad Seligman 23 Defendants. Complaint Filed: Nov. 30, 2020 24 Trial Date: September 5, 2023 25 26 27 28

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Attachment A

Cayla J., et al., v. State of California, et al. Los Angeles Superior Court Case No. RG20084386

EXPERT REPORT Elizabeth Birr Moje, Ph.D.

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Qualifications

- 1. I am Dean of the Marsal Family School of Education at the University of Michigan and the George Herbert Mead Collegiate Professor of Education and Arthur F. Thurnau Professor of Literacy, Language, and Culture at Marsal Education. I am also a faculty associate in the Institute for Social Research and in Latina/o Studies (College of LSA) at the University of Michigan.
- 2. I received my Bachelor of Arts degree in History, Political Science, and Biology from Concordia College, Ann Arbor, as well as a secondary school teacher certification (States of Michigan and Colorado) in 1983. I taught high school and adult literacy for seven years before receiving my M.A. in Reading Education from Eastern Michigan University and a K–12 Reading Specialist endorsement to my state teaching certification (State of Michigan) in 1990. In 1994, I completed a Ph.D. in Literacy and Language from Purdue University. I served as a faculty member in the School of Education at the University of Utah from 1994 to 1997, and I have been a faculty member at the University of Michigan since 1997.
- 3. My research has been funded by the National Institutes of Health (the NICHD, specifically), Office of Vocational and Adult Education, the Institute for Education Sciences, the National Science Foundation, the Spencer Foundation, the William T. Grant Foundation, and the John S. and James L. Knight Foundation. I have served as a member of several national research panels, including the National Academy of Sciences/National Research Council's Committee on Adolescent and Adult Literacy, the NRC Committee on Science Literacy, the International Reading Association's Literacy Research Panel, the Carnegie Corporation of New York's Adolescent Literacy Council, and the Program for International Student Assessment Steering Committee, where I evaluated and advised on the 2009 PISA reading assessment items. I have served on the advisory boards of several research centers and projects, including the Strategic Literacy Initiative's *Investing in Innovation* randomized clinical trials and the Center for English Language Learning. In 2014, I advised the William T. Grant Foundation's Research-Practice Partnerships Project, which brings together district leaders with researchers who are supporting and studying district-wide turnaround and intervention efforts. I have also led the William T. Grant Foundation Scholars Selection Committee and am currently a member of the Board of Trustees for the William T. Grant Foundation. I was an advisory board member to the Kresge Foundation's KEYS Detroit Initiative. I am a fellow of the American Educational Research Association, an elected member of the Reading Hall of Fame, and an elected member of the National Academy of Education. My curriculum vitae is attached.
- 4. My areas of research and specialization are adolescent and secondary school literacy learning, urban youth culture and literacy, literacy teaching and teacher education, and education research methods. I am particularly interested in developing strong literacy skills in and across all subject areas at middle and high school levels, but I also study the education of prospective, new, and veteran teachers.
- 5. My university teaching crosses all levels from undergraduate lower division courses to doctoral courses; my work in Teacher Education was recognized in 2010 with a University Teaching Innovation Prize for efforts to revise our secondary teacher education program to follow a medical model of clinical teaching rotations.
- 6. As part of my scholarly efforts, I have worked as a researcher and professional developer in and with the Detroit Public Schools Community District for the past 26 years. I am currently leading a research-practice partnership in collaboration with the Detroit Public Schools Community Schools, Starfish Family Services, the Marygrove Conservancy, and the Kresge Foundation. Marsal Education's role is to lead all curriculum development and professional development activities at The

School at Marygrove (a DPSCD public school), develop a "Teaching School" (akin to a "teaching hospital") that supports new teacher development, coordinate child and family services across the initiative, and lead research and evaluation of the initiative. All parties in this endeavor collaborate closely on daily on-the-ground school activity, necessitating regular presence and connection with students, teachers, and school leaders, including in and through the COVID-19 pandemic. These commitments make me uniquely qualified to comment on the challenges of teaching and learning in a global pandemic, as well as on the resource needs post-pandemic.

Questions of the Case and Summary Conclusions

The questions presented by the attorneys filing for the Plaintiffs included the following:

- 1. Is there evidence of a national problem of academic learning loss (particularly in routinely tested subjects of literacy and mathematics) and threats to social and emotional health as a result of the COVID-19 pandemic?
- 2. Is there evidence that Plaintiffs experienced particularly egregious challenges in accessing necessary academic and socioemotional learning supports as a result of the COVID-19 pandemic?
- 3. What are research-based remedies for any and all learning challenges posed by the COVID-19 pandemic?

