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STRENGTHENING SOCIAL AND
EMOTIONAL HEALTH

Rochester Early Childhood Assessment Partnership 2020-2021 Twenty-Fourth Annual Report

ERINN B. DUPREY, PH.D.
ANDREW MACGOWAN III, M.S.
GENEMARIE VAN WAGNER
ABDOULAYE AL ANSAR
KATHLEEN EMBT
DAVID PEELLE, MBA
LAURI STRANO, M.S.
A. DIRK HIGHTOWER, PH.D.
ROBIN HOOPER, ED.D.
MARJORIE ALLAN, M.P.H.
REBECCA BOYLE, M.S.
CLAIRE CAMERON, PH.D.
LYNN LUBECKI, ED.D.
EVA THOMAS, ED.D.
KRISTEN TORKELSEN, ED.D. CANDIDATE
STEPHANIE TOWNSEND, PH.D.
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INTRODUCTION

Preface

Dear Readers,

As this 2020-21 RECAP report is published, the dawn of a third pandemic year looms. At the same time this report goes to press, the Classes of 2035/6 enter the remaining 100 days of their educational career launch as prekindergarten 4s and 3s. Beginning this fall 2022 – the last generation of scholars born only into pre-pandemic conditions will grace prekindergartens' doorsteps forever more.

And so, as the Akan tribe signifies in the symbol of Sankofa, this 2020-21 RECAP report summarizes a unique quest for knowledge. In this year's report we sought to look ahead to see how the 2021-22 cohort entered Pre-K. This report provides a first glimpse or baseline of young children's entering readiness among those who enrolled in a context of lengthy pandemic conditions. We articulate new learning directions responsive to parents' voices and current community conditions for raising one's youngest children. We also seek to remember and call out past learnings about how quality and school readiness is consistently achieved across birth year cohorts – to inform future directions.

The content and format of this year's RECAP report uniquely reflects this learning goal of Sankofa. While reading this year's report, the reader will engage with preliminary information - drawn from this school year's cohort of 3s and 4s in our fall 2021 classrooms. We are seeking to better understand whether similarities and differences exist in children's readiness when starting out in Pre-K classrooms this year, as compared to the last pre-pandemic cohort's start in fall 2019. (Over the course of the current school year, we will continue to gather and review these data for final reporting in next year's 2021-22 RECAP report.) We also describe patterns in socioemotional development along with other key characteristics of school readiness among Rochester's youngest scholars – during their significant early life transition into pandemic conditions for learning and overall development.

Looking ahead also requires new inquiries informed by lived experiences with the home-classroom curricular partnerships of remote learning programming. New directions for RECAP inquiry also began to be identified in 2020-21 – drawn from parent and caregivers' reflections on last year's experiences as educational leaders of their children's Pre-K learning. This critical role-relationship was highlighted during remote programming needs of 2020-21 when parents were asked to further enable curricular engagement within their home settings. Questions last year's parents sought to have asked and answered in RECAP's future processes – now underway to inform the next and 25th report – are also described.

Importantly, pandemic conditions of 2020 brought again into stark relief the social and economic inequities including digital access gaps among Pre-K aged children in Rochester. Consequently, new

modes of intentional holistic engagement through caring connections processes were piloted across the 2020-21 school year. We describe in this report how these adaptations to parent engagement practices helped further unite home environments digitally – and relationally – with supportive resources like schools and healthcare as caregivers adjusted to shelter-in-place safety realities of COVID-19. We also provide descriptions of digital access discrepancies, as novel engagement practices intensified in places to shape Pre-K children’s experiences and consequential engagement in learning.

Taking a 20,000-foot view, RECAP’s yearly contributions have been to describe forces that strengthen this system of early learning in Rochester – insights borne of many important observations and contributions of Rochester’s parents, teachers, administrators, community stakeholders and researchers over the past twenty-four years. Consider also that any direction of change from a system’s current state will unfold from what came before. In other words, we face future pathways in present time because of where we have traveled from in our past times. Additionally, being able to forecast a system’s possible future state is critical when confronting an external change force never seen before such as a global pandemic generating negative effects not experienced equally across families and communities. In response, this past year, we reviewed 23 years of empirical RECAP products. We summarize some “RECAP wisdom” generated over the years – by describing consistent or significant insights about program quality and children’s development generated over two+ decades of Pre-K cohorts. The goal in doing so is to help consistently ensure this system’s uniquely strong future remains informed by high-level, persistent lessons learned. We share these key themes to inform future system strengthening - as early learning systems across the U.S. will continue to face more sources of external uncertainties than ever before. We thus share elements of this unique resource for future planning.

Most important – March 2022 marks 30 years since RECAP’s inception. We express our gratitude for the many collaborative efforts performed that together maintain a robust early learning system now across generations of Rochester’s children. These collaborations with so many families, classrooms, schools and community agencies across Rochester – when combined with your interest and subsequent action as readers of RECAP reports – bring hope and optimism to our children’s future on a daily basis. Only by working together can we continue to achieve this nationally recognized Pre-K system where learning, growth and development thrives among Rochester’s beloved and cherished youngest scholars.

With respect,



Ann Marie White, Ed.D.
Executive Director
Children’s Institute

Acknowledgements

RECAP (Rochester Early Childhood Assessment Partnership) is made possible through valuable contributions from Rochester community members including parents and families, early childhood education program staff, funders, policymakers, and volunteers. The RECAP Assessment Team is grateful to its partners who meet with us twice monthly, year-round, to plan and implement the program. This team works collaboratively to improve the RECAP system to meet the needs of young children, families, and early childhood education programs.

Financial support for RECAP is provided by ESL Charitable Foundation, Generations Child Care Centers, New York State Education Department, Rochester Area Community Foundation, Rochester's Child Fund of the Rochester Area Community Foundation, Rochester City School District (RCSD), and United Way of Greater Rochester and the Finger Lakes.

During this pandemic and in response, an entirely new system was created for our prekindergarten three- and four-year-old children and their families in Rochester – integrating these grades with k – 12. For this we are indebted to our *Digital Uniting Caring Connection* donors, who made this new program possible: ESL Charitable Foundation, Rochester Area Community Foundation, and the Community Crises Fund launched by United Way of Greater Rochester and the Finger Lakes with Rochester Area Community Foundation. This program provided digital access and equipment to all prekindergarten families in the RCSD prekindergarten program in both schools and community-based organizations.

We are especially indebted to our colleagues at the Rochester City School District's Information, Management and Technology Department, in particular Chief Information Officer, Glen VanDerwater, Executive Director of Instructional Technology, Timothy Johnsen, and Senior Information Services Business Analyst, Nicole Klimek. At the height of the COVID-19 pandemic, without additional resources, this team aided our prekindergarten students – and did so with uncommon grace and generosity. They assumed new technological responsibilities for two entire grades, Pre-K 3 and Pre-K 4, over 2,300 students and their families, without any additional staff or support. We are also especially grateful to Craig Maurer of Children's Institute for his technology solution support with community-based organizations during this rapid transition.

Participating community based organizations (many of which are also members of the Early Childhood Education Quality Council) include: Action for a Better Community's Early Education Division, Asbury Day Care Center, Baden Street Clinton and Charles House Centers, Caring and Sharing Child Care Center, Community Child Care Center, Community Place of Greater Rochester, Creative Beginnings Child Care, Friendship Children's Center, Generations Child Care Centers, Hillside Children's Center, Ibero Early Childhood Services, Little Hearts Child Care, Oregon Leopold Day Care Center, Richard M. Guon Child Care Center at Monroe Community College, Rochester Childfirst Network, St. Paul's Child Care Center, Volunteers of America Children's Center, and the YMCA Child Care Center. Rochester City School

District programs included: the Florence S. Brown Pre-K Center at School No. 33, Rochester City School District Montessori Academy, Rochester City School District Rochester Early Childhood Education Center, and 25 Rochester City School District prekindergarten sites in elementary schools.

We thank teachers, adult family educators, paraprofessionals, family service coordinators, center directors, and school administrators who contribute their expertise and numerous hours of work to RECAP. We extend our gratitude to thousands of parents and other caregivers who share essential feedback regarding prekindergarten programs and experiences with program staff routinely. Families are an indispensable component in the comprehensive RECAP model.

The RECAP Advisory Council, chaired by Nancy Kaplan, Coordinator of Rochester's Child, plays an instrumental role by providing feedback and advice regarding assessment goals, needs of children and families, and effective use of RECAP data to inform early childhood policymaking in Rochester. We are grateful to the Advisory Council for its wisdom and for advising our team how best to enrich the relevance of RECAP in community-wide decision-making on behalf of children, families, and programs.

Authorship statement: Erinn B. Duprey and Andrew MacGowan III were co-lead authors. Ann Marie White (senior author) and Genemarie Van Wagner both contributed to writing the report. Abdoulaye Al Ansar, Kathleen Embt, and David Peelle were involved in data collection and/or data analysis. Lauri Strano, A. Dirk Hightower, and Robin Hooper all provided significant revisions to the report. All other coauthors were integral to the report as part of the RECAP assessment team and/or provided insights about results used as part of this report.

Executive Summary

This RECAP report is unlike any of our previous annual reports as a result of the extraordinary situations our youngest students faced during the COVID-19 pandemic. In this report, we include the 2020-21 school year *and* preliminary results from fall of the 2021-22 school year. The 2021-2022 school year provides us the first glimpse of data on prekindergarten student performance and socioemotional skills since the first half of the 2019-20 school year (pre-pandemic), a nearly two-year gap. The new information on our youngest students is important enough to warrant its inclusion. RECAP is currently collecting developmental, cognitive, and social-emotional data on 2,800 prekindergarten students enrolled in 2021-22. The complete report of the 2021-22 year will be published in fall 2022.

Fall 2021 Preliminary Results

Pre-K Students

Fall 2021 Growth and Development – COR-Advantage

The teacher-reported Child Observation Record (COR)-Advantage assessment (a measure of students' progress in multiple developmental areas) results confirm, as of November 2021, that enrolled four-year-old student performance lagged compared to recent years' fall assessment reports. We documented some high achieving students, but more were further “behind,” comparatively speaking, to recent years of student cohorts. COR-Advantage assessments of current three-year-old prekindergarten students appeared to be more similar to recent years.

On the COR-Advantage, the 2021 cohort of Pre-K-3 students had statistically significant lower scores ($p < .01$) on the creative arts and science and technology categories compared to fall 2019. We did not see a statistically significant difference on the COR overall score amongst Pre-K-3 students in 2019 and 2021. Pre-K-4 students had statistically significant lower scores on all subscales including the COR overall score (2019 mean = 3.00, 2021 mean = 2.89, $p < .001$; effect size $d = .16$), compared to 2019. However, these differences are not large in a practical sense.

Fall 2021 New Entrants Screening – Brigance III

The primary screening tool for cognition, Brigance® Early Childhood Screen III, showed that both three- and four-year-old results were similar or even better than pre-COVID-19. In addition, scores were higher in 2021 compared to the 2020 scores.

Results from the Brigance® Early Childhood Screen III showed that 75.5% of Pre-K 3 students were developmentally on track; 21.5% of Pre-K 3 students screened as having a need for formal evaluation (with an additional 3.0% in the “monitor closely” designation). Additionally, 10.3% screened as being “talented and possibly in need of enhanced work”. This is only slightly lower than in fall 2019 (10.5%).

Pre-K 4 results for 2021 also closely mirrored the 2019 results. There were 67.3% who were screened as developmentally on track, which is representative of previous years. Further, 28.3% of Pre-K-4 students screened as having a need for formal evaluation. At the same time, 11.0% of Pre-K-4 students were screened as “talented and possibly in need of enhanced work,” which is higher than observed in at least the past six years.

Fall 2021 Social-Emotional Adjustment – Teacher-Child Rating Scale

RECAP has evaluated Pre-K students’ social-emotional adjustment using the Teacher-Child Rating Scale (T-CRS) since the inception of New York State-funded RCSD Universal Pre-K. This fall’s observed rates of multiple social-emotional risk factors were the highest reported in recent years. There were approximately 20% of Pre-K-3 students significantly (i.e., at least one standard deviation from the mean) below average on multiple socio-emotional factors, and approximately 18% of Pre-K-4 students significantly below average on multiple socio-emotional factors.

However, the overall scores were similar to the most recent years of administration. Notably, there were no significant differences on any T-CRS-sf subscales between the Fall 2021 and Fall 2019 Pre-K-3 cohort, and only one marginally significant difference between the Fall 2021 and Fall 2019 Pre-K-4 cohort (with slightly lower scores on assertiveness among Fall 2021 4-year-olds).

By examining the data as well as carefully listening to prekindergarten teachers and staff, we conclude that there is a group of children enrolled who appear adversely affected by COVID-19 pandemic conditions. But it is also true that we see a large group of children who were resilient and rated with higher scores than seen in the past. Reports from teachers confirmed they were witnessing both highly resilient students as well as those who were trauma and stress-affected.

2020-2021 Results

Pre-K Students

Prekindergarten Student Attendance

On average, attendance declined throughout the year. For comprehensive programs with additional resources (e.g., family navigators and transportation assistance), however, attendance was stable or increased throughout the year. We also saw increases in attendance for programs that were involved in the Caring Connectors (digital access and support) program. These trends were different than in ‘typical years’ where there is often decreasing attendance in winter and increases again in spring.

Screenings and Brigance

Compared with prior years, scores on the Brigance® Early Childhood Screen III among Pre-K-3 (i.e., EPK) students were consistent. However, for Pre-K-4 (i.e., UPK) students, there was a 9% increase in student scores indicating “determine need for formal evaluation” compared to the prior year.

Our Get Ready to GROW Initiative was successful in screening over 600 3- and 4-year-old students at community-based-organizations in Rochester. These screenings revealed that the largest area of risk for Pre-K students was language, with 41.2% screened as in need of follow-up or referral, and physical health, with 47.0% screened as in need of a referral based on BMI.

