



Emotional and Educational Recovery: Overview

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ROC the Future

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The Context

Pandemic

On March 16, 2020, all schools in New York state immediately shifted to remote learning as a necessary public health intervention to control the COVID-19 pandemic. What was initially hoped to be a short-term situation became long-term and was accompanied by chronic upheaval in people's lives. Everyone was faced with the uncertainty of the pandemic and challenges in meeting basic needs like food. Many families were faced with COVID infections, including long-term hospitalizations and deaths. Childcare facilities closed. Social isolation escalated. Massive layoffs occurred.

Data from New York state and Monroe County indicate that during the first six months of the pandemic:

- The unemployment rate in Monroe County rose from 4.4% in March 2020 to 15.1% in April 2020 with a gradual decrease to 6.8% in October 2020ⁱ
- Statewide, 8-13% of women were not working between April and December 2020 due to lost childcare and/or in-person schoolingⁱⁱ
- Statewide, 80-90% of households receiving unemployment insurance in December 2020 were households with childrenⁱⁱⁱ
- As a result of the loss of employment and reduction of hours for adults, approximately 10,000 children in Monroe County were newly entered into or were considered near poverty in June 2020^{iv}
- 68% of New York families with infants or toddlers worried their children were emotionally suffering due to the pandemic and 25% were concerned about the impact of substance abuse and/or domestic violence^v
- As of July 2020, 1 out of every 4,320 children in New York had lost a caregiver to death as a result of COVID^{vi}

Remote Learning

Schools that were not set up for remote learning had to scramble overnight to equip their teachers, students, and staff with technology. Families and students had to adjust to at-home learning. Despite heroic efforts and cross-sector collaboration, education for children PK-12 was severely impacted.

- From April to June 2020, parents in New York reported their children had only between 4.25 hours and 5.4 hours of contact with a teacher during the previous 7 days^{vii}
- In RCSD, the monumental task of deploying Chromebooks and MiFi units meant that for many months most grade levels relied on optional learning packets that could be picked up at food distribution sites; technology deployment was completed through a phased process:
 - March 2020 Grades 9 - 12
 - May 2020 Grades 6 - 8
 - September 2020 Grades K - 5
 - March 2021 Pre-K

The resumption of in-person learning began in January 2021 for some students with the highest special education needs. That was followed in February by the return of some general education students, although using a hybrid model that allows for only 2 days per week in-person instruction. The majority of RCSD students continue to learn fully remotely.

Year over Year Monthly ADA Comparison by Grade Level
Average Daily Attendance as of March 23, 2021

Grade Level	September		October		November		December		January		February		March	
	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021	2019-2020	2020-2021
Kindergarten	90.3%	84.8%	90.8%	86.1%	87.6%	84.6%	83.7%	82.3%	87.2%	79.1%	87.3%	78.2%	83.1%	78.4%
Grade 1	91.9%	81.3%	91.9%	82.0%	88.3%	81.7%	85.3%	79.2%	88.4%	77.6%	88.1%	78.0%	84.5%	77.7%
Grade 2	91.9%	82.6%	92.7%	84.1%	89.8%	83.3%	86.6%	80.8%	89.3%	79.2%	89.4%	79.7%	85.5%	80.0%
Grade 3	92.5%	85.1%	93.0%	86.7%	89.9%	86.2%	87.0%	84.2%	89.7%	82.4%	89.4%	83.2%	85.2%	82.2%
Grade 4	93.3%	86.8%	93.6%	87.5%	90.3%	86.9%	88.0%	85.1%	91.0%	83.7%	89.9%	84.1%	86.3%	84.1%
Grade 5	92.6%	84.7%	93.1%	88.1%	90.0%	87.2%	87.5%	84.8%	90.4%	83.5%	90.3%	83.5%	86.1%	82.2%
Grade 6	91.4%	86.9%	92.3%	88.0%	89.7%	86.5%	87.1%	84.6%	89.9%	83.2%	89.6%	83.0%	86.3%	82.6%
Grade 7	92.2%	90.0%	92.2%	90.2%	89.6%	90.3%	86.7%	89.1%	89.6%	88.1%	88.5%	88.7%	85.8%	87.5%
Grade 8	91.2%	90.2%	90.5%	90.1%	88.0%	89.6%	85.7%	88.4%	88.3%	88.8%	87.4%	88.3%	84.4%	87.4%
Grade 9	77.8%	80.2%	75.4%	77.4%	72.2%	75.4%	69.3%	74.1%	72.1%	71.2%	70.8%	72.2%	68.3%	72.2%
Grade 10	80.2%	84.8%	79.0%	81.2%	75.6%	79.1%	74.7%	78.4%	76.7%	75.9%	75.8%	76.3%	73.1%	75.6%
Grade 11	83.5%	86.9%	82.2%	82.5%	79.7%	80.8%	77.5%	80.2%	79.9%	77.1%	78.9%	79.0%	75.6%	77.9%
Grade 12	80.1%	88.1%	77.9%	83.8%	75.9%	82.9%	73.5%	81.6%	74.9%	79.2%	75.3%	79.6%	72.1%	79.1%