Summary conclusions are as follows:

Evidence examined here clearly demonstrates a national problem of academic learning loss—especially in terms of literacy and mathematics learning—as well as damage to the social and emotional health of children nationally and of the plaintiffs in this case. Plaintiff testimony further documents particular challenges presented for accessing opportunities to learn, as well as aggravating and/or creating social and emotional challenges due to the district's lack of resources for addressing challenges both during and immediately following the height of the pandemic. Research-based remedies recommended include dedicated resources for recruiting and retaining teachers, social workers, and school psychologists; access to additional in-classroom supports for both students and teachers; high-quality, high-dosage tutoring; and access to extracurricular resources and opportunities to address socioemotional issues precipitated or exacerbated by social isolation necessary during the pandemic. In some cases, specialized/individualized student supports may also be necessary.

Section 1: Narrative Account of the Problem

Much has been written in the last three years about the effects of the COVID-19 pandemic on children's learning and well-being (Dorn et al., 2020). I am writing this account based on both written evidence and direct, firsthand experience in the Detroit Public Schools Community District, as well as in other districts around the State of Michigan.

Without a doubt, children experienced restrictions on in-person interactions—including restrictions on school, community, and cultural activities—that shaped their near- and long-term learning and their prospects for leading happy and healthy lives in the future. These restrictions on opportunities to engage in organized learning—whether in person or in high-quality virtual modes—had dramatic impacts on all learning, but especially compromised opportunities to learn literacy and mathematics concepts and skills.

An early (and optimistic) projection in 2020 (Kuhfeld et al., 2023) estimated that children would start the fall of 2020 having achieved 63 to 68% of typical literacy learning for a given grade, and with 37 to 50% of typical mathematics learning achieved. As is now obvious, nothing returned to "normal" in the fall of 2020, and as evidenced in state and national statistics and in the evidence from these plaintiffs, children experienced continued lost learning opportunities and continue to lose far more ground in literacy and mathematics than had been initially projected (König & Frey, 2022).

These learning challenges are evident across all grades and are especially dramatic in the early grades, when children should be learning foundational reading, writing, and mathematics skills (Konig & Frey, 2022). And the results of national testing post-pandemic (NAEP, 2023) demonstrate that, on average, children are not reading and writing at the levels of past cohorts. Whether these literacy and mathematics learning set-backs stem from lost academic skills or from lost social and self-regulation skills is not clear; most likely the lower scores are a result of both lost opportunities to learn academics and the social isolation and trauma created by pandemic shutdowns.

It is worth noting that children who live in poverty have long felt the effects of school shortages and restricted access to goods and services; the COVID-19 pandemic exacerbated those inequitable conditions and opportunities to *crisis* levels, and that crisis is felt more dramatically by those who live in poverty (Van Lancker & Parolin, 2020; Hammerstein; König et al., 2021).

Children in such settings lost (or never had) access to books and technology tools that for other children provided a lifeline to some semblance of academic engagement. Whereas many families in well-resourced communities were able to form small learning pods, for which they hired private teachers, children in low-income communities were relegated to whatever kind of virtual instruction schools could provide in an emergency situation (Dorn et al., 2020). Due to resource restrictions, under-resourced schools had to make do with minimal technology tools and poor bandwidth but still experienced lack of connectivity because the families they served had no access to such tools (hardware, wiring, or software) (Engzell et al., 2021).

The crisis did not end at the door of academic learning. Children in many urban and some rural settings lost access to the only stable source of food in their lives, that being access to universal school breakfast, lunch, and even dinner programs offered in most under-resourced districts. In several urban districts, for example, ingenious—and desperate—school leaders hatched plans to photocopy homework packets *on paper* to maintain some semblance of opportunities to learn, and the districts distributed the packets while they distributed meals to families *seven days per week*. This low-tech solution was the only way for such districts to maintain connections with their students. Unfortunately, distributing paper packets is not sufficient for maintaining either learning or relationships.