Pre-K Students and Families as Digital Partners – Caring Connections

An exciting and positive endeavor in this COVID-19 era was the partnership among funders, Children’s Institute, the Rochester City School District (RCSD) Department of Information Management and Technology (IM&T), and the RCSD Office of Early Childhood. This partnership ushered in a new era for Pre-K children and their families in the realm of technology and digital access to programming and services. All Pre-K students and their families received Chromebook tablets or other portable devices and free internet access. In addition to devices and internet access, the more than 300 families who were engaged in Pre-K system agencies were linked to the Caring Connection program pilot. A Caring Connector staff person was assigned to each family identified as needing and wanting better digital access for their prekindergarten aged children. They helped prepare the family and engage with prekindergarten in a pandemic context. They assisted the family in using their new devices and internet services for their child’s virtual prekindergarten programming and to access other services such as tele-health appointments, special education programming, and human services such as food distribution sites and housing assistance.

Family and Parent Perspectives

Parents’ and Families’ Perspectives

Parents’ and families’ perspectives provide a very rich overview of their aspirations for their children. Though we did not distribute the family survey in 2020-2021, the RCSD Department of Early Education collected important information from families at the *Transition to Kindergarten Summit* in May 2021. Themes within parent feedback indicated they wanted their children safe from COVID-19 and to succeed academically and socially with peers and adults. Parents also expressed continuing frustration with difficulties in the transition from prekindergarten to kindergarten.

Family Engagement

Through our Caring Connectors program, families participated in focus groups and helped to design a new parent survey based on their experiences during COVID-19. Results from this survey will be reported in the 2021-22 RECAP report as data collection is still ongoing. Caring Connector staff persons were also interviewed to provide related perspectives on family engagement and program enhancement opportunities. Several themes emerged from these interviews, including the ability of families to adapt and be resilient, insights relative to the digital divide, and benefits that the Caring Connector program had for factors promoting individual student growth such as attendance.

Program Quality

Due to the COVID-19 shutdown, RECAP did not complete in-person classroom observations using the Early Childhood Environmental Rating Scale – Third Edition (ECERS-3) or the Classroom Assessment

Scoring System (CLASS) in the 2020-21 school year. However, RECAP staff provided professional development related to program quality, virtual programming, and topics specifically centered upon quality indicators within the ECERS-3 and CLASS observation instruments. These offerings included sessions on conducting high quality observations in virtual and hybrid settings, and an opportunity for teachers to give feedback on their teaching practices in the hybrid context via a brief survey. Additionally, lead CLASS trainers developed an approach for conducting virtual classroom observations. In the current 2021-22 school year, classroom observations are resuming using ECERS-3.

Professional Development and Cultural Humility

With the inability to conduct operations-as-usual (e.g., systematic classroom observations with feedback to teachers) due to limitations of COVID-19, we shifted our strategy to focus on professional development, and this included a specific focus on training in cultural humility. Participants provided positive feedback on learning objectives and content for their individual professional development, and concepts to apply within prekindergarten programming and authentic family engagement. After each part of the training, participants filled out surveys (sample size range: $n = 27$ to $n = 189$). Overall, most participants agreed or strongly agreed that each training met its daily objectives, was useful for improving student learning and achievement, and that a supportive climate for professional community and sharing was created.

Conclusions and Recommendations

This report highlights the impact of COVID-19 on Pre-K children and families, and on the prekindergarten system in its entirety. We note that the Pre-K educational system (along with RECAP) is currently in a “retooling” phase. While prekindergarten resumed operations-as-usual in the 2021-2022 school year, it is also building up additional supports that can address the detrimental impact of COVID-19. The nature of RECAP (e.g., emphasis on continuous improvement and system-wide feedback loops) has allowed us to anticipate and respond to the needs of our Pre-K children and families during COVID-19 and in our current phase of retooling and rebuilding.

The present report and its findings have several implications for policy and practice. First, there is a need for universal screening of all Pre-K-3 and Pre-K-4 students. The Get Ready to GROW (GROW) initiative has made great strides in this area, but there is still work to be done. We recommend further strengthening the partnership between RCSD prekindergarten and GROW on state-mandated screening, which is our first line of defense against early school failure. Second, this report highlights the value of high quality and sustained professional development. High quality professional development opportunities must continue to be offered for Pre-K teachers and staff, to maintain and enhance Pre-K educational quality despite high rates of turnover. Third, data in this report using teacher-reported indicators show that Pre-K students in Fall 2021 had higher rates of socio-emotional problems than students before the pandemic. We recommend a renewed emphasis on the Pyramid Model (socio-emotional learning curriculum) for teaching staff. Finally, the importance of centering policy and practice on family, parent and caregiver connection and engagement – and on their partnership in achieving high quality early learning community systems – cannot be overemphasized.

Reflections on Thirty Years of RECAP (1992-2022)

This publication marks the thirtieth anniversary of the formation of the Rochester Early Childhood Assessment Partnership (RECAP). It was in March 1992 that Rochester Area Community Foundation convened Rochester City School District, United Way of Greater Rochester, Daisy Marquis Jones Foundation, County of Monroe, Eastman Kodak, Xerox Corporation, and subsequently the Diocese of Rochester and Action for a Better Community Head Start. This first meeting took place five years prior to the implementation of New York State Universal Pre-K (UPK), setting the stage and establishing the foundation for Rochester's UPK program. Finding pockets of excellence in urban education is more common than often recognized, but finding sustained excellence is rare. RECAP has been instrumental in documenting and contributing to the long-term continuous improvement process that was established and continues to evolve in Rochester, New York.

Prior to the passage of the New York State Universal Prekindergarten Act of 1997, RECAP had already published important studies including parent preferences and a retrospective study of Pre-K effectiveness (documenting the potential value of Pre-K for our city's children). During the 1997-98 UPK planning year, RECAP played a central role in the design of Rochester's UPK, in the selection of the first five community-based organizations as partners (an open, competitive process still used today), and other key actions designed to support UPK program quality. In September 1998, UPK became operational with 800 four-year-old half-day classroom slots. RECAP also became operational in its close work with students, teachers, agency directors, principals, and education leaders in Rochester.

In addition to adopting the "check your ego at the door" operating philosophy from this often-found virtue of early childhood professionals and stakeholders, the founding principles of RECAP have shown to be durable and include the following:

- *Our first three "customers" are parents, providers, and policymakers (which includes funders).*
- *A "low stakes," or no punishment-based assessment system:* In contrast to most current accountability systems, everyone gets a chance to improve. This approach has repeatedly proven to be an essential element of continued success.
- *Continuous improvement in all areas:* Student achievement, teacher mastery, program quality. All parties are part of all continuous improvements leading to informed policy decisions based on reliable data.
- *Working as partners committed to the highest standards and rigor in educational assessment:* All areas of measurement are required to meet the highest standards in the education profession as well as evaluation best practices. RECAP was one of the first UPK programs to publish reliability statistics (possessing very high standards within all metrics), now common practice. State-of-the art instruments were and are chosen to observe children, classrooms, programs, and to understand family relationships and family desires for their children.

These guiding principals have allowed us to realize a sustained, high performing Pre-K system. "Data driving policy" is now nested in the culture of Rochester's Pre-K system.

Key Lessons and Recommendation after 30 RECAP Years

As we mark the 30-year anniversary of the start of RECAP, we pause to reflect on key themes and lessons learned throughout the past three decades. Below are themes that have emerged upon review of all prior RECAP empirical work and partnerships, relevant to the current prekindergarten climate and RECAP findings, and that offer recommendations to guide our work in the future.

Forces that work in favor of producing a high-quality Pre-K program over time are related to:

A climate attentive to *comprehensive kindergarten readiness* with continuing attention to all aspects of child development (e.g., physical, social, emotional, language, academic, etc.) is required during periods of significant growth and change for children in their earliest years.

In Rochester during a typical year, just over half of our children who complete Pre-K are on track for kindergarten. With intentional further summer learning activities in advance of kindergarten, this readiness can grow to 70% or more of entering kindergarteners.

Comprehensive developmental screenings are needed to identify and address key barriers to early learning across multiple domains such as vision, hearing, dental, cognition, and other aspects of developmental growth.

Children’s socioemotional development is responsive to quality of socioemotional experiences provided in early learning settings by adults. For example, by training teachers and other classroom professionals in the Pyramid Model, we were able to end a decade long slide of social-emotional scores, as measured by the T-CRS. By using measures sensitive to change, such as the T-CRS, we have seen children develop beyond risk status in classroom adjustment to achieve strong growth in areas such as social skills and task orientation.

Greater immersion leads to greater student growth. Full day Pre-K programs and an additional year of programming are each related to greater gains in student outcomes. Further, growth while in prekindergarten varies and attributes of children such as gender and ethnicity have been related to variations observed.

A community-based Pre-K system is essential. The RECAP community-based organizations (CBOs) produce consistently high-quality programs and with strong parent engagement in the context of quality-enhancing factors (e.g., sustained and comprehensive professional development and a continuous improvement system, such as RECAP).

Careful curriculum selection can lead to system-wide improvements. The addition of the HighScope curriculum in 2010-11 resulted in system-level improvements in child outcomes that were sustained over time.

Consistent and reliable classroom quality observation across the Pre-K system (e.g., via ECERS-3, CLASS) – annually and in a low-stakes manner to support teacher coaching and learning - provides essential information for achieving program improvement and measuring existing and resulting strengths over time. This practice over time results in a Pre-K system able to sustain high quality as new teachers arrive to a large degree (e.g., in 2018-19 when there was a high level of turnover). The introduction of

the Classroom Assessment Scoring System (CLASS) further enhanced quality observed by continually informing teacher professional development and classroom practices related to teacher-child interactions.

Family engagement and parent approval of Pre-K programming is an essential focus and has remained so in RECAP. Parent approval of Pre-K programming has remained high across years. The majority (at least 94%) of parents consistently rate the quality of Pre-K programming as an A, A-, B+, or B. This trend exists since 1998 in the beginning of UPK (Now known as Pre-K-4).

Proactively identifying and responding to children facing multiple screening risks is the first line of defense against future school failure. For example, underdeveloped communication and language skills combined with more exposure to adverse experiences means children will have less capacity to describe feelings that can help to foster resilience. Identifying and responding to these needs immediately (e.g., providing extra supports around communication and language) will help children to adapt and thrive.

As we begin to look towards a pandemic-turned-endemic period of recovery and the resulting post-COVID-19 era of education, how do these lessons we learned from RECAP translate into next steps? Based on these key lessons drawn over time, we make the following recommendations:

- A “whole child” kindergarten readiness measurement model is needed to conceptually integrate child-, school-, community-, family-readiness – and to drive continuous improvement systemically in this direction.
- Continued investment for high quality in- and out-of-school (including summer) learning activities will support children’s learning and development continually throughout the year.
- Strengthening early screening and referral activities are essential when pandemic conditions alter children’s growth trajectories prior to Pre-K entry.
- Increased awareness and training to strengthen children’s socioemotional development are needed in order to move/protect children from risks such as arriving to school with greater behavioral adjustment and development needs. Response to intervention, however, takes time.
- Parents and families must be incorporated into all aspects of programming. Authentic family engagement became the cornerstone of maintaining Pre-K educational quality during the pandemic as they provided connection to remote instruction in partnership with teachers in virtual and hybrid learning scenarios.

Overview of Basic RECAP Operations

Through “low stakes” and continuous improvements, RECAP translates data into usable information for parents and families, providers, and policy makers / funders through community collaboration, technical assistance, and professional development. RECAP fulfills a central role in local, regional, and statewide programs and interventions for children, as well as collective impact initiatives, by providing reliable information about the early childhood care and education systems in Rochester, as well as regional and national, early childhood systems via research, analysis, and literature reviews.

As in years past and today, RECAP provides the following services:

- Professional development for teachers, paraprofessionals, family service professionals, and program administrators in the use of child screening measures, assessments, program quality rating scales, parent surveys, web-based data information system use (COMET[®]), and report interpretation.
- Efficient and user-friendly data collection, processing, analysis, and reports that provide rapid feedback at the child, parent, classroom, program, and system levels.
- Twice monthly review and planning Assessment Team meetings with staff from community-based organizations including, for instance: Action for a Better Community (ABC) Head Start, Rochester City School District (RCSD) Department of Early Childhood, Early Childhood Development Initiative (ECDI), All Kids Thrive, ROC the Future, The Children's Agenda, SUNY Buffalo, and Children's Institute, to analyze and synthesize information, recommend changes, and monitor the systematic quality of early education in Rochester.
- Community Advisory Group meetings to facilitate partnership with the local community, families, professionals, and other stakeholders.
- Presentations of aggregate outcomes for Pre-K-3 and Pre-K-4 to support informed decision-making for practices and policies in support of children, families, and programs.
- Anticipatory and participatory planning followed by additional resource development to help respond and adapt to conditions predicted to affect school readiness. RECAP expands support towards achieving a high-quality prekindergarten system by partnering with many community resources including philanthropy. In bringing together funding and resources across the community, RECAP helps expand and improve capacity for addressing needs identified in its continuous improvement, assessment, partnership efforts. For instance, in response to the pandemic, RECAP expanded to employ participatory evaluation practices such as asking parents and caregivers what was newly important to assess about parent prekindergarten experiences; it explored and developed new approaches towards the goal of greater equity in digital access among families with prekindergarten aged children.

Information-based decisions using RECAP data are integrated into Rochester's early childhood continuous improvement system that strives to ensure and maintain high quality Pre-K programs and improve students' overall performance and outcomes.

RECAP and the Immediate Impact of COVID-19

The 2019-20 RECAP assessment year was shortened in March 2020 due to the COVID-19 pandemic and subsequent school closings. In New York State, the Governor enacted a 'New York on Pause' executive order in mid-March, declaring that schools be closed for the foreseeable future. The Governor extended that executive order on April 9th, 2020, mandating that schools would remain closed until April 29th, 2020. Finally, in late April, then-Gov. Cuomo closed schools for the remainder of the 2019-2020 academic year.

Schools and early childhood center facilities remained closed except for a few childcare programs that remained open to support families with parents/guardians who were essential workers and could not work at home. Buildings were closed, but prekindergarten programming continued for many but not all young students. Teachers provided virtual programming to the greatest extent possible given significant systemic barriers including lack of access to internet and computer equipment for many families. In Rochester, spring 2020, 37% of families were estimated to have limited online functionality (ROC the Future, 2020). Many alternate methods were utilized by prekindergarten teachers to communicate and engage with families and students including phone calls, delivery of learning resources, and others which are described later in this report in the home-learning attendance section.