Police Violence and Community Protest

In addition to the social upheaval of the pandemic, many children have been impacted by police involved violence and the asphyxiation of George Floyd in Minneapolis in May 2020 and then the death of Daniel Prude in Rochester that came to light in August 2020. Children in Rochester were further exposed to aggressive police tactics used during the community protests.

As described by the City/County Commission on Racial and Structural Equity:

On several occasions, there were confrontations between the protesters and the police, leading to the police detonating tear gas canisters and pepper spray, firing pepper balls into the crowds, displaying of police dogs, and at least one report of an armored military-styled vehicle at the scenes. These were widely condemned by the protesters. The City Council strongly urged the Mayor and the Chief to de-escalate tensions with the protesters. The opposite occurred. The police countered that these tactics were only deployed when acts of violence were directed towards them, and that these acts were largely perpetrated by “outside agitators.”

Images of police officers outfitted in riot gear, with police dogs on visible display, were jarring for residents of a city with the social justice legacy of Rochester. This out-of proportion use of force, and the inappropriate description of protesters as “outside agitators,” were reminiscent of the 1960s Civil Rights era police-protester confrontations led by the likes of ‘Bull’ Connor, Jim Clark and George Wallace. Complicating this was the inability or outright refusal of City and police officials to explain who ordered this style of “show of force,” and whether any established guidelines existed for these deployments.

Witnessing, and for some children and adolescents being directly involved in, these experiences had further emotional impact on already vulnerable children. Children will bring those impacts with them into the classroom, whether remote or in-person.

Learning Loss

Impacts on Pre-K Enrollment and Education

Rochester saw significant declines in enrollment in pre-K education during the time of remote learning. As reported by RCSD staff in the Early Childhood Department, pre-K enrollment in 2020-2021 is down by about 1,000 children. Additionally, 500 - 700 5-year olds who would normally be enrolled in and attending kindergarten are unaccounted for.

The impacts on pre-K education and social-emotional development are currently being assessed by the Rochester Early Childhood Assessment Project, a partnership between RCSD, the Children's Institute, and the community-based pre-K programs. Their findings are not yet available.

However, it is anticipated that in Fall 2021 the entering kindergarten cohort will likely have a wider range of academic and social-emotional skills than is typically seen. Additionally, many children with special education needs who would normally have been identified prior to kindergarten and already begun receiving services will begin school with no assessments, screenings, referrals or services.

Consequently, it is imperative that every child entering kindergarten receives comprehensive developmental screenings that include physical, intellectual, and social-emotional assessments. This should occur as early as possible following enrollment so needs are identified and services started as soon as possible in the school year.