Despite their attempts to maintain student learning, these under-resourced districts lost children on their rolls because children's families did not have access to quality technology tools and the districts did not have adequate resources to supply them with such tools. Districts knew that children were not able to tune in to virtual learning experiences and that when students did manage to get online, they were unsupervised within their homes due to parents' work commitments, health crises brought on by the pandemic, or other obligations. Many of the youngest children who were emergent literacy learners were severely compromised due to their inability to read their paper packets or LMS written instructions independently, as was also true for English learners and children with specialized learning needs. If parents were not available to sit with the children, then teachers struggled to support them (Dorn et al., 2020). In short, children languished in their homes, especially while parents struggled with the demands of their own fractured work lives or with illness from the pandemic and other health demands during the height of the pandemic (March 2020 to June 2021).

Children across the socioeconomic spectrum also experienced the trauma associated with the spread of a new and poorly understood viral contaminant (Samji, Wu et al., 2022). They experienced fear of illness and death at young ages. And they experienced fear of associating with other people; they were told not to touch, talk to, or even breathe near other people, for fear of contagion. They spent much of their time sitting in online classrooms (when they could access such classrooms) or sleeping (Cingel et al., 2022). Children who lived in crowded conditions or whose families could not safely isolate due to their status as emergency workers or because their very lives depended on the income they received from service jobs—often in close contact with others—experienced the trauma of death and disease. Many children in such conditions lost parents, grandparents, and other elders in their lives. The effects of these conditions have been documented to be larger than expected and are predicted to have lasting effects on both physical and mental into adulthood (Xiang et al., 2020).

The academic year following the worst of the pandemic school closures (August 2021to June 2022) was little better for schools, especially in the early months. Many schools attempted to return to in-person learning in the fall of 2021 (August to December) with masking, testing, and physical distancing rules in place, but most schools struggled to maintain attendance of both students and teachers, and some found it more productive to run fully virtual schooling rather than try to maintain hybridity amidst constant shutdowns for illness. The key culprit in the struggle was the sheer number of students in school spaces, and again, the most economically compromised schools had the greatest challenges because such schools have dilapidated physical infrastructure with poor ventilation and crowded rooms. In addition, many teachers who were at an age identified as vulnerable (ages 50 and above) were fearful of returning to classrooms filled with unvaccinated students, despite masking, testing, and distancing protocols.

The same issues occurred in the fall semester of 2022. As recently as fall of 2022, COVID infections were still likely, and whole schools in some of the best conditions had to close completely for the required five isolation days due to lack of faculty (who were sick or had children with COVID) or to numerous COVID cases among children. School administrators and any available teachers were called upon to substitute for those who were sick, compromising the leaders' and teachers' capacity for planning, grading, and attending to their students' needs.

Added to these challenges is the fact that as schools re-opened more fully in late 2022 and in the most recent academic year 2022–2023, they were opening with fewer teachers and other ancillary staff members, many of whom had retired, resigned, or refused to come back in person due to compromised health conditions (ERS, 2023; Lambert, Willis, & Xie, 2022). Losses of qualified teachers were not (and have not historically been) equally distributed; predictably, districts serving low-income children are more likely to see teacher shortages (Lambert et al., 2022). The pandemic effects simply hastened the exit of many teachers from their classrooms, out of fear, exhaustion, or frustration with the challenges they faced in educating their students. Low-income students were the most likely to be affected by these losses because teachers in California (and across the nation) are most likely to leave under-resourced schools with poor working conditions. Evidence demonstrates that low-income students have more underqualified teachers than students in better resourced districts and schools.

Moreover, when they did return, teachers spoke of students struggling to self-regulate, of angry and frustrated students who could not get along with other children, and of the general lack of progress students had made in the prior 14 months, when many of them were (at best) seated in front of computer screens all day and had little extracurricular opportunity (no sports, music, dance, arts, church, etc.). Many of the younger children demonstrated weak foundational literacy and mathematics skills (Dorn et al., 2020) likely due to the challenge of teaching foundational skills to young children in a virtual environment, and yet were expected to move forward to the next level of curriculum, thus increasing their frustration and feelings of inadequacy.

It is worth noting that teachers were raising concerns about socioemotional needs of students, heightened trauma concerns, and suicidal ideations and suicide attempts well before the COVID-19 pandemic struck. The challenges of social isolation, lack of cognitive stimulus, sickness and death, and fear and trauma, all experienced while cultural and familial bonds were rupturing around them, dramatically exacerbated the already-fragile social-psychological capacities of the nation's children (Santibañez, 2023). Unsurprisingly, the most vulnerable children—those who live in low-income settings and attend underresourced schools—experienced these challenges at higher rates than more resourced youth (Dorn et al., 2020).