After schools closed, the New York State Board of Regents cancelled Regents Examinations and standardized assessments for school districts. Therefore, spring/post RECAP prekindergarten student assessments were not completed.

Because of the school closures, many classroom observations could not be completed. Classroom observations typically begin in February and are completed by late May of the academic year. For this academic year, only 75 ECERS-3 and 59 CLASS observations were completed. To read the RECAP report for the 2019-2020 abbreviated school year, see Infurna et al. (2021).

A typical RECAP year includes teachers' completion of Child Observation Record—Advantage (COR+) three times during the school year (fall, winter, and spring). But for 2019-20 only fall and winter assessments were completed. Similarly, only fall T-CRS-sf (T-CRS short form) were completed only in the fall of 2019. To read the RECAP report for the 2019-2020 abbreviated school year, see Infurna et al. (2021).

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The 2020-21 RECAP Year

The 2020-2021 academic year was not “typical” in any sense. Due to the constraints of COVID-19 on time and resources, and the continued shift from in-person to distance-only and then hybrid learning models, we made several adjustments to the measures to validly assess the dynamic prekindergarten system. The following measures were collected and analyzed:

Table 1. RECAP Variables, Measures, Numbers Assessed, and Method of Assessment

RECAP 2020-2021 Variables, Measures, Number Assessed, and Methods		
Variables	Measures	Method
Academic Skills, Physical Development, and Health	Brigance Early Childhood Screen III	Child Direct Performance, Teacher Observation
Classroom Quality	RECAP-Developed Teacher Survey	Teacher Survey (Online)
Student Engagement	Student Attendance	Secondary Analysis of PowerSchool Data
Family Engagement	Transition to Kindergarten Survey	Individual Parent Survey
Family Engagement	Focus Group Perspectives on Parent Surveys	Parent Focus Groups
Family Engagement	Caring Connectors Program Surveys	Individual Interviews with Caring Connectors

We also report on screenings tools used by the Get Ready to GROW Initiative (see chapter on Screening), and by the district for new entrants screening (see Appendix I). Additionally, we provide preliminary results from our Fall 2021 RECAP assessments. These preliminary Fall 2021 results are drawn from the Brigance Early Childhood Screen III, the COR Advantage (COR +), and the Teacher-Child Rating Scale, short form (T-CRS-sf).

Pre-K-3 and Pre-K-4 Enrollment Breakdowns, In-District and CBO, 2020-21

Another notable difference in the 2020-21 RECAP year was enrollment, which was significantly lower than recent years (See Table 2). Thus, all our results must be interpreted in light of these major decreases in student enrollment.

Owing to the COVID-19 pandemic, 2020-21 Pre-K enrollment dropped from an estimated 3,200 to approximately 2,341, or nearly one thousand fewer students pre-COVID-19 (See Table 2 below). Enrollment dropped most significantly among three-year-old students. Due to decreases in enrollment, 30 classrooms were closed in the 2020-21 academic year. The following enrollment data were obtained from the January 15, 2021, State BEDS “pull”. Note that the State Education Department Basic Educational Data and Statistics, BEDS, is historically on the first Wednesday of October, a practice that resumed in 2021. The 2020-21 year was different and occurred approximately three months later.

Table 2. Total Pre-K Enrollment, 2020-2021

	RCSD Sites	CBO Sites	Total
Pre-K3	311	474	785
Pre-K4	696	860	1,556
	1,007	1,334	2,341

STUDENT OUTCOMES

Attendance

As the COVID-19 pandemic demanded adaptation from the usual mode of in-person program delivery – to remote and hybrid offerings – student engagement via attendance records became a key focus. Data on attendance present an opportunity to learn about student engagement in the context of distance and hybrid learning throughout 2020-21.

We developed new attendance procedures in response to the unique context of the 2020-21 school year. Specifically, a new attendance module for community-based organizations (CBOs) on the COMET system enabled teachers to identify students' mode of attendance, daily. New attendance categories included: in-person, virtual (asynchronous), virtual (synchronous), absent (excused) and absent (unexcused).

Definitions: In the virtual learning mode, students were marked as present for *asynchronous learning* if they participated in an asynchronous learning environment, had a daily check-in or two-way communication with a service provider or teacher, participated in a pre-recorded SeeSaw lesson or activity, engaged in daily assignments online or offline, and if there was evidence of student working despite having difficulties logging into the system. Students were marked as present for *synchronous learning* if they participated in a synchronous learning environment (ex. Work time, small group, morning meetings), and/or if they participated in an individual Zoom or phone call with the teacher. Further, unexcused absences were marked if there was no contact with students or families or no evidence of school engagement. These may have included the student oversleeping, family vacations, and all other unexplained absences.

Below, results show the overall attendance rates by prekindergarten students in Rochester City School District (RCSD) schools and CBOs. These two categories of schools are presented separately due to different attendance systems. Attendance data were obtained from teachers and administrators, who documented attendance data each day and then recorded it in the COMET (for CBO classrooms) or PowerSchool (for RCSD classrooms) systems.

Below are also results from a time series analysis showing trends in daily attendance over the course of the school year.

Attendance by Prekindergarten Students in RCSD Schools

See Table 3 for results. Out of a possible 179 school days, 3-year-old prekindergarten students attended an average 66.78% of days, and 4-year-old prekindergarten students attended an average of 72.02% of days.

Table 3. RCSD Attendance Summary Statistics

					Preschool-3		Preschool-4	
# School Days	Locations	Classrooms	# Pre-K-3 Students	# Pre-K-4 Students	Present %	Absent %	Present %	Absent %
179	29	68	366	671	66.78%	33.22%	72.02%	27.98%

Attendance by Prekindergarten Students in Community-Based Organizations

See Table 4 for results. On average, 3-year-old prekindergarten students who attended CBOs were present for 61.7% of possible school days and Preschool-4 students were present for 61.1% of school days. Three students were excluded from this analysis due to not having any records of attendance between the first and last day of school. Note that the number of days of programming differed for ABC Head Start sites (total days: 176) and other CBOs (total days: 179).

Table 4. CBO Attendance Summary Statistics

					Preschool-3		Preschool-4	
# School Days	Locations	Classrooms	# Pre-K-3 Students	# Pre-K-4 Students	Present %	Absent %	Present %	Absent %
176-179	27	95	473	849	61.7%	38.3%	61.1%	38.9%

Trends in Attendance During the 2020-2021 School Year

We analyzed daily attendance within RCSD-affiliated prekindergarten programs for which granular (i.e., daily) attendance records were available, to ascertain trends in attendance throughout the 2020-21 school year. Several findings emerged regarding overall trends in attendance.

Methods

Attendance was recorded as present (virtual-asynchronous, virtual-synchronous, in-person) or absent (excused or unexcused). Time series data were inspected using Microsoft Excel. Trends were analyzed separately for sites that were part of a federally funded comprehensive program that provides both developmental and educational services (hereafter referred to as *comprehensive programs*). We also inspected the data in relation to key events in the 2020-21 school year that may have impacted attendance metrics (see Table 5). Events included the beginning of in-person learning in February 2021, tablet distribution via the Caring Connectors program from March to May 2021, and the opening of a new system to record hybrid learning attendance on COMET, which occurred in May. Prior to this new attendance system, teachers were taking attendance manually (ex. paper and pencil).

Daily summary statistics were calculated for the percentage of students present in-person, present virtual-synchronous, present virtual-asynchronous, and absent (both excused and unexcused). A daily summary was also calculated that represented the percentage of students present in any mode of learning (i.e., in-person, virtual asynchronous, or virtual synchronous). Missing data were not included in the analysis. Attendance was missing on a given day due to data entry error or misunderstanding of attendance procedures. The specific reason for a missing data point was unknown. Thus, when calculating the percentage of children attending school on a given day, the denominator equaled the number of children for whom data was available.

Upon inspecting the data, we noticed that there were significant decreases in attendance on Wednesdays of each week. We consulted with partners and learned there was a misunderstanding regarding how teachers were instructed to input students' attendance on Wednesdays, which were asynchronous learning days. Specifically, there were no in-person offerings on Wednesdays, but caregivers were instructed to log-in to the system and participate in asynchronous learning with their child. Teachers were instructed to record all students as "present" on these days, but we see instead a high percentage of absences recorded. Thus, we dropped this data from the analysis due to lack of reliability in recording across teachers.

Table 5. Some Key 2020-21 School Year Events

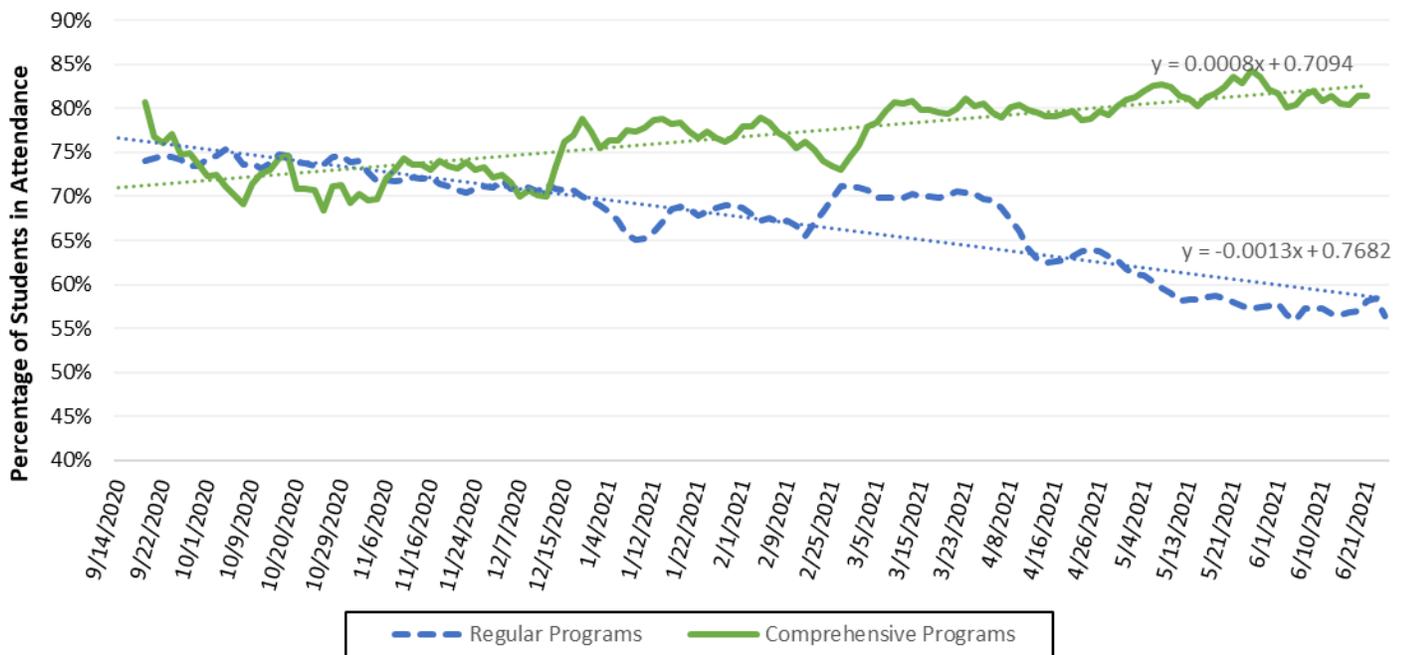
Event	Date
Schools open for in-person learning	February 8, 2021
Many tablet distributions begin	March 4-April 7, 2021
Hybrid attendance system opens	May 6, 2021

Results

Missing data: The amount of data (i.e., ‘blanks’ in attendance chart) was 9.60% across all students and all possible days of attendance. This percentage was 10.17% before the COMET attendance system opened and decreased to 7.12% after the attendance system opened.

Overall yearly trends: See Figure 1. We found that, overall, there was a decline in attendance over the course of the school year for students in regular preschool programs. For students in programs providing more comprehensive support, the daily percent recorded attendance in any mode was overall stable to increasing - and the overall averages were higher compared to other programs.

Figure 1. 2020 to 2021 Attendance by 4-Day Moving Averages



Note. Linear equations for each trend line is shown in the figure.

Overall yearly trends by mode of attendance: Below, we show yearly attendance trends for Pre-K programs with daily data available. Data are separated by regular programs and comprehensive programs. For all sites, in-person Pre-K teaching began in February 2021. After this date, there was an increase of in-person attendance and a decrease in synchronous learning. It is also evident from these analyses that attendance varied by day of the week. Attendance averages were typically higher on Mondays and Tuesdays than on Thursdays and Fridays, particularly after in-person learning began in February 2021.