Impacts on Elementary/Middle School Reading and Math

Since the summer there have been four key national studies estimating the learning loss incurred in the spring of 2020 due to disruptions in in-person learning. Details of those studies have previously been provided to RCSD administrators, the charter schools network, and the Monroe County Association of School Superintendents. One of the studies is particularly useful to Rochester

as the researchers provided ROC the Future with estimates for each school and each grade level for Grades 3 - 8 in both RCSD and charter schools.^{viii}

The key findings of that study were:

- We are seeing historically unprecedented learning loss
- Learning loss varies across grade levels with math impacts being more severe than reading
- Economically disadvantaged students have been impacted more
- Educational recovery plans need to be specific to a district’s and school's own data
- New instructional approaches will be needed with ample, coordinated support (within and outside of school) for students who have fallen behind
- Need strong, frequent progress checks and transparency of data

Specifically, using estimates of the NWEA assessment scaled scores, decreases in scores were estimated and are shown in the table below. Put another way, the estimated days of learning lost in RCSD were, on average, 124 school days in English and 230 school days in Math. It is important to remember that these estimates are only for the impact of school disruption from March - June 2020. They do not account for the impact of remote and hybrid learning from September 2020 - present.

	Reading		Math	
	RCSD	Charters	RCSD	Charters
Grade 3	-4.3 points	-4.6 points	-10.2 points	-9.3 points
Grade 4	-3.8 points	-3.4 points	-9.3 points	-8.3 points
Grade 5	-3.7 points	-2.7 points	-10.9 points	-12.0 points
Grade 6	-4.5 points	-3.9 points	-5.9 points	-5.0 points
Grade 7	-3.5 points	-3.1 points	-5.0 points	-4.6 points
Grade 8	-3.5 points	-3.6 points	-4.4 points	-3.7 points

Impacts on High School Graduation and Post-Secondary Enrollment

High school graduation rates in RCSD did go up in 2020, despite the pandemic:

- District-wide, the RCSD graduation rate went up 5 percentage points

- Every school in RCSD except one saw an increase in their graduation rate (exception was a non-significant decrease at a high performing school)
- Every charter school except for one also saw an increase

However, it should be remembered that the class of 2020 was impacted by school disruption during only the last three months of their senior year. The class of 2021, in contrast, will be impacted by a total of 13 months of school disruption. While a subset of students has been reported anecdotally as performing better with remote learning, it is not unreasonable to expect there may be more challenges to high school graduation this year.

Finally, in terms of post-secondary enrollment there are troubling data that indicate far fewer students may be enrolling in college or training programs next fall. Consistent with national trends, there has been a drastic reduction in the number of high school seniors in RCSD who have completed the Free Application for Student Aid that is required for Pell Grants, federal work-study programs, and most need-based aid at virtually all community and four-year colleges. Almost every school's completion rate is lower than at this date last year.

	FAFSA Completion Rate as of April 23	Compared with This Date in 2020
New York State	54%	-4%
RCSD		
School of the Arts	42%	No change
School Without Walls	39%	+86%
World of Inquiry	29%	-32%
East	27%	-11%
Wilson	26%	-37%
Northeast	18%	-19%
Leadership Academy	16%	-31%
IAT	14%	-37%
Rochester Early College	16%	-55%
Edison	10%	-28%
Monroe	10%	-46%
Charter Schools		
True North	72%	+176%
Rochester Academy	30%	-19%
University Prep	26%	-22%
Vertus	8%	No change

Reopening Better

Now the Rochester community is faced with the challenge of how to return all children to in-person learning in Fall 2021. That return is not merely a logistical challenge. It also necessitates supporting the educational and emotional recovery of children and supporting the well-being of the adults who teach and care for them.

Reopening and recovery is not the sole responsibility of the schools. It will require the active and coordinated involvement of the entire community. Children spend more hours outside of school than inside. Children also learn through play and social interactions everywhere they go. To facilitate a full recovery is the responsibility of all of us.