Many similar accounts to that which I have offered above have been documented around the nation. But such accounts are not the only evidence available that both academic and socioemotional learning opportunities were compromised during the COVID-19 pandemic years. The evidence of student learning loss is clear in multiple analyses, whether using national or local data. Professor Andrew Ho's account offered as part of this case (Ho, 2023) provides one view, but many other similar accounts have been rendered, including evidence from the recent National Assessment of Educational Progress (NAEP, 2023), which demonstrates statistically significant drops in students' reading and mathematics scores when compared with similar cohorts from past years. The evidence of academic loss is undeniable. Equally worrisome, NAEP 2023 reported that students' confidence in their abilities has significantly declined as well. This finding is of grave concern because self-concept of ability is well-established as a key dimension of achievement motivation (Eccles et al., 1983; Wigfield & Eccles, 2000). Not only does the nation have evidence of significant learning loss, but educators, parents, and policy makers must also worry about how to encourage this generation's children and youth that they can make up those losses and that there remain ample opportunities for them to learn and thrive. That said, the task is now more difficult—and it was never easy, especially for children in under-resourced schools and communities thus requiring even more urgency and even more resources afforded through public policy remedies than ever before. Making up loss is possible (Dorn et al., 2020), but it will require a significant investment that cannot be born alone by under-resourced schools in low-income communities.

This account—and what follows—makes clear that children identified as Plaintiffs and their families were not well served in terms of academic learning and/or socioemotional health during the COVID-19 pandemic. This is not a surprising conclusion, given the enormity and unprecedented nature of this crisis. The United States—the world—was clearly not prepared for a health crisis of this magnitude, and its impact will be felt for decades to come. Schools—especially historically under-resourced schools in under-resourced communities—were devastated by the COVID-19 pandemic, largely because they operate on very slim margins in the best of times and also because the communities in which they are embedded have historically been disenfranchised, from redlining (Aaronson et al., 2022), which compromises internet access to this day for children who live in poverty, to bankruptcy filings and state takeovers of schools around the country. Working class and poor parents could not supplement their children's education, as parents who were well-resourced could. There were few, if any, learning pods with private tutors for the children of the nation's most challenged school districts. Thus, it is not surprising that the schools hardest hit by the pandemic are those that have been traditionally underserved. The remedy must involve additional resources for the children of those families who lost the most during the pandemic. Those resources must come from the state, because even the best-resourced public school districts do not have the financial capacity to close the gap that has been exacerbated by this global pandemic. We cannot lose a generation of the most disenfranchised children.

Section 2: Evidence from Plaintiffs of Resource Challenges That Exacerbated Learning Loss

Plaintiffs in this case experienced challenges with many school-based issues during the COVID-19 pandemic, as evidenced by multiple data sources collected from both the schools and from Plaintiffs'

caregivers. The issues that rose to prominence in my review of the evidence collected included (a) compromised time spent in organized learning, (b) lack of access to working technology tools (hardware, software, and wiring), (c) minimal or inadequate teacher responsiveness, (d) lack of services for specialized student learning needs, (e) either *penalizing* or *lax* attendance policies, and (f) social isolation and trauma as a result of school closures. I address each of these issues briefly, pointing not only to the exemplars from the ample database presented by counsel, but also commenting on the effects of these challenges.

Time Spent in Organized Learning

The lack of time spent in organized learning with a certified teacher (or any adult guide) is one of the most impactful dimensions of the COVID-19 pandemic. Put simply, children do not learn to read and do mathematical calculations without guided instruction (this does not even take up the question of natural and social science learning or of learning how to self-regulate, work in teams, manage time, and more).

Plaintiff Cayla J.'s caregiver testimony provides an exemplar that paints the picture of diminished instruction across all Plaintiffs: Cayla J.'s second-grade class was held **only two times** (including virtual instruction) between March 2020 and the start of the next school year. In that next year (2020–2021), Plaintiff's daily instruction comprised **one 45-minute video class and one 30-minute small group session**. Plaintiff then was expected to do class work independently with only a checklist as a guide for the remainder of each day. As a reminder, Plaintiff Cayla J. was a Grade 2 student, meaning she was likely seven years old. Five hours of independent work for a seven-year-old is not a reasonable expectation for high-quality learning.