Figure 2. 2020 to 2021 Attendance by Day and Mode of Attendance (*regular programs*)

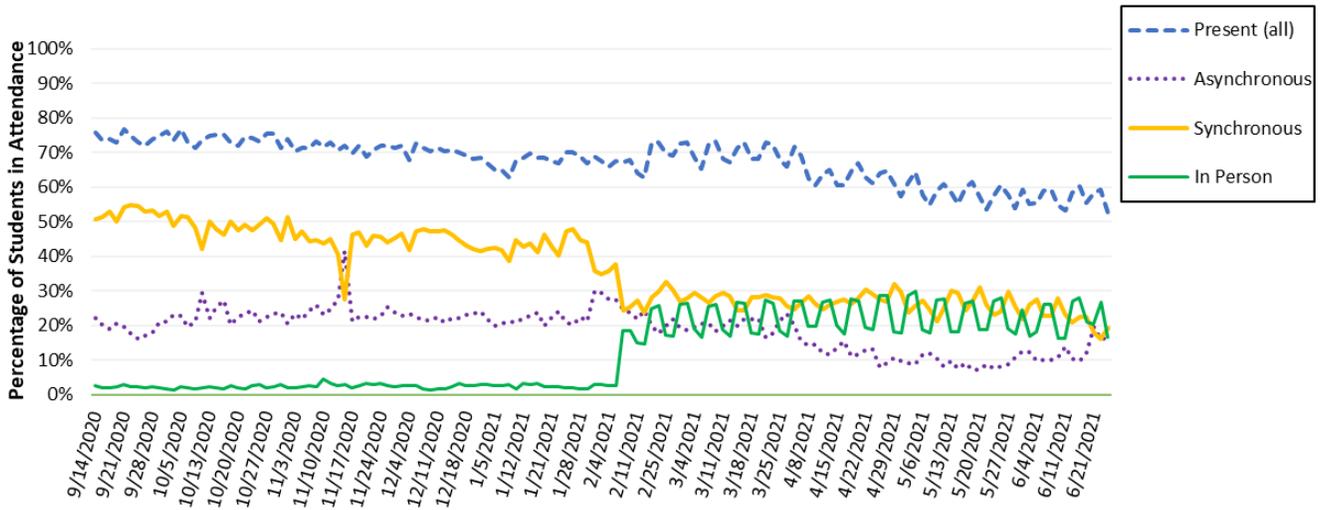
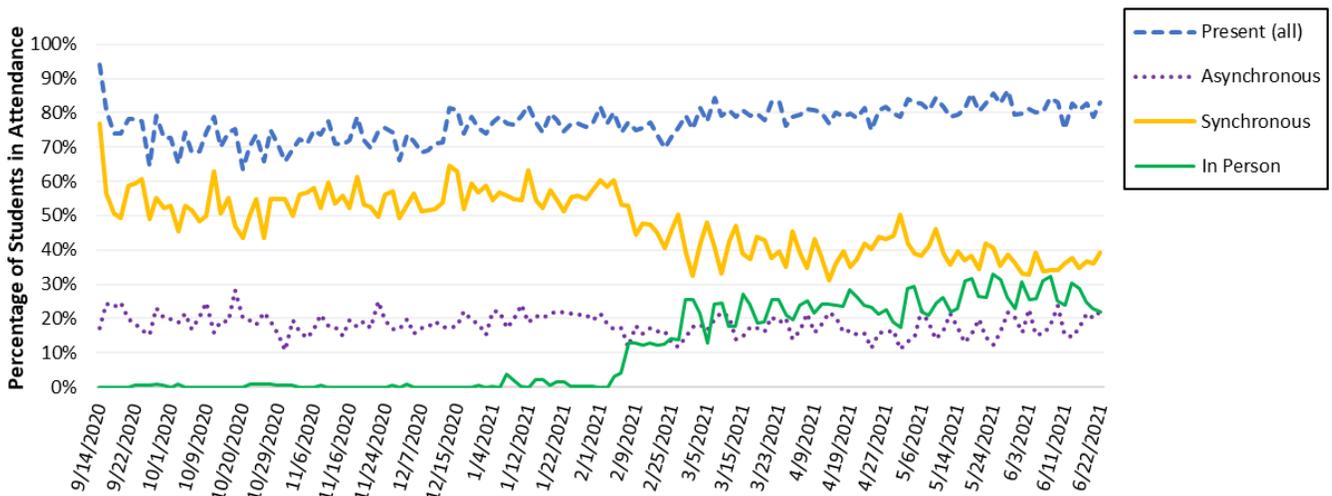


Figure 3. 2020 to 2021 Attendance by Day and Mode of Attendance (*comprehensive programs*)



Conclusion and Discussion

Student attendance is a metric of engagement, and therefore is an important data source to consider in the context of virtual/hybrid learning modalities in the COVID-19 pandemic. Overall, attendance declined from September to June for regular preschool programs. However we did not see this decline for sites that had comprehensive programming, which included family navigators. Rather, the total percentage of students present was stable and slightly increasing over time – with for instance slightly higher levels of asynchronous and synchronous participation throughout late winter and spring as compared to sites without additional resources. This may be due to several reasons. First, these sites had a different staffing

support that offered more intentional resources for family engagement and digital literacy. The availability of these resources may have helped to boost student attendance during the 2020-21 school year. Second, these sites also offered transportation to families. This could have made a considerable difference particularly when schools opened for in-person learning in February.

In conversations with school partners, we heard that attendance trends were reported to be different in the year 2020-21 compared to most years. In ‘typical’ in-person learning school years, there is traditionally a decrease in attendance during the winter months that increases again in spring. Notably, there was a steady decrease in attendance for students observed in 2020-2021 at centers with fewer family support resources.

We also found that missing data decreased after the novel e-attendance system opened on COMET on May 6th that met new attendance specifications. At this point in time, teachers and administrators began entering stored attendance records from school days prior to May as well as current attendance.

There are several limitations of the attendance time series analysis. First, we were unable to analyze all Pre-K sites due to lack of availability of granular (daily) attendance data from the PowerSchool system. Additionally, it is likely that there is some unmeasured data entry error as teachers manually enter information into the system. Further, when schools opened in February for in-person learning, students either attended Monday-Tuesday or Thursday-Friday. It is possible that there were systematic differences between these groups of students that impacted what we see in this time series analysis. Last, this is a descriptive analysis, and we did not test whether differences in attendance between sites, or throughout the year, were statistically significant.

Despite these limitations, this analysis offers visual descriptive data on overall trends in attendance during the 2020-21 attendance year. Classroom teachers’ curricular provisions took place largely remote (from September to February) and then both in-person and remote (from February to June). The 2020-21 school year was unprecedented due to the COVID-19 pandemic. It is of utmost importance that we inspect all available data to gain information on student learning and associated outcomes during the 2020-21 school year, to inform future policy decisions related to remote learning interventions. Future analyses planned include inspecting attendance by student characteristics (e.g., gender), which is possible in part by the interoperability of different datasets available to the RECAP assessment team.

Screenings: Brigance Early Childhood Screen and Get Ready to GROW Screen

The following sections detail results from the Fall 2020 Brigance Early Childhood Screen, as well as the data we have on screening 3- and 4-year-olds via the Get Ready to GROW initiative.

Also included as an appendix to this report are results from the RCSD new entrants screening for prekindergartners and kindergarteners in the year 2020-2021 (see Appendix I).

Get Ready to GROW Screening of 3- and 4-Year-Olds

The Get Ready to GROW (GROW) initiative of Children’s Institute conducted 638 Pre-K-3 and Pre-K-4 comprehensive screenings in CBO settings. GROW uses comprehensive state-of-the-art instruments to screen children in multiple areas including vision, hearing, dental, BMI, physical development (motor skills), speech /language, cognitive functioning, and social/emotional.

Below (see Table 6) we present results (total screened and percentage referred for follow-up) for vision (using SPOT technology), hearing (using pure tone hearing screening, otoacoustic emissions [OAE] screening, or tympanometry screening), dental (assessed via a visual inspection for tooth decay- ‘lift the lip’), BMI (height and weight), motor skills (using the DIAL – Developmental Indicators for the Assessment of Learning), language (using the Preschool Language Scale [PLS-5]), and socio-emotional (using the Ages and Stages Questionnaire Social-Emotional [ASQ:SE]). The total screened and percentage referred for follow-up are shown in the table below.

Table 6. GROW Screening Referral Rates for 3- 4-Year-Olds

	<i>N</i> (total screened)	% Follow Up or Referral
Vision	388	19.6
Hearing	236	6.4
Dental	309	11.3
BMI	517	47.0
Motor	204	18.1
Speech/Language	330	41.2
Socio-Emotional	21	33.3

Results from the Brigance Screening Tool

Screening Status Outcomes for Pre-K-3 and Pre-K-4

Out of a total 785 students enrolled in Pre-K-3 in 2020-21, the Brigance screening tool was completed for 62.9% ($n = 494$). Out of a total 1,556 students enrolled in Pre-K-4, the Brigance screening tool was completed for 60.3% ($n = 938$). See Table 7 for full results.

The distribution of Brigance scores among Pre-K-3 (EPK) students was consistent with prior years. Among Pre-K-4 (UPK) students, there was an increase in students receiving a score of “1” indicating that there was a need for formal evaluation. There was a bimodal distribution, consistent with past years’ scores, wherein most students received either a “1” (*determine need for formal evaluation*) or a “3” (*functioning within normal range*).

Table 7. 2020-21 Pre-K-3 and Pre-K-4 Brigance Screening Status Outcomes

Screening Status	Pre-K-3 ($n = 494$)		Pre-K-4 ($n = 938$)	
	Count	Percent	Count	Percent
Determine need for formal evaluation	122	24.7%	347	37.0%
Monitor closely	6	1.2%	32	3.4%
Functioning in normal range	314	63.6%	470	50.1%
Academically talented	52	10.5%	89	9.5%

Trends in Brigance Scores

Tables 8 and 9 present trends in Brigance III scores for five consecutive years. As mentioned above, scores among Pre-K-3 students were consistent in 2020-2021 with prior years of cohorts. However, among Pre-K-4 students, there was a 9.1% increase in students scoring a “1” (*determine need for formal evaluation*) compared to the year 2019-2020. It is possible that the COVID-19 pandemic presented more deleterious effects for four-year-olds than for three-year-olds, due to their stages of development. Another possible explanation is that the sample size for Pre-K-3 students was almost 50% smaller than that of Pre-K-4 students, and this may have influenced our results. The families of Pre-K-3 students who were present for screenings are likely not representative of all Pre-K-3 students in the district, but rather higher functioning.

Table 8. Brigance III Pre-K-3 Results by Percent for Five Consecutive Years

Screening Status	2016-17 (n = 1028)	2017-18 (n = 921)	2018-19 (n = 948)	2019-20 (n = 1148)	2020-21 (n = 494)
Determine need for formal evaluation	24.8	23.5	24.6	28.0	24.7
Monitor closely	3.8	2.3	2.3	3.9	1.2
Functioning in normal range	65.8	66.7	66.7	60.9	63.6
Academically talented	5.6	7.6	6.4	7.2	10.5

Table 9. Brigance III Pre-K-4 Results by Percent for Five Consecutive Years

Screening Status	2016-17 (n = 1813)	2017-18 (n = 1747)	2018-19 (n = 1650)	2019-20 (n = 1634)	2020-21 (n = 938)
Determine need for formal evaluation	30.2	30.4	30.4	27.9	37.0
Monitor closely	4.6	4.5	4.2	4.0	3.4
Functioning in normal range	56.0	56.0	57.5	58.4	50.1
Academically talented	9.2	9.0	7.8	9.7	9.5

Historic Trends, Gender, and Ethnicity

As far back as 1997, RECAP has conducted analyses of New Entrant Screenings, beginning with “The Predictive Validity of RCSD Kindergarten Screening, 1992-1997” (Montes et al., 1997). The RCSD Department of Research, Evaluation and Testing had also conducted internal studies on screening. The screening of Pre-K students did not commence until 2007, at the direction of the New York State Education Department. Previous RCSD studies, including a longitudinal predictive validity evaluation, indicated one problem only as being a “yellow flag” – but multiple problems as a “red flag.”

Historically in our screenings, boys lag significantly behind girls, especially in motor skills. We have reported greater gender differences in young children (Pre-K and Kindergarten) than we do racial/ethnic differences. These gender and racial/ethnic differences in screening are consistent with group differences on other measures. In previous comprehensive studies, overall, in Pre-K, the lowest performing groups of girls perform at higher developmental levels than the highest performing groups of boys (separated by

race/ethnicity). Note these are *average* effects, *not* individual effects, where there are very broad distributions. Historically the developmentally lowest group by gender/ethnicity has been Latino boys.

Discussion

There are several noteworthy limitations. First, due to the COVID-19 pandemic there were fewer children screened in 2020-21 than in prior years. It is possible, and perhaps likely, that children not screened were at a higher risk compared to those who were screened.

Several strengths must also be noted. The Brigance is a reliable and valid screening instrument for evaluating risk, as well as possibly giftedness, among 3- and 4-year-old students. Additionally, the Brigance screening results among three- and four-year-olds were consistent with prior years, which signals that this screening was still valid in the context of the COVID-19 pandemic. The Brigance and GROW screenings are our primary sources of student data in the year 2020-21, and consequently we can obtain important information from these assessments on how children fared during the COVID-19 pandemic.

Preliminary Results from Fall 2021

The Fall 2021 semester gives us the first glimpse of student outcome data post-COVID-19. In this section, we provide preliminary results from three student-level assessment tools: The Child Observation Record (COR-Advantage), the Teacher-Child Rating Scale short form (T-CRS-sf), and the Brigance Early Childhood Screen. At the time of this report, we only have results from a single time, and consequently our analyses and interpretation of this data is limited. We provide a summary of results and discussion points within the context of these limitations.

Child Observation Record – Advantage (COR+) Results

Description of the Child Observation Record

The Child Observation Record (now called COR-Advantage [COR+] in its latest iteration), is published by HighScope, of Ypsilanti Michigan. HighScope is the oldest and most recognized institution in Pre-K, dating back to 1960 and the first U.S. longitudinal studies of prekindergarten effectiveness. Indeed, HighScope coined the assertion, “For every dollar invested in quality Pre-K, your community receives approximately six dollars by the age of 19” (HighScope’s first cost-benefit study was published in 1986). The Rochester City School District (RCSD) and HighScope have a decades-long relationship. The district currently uses both the COR-Advantage and the HighScope curriculum. This means the assessment and curriculum are aligned – a key consideration in an effective instructional program.

Immediately prior to the advent of UPK, the United Way of New York funded RECAP for an evaluation of the eight (8) most recognized, valid and reliable instruments. The results pointed to use of the COR and Teacher-Child Rating Scale. Therefore, we adopted these instruments in the RCSD-RECAP partnership. This allows us to accurately examine trends over any length of time; we now possess 23 years’ worth of COR data. This is an example where data facilitates policy.

The COR-Advantage assesses eight (8) categories: Approaches to Learning; Social Emotional Development; Physical Development and Health; Language, Literacy and Communication; Math; Creative Arts; Science and Technology; and Social Studies. The overall COR+ score can be reliably, statistically averaged. The scale is from 1 to 7 and covers very young prekindergartners through early-to-mid kindergarten.

Summary of Findings

Overall on the COR+, four-year-old students enrolled in Fall 2021 were slightly developmentally behind their 2019 counterparts in multiple areas. For three year-old students we detected only a few significant differences between current 2021-22 students and 2019-20 (e.g., pre-pandemic) three year-olds. There

were some areas of lagging (slightly, in *Creative Arts* and *Science and Technology*), but overall they were comparable.

Some qualitative evidence suggests that Pre-K students have been growing (i.e., developing in multiple domains such as social-emotional and cognitive) at high rates. We will have a better sense of developmental growth as the school year progresses and more information becomes available. The rates of growth by COR+ category will be a central topic in next year’s RECAP Report.