Simply "going back to normal" will not be sufficient. While getting children back into school with predictable routines will have a stabilizing effect, by itself it will not heal the emotional trauma they have experienced. Trying to catch children up through re-teaching will not get them back on track academically. What is needed are multiple strategies in many settings that are aligned with one another and sustained over time.

Educational Recovery and Reform in Times of Social Upheaval

The most comparable parallel for the times we are in was the trauma and upheaval children in New Orleans experienced during and after Hurricane Katrina. Research following their educational recovery (both in New Orleans and in communities they were displaced to) and the rebuilding of the education system in New Orleans indicates some lessons Rochester can use in planning educational recovery for our children:^{ix}

- **Decentralization of school administration made planning for long-term sustainable change more difficult** and made schools more dependent on their pre-existing capacity. So schools with more capacity rebuilt and recovered better than schools with less capacity. A more centralized

approach can lead to more consistent, sustainable, and equitable outcomes.

- **Successful public education relies on having a shared purpose and creating internal structures that achieve that purpose.** This requires strong vision, processes, and resources internal to the school system. Overreliance on external resources means that teachers spend a lot of time sorting out the information and tools that are given to them and adapting them. External resources can be beneficial, but only when they are an adjunct to and complement what is happening internally within the school system, not when they drive what happens within the school system.
- **Retaining effective leaders during times of social upheaval and rebuilding leads to better outcomes than replacing leaders.** Building on existing leadership means those leaders can use their prior relationships to minimize the turmoil impacting their schools, staff, and students. They can bring the requisite stability for change to be successful.

Following Hurricane Katrina, as well as other cases of major disruption to education systems, there was a tension between short-term and long-term strategies. If the goal is simply to go back to what was, short-term strategies may be sufficient. However, if the desire is to take the opportunity to reform the education system, that requires:

- Having a vision
- Engaging in long-term, strategic planning
- Attending to equity at every step
- Ongoing, collaborative work in an atmosphere of trust
- Changing structures, cultures, and capacity

Dr. Beabout cautions that improvements in education outcomes are not likely immediately following a time of social upheaval. However, it is an opportunity to implement processes and enable the conditions that will lead to better outcomes over time. "Promising quick results will almost always lead to disappointment."

Emotional Support, Resilience, and Recovery

There are numerous models for systematically supporting students in schools following traumatic events that impact many people in the community. Four that have been evaluated for efficacy are:

Model	Author	Context	Goals	Core Elements
Psychological First Aid	National Child Traumatic Stress Network	First days or weeks after a disaster or terrorism	Assess and ensure safety, security, and other vital and immediate needs are met and to reduce the initial stress	7 steps: <ul style="list-style-type: none"> • Initiate contact • Provide safety and comfort • Stabilize survivors • Assess needs and concerns • Offer practical help • Connect with social supports • Provide information on coping
Skills for Psychological Recovery	National Child Traumatic Stress Network	Weeks and months following disaster and trauma when more intensive intervention is needed	Help individuals and families gain skills to reduce ongoing distress and effectively cope	6 modules: <ul style="list-style-type: none"> • Prioritize concerns • Build problem-solving skills • Promote positive activities • Manage reactions • Promote helpful thinking • Rebuild healthy social connections
Mental Health First Aid	National Council for Behavioral Health	Training for adults and teenagers to be used any time they see a child or peer who may be in emotional distress or crisis	Teaches adults and teenagers to recognize and respond to mental health concerns in youth	Curriculum covers: <ul style="list-style-type: none"> • Common signs and symptoms of mental illness in age group • How to interact with a child or adolescent in crisis • How to connect the person with help • Expanded content on trauma, addiction

				and self-care and the impact of social media and bullying
Katrina Inspired Disaster Screenings and Services	Included as part of the Disaster Psychological Assessment & Surveillance Toolkit	School-based screening measures and processes post-disaster	Identify students who are in need of emotional support, connect them with services, and follow up over time to ensure needs are being met	4-step public health process: <ul style="list-style-type: none"> • School-based collaboration to implement basic stress reduction and share psychoeducational resources with students and families • Screening to help school understand needs of overall student population and normalize emotional responses • Screening of students and referral of those with more intensive support needs • School-based support services provided by a licensed professional with trauma-informed training