Several other plaintiffs experienced similar daily schedules, as evidenced by school schedules distributed to caregivers and by caregivers' independent testimonies. In short, teacher-led instruction over the 14 months of the height of the pandemic was in many cases minimal to non-existent, poorly organized, and largely inaccessible, as will be demonstrated in the next section.

It is important to note that district and school leaders, as well as teachers, were struggling with deficient technology tools, inadequate virtual learning management systems, their own illness, and their own family challenges. I witnessed firsthand the incredible efforts of school leaders and teachers to maintain some semblance of instruction during the initial 14 months of the COVID-19 pandemic. It was an incredibly difficult time. Thus, the point here is not to assign blame but rather to recognize that children simply were not receiving an adequate amount of quality instructional time. This lost time must be made up if the state hopes to prevent a lost generation, one that will experience vast economic, social, political, and educational effects.

Lack of Access to Adequate (Working) Technology Tools

As noted above, in-person schooling was not possible for many months early in the pandemic and was sporadic at best in most large urban districts throughout the first 14 months. As a result, schools turned to virtual learning. Unfortunately, children who live in economically compromised communities and who attend under-resourced schools often have an accompanying lack of access to adequate technology tools and infrastructure. The low-technology reality of most under-resourced schools stands in stark contrast to that of adequately resourced and, especially, highly resourced schools (Slavin & Storey, 2020). Schools in low-income communities are often also poorly resourced in terms of both tools and infrastructure that would provide high levels of connectivity even if the schools had the resources to distribute multiple working devices to each child (it is worth noting that distributing a single device to families with multiple children hardly addresses the problem). This was indeed the case for these plaintiffs as demonstrated through their testimony, email records, and school documents.

In fact, every single plaintiff documented inability to access the devices and connectivity necessary for effective remote instruction. For example, in Spring 2020, Joshua I. received from his school a hotspot, which stopped working in November/December 2020. The plaintiff's grandmother told the school but never received a replacement.

In another instance, Plaintiffs Matilda and Megan O. received a single iPad for the two children to use across their different classrooms (Grades 2 and 5, significantly different instructional programs). To make matters worse, the iPad did not work. They did not receive a working iPad or a hotspot connection until Fall of 2020; the hotspot, however, did not work. In a noteworthy attempt to take advantage of the instruction available through virtual means, the two children shared one parent's mobile phone. It seems clear that the two children could not use one mobile phone to participate in instruction in two different grade levels simultaneously, thus making it likely that one child always missed some sort of instruction. (It is worth noting that the Plaintiffs presented here also had an older brother who did receive a hotspot in Spring of 2020, but evidence suggests that he was not provided any device to access the hotspot.)

Additionally, more than one plaintiff reported that caregivers were expected to print work if technology was not functioning. One plaintiff's caregivers expressed that it was costly and difficult to create a productive learning environment with multiple students in a one-bedroom apartment. All parents expressed challenges around lack of learning supports. They were expected to be present for their children during instruction time, despite the multiple demands on their time necessitated by work and by family health challenges.

Challenges with technology tools also led to assessments by school personnel of the students as chronically absent because they were unable to join remote learning sessions. It is true that many of the children were chronically absent, but the reasons for their absences were out of their control. In some cases, children were recorded as absent if they could not submit an assignment, regardless of whether they had in fact attended the class by Zoom. For example, Plaintiff Isaac I.'s attendance record documents chronic absenteeism, with his typically regular attendance declining to **58 full days** missed in Grade 7 (2020–2021) and **44 partial days** missed in Grade 8 (2021–2022). However, when one examines the data presented by Isaac's grandmother, it becomes obvious that technology problems had a role in Isaac's attendance. Plaintiff's grandmother reported that she filled out hotspot request form in September 2020 and again in January 21 after the request was not met. There is no evidence that Plaintiff Isaac I. ever received the technology tools he needed, making his reasonable participation noteworthy. Nevertheless, Plaintiff Isaac I. lost class instructional time, putting him at a disadvantage. Indeed, lack of access was evident for all the plaintiffs' families; they either did not receive a working device/hotspot or were given one that had to be shared with the entire family.