Results: Pre-K-3

In Table 10 we present the summary statistics for three-year-old prekindergarten students enrolled in fall 2021. In Table 11 are comparisons of three-year-olds from the fall 2019 to fall 2021. Also in Table 10 are the Cronbach’s alpha (α) coefficients, which are indicators of internal consistency, or reliability, of each subscale within the COR+.

Table 10. COR+ Scores, Pre-K-3, Fall 2021

Scale	α	<i>N</i>	Mean	<i>SD</i>
Approaches to Learning	.79	942	2.27	0.79
Social and Emotional Development	.86	941	2.29	0.85
Physical Development and Health	.76	941	2.79	0.77
Language, Literacy, and Communication	.88	940	2.11	0.71
Mathematics	.85	898	2.13	0.74
Creative Arts	.82	935	2.2	0.8
Science and Technology	.81	917	2.11	0.77
Social Studies	.76	929	2.21	0.78
Overall Score	.96	925	2.27	0.69

Table 11. COR+ Fall 2019 and Fall 2021 Cohort Results, Pre-K-3

Category	Fall 2019			Fall 2021			<i>t</i>	<i>p</i>	Effect Size (<i>d</i>)
	<i>N</i>	Mean	<i>SD</i>	<i>N</i>	Mean	<i>SD</i>			
Approaches to Learning	1138	2.30	0.70	942	2.27	0.79	0.92	ns	0.04
Social Emotional Development	1130	2.30	0.70	941	2.29	0.85	0.29	ns	0.01
Physical Development & Health	1160	2.80	0.70	941	2.79	0.77	0.31	ns	0.01
Language, Literacy & Comm.	1117	2.10	0.60	940	2.11	0.71	-0.35	ns	-0.02
Math	1092	2.10	0.60	898	2.13	0.74	-1.00	ns	-0.04
Creative Arts	1104	2.30	0.70	935	2.20	0.8	3.01	0.003**	0.13
Science and Technology	1100	2.20	0.70	917	2.11	0.77	2.75	0.006**	0.12
Social Studies	1087	2.20	0.70	929	2.21	0.78	-0.30	ns	-0.01
COR Overall	1091	2.30	0.60	925	2.27	0.69	1.04	ns	0.05

As per Table 11, there were no statistically significant differences overall and within six of the eight categories. There were small and statistically significant differences in *Creative Arts* and *Science and Technology* between the 2019 and 2021 cohorts, with the current cohort lagging slightly.

Three-year-olds' *Language, Literacy and Communication*, along now with *Science and Technology*, remained our students' lowest developmental area. On the other hand, *Physical Development and Health* remained our three-year-olds' (and our four-year-olds') strongest area. This is a most encouraging sign during the COVID-19 pandemic. The physical development among this cohort of youngest students appears to have not been adversely affected by the pandemic, on average.

Results: Pre-K-4

Below we present the summary statistics for the cohort of four-year-old prekindergarten students in fall 2021. We also compare the four-year-olds from the fall 2019 to this past fall 2021 (see Tables 12 and 13). We also present the Cronbach's alpha (α) coefficients to assess internal consistency (reliability) of each subscale and the overall score of the COR+.

Table 12. COR+ Scores, Pre-K-4, Fall 2021

Scale	α	<i>N</i>	Mean	<i>SD</i>
Approaches to Learning	.76	1368	2.89	0.76
Social and Emotional Development	.83	1347	2.92	0.80
Physical Development and Health	.73	1378	3.33	0.79
Language, Literacy, & Communication	.83	1335	2.75	0.69
Mathematics	.80	1323	2.68	0.68
Creative Arts	.79	1362	2.94	0.83
Science and Technology	.82	1329	2.77	0.79
Social Studies	.72	1351	2.85	0.76
Overall Score	.95	1347	2.89	0.65

Table 13. COR+ Fall 2019 and Fall 2021 Cohort Results, Pre-K-4

Category	Fall 2019			Fall 2021			<i>t</i>	<i>p</i>	Effect Size (<i>d</i>)
	<i>N</i>	Mean	<i>SD</i>	<i>N</i>	Mean	<i>SD</i>			
Approaches to Learning	1794	3.00	0.70	1368	2.89	0.76	4.22	< .001***	0.15
Social Emotional Development	1796	3.00	0.80	1347	2.92	0.80	2.77	0.006**	0.10
Physical Development & Health	1812	3.50	0.80	1378	3.33	0.79	5.98	< .001***	0.21
Language, Literacy & Comm.	1768	2.80	0.70	1335	2.75	0.69	1.98	0.048*	0.07
Math	1742	2.80	0.70	1323	2.68	0.68	4.76	< .001***	0.17

Creative Arts	1753	3.10	0.90	1362	2.94	0.83	5.09	< .001***	0.18
Science and Technology	1720	2.90	0.80	1329	2.77	0.79	4.47	< .001***	0.16
Social Studies	1749	3.00	0.80	1351	2.85	0.76	5.29	< .001***	0.19
COR Overall	1736	3.00	0.70	1347	2.89	0.65	4.46	< .001***	0.16

According to these data, four-year-olds in the Fall 2021 cohort had statistically significant lower scores in all COR categories compared to the Fall 2019 cohort. The historically strongest area of our four-year-olds, *Physical Development*, remained the highest – although there was still a small but statistically significant difference, with our 2021 four-year-old cohort lagging behind the 2019 cohort.

COR+ Discussion of Findings

An important limitation is the issue of selection bias of the sample, probably more so with three-year-olds than with four-year-olds, as there are fewer three-year-old students overall (only 925 with COR Overall scores in the 2021 cohort, versus 1,091 for the 2019 cohort). Parents can decide to enroll their children to these programs or not; the sample is determined by families who “select” to enroll their children. The three-year-old program is traditionally smaller than the four-year-old program and this program did not commence formally in modern UPK until 2016. (Rochester has the largest three-year-old program in our state, outside of New York City.) The demand for three-year-old seats was high among families pre-COVID-19 and this demand resulted in waiting lists. Since the pandemic, however, demand for three-year-old placements declined. Due to decreased enrollment, there were 30 prekindergarten classrooms closed. There were no wait lists for Pre-K in 2020-21. Thus, the three-year-olds’ developmental levels of this fall 2020 cohort cannot be assumed to be representative of either the previous years’ three-year-olds’ or the city’s three-year-old population as a whole.

Selection bias is also a limitation in our analysis of Pre-K-4 data. It must be noted that selection bias is endemic in the evaluations of large urban districts. Because prekindergarten is not mandated, there will almost always be issues of selection bias. The children who attend Pre-K may not be representative of the overall population these ages. Numerous studies, covering decades (going as far back as the late-1980s), by the Center for Governmental Research and The Children’s Agenda conclude that a large majority of four-year-olds in Rochester attend center-based care (e.g., an estimated 85%; The Children’s Agenda, 2009). This tends to ameliorate our concerns about selection bias, at least pre-COVID-19, among our four-year-old population. Pre-COVID-19, Rochester’s UPK (Pre-K-4) was serving approximately two-thirds of all our city’s four-year-old children (Nabozny, 2020).

However, as we can see from Table 13, the number of students in 2020-2021 who were assessed was smaller than the number assessed in 2019-20. Assuming similar enrollment during this time, selection bias may be greater now than before the pandemic. Selection bias may either exaggerate group averages in a higher direction (i.e., students with higher levels of COR-assessed skills are more likely to enroll) or lower direction (i.e., students with less preparation are more likely to enroll). There is no way to know in the short-term which, if any, selection bias is at work in this data. If the former, then this last COVID-19

cohort is actually performing far lower than assessed; if the latter, then the cohorts may actually be very similar in performance. Future longitudinal data analyses will be helpful for getting a clearer story.

Despite these limitation, cohort analysis and comparisons remain useful in observing whether the program is responding to similar developmental needs among enrolled children (or not) compared to prior years. The results are encouraging. The developmental levels of three-year-olds are comparable to pre-COVID-19 levels. However, there also was a small lag among current Pre-K-4 students compared to prior cohorts.

These COR+ results from this past fall represent the first comprehensive developmental data on our Pre-K students for both three-year-olds (Pre-K-3) and four-year-olds (Pre-K-4) in two years. COVID-19 precluded almost any direct and reliable assessments of students from the spring 2019-20 through the 2020-21 school year. It is only now with these data that we can examine performance among Pre-K students after two tumultuous years.

The COR+ is and has been a central component in the driving and improvement of the prekindergarten instructional program in Rochester; the COR+ possesses the necessary validity and reliability to guide our resources and actions in the improvement of Pre-K students' achievements. The COR+ is both developmentally appropriate and standards-based – two important considerations in any assessments of young children.

We must stress that drawing on these data in prior years, we have learned *the consistently best scenario for Pre-K students* is to have attended both Pre-K-3 and Pre-K-4. We see kindergarten readiness amongst these students at significantly higher levels – often in the double digits. Many more students who attend *both* Pre-K-3 and Pre-K-4 are ready for kindergarten by the spring, compared to those who only attend Pre-K-4. For example, in two consecutive years of analysis, students who attended two years of Pre-K had higher levels of kindergarten readiness compared to students who attended one year, as measured by the COR (57% to 50% respectively; Infurna et al., 2019; and 61% to 50% respectively; Infurna et al., 2018). Since the inception of the modern three-year-old Pre-K, starting in January 2016 (partly implemented, with full implementation in September 2016), RECAP has extensively documented in RECAP Annual Reports, the clear advantages seen by students attending two years of Pre-K.

An important note from previous years is that students arriving at the higher developmental end tend to grow less, a phenomenon that economist, early childhood expert and former Director of Research at Children's Institute, Dr. Guillermo Montes, has termed “declining high achievers.” We have extensively studied this phenomenon with the intent on better addressing these children's needs (see Montes & Infurna, 2019). An important recent RECAP publication, *Who is likely to achieve kindergarten readiness in universal prekindergarten: A predictive analytic model* (Montes & Infurna, 2018) provided us with useful information with respect to utilizing our measures to improve student achievement. This study is also among the first of its kind in Pre-K to address the nature of “declining high achiever” students.

This predictive analytics model pointed to COR categories, *Creative Arts*, *Social-Emotional Development*, *Social Studies* and *Language, Literacy and Communication* as predictors of kindergarten readiness. (The *Assertive Social Skills* subscale of the Teacher-Child Rating Scale is also a predictor of kindergarten readiness.) Of note, this predictive analytics model did not “choose” gender or race/ethnicity as predictors.

Historically, we have seen gender and race/ethnicity gaps, even at this early age – but gender gaps are far more pronounced: the lowest performing group of girls (which can change year-to-year) have, on average, higher COR scores compared to the highest performing groups of boys. Gender differences can be seen both with respect to overall COR+ scores and kindergarten readiness, an indicator obtained from the COR (Infurna et al., 2021). There have been years where we see no gaps between boys and girls, or between Black/African American, Latina/o or white students, but that is the exception. The most troublesome trend with respect to gender/ethnicity is the consistently low COR scores for prekindergarten Hispanic males. Note that these are average, and not individual, effects.

Issues of timing of these COR+ assessments: The COR+ assessments took place from mid-September through the end of November 2021, a similar time frame as in years past. However, many of us spent time in Pre-K classrooms in September, and among those who did so, there has been consistently broad agreement that our students were observably developmentally behind – more so than these COR+ scores indicate. We may be able to better confirm these observations with the winter 2022 and spring 2022 COR scores. Although impossible to prove without prior data, one hypothesis anecdotally reported by teachers is that students experienced high rates of growth between September and November.

Teacher Child-Rating Scale Short Form (T-CRS-sf) Results

Data from the T-CRS-sf revealed mixed results. Average subscale scores remained consistent with prior years, which may indicate children’s resilience. However, in our analysis of social-emotional risk factors, we noted a greater percentage of students with multiple social-emotional risk factors than in previous years. Approximately one in five students arrived with multiple social-emotional risk factors, data points never seen before among our Pre-K cohorts.

Description of the Teacher Child-Rating Scale Short Form

First published in 1979 by Primary Mental Health Project (PMHP, now Children’s Institute), the Teacher-Child Rating Scale (T-CRS) in its various iterations has been an instrument of choice in Pre-K (and many other settings) for the evaluation of children’s social-emotional adjustment. As noted in numerous publications the T-CRS has been described as “possessing robust indices of predictive validity and reliability.” This current iteration is termed “short form” because we were able to reduce the number of items in each subscale. We were able to reduce teachers’ workload on this instrument by 22% (Weber et al., 2017).

The T-CRS has proved to be an important measure for Pre-K and has allowed early childhood leaders to make informed policy decisions in this fundamental realm.

The T-CRS and T-CRS-sf has four validated and reliable sub-scales related to classroom adjustment:

- *Task Orientation*, which is comparable to executive functioning. Individual items include “self-starter,” “works well without adult supervision,” “organized,” “completes assignments” and the like. In some small, unpublished studies we have found Task Orientation to be predictive of early school success.
- *Behavior Control*, assesses students in items including “accepts imposed limits,” “tolerates frustration” and similar items.
- *Assertive Social Skills (Assertiveness)* “Defends own views under group pressure,” “comfortable as a leader” and similar items.
- *Peer Sociability (Peer Social Skills)*, includes “well-liked by classmates,” “classmates like to sit near child” and similar items.

Descriptive Results

Below we provide results from the Teacher-Child Rating Scale- short form (T-CRS-sf; Weber et al., 2016). The T-CRS-sf measures students’ social and emotional skills, and consists of four subscales (task orientation, behavior control, assertiveness, and peer social skills). Teachers completed the T-CRS-sf in late December, and the results below reflect the most up-to-date data as of February 7, 2022. Note that at the time of this data pull, there were several classrooms missing data. Thus, the following results are preliminary.

See Tables 14 and 15 for descriptive results among 3-year-old and 4-year old Pre-K students.