Whether one of these or any other strategy is used to enhance the emotional support provided to children as they return to school, the chosen strategy needs to be assessed for its cultural relevance and sensitivity, including the extent to which it:

- Breaks down stereotypes and dismantles discrimination
- Increases child/family access to culturally-relevant care
- Demonstrates respect for the dignity, culture, and experiences of the child and family
- Affirms and builds on children's and families' strengths in order to foster a sense of esteem and self-determination

Academic Recovery

Academic recovery is not likely to be achieved merely by getting children back in school or by trying to "re-teach" any material that was not covered or was not mastered. Based on prior research on academic recovery and acceleration, the following recommendations have been made in a report from McKinsey & Company^x:

- **Students need to be assessed, especially in reading and math.** Those assessments need to be done at the beginning of the school year with results provided to teachers, families, and students in a timely manner so they can be used to tailor individualized learning recovery plans.
- **Students should continue to be immersed in grade-level work,** being offered what is often called "just in time support" so they can keep up and master the work. The curriculum should not revert back to lower grade level work.
- **High-intensity tutoring** -- 50 minutes of tutoring daily with 2 students per tutor -- is recommended as the best practice for educational recovery and acceleration in **mathematics**.
- **Acceleration academies** -- week-long summer or vacation instruction with 25 hours of targeted teaching in small groups of 8 - 12 students -- is recommended as the best practice for educational recovery and acceleration in **reading**.
- **Student growth should be tracked and progress shared frequently** with students and families

As noted earlier, schools alone cannot do this work. Therefore, ROC the Future has offered these simple suggestions for others in the community for how they can help in children's educational recovery:

- **Families**
 - Play with your child, indoors and outdoors, through games and imaginary play
 - Explore new places with your child and talk about what they experience -- at the beach, in the park, at museums, in the neighborhood
 - Do projects together where you plan and problem solve -- cooking, building, art, gardening
 - Enroll your child in after-school and summer programs that they enjoy
 - Ask your child's teacher for specific skills to practice at home

- **Summer and After School Programs**
 - Have a clear purpose and intentional design that helps youth develop new skills
 - Develop caring relationships and safe spaces where youth feel like they belong
 - Engage youth in planning, problem solving, and reflecting on their experiences
 - Help children develop skills to -- listen & cooperate express their opinions take responsibility empathize with others set and achieve goals communicate

- **Community Members**
 - Ask youth about their goals and their plans for achieving them
 - Share how you overcame challenges in your life
 - Invite youth to shadow you at work or offer them a summer job
 - Volunteer as a coach or tutor or teach a class at a recreation center
 - Organize block parties or neighborhood events to build a sense of community
 - Speak up if you think a child is skipping school

ⁱ NY Department of Labor

ⁱⁱ NYS Census Pulse Household Survey

ⁱⁱⁱ NYS Census Pulse Household Survey

^{iv} United Hospital Fund

^v Raising NY

^{vi} Raising NY

^{vii} NYS Census Pulse Household Survey

^{viii} Center for Research on Education Outcomes at Stanford University; Report can be found at:
https://credo.stanford.edu/sites/g/files/sbiybj6481/f/covid_sim_meta_analysis_final_v.3.pdf

Appendices can be found at:

https://credo.stanford.edu/sites/g/files/sbiybj6481/f/meta_technical_appendices.pdf

^{ix} This section draws heavily from research led by Dr. Brian Beabout from the University of New Orleans. Dr. Beabout grew up in Irondequoit and may be a resource for further insight and planning.

^x <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-learning-loss-disparities-grow-and-students-need-help#>