In other cases, other students were unable to attend lack of adequate technology (and sometimes due to illness), and *yet were marked present*. For example, as is clear from Plaintiff Alex R.'s multiple messages to their teacher, Alex was routinely unable to access Zoom connections that prevented them from learning. Alex's teacher appeared to have few solutions and was unable to offer Alex any resources to intervene on these challenges. In every case that Alex wrote to their teacher to report on a problem with Zoom connections, the teacher responded with comments such as, "Hopefully it [Zoom] will work tomorrow." In one case, Alex reported that they could not understand the video they were assigned, and the teacher responded, "You can go to the questions and do your best to answer them. As long as you answer them you'll get points." Although the teacher's compassion for Alex is understandable in the face of a problem neither could solve, the response did not prioritize learning and the situation was clearly not a robust learning experience for Alex.

Lack of Access to Promised Learning Support Services

Students also failed to receive equal access to academic supports; in particular, IEP plans not adhered to during distance learning. For example, when requesting academic support for Matilda O., the plaintiff's mother was told that it was not available. Plaintiff Matilda O.'s parents had to go to the school to pick up/turn in assignments as well as materials.

In another instance, Plaintiff Joshua I.'s grandparent reported that they were having problems accessing promised services dictated by plaintiff's 4th-grade IEP due to connectivity and technology problems with using a tablet for instruction and was told that the only other option was to use paper-based instructional tools. Plaintiff's grandparent was expected to print those materials and could not afford the printer, paper, and toner necessary to do so. In general, the evidence gathered documents that IEP services were especially compromised across the plaintiffs.

Summer school or extended periods offered did not compensate for lost learning time. In the instances that summer/after school sessions were offered, multiple plaintiffs asserted repeatedly that their children were simply sitting in summer school and extended learning sessions with little-to-no instruction. Plaintiffs raised the issues with their teachers and school leaders, apparently to no avail.

Devastating Socioemotional and Health Challenges

In regard to socioemotional learning and to issues of diminished self-concept of ability, all Plaintiffs repeatedly described feeling intense frustration and lack of motivation from connectivity issues and online learning. Online learning and the lack of social reactions with other students and teachers led these plaintiffs to struggle with feelings of loneliness and a lack of motivation that continues into their current education experience (for analysis of the impacts of social isolation, see Anderson et al., 2004).

In the case of Plaintiff Cayla J., Plaintiff's mother asserted in supplemental responses to interrogatories that she requested the assistance of a school social worker to address Plaintiff's feelings of social isolation and depression but was told by school personnel that the school did not have enough funding to hire a social worker to support students' SEL needs. Such a stance is unacceptable and needs to be redressed.

These feelings of lack of motivation may have led to the documented issues of chronic absenteeism. In point of fact, plaintiff's absences skyrocketed during and after the pandemic, despite their attempts to participate. Some of these absences are surely explained by connectivity problems (see Plaintiff Isaac I. above), however, documentation of chronic absenteeism can position a child (or their family) as unmotivated, creating identifications that can follow children for years and are likely to have a direct impact on future opportunities to learn (Marsh, Pekrun et al., 2018).

Equally challenging for the plaintiffs were their own battles with the COVID-19 virus. Plaintiff Cayla J., for example, contracted COVID-19 and was ill for an extended period (11 missed days of school). According to Plaintiff's parents, to date, no resources had been offered to make up for the lost instruction and, as a result, Plaintiff Cayla J. has fallen at least one grade level behind as documented in tests and report card results. Several of the plaintiffs documented missed schooling (school records corroborate their claims). And yet, there is no evidence that they have been offered school-based opportunities to recoup the lost time, either through intensive tutoring or high-quality after-school or summer school programming. The only advice that plaintiffs' families have been given were recommendations for online tutoring supports that they are expected to access independently.

Summary of the Main Challenges

As documented in the amended complaint, low-income students' peak participation rates in either online or in-person schooling were 10–20% lower than students from more affluent families, and even a cursory review of the data presented in this case explains why. This lack of participation is a direct result of lack of resources provided to families and their children (and to teachers) and has a profound impact on student learning and motivation to learn in the future. The smattering of examples presented from Plaintiffs in this report is a mere glimpse into the lack of services provided, as well as the technology and health challenges that disrupted student learning. This report could fill many more pages if I were to document each and every gap that this small group of Plaintiffs experienced. Based on my review of these data, combined with my own direct observations in classrooms in another urban district, these were not isolated experiences of a few students, although it is the case that students whose families lacked resources suffered more. Compromised literacy and mathematics learning (not to mention other subjects) has always been an issue for children who experience poverty; the COVID-19 produced the "perfect storm" in which only the most well-resourced children were able to emerge from the pandemic years relatively unscathed.