Table 14. Pre-K-3 T-CRS-sf Descriptive Results, Fall 2021

	<i>α</i>	<i>N</i>	Mean	SD
Task orientation score	.85	863	12.90	3.74
Behavior control score	.91	863	11.72	4.03
Assertiveness score	.90	861	13.17	4.18
Peer social score	.88	862	15.34	3.16

Table 15. Pre-K-4 T-CRS-sf Descriptive Results, Fall 2021

	<i>α</i>	<i>N</i>	Mean	<i>SD</i>
Task orientation score	.88	1284	13.06	3.88
Behavior control score	.91	1287	12.61	3.90
Assertiveness score	.89	1287	14.17	3.80
Peer social score	.89	1288	15.56	3.14

Comparisons with Fall 2019 Data

Similar to the COR analyses performed and reported here, we were interested in examining whether differences existed between the T-CRS-sf between students in the Fall 2019 cohort and students in the Fall 2021 cohort. To do so, we compared cohorts using two methods. First, we looked at descriptive summaries of “at-risk” counts within each cohort. At-risk scores were calculated for each student by summing the number of subscales that student had that were at or below one standard deviation of the mean. Risk scores consequently range from 0-4. See Tables 16 and 17 below.

Table 16. Pre-K-3 Risk Score Frequencies, 2019 and 2021 Comparisons

Risk Score	2019		2021	
	<i>N</i>	%	<i>N</i>	%
0	799	65.71	548	63.50
1	211	17.35	141	16.30
2	110	9.05	96	11.10
3	65	5.35	48	5.60
4	31	2.55	30	3.50
Total	1216	100.00	863	100.00
Multiple Risk Count	206	16.95	174	20.16

Multiple Risk Counts: In 2019, there were 16.95% ($n = 206$) of students with a multiple risk count, whereas in 2021 there were 20.16% ($n = 174$) of students with a multiple risk count.

Table 17. Pre-K-4 Risk Score Frequencies, 2019 and 2021 Comparisons

Risk Score	2019		2021	
	N	%	N	%
0	1248	69.41	810	63.10
1	307	17.07	239	18.60
2	147	8.18	125	9.70
3	68	3.78	75	5.80
4	28	1.56	34	2.70
Total	1798	100.00	1283	100.00
Multiple Risk Count	243	13.52	234	18.24

Multiple risk counts: In 2019, there were 13.52% ($n = 243$) of students with a multiple risk count, whereas in 2021 there were 18.24% ($n = 234$) of students with a multiple risk count.

Controlling for age at the time of T-CRS-sf: Second, to further examine differences between 2019 and 2021 T-CRS-sf scores, we conducted a multivariate analysis (i.e., MANCOVA) to compare 2019 and 2021 scores (mean subscale scores) while controlling for a possible confounding factor, which is the child’s age at time of completion. The T-CRS-sf was completed later in the fall semester in 2021 than what is typical. This may have led to higher scores in Fall 2021 since students were (a) older and (b) had a greater dosage of programming compared to the Fall 2019 cohort at the time the T-CRS-sf was completed by teachers. Results showed that, when controlling for days between registration start date and the completion of the T-CRS-sf, there were no significant differences between any subscales of the T-CRS-sf between the 2019 and 2021 three-year-old cohorts.

Among 4-year-old prekindergarten students, after controlling for student age when the T-CRS-sf was completed, there was one marginally statistically significant result. Specifically, we see that students’ average assertiveness scores in the Fall 2021 cohort were slightly lower ($M = 58.78$) than in the Fall 2019 cohort ($M = 60.98$), $F(1, 3154) = 3.69$, $p = .06$.

Preliminary Brigance® Early Childhood Screen III (Brigance III) Results

This section illustrates three-year-old prekindergarten student screening status (Table 18) and four-year-old student screening status (Table 19) thus far in the 2021-2022 fall year. These results are preliminary and are based on data obtained on February 2, 2022. We expect that we will have additional screens at the time of our 2021-2022 report to reflect the scores of the entire student population, given that there are late registrants who did not take the Brigance in the fall.

Areas assessed by the Brigance III include *Language Development, Academic and Cognitive Skills, and Physical Development and Health*. An overall score for the Brigance III is calculated out of a possible 100

points and is used in conjunction with a calculated “At Risk” score, which is derived from a subset of Brigance III items, to assign a status level to each student:

- Level 1 – students who are at high risk and may need further evaluation for developmental delays
- Level 2 – students who should be monitored closely
- Level 3 – students who are functioning in a normal developmental range
- Level 4 – students who are possibly talented and may need enhanced work and additional stimulation

Table 18. Fall 2021 Brigance Results for Preschool-3

	Frequency	Percent
Determine need for formal evaluation	128	21.5
Monitor closely	18	3.0
Functioning in normal range	387	65.2
Academically talented	61	10.3
Total	622	100

Table 19. Fall 2021 Brigance Results for Preschool-4

	Frequency	Percent
Determine need for formal evaluation	287	28.3
Monitor closely	40	3.9
Functioning in normal range	571	56.3
Academically talented	111	11.0
Total	1014	100

Discussion of Findings

Overall, the fall 2021 student results present us a mixed picture of Pre-K student well-being. On the Brigance Early Childhood Screen, Pre-K-3 and Pre-K-4 students had high rates of passing, and among four-year-olds there was the highest rate of students scoring as “possibly talented and in need of extra work” in recent years (10.95%). As expected, the percentage of prekindergartners who scored as “determine need for formal evaluation” decreased in Fall 2021 from 2020. On the other hand, results from the COR+ assessment indicated that Pre-K students in the Fall 2021 cohort had statistically significant lower scores than their Fall 2019 cohort counterparts. These results could indicate the detrimental impact that COVID-19 may have had on Pre-K students – and, in particular, among four-year-olds. Results from

the T-CRS-sf similarly are mixed. While the average scores in Fall 2021 are similar, and not statistically distinct, from Fall 2019, there is a higher percentage of prekindergarteners with multiple socio-emotional risks.

These findings must be considered within the context of RECAP and previous empirical findings, including *declining high achievers* and absolute loss. What does “declining high achievers” mean? This phenomenon was first documented by Children’s Institute two decades ago, in a longitudinal study of first through fourth graders. In prior analyses, we have observed high achieving students who are losing ground; they remain high achievers – but not at the levels when they first entered Pre-K. In previous RECAP reports we have documented the phenomenon of “absolute loss,” where students, irrespective of their achievement levels, are at lower developmental levels in the spring, when compared to their fall levels. In years past RECAP staff worked one-on-one with teachers on specific students who had experienced “absolute loss.” In every documented instance to date, there was a traumatic family event, not related to the instructional program, that teachers noted as to why these losses took place. As one data point from a previous Parent Appraisal of Children’s Experiences (PACE) Project, we see approximately 27% of incoming Pre-K students had experienced the death of a close family member (Lehmann, Hightower, & Broser, 2009). These findings are important in the current context, as many children have experienced traumas throughout the COVID-19 pandemic.

RECAP ADAPTATIONS DURING COVID-19

Parent and Family Engagement

Parent perspectives and family engagement have consistently been a hallmark of RECAP. In the 2020-21 academic year, we were able to collect several sources of data on parent and family engagement. First, RCSD conducted surveys with parents and families as part of their transition to kindergarten summit. These surveys revealed parent perspectives on expectations, challenges, and opportunities inherent in the transition to kindergarten. Second, we engaged families in two focus groups with the goal of soliciting feedback on the design of a parent survey and key areas of inquiry regarding engagement, from their lived experiences during the pandemic. The information gathered through these focus groups have been used to inform the data collection approach in the 2021-22 school year. In anticipation of that reporting, we present historic trends below from prior measures to describe this dimension, pre-pandemic.

Transition to Kindergarten: Survey of Parent Perspectives

Historical Overview of Surveying Parents and Families, 1998-2021

“My expectations are that my child’s teacher is fully engaged in her learning and keeps up with the standards that we have set for her outside of school. My expectations are that her teacher understands we are fully invested in [name of child] growth and we expect her teacher to also be. I expect her teacher to develop a positive relationship with [name of child] showing her that you actually care about her.” –Pre-K parent who participated in the Transition to Summit, June 2021

RCSD has collected data from parents of students transitioning to kindergarten from 1998 to 2021, via assessments tools discovered or developed by the RECAP and RCSD assessment teams (e.g., the Family and Provider/Teacher Relationship Quality [FPTRQ] measure; see Infurna et al., 2018). Overall, there has been consistency in two overall domains: (a) grading of Pre-K (on a range from “A” [excellent] to “F” [unacceptable]); and (b) parental aspirations for their children. Specifically, parents have reported:

1. Consistent 94% A, A-, B+ or B for the quality of their child’s *Pre-K program*, overall
2. Consistent 96%-97% A, A-, B+ or B for quality of their child’s *Pre-K teaching*
3. Consistent in what they desire for their child’s future, including success in school, success in peer relationships, success in their relationships with adults

These trends have been true from the beginning of UPK, in 1998, through the June 2021 Transition to Kindergarten Summit (for example, see Infurna et al., 2017; Infurna et al., 2018).

Historical Overview of the Transition to Kindergarten Summits

Transitioning from prekindergarten into kindergarten has uncertainty – for parents, teachers, early childhood teachers and leaders. Within the Rochester community, historically for students, kindergarten to first grade was often the larger transition, given the pedagogic approach of kindergarten is closer to that of prekindergarten compared to first grade. However, this may have changed in recent years, with national evidence showing that kindergarten curriculum has incorporated more academic-content and fewer child-led activities, including fewer opportunities for play, due to a heightened focus on accountability (Bassok et al., 2016).

As part of the New York State Universal Pre-K legislation, districts receiving UPK funding are expected to provide annually articulated plans for the transition of students and families from Pre-K into kindergarten. Since 2009 and every two years, our early childhood community, typically headed by RCSD Office of Early Childhood and in partnership with ABC Head Start, holds a *Transition to Kindergarten Summit*. These events attract between 60 and 100 participants, including parents, grandparents, Pre-K family members, members of the higher education community, teachers, early childhood administrators and early childhood leaders, spanning across RCSD and our community-based organization partners. The Summits are intended to address issues for both families and institutions, as Pre-K students and their families move into kindergarten.

Owing to COVID-19, the June 9, 2021 *Transition to Kindergarten Summit* was virtual. The Summit was grant funded in the amount of \$10,000, by the New York State Council on Children and Families, Birth Through Five Renewal (NYSB5-R project), through the U.S. Department of Health and Human Services Administration of Children and Families. These funds were used to purchase tents to have outdoor transition events; promotional items; books; posters and the like.

The Summit included a question-and-answer panel session of content experts. Included on the panel were agency directors, including leaders from ABC Head Start, and Dr. Robin Hooper, Executive Director of the RCSD Office of Early Childhood and Dr. Eva Thomas, currently Principal of Dr. Walter Cooper Academy, who also served in 2020-21 as a director in the Office of Early Childhood. The Summit provided several presentations, including information about the process of transitioning – the actual physical process. The Office of Equity and Placement presented an overview of school choice, and how to register. Kindergarten teachers spoke about what kindergarten is like. The Department of Food Service presented a brief overview. The Department of Student Health Services (e.g., the Nursing Department) discussed COVID-19 related issues, about administration of medication (approximately 16.7% of entering Pre-K students receive prescription medication).

The event was recorded and made available on the District’s Early Childhood Facebook and the Early Childhood web page. These were very well received: within less than a week there were 635 views on these pages.

The Transition Summit carried over into the summer, with two outdoor events (utilizing the newly purchased tents). Included were registrations; kindergarten teachers were on hand to speak to parents. Dr. Hooper and Dr. Thomas were present to answer parents' questions. The Summit had radio coverage, courtesy of WDKX, which covered both summer events. As before, social media was also utilized to attract parents.

In surveys going back to as far as Monroe County-funded parent survey in 1997 and conducted by RECAP, through our recent surveys of parents (pre-COVID-19) during the *Transition to Kindergarten Fair*, we observed practically the same patterns:

1. Across all locations (in our samples, throughout Monroe County, oversampling within the City of Rochester), safety has always ranked first in terms of parents' priorities. In the 2020-21 school year, these safety concerns were specific to COVID-19. In years prior, however, parents still prioritized safety in the general sense.
2. Overall success: Parents want their child to be a success from kindergarten through adulthood. In the first two years of administering *Parent Appraisal of Children's Experiences* (PACE; 1998 – present), when asked, "Do you expect your child to graduate from high school?" we observed a 100% rate of "yes"; therefore, after two years of these responses we dropped this question.
3. Then, as now, parents demonstrated their practical knowledge on the matter of "the whole child," i.e., development of socio-emotional learning in addition to physical and cognitive development.

Results from the Parent Survey Responses

This year, parent survey responses were collected via an online form during the virtual Transition to Kindergarten summit. In the Parent Survey Responses from the Transition Summit in June, 2021 ($N = 47$), we observed the following themes:

1. Desire to ensure their child's safety from COVID-19. For instance, when asked about their expectations about their child's entry into kindergarten, parents said:
"To be able to be safe with mask and social distancing and learn at and above the level she need to be and enjoy being in kindergarten."
"For him to able to be comfortable and safe in the classroom"
2. Desire to have their child achieve academically. For instance, when asked about their expectations about their child's entry into kindergarten, parents said:
"Turning building blocks into actual skills and abilities"
"That he improves his speech"

3. Desire to have their child develop social skills. For instance, when asked about their expectations about their child’s entry into kindergarten, parents said:
“Socializing as safe as possible”
“Communication and interaction with teachers and students”
4. We also see parents embracing “the whole child” – even though they do not use that specific language. Parents commented on:
 - a. Academics;
 - b. Included references to curriculum;
 - c. Quality of teaching;
 - d. Social-emotional / behavior;
 - e. Learning to get along with other students
 - f. Transitioning to kindergarten; one parent wrote: *“She hasn’t been in a classroom for over a year, so I worry about her general transition into the classroom.”*
5. In the question: *What areas of the school experience would you like to know more about? (Curriculum, social/emotional learning, mental and physical well-being, supports for academic success or behavioral needs)*, parents responded in several categories. Most parents remarked that they would like to know more about “everything”, while other parents highlighted they would like to know more about safety, academics (e.g., “supports for academic success”), and/or the curriculum (e.g., “I would like the full curriculum for the kindergarten school year to make sure it aligns with what my child is and should be learning”).

The survey responses provide insights such as these and are representative of parents’ sentiments and aspirations.

Overview of Parent Focus Group Perspectives, May 2021

With the pre-COVID-19 conventional methods of surveying parents and family members (generally paper copies provided to Pre-K sites) not available for the 2020-21 school year, the Rochester City School District’s Office of Early Childhood and Children’s Institute partnered together in an effort to begin re-designing the approach to obtain parent information through other means. The joint team centered on parent voice in this RECAP effort, and used the 2020-21 year to organize parent focus groups to glean their perspectives on what they would like to survey about the parent Pre-K experience. We aimed to apply this learning to the next RECAP survey data collection to gather necessary information that would speak directly to parents and shape early childhood policies and practices responsive to parent and family adaptations since March 2020.

With local foundation support, RECAP partnered directly with Adult Family Educators from the Department of Early Childhood. These family engagement professionals were successful in collaboratively organizing two virtual parent focus groups. Each focus group took place on May 20, 2021, with morning and evening sessions. Although parent attendance was small – only a few per session – the parents were informed, highly engaged, ready to address each aspect of survey design, and they remained positive and upbeat. Staff from both Children’s Institute and the Department of Early Childhood were present throughout each focus group and offered questions and observations.

“My son’s teacher is a rock star. This turned out far better than I could have thought; the teacher always kept me up to date; she made virtual work. My child made friends [on Zoom]; the teacher made it interesting online, and even when he was the only kid in the class.” -Pre-K Parent

Emerging Themes from the 2021 Parent Focus Groups

Staff from the Children’s Institute and RCSD analyzed the parent focus group data to determine major themes. In summarizing parents’ shared or common perspectives in these focus groups, five major themes emerged:

First, the overriding request on future parent surveys was to keep any survey as simple as possible. At the same time, when questions themselves were less than simple, parents suggested making the questions longer, to be more descriptive – to better explain the intent of the question. Parents made several references to needing questions to be “explicit.”

Second, while endorsing the presence of survey questions associated with social-emotional wellbeing, parents provided three recommendations. They recommended defining what “social-emotional” means (for example, anxiety, behavior and the ability for a child to make friends). Parents recommended that parents themselves – not only their child – be queried about their own social-emotional well-being. Lastly, parents recommended the survey be specific as to the timeframe of the question, for example, the school year to date, or the past few months, but to otherwise explicitly spell out the timeframe in which the question was being posed.

Third, parents expressed frustration with issues associated with the transition from prekindergarten to kindergarten. While these frustrations were articulated – this was perhaps the most negative area covered in these focus groups – they did not necessarily generate concrete future survey questions. See the survey results from the *Transition to Kindergarten Summit* (above), which took place a few weeks after these focus groups, and was informed by these sessions to generate further discussion of this topic.

Fourth, although the groups were small and the analytic approach was descriptive, some parents clearly expressed anxiety and frustration with Seesaw. Their technology use generated much discussion. One parent noted “I got to hate Seesaw. I had anxiety at looking at homework....” In subsequent analyses, we

have noted there are a portion of parents who do not participate in Seesaw. Accordingly, technology solution design and implementation are areas that will require further work with parents and families.

Fifth, we saw consistent agreement in both groups about ending any parent survey on a high note, although how to craft such an ending was undetermined. One parent suggested posing a question where the parent imagines her child's future.

Last, parents expressed a need or desire to connect with other parents. Many parents had experienced isolation during COVID-19 and valued the time spent with other parents during the focus groups. The groups not only were a space to give input on survey tools, but also a way to meet other parents and share about their experiences. Ultimately, many participants sought to continue working on the design of the survey tool and offered to be an ongoing resource for the RECAP team and future evaluation and assessment design and implementation.

Discussion and Conclusions

The focus groups occurred a month before the end of the school year; therefore, we were not able to launch a parent survey in '20-21. However, we successfully administered a parent survey as part of the *Transition to Kindergarten Summit*, which was informed by these focus groups. With nearly fifty responses, it proved to be the only successful RCSD survey of parents for 2020-21. Moreover, the lessons learned from these focus groups informed the design of the new *UPK Family Survey* for 2022. The focus groups proved useful to the early childhood education community – and helped RECAP build the tradition of including parents in the evaluation inquiry design process from the get-go.

Parent and Family Engagement: Digital Inequities and the Caring Connectors Intervention

The coronavirus pandemic brought to the forefront existing digital inequities, termed the “digital divide”, and highlighted the need for extra supports for Rochester’s children and families. A report by ROC the Future (2020) about the digital divide in Rochester found that approximately 37% of Rochester residents had limited digital capacity. In an initial survey of Pre-K families in 2020, district leaders found that approximately 30% of Pre-K students needed community support to achieve complete digital connectivity. Given the virtual learning environment during COVID, providing support for digital connectivity – both in terms of technology and literacy – among Pre-K families was a top priority for the RECAP team.

Digital Uniting Through Caring Connections

To ameliorate the digital divide among RCSD prekindergarten students, Children’s Institute and their RECAP partners developed and implemented the *Digital Uniting through Caring Connections (aka Caring Connectors)* intervention. This initiative was notable, in part, because it was the first to provide community-wide support of digital access among children who attended RCSD and/or RCSD-affiliated prekindergarten programs.

The *Caring Connectors* program was developed beginning in Spring 2020 to understand and collaboratively address the digital access crisis and to support families with Pre-K aged children in the context of how they wished to adapt to the COVID-19 pandemic to sustain their wellbeing. Families were eligible if they had a 3- or 4-year-old child who attended Pre-K in RCSD and/or a Pre-K affiliated childcare center, and if they identified as lacking digital connectivity (adequate devices and internet) in the home. RCSD district had employed a survey of all Pre-K families to assess who was in need of additional digital support. Ultimately, there were over 319 families who participated - throughout seven RCSD- and RCSD-affiliated prekindergarten programs. During the school year, recruited program support staff at these locations engaged as family “digital” navigators or Caring Connectors (e.g., family liaisons, social workers). These connectors aimed for weekly “caring contacts” to provide families with necessary supports and resources – to equip families as they adjusted to meet their child’s needs and strengths in pandemic conditions, to enhance their digital literacy, to help them successfully use smart and internet devices, and to help them connect to online resources and services that support their child and family’s health and development. Devices (Chromebook tablets, protective cases, mifis, etc.) were distributed to all participating families by spring 2021.

Note: The technology solution designed during summer 2020 for the Caring Connectors initiative became the basis of the plan for how to serve the remaining Pre-K classes (with additional funding resources) – thus catalyzing an overarching solution to address all unmet device and internet connectivity needs among all Pre-K families including prekindergarten aged special education recipients served by RCSD in 2020-21.

Interviews with Caring Connectors

Interviews were conducted with Caring Connectors – those doing the routine family engagement and support – to learn about the feasibility and implementation of the project. These interviews aimed to identify successes and challenges they and families faced in this transitional period of needing to rely more on technology to receive community- and educational supports of their children’s early learning and development. A total of six interviews were conducted which were approximately 30 minutes each, and until thematic saturation was reached. Qualitative descriptive analysis was used to identify common themes that emerged among interviewees. Key themes included: the digital divide; adaptability and resilience of children, families, and schools; benefits of the intervention on academic and student outcomes; benefits of the intervention for building relationships; family engagement strategies; and recommendations and lessons learned from the field. We describe these key themes below with illustrative quotes from interview participants.

The Digital Divide

Interviewees spoke about seeing the digital divide and the need for added response such as the Caring Connectors intervention. In some families who did not have access to tablets or computers, prekindergarten students were logging into virtual schooling using their parents’ phones. This posed a major challenge for students’ learning and engagement in school. For instance:

“I do believe every child needs to have some sort of technology, tablet or something. But the internet, which I think they’re trying to work on now, because we can’t assume that everybody has a computer or everybody has internet, and we can’t assume that anymore.”

“... the teachers would inform me that, you know, what students weren’t, why their attendance was so low is because they did not have a device, and they were not able to get on to Zoom.”

“And so just imagine a little child who’s just learning how to develop his motor skills, trying to do everything on a small device.” [e.g., phone]

Adaptability and Resilience

Caring Connectors described seeing children and families’ resilience in the face of hardship. Caring Connectors staff also described ways in which they were also able to a) adapt to some challenges they faced during the program year, and b) learn how to improve engagement with technology. Selected quotes from participants include:

“Parents have been extremely resilient in terms of their ability - to kind of adapt.”

“And most of all, I think we’ve learned that, you know, our, our children, and our parents are just incredibly resilient, you know, just as resilient as our staff are.”

“I think we’ve learned some ways in which we can continue to use technology to enrich what we the experience that we’ve already - that we would typically provide anyway, even when maybe

the need for virtual instruction kind of goes, decreases, we'll still have ways in which now because we've gone through this experience.”

Benefits of the Intervention: Academic and Student Outcomes

Interviewees noticed some immediate benefits of the Caring Connectors intervention, including student attendance in virtual schooling and academic engagement. For instance:

“Now that they do have the devices, we see more students are actually on their devices, and the attendance has increased, because the parents are getting the students on.”

“I think as long as our children have the opportunity to have the devices in hand [this] will continue to enhance their academic learning.”

“I would say, starting in September, my attendance may have been between 80-85%. However, now, it's about 95%.”

Some additional benefits came in the form of resources that were offered to families outside of internet access and devices – to meet basic and other needs:

“And we've offered them assistance, technical assistance, as well as assistance to secure any kind of emergency household needs terms of food, shelter, and clothing.”

Benefits of the Intervention: Building Relationships

An important aspect of the Caring Connectors intervention was the weekly ‘touch points’ between families and caring connectors staff. This program went beyond simply providing technology but worked to facilitate supportive relationships between identified school staff members (Caring Connectors) and families. The importance of these personalized interactions in building relationships with prekindergarten families- and to help families prepare for their roles in prekindergarten education - emerged as a theme in our interviews:

“...once I get that face-to-face connection and build a rapport with families, I find them to be much more willing to then follow through with the zooms, and, you know, completing the work with the kids online.”

“I think that our working experiences with our families were just validated, really, you know, in that, if we were connected with families and had their personal report established, then we were able to continue to move along with providing the education that the children needed.”

Family Engagement Strategies

Teachers and administrators were intentional in how they engaged families in the context of digital learning. For instance, one center created their own Facebook group where parents could get daily updates

and videos from the school. Other tools were also used for family engagement including emails to parents with “A Question A Day” that prompted parents to respond, with a weekly raffle drawing for parents who engaged in the question that week. Another created celebrations for the families they met with.

One interviewee also noted that they were purposeful in educating families about the value of virtual learning, particularly in the context of children’s hybrid school schedules, and as the school year progressed:

“Okay, now we’re starting to see a decline, you know, in some of the engagement zooms, because, you know, especially from those hybrid kids, because the parents maybe are assuming that, you know, they don’t have to log on to the zooms on, you know, the other days of the week, you know, so we tried to kind of troubleshoot that and kind of re-educate our parents on the importance of staying engaged on those other days.”

School staff were also engaged with families in providing them with basic needs during the pandemic:

“But from the very beginning, you know, we delivered materials to the children’s homes, we delivered food to the families who needed it.”

Recommendations and Lessons Learned

Interviewees made several recommendations during their interviews. Most of these recommendations were regarding the timeline of device distribution and the need to get devices to families earlier in the school year. Other specific recommendations were made, such as giving families headphones so that children’s virtual schooling does not interfere with their siblings’ schooling and making sure that resources are accessible in Spanish as well as English. Specific quotes that highlight these recommendations include:

“What I would do differently, I would have devices already on hand [at school year’s start]. We didn’t know, you know, that COVID-19 was coming in with the pandemic, and all of that. But I think this is a lesson learned to have that device just in case, something does come up, where you’re not able to be in the building to teach.”

“You know, the other the other lesson that that we learned was the language access, because a lot of information was being provided in English, but not necessarily in Spanish.”

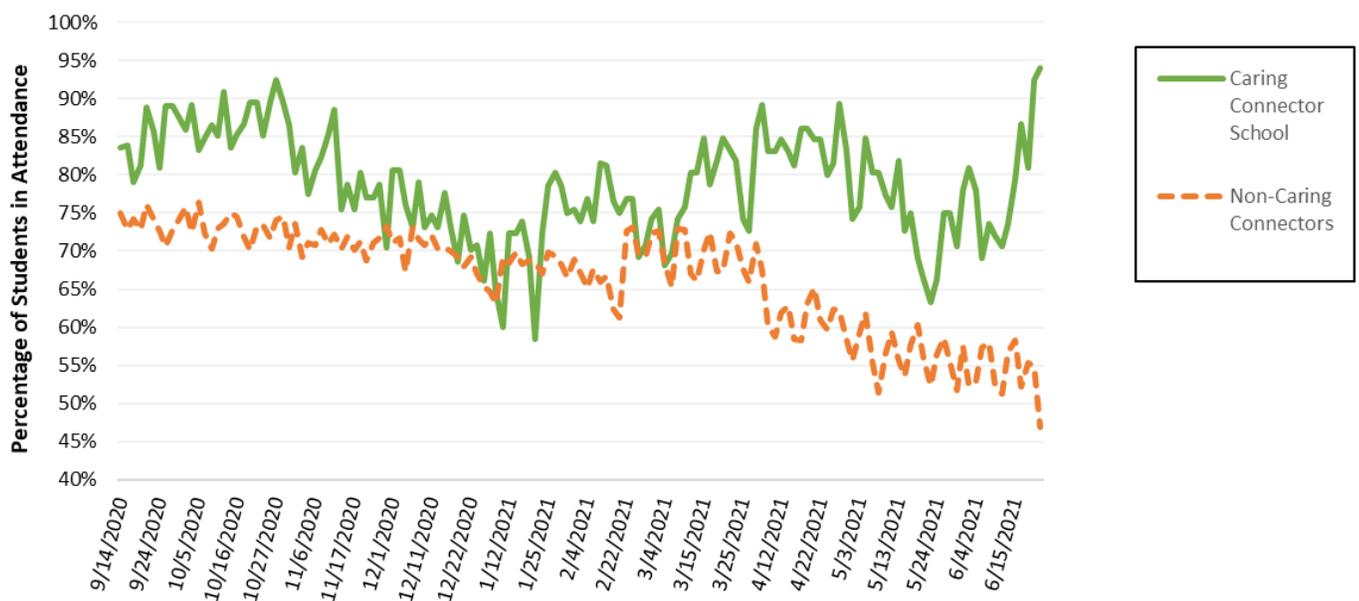
Interviewees also noted that the entire process was a learning experience - and helped them see new ways to connect to instruction and re-tool using technology. For instance, one participant said:

“I think we’ve learned some ways in which we can continue to use technology to enrich what we the experience that we’ve already that we would typically provide anyway, even when maybe the need for virtual instruction kind of goes, decreases, we’ll still have ways in which now because we’ve gone through this experience.”