It's worth noting that the teachers of these Plaintiffs appeared to have been doing their best to keep up, but in many cases, the school's organization of instructional time was mystifying and the amount offered was insufficient. This was a worldwide crisis, the disruptions were profound, and school personnel alone cannot shoulder the entire responsibility for their inability to maintain high-quality learning opportunities in under-resourced schools of under-resourced communities. However, it is the state's responsibility to ensure that all children are being adequately—and preferably, well—served. Based on the evidence I reviewed, that was not the case for the Plaintiffs represented.

To conclude this review of the evidence, I will make an observation that may seem obvious, and yet it bears repeating: *Students cannot learn what is taught in school if they do not have access to the learning opportunities offered.* Throughout the pandemic, students were denied the opportunity to learn.

The past is past, but educators and state policy makers now have the responsibility to provide the supports needed to get students back on track and to ensure a solid future. It is possible to change this trajectory (Dorn et al., 2020). Failure to do so will be devastating not only for children and their families, but also for the state and nation.

Section 3: Research-Based Recommendations for Remedies to the Problem

In making research-based recommendations for how to remedy this situation, I must clarify that these remedies should not come at the expense of the school districts or their teaching staff. Every single person in this country struggled in the pandemic, and it would be inappropriate to expect teachers and school leaders to have solutions to all the challenges the nation faced. That said, it is imperative that the State of California address the needs of the children whose learning opportunities were most compromised over the past three-and-a-half years. The following recommendations come from the best research available:

1. Access to well-prepared, certified teachers who have supportive working conditions

The Plaintiffs and their peers must have access to well-prepared, certified teachers if there is to be any hope of recovery. Research is clear that a well-prepared teacher who has the appropriate tools and resources is the single most effective ingredient in children's learning (Podolsky, Darling-Hammond et al., 2019). Under-resourced schools in low-income communities—the very schools that serve our most

vulnerable children—have been grappling with a shortage of qualified teachers for many years (Lambert et al., 2023). The pandemic has heightened this lack of qualified teachers for the nation's most vulnerable children to crisis levels (Dorn et al., 2020; Lambert et al., 2023). These are the children for whom the pandemic had the greatest impact in regard to literacy and mathematics learning loss (Dorn et al., 2020; Hammerstein, 2021), as well as socioemotional trauma (Santibañez, 2023).

Redressing the lack of qualified teachers for the most vulnerable children will require two essential moves. First, more money must be allocated by the state to public education to pay teachers the *professional salaries* they deserve. Teachers are struggling to live on the salaries they are paid. It is a sad fact that our nation's teachers can make more money, with less daily stress, doing gig work, waiting tables, or delivering groceries. Indeed, many are leaving the profession to do such work. If we hope to stem the rampant teacher turnover faced at higher rates by children who live in poverty than other children (ERS, 2023), then the state must provide the resources to districts to attract and retain high-quality educators for the most challenged school settings.

The prior point leads to the second essential move by the state: The most challenged schools need the financial resources necessary to provide reasonable *working conditions* for teachers. According to ERS (2023), schools serving under-resourced children and families lost 34% of their teachers between October 2021 and October 2022, and they lost those teachers to districts with better conditions. By contrast, schools in low-poverty settings lost 21% (still a high number, but significantly less impactful than those in high-poverty settings). The practice of teaching is difficult and requires highly skilled individuals in the best conditions. It is nearly impossible to maintain high levels of teaching practice in desperately challenged working conditions.

What are the necessary conditions? Teachers need to teach a reasonable number of children in their daily load. They need ancillary supports such as paraprofessionals and literacy and mathematics specialists who can work closely with students who present specialized learning needs. Teachers need social workers and counselors who can push into classrooms and meet with individual students one on one to handle issues of trauma, anxiety, and depression. They need adequate technology tools, books, paper, and writing implements (*i.e.*, basic teaching/learning supplies). They need heat when temperatures are low, and cooling when the temperatures are high. They need to be sure that the children are adequately nourished. (Children, by the way, benefit from adequate conditions, as well.)

If the state hopes to stem the teacher shortage crisis and redress the learning losses of the pandemic, then it must pay teachers and provide them with adequate—if not stellar—working conditions (ERS, 2023; Lambert et al., 2022).

2. Access to social workers, psychologists

Ancillary school support personnel such as school social workers, psychologists, and nurses are a must at this critical time of recovery from the trauma of the pandemic. For the most under-resourced schools, many of these supports have been depleted for years, with such support staff often traveling across multiple schools with responsibilities that exceed the time in a typical workday. The loss of such staff in many schools and school districts has been a problem for years; at this time of crisis, the hope of recovery is muted if such experts are not reinstated in schools. This is a matter of providing the funds necessary to school districts to maintain such support personnel and, as with teachers, of paying these personnel a salary that will be adequate to the task they face and that will allow them to feed their families and pay their rent.

3. Dedicated literacy and mathematics coaching for teachers; in-classroom literacy and mathematics specialists for students

The learning needs and skill development of children coming out of the pandemic are enormous and varied, adding additional complexity to already challenging classroom teaching demands. In addition, as noted previously, experienced teachers have left the classroom in high numbers (ERS report, 2023; Lambert et al., 2022). This is a perfect storm in which inexperienced certified teachers and, in many cases where children live in poverty—such as the Plaintiffs represented in this case—unprepared emergency certified teachers or substitutes have to grapple with more classroom complexity than most teachers see in a whole career. All teachers will benefit from direct literacy and mathematics coaching and from specialists in the classroom to work with individual children who have highest needs. Un- or underprepared and early career teachers will not succeed without such supports. The children represented in this case—and the peers they exemplify—deserve better teaching than ever before.

4. Free access to athletics, arts, and academic programming in summer and afterschool programs

Research is clear about the positive effects of participation in elective extracurricular activities, with a strong correlation between participation in such activities and both motivation to achieve and high achievement itself (Eccles & Barber 1999, Shernoff 2010). Although the exact mechanisms for this relationship are not clear, various scholars have argued that such participation builds teamwork skills, teaches self-regulation, provides opportunities for feedback, teaches literacy and mathematics skills (depending on the exact activity), and motivates children to engage in schoolwork to be allowed to participate in extracurriculars. It only stands to reason that providing these opportunities for children in a time of such loss would boost their motivation, address challenges with social isolation and depression, and extend opportunities to learn. Such programming should include sports activities; arts (visual art, music, dance, and theatre); and coding camps, math camps, and writing camps.

5. High-quality, high-dosage tutoring for all students who demonstrate any level of learning loss

The best evidence on individualized learning opportunities such as tutoring makes clear that tutoring must include at least two critical elements (Schueler, 2022): First, tutoring works best when delivered by trained tutors. The most effective tutors are certified and experienced tutors, and in fact, a poorly trained or inexperienced tutor can do harm. Second, tutoring works best when it is high dosage (Dorn et al., 2020; Kortecamp & Peters 2023).

Online tutoring programs are considered an option by some, but these programs have not been well studied. Despite lack of explicit evidence for or against online tutoring, it stands to reason that children who have spent two years learning online may not be well served by more of the same, especially given the evidence of negative physical and mental health effects of the online experience (Cingel et al., 2022). Extensive online tutoring risks further trauma, poor mental and physical health, and de-motivation of learners. Moreover, as amply evidenced by the Plaintiffs' data and the literature (cf. Slavin & Storey, 2022), under-resourced children are unlikely to have the technology tools and internet access to make online tutoring effective unless it is delivered by school, and even then the questions of tutor quality and dosage levels remain in the online space.

In sum, the best tutoring programs are delivered in person on a regular basis by well-trained individuals. Moreover, due to lack of technology access and to potential costs of online programs, it is the responsibility of the school district—resourced by the state—to offer these programs and not to devolve the responsibility for this provision to under-resourced families.

6. High-quality accelerated summer school for those who need explicit instruction to recover lost foundational skills

Similar to tutoring, summer school programs need to be robust, with trained facilitators (Darling-Hammond et al., 2020; Dorn et al., 2020). Programs need to be more than skill drill. In general,

approaches that engage children in active, engaged learning are more effective than programs that force children to sit silently at school desks for long hours of the summer completing worksheets. Moreover, after two or more years of social isolation and lack of activity, children need engaged, active, and interactive learning opportunities with peers and elders (Anderson et al., 2004). Programs that force children to sit silently for long hours to complete worksheets are likely to de-motivate, stunting skill development and leading to increased distancing from school.

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