Attendance Among Students Enrolled in the Caring Connectors Program

Overall, there is evidence that the Caring Connectors intervention sites experienced boosts in attendance (See Figure 4). Notably, the attendance trends converged by the start of March 2021 between students at Caring Connectors sites and non-Caring Connectors sites; however, these trend lines then diverge as the majority of tablet distributions commenced across all Caring Connector participants and Pre-K participants (due to shipment delays) beginning March 4. Overall, attendance averages were higher for schools who were a part of the Caring Connectors program, and these sites did not see the decline in attendance in the final quarter of the school year, as observed overall across all other sites.

Figure 4. Attendance, by day, among students in schools and centers affiliated with the Caring Connectors program, and students at schools not affiliated with the Caring Connectors program



Conclusion

Preliminary evidence from interviews with Caring Connectors and student engagement (i.e., attendance) data show the potential effectiveness of the Caring Connectors program. This effort importantly went beyond providing equipment alone. The program helped to equip families with *knowledge* about their technology (e.g., Wi-Fi and tablets) as well as learning in the digital context. There were also several positive consequences of the program goal to proactively connect around family-driven goals and needs as they responded to the pandemic while doing prekindergarten. For instance, the Caring Connectors were supportive contacts for families and played an important role in maintaining and increasing family engagement in the 2020-21 school year. As a result of these positive outcomes, we plan to continue our work on the Digital Uniter Caring Connectors program, with the goal of promoting family connections

with teachers and family educators. Future directions also include attention to the sustainability of this program and the institutionalization of Caring Connectors into all Pre-K programs.

Program Quality: Professional Development

RECAP staff responded to the early childhood education community in meaningful and supportive ways. We did this through ongoing communication to listen, reflect, and support each other often and to ensure relationships were maintained with our observer team and our partners. In this chapter, we detail several adaptations that were made because of COVID-19 and the hybrid learning environment.

Alternative Observation Models

Over the course of the pandemic, Pre-K teaching pivoted to first a fully remote then a hybrid model which included both virtual learning and in-person teaching in modified classroom environments. As a result, RECAP Master Observers continued exploring alternate program and teacher-child observation models for use in the upcoming school year. Federal and state infection control guidelines were also closely monitored for the health and safety of observers and our partners in making informed decisions regarding classroom quality assessment.

Observation of virtual live classrooms or recorded segments were permissible according to CLASS protocols. Two Children’s Institute lead CLASS trainers researched means to conduct virtual assessments. CLASS Observer reliability training for virtual observation was novel and not available at this juncture in time. Based on the requirements of reliability training for other standardized tools, protocols were developed employing virtual observations. This enabled the lead trainers to achieve acceptable levels of inter-rater reliability using videoed segments of early childhood programming.

Research involved six observations of live but virtual classrooms, recorded classrooms (videos of in-person classrooms) and recorded virtual sessions. Following inter-rater reliability protocols, trainers successfully attained reliability levels of over 85%. Viewing recorded sessions, in whatever form, while using the CLASS tool was offered to teachers on a voluntary basis to inform their teaching practice, especially during this challenging academic year. Teacher feedback indicated clearly that this level of observation was too stressful during such trying times. However, this opportunity permitted the development of a promising practice for when virtual engagement may become routine.

Support for Virtual Learning

Alternatively, teachers requested additional support on high quality practices for virtual learning as they implemented virtual learning for the first time in their fully remote, and then hybrid classroom settings. In response, RECAP trainers developed a specific training based on the high-quality interactions researched in the development of the CLASS tool and applied to virtual and hybrid learning environments. Teachers ($n = 27$) attended one of two training offerings of “High Quality Practices in Virtual and Hybrid Settings”.

Conducting on-line trainings for the first time required much practice and development of technical acumen. Trainers spent over 30 hours preparing this on-line, innovative training. An overview of the training was offered to the Technical Support Teachers (TSTs) in prekindergarten in a full presentation to assure alignment with RCSD's curriculum and vernacular. TST's informed teachers of this offering and encouraged staff participation.

Teacher Feedback

Part of the design for the "High Quality Practices in Virtual and Hybrid Settings" training was to get feedback from teachers on their teaching practices during this unconventional year. To gain insight on the quality of teacher-student interactions during this school year across the district, a standard teacher self-reflection survey for both virtual teaching and in-person teaching practices modeled from the CLASS was designed and implemented. Tabulated results will inform professional development for this current year (2021-22). A small sample of teachers submitted the survey (n=23). Teacher experience varies across the board in relation to use of technology and virtual learning, and pointed to the need for targeted support.

Teacher Feedback Results: Qualitative Themes

There were several common themes in teachers' feedback. Several teachers reported on the importance of caregiver engagement and support in the virtual learning environment. For example:

"When at-home caregivers were able to support children, the interactions were more positive and beneficial for the child. Children who sign on to Zoom alone, and children who do not participate in Seesaw, did not gain what they needed to this year."

Several teachers also remarked that an unanticipated positive consequence of virtual schooling was a close relationship with families. For instance:

"I enjoyed the relationships that I have formed with my remote families that committed to showing up daily to zoom for at least one session"

"This year I was able to make a greater, deeper connection with the families of my students."

Other teachers were concerned that virtual schooling was not adequate for prekindergarten students' developmental needs. For example:

"Children have a difficult time interacting with each other while in their learning pods. Even with teacher modeling the interactions are minimal. Children need to be able to interact as the social aspect of Pre-k is so important."

"It was a good effort overall, however, virtual instruction is not developmentally appropriate for pre-K and I hope to return to an appropriate classroom (without pods!) soon."

"Children miss the direct interaction with peers provided by in-person learning."

There were also comments regarding difficulties with logistics of virtual learning, including limited access to the internet and other connectivity issues:

“I do not think online learning has been effective. My internet connection is unstable, with the connection failing frequently. We often cannot hear each other or even see each other.”

Teachers also spoke about student engagement and attendance:

“The children who attended zoom and in person regularly with the materials provided have made the most growth.”

“Many children are absent frequently and only 4-6 children do any activities on Wednesdays.”

Last, several teachers offered concrete suggestions for improvements:

“One thing that would have been more helpful this year would have been to have had access to the pacing guide (or even just a framework/timeline when concepts would be introduced) more than a week in advance. This would have allowed me to create additional supplemental learning kits with the materials I had in the classroom as well as in creating additional activities to enhance the concepts of the pacing guide.”

Master Observer Professional Development

RECAP recruitment and training efforts were greatly altered by the continuing effects of the COVID-19 pandemic. The annual cycle of recruitment and training of new candidates to maintain a strong pool of master observers on the Early Childhood Environment Rating Scale –Third Edition (ECERS-3) and Classroom Assessment Scoring System (CLASS) was postponed due to restrictions according to health and safety protocols per Centers for Disease Control and New York State Department of Education. All in-person training and field training in Rochester’s prekindergarten classrooms was postponed because of the pandemic: training in live classrooms is a necessity for any new observers’ reliability training. However, training efforts for existing master observers and master observer trainers continued and was modified to a virtual platform, specifically via Zoom.

In a typical year, a cadre of 22-28 Master Observers are annually recertified and monitored on both the ECERS-3 and the CLASS. Minimum standards include maintaining inter-rater reliability ($\geq .85$) on at least 20% of official in-person observations during the annual observation period February through mid-May. However, in 2020-2021 academic year, the in-person ECERS-3 and CLASS observation cycle requirement was eliminated because of the COVID-19 pandemic, per Rochester City School District contractual agreement based on New York State Department of Education expectations. The observer team’s skills were maintained and enhanced through periodic training, professional development with Environment Rating Scale Institute (ERSI) and literature review on timely topics such as virtual early learning and curricula, virtual child assessments, and virtual program quality, as well as high quality practices of observing.

Although official observations were not required in 2020-2021, Children’s Institute continued to employ a cadre of 17 Master Observers during this school year with an alternate focus to respond within the changing needs of the prekindergarten community. Observers were assigned different tasks related to teacher quality interactions and practices when classroom observation access was prohibited.

For example:

- Observers researched best practices for teaching virtually and how best to create early childhood classroom community in virtual settings. This information informed the greater community as teachers, staff and administrators made programmatic decisions-based information provided by RECAP. A UPK COVID-19 advisory committee on program implementation during COVID-19 was convened by the director of early childhood with representation from UPK teachers and administrators in schools, CBO sites, and the RECAP project coordinator in which information on best practices in virtual settings was shared.
- RECAP developed a virtual training for prekindergarten teachers on best practices in virtual and in-person classrooms based on high quality teacher interactions aligned to the CLASS tool.

- Observers developed mini-professional development ECERS-3 In Action! trainings for teachers, based on the successful implementation of the ECERS-3 Did You Know? training series, now in year 4. Monthly distribution of the training series is occurring in the 2021-2022 school year.
- Aligning with Children’s Institute Strategic Direction, observers attended a two-part workshop on Cultural Humility facilitated by Earl Greene, Children’s Institute’s Director of Family Engagement and Equity.
- Five ECERS-3 Trainers attended the Environment Rating Scale Institute (ERSI) Webinar Courses for Train the Trainer Training, completing nine course modules over three months. Courses provided information and interpretations of all ECERS-3 indicator requirements and was taught by the authors of the ‘All About the ECERS-3 Resource Guide’.
- Observers attended two in-depth ECERS-3 trainings facilitated by RECAP ECERS-3 project coordinators to maintain content knowledge and be informed of current instrument clarifications by the authors – such as how it is to be used during the pandemic’s teaching conditions (e.g., where materials are lessened, and students have social distance).
- Seventeen observers attended the Environment Rating Scale Institute (ERSI) National Conference held May 2020. In two-follow-up training sessions, each observer shared information they obtained at the conference that was pertinent to our understanding of the ECERS-3 and its protocols as well as appropriate use of the instrument during the COVID-19 pandemic.
- Observers remained informed of current federal infectious control guidelines throughout the year.

Professional Development in Cultural Humility and Cultural Responsiveness

Cultural Humility and Anti-Bias Training Series

In the 2020-2021 school year, Pre-K teachers and administrators took part in a Cultural Humility and Anti-Bias training series lead by Earl Greene, M.A., Director of Racial and Social Justice, Family Engagement & Equity for Holistic Wellbeing at Children’s Institute. The purpose of the training was to educate prekindergarten teachers and administrators on cultural humility. Cultural humility is a recognition of one’s own biases and how these biases shape one’s interactions with the world. Individuals with cultural humility understand that it is impossible to be fully knowledgeable of cultures other than one’s own. The cultural humility framework encourages providers to see the whole person, and to acknowledge strengths and areas of resilience in individuals who are often subject to interpersonal, institutional, and systemic racism.

The training was presented in six parts, beginning on March 3rd and culminating on May 26th, 2021. There were three longer sessions and three shorter, more specialized, sessions, attended by fewer participants. Each training was approximately two hours long and was held virtually. Session topics included “Cultural Humility vs. Cultural Competence: Do You Know Me?”, “Cultural Humility: The Power of Engagement” (Understanding Implicit Bias, Race, Stereotypes and Privilege), “Cultural Humility: The Power of Engagement (Individual Practice and Organizational Implementation – Affinity Groups/Caucus Work)”, “ACEs, Racial Trauma and Civil Unrest: A Case for Cultural Humility”, “ACEs, Secondary Trauma: Healing Centered Practices and Effective Diversity, Equity and Inclusion Strategies”, and finally, “No Justice, No Peace in the Absence of Truth (A Case for Cultural Humility)”.

Evaluation of the Training Series

After each part of the training, participants filled out surveys. The sample size for each survey ranged from $N = 27$ to $N = 189$. A summary of three of these training results are presented below in Table 20. Overall, the majority of participants agreed or strongly agreed that each training met its daily objectives, was useful for improving student learning and achievement, and that a supportive climate for professional community and sharing was created.

Table 20. Participant Evaluations of the Cultural Humility Professional Development Series

Session I: “Cultural Humility vs. Cultural Competence: Do You Know Me?” (An Overview / Introduction)						
	Strongly Agree (N, %)	Agree (N, %)	Neutral (N, %)	Disagree (N, %)	Strongly Disagree (N, %)	Total (N)
The objectives of the day were successfully achieved	110, 59%	56, 30%	21, 11%	0, 0%	1, 1%	188
The content presented will be useful for improving student learning and achievement	108, 57%	58, 31%	20, 11%	2, 1%	1, 1%	189
A supportive climate for professional community and sharing was created.	114, 60%	55, 29%	19, 10%	1, 1%	0, 0%	189
Please comment about any of the above statements and your ratings: (selected responses) <i>“A supportive climate for professional community and sharing was created when the presenter spoke of ways for teachers to become more aware of the experiences and perspectives of those around us that affect how the world and life is experienced.”</i> <i>“Mr. Greene was very knowledgeable and presented in such a way that made people feel safe and feelings respected.”</i> <i>“One of the best trainings I have taken”</i>						
How will you implement/apply the concepts from today in your current work? (selected responses) <i>“A lot of self-reflection and examining my position as a white educator in a mostly non-white classroom setting.”</i> <i>“Directly with my work with my UPK students and families as well in my personal life by bringing an understanding of cultural humility in and out of the classroom.” “I will continue the lifelong process of cultural humility. I will also learn about cultures that are different from mine.”</i>						

**Session 2: Cultural Humility: The Power of Engagement”
(Understanding Implicit Bias, Race, Stereotypes and Privilege)**

	Strongly Agree (N, %)	Agree (N, %)	Neutral (N, %)	Disagree (N, %)	Strongly Disagree (N, %)	Total (N)
The objectives of the day were successfully achieved	69, 49%	54, 38%	15, 11%	1, 1%	3, 2%	142
The content presented will be useful for improving student learning and achievement	68, 48%	55, 39%	12, 8%	3, 2%	4, 3%	142
A supportive climate for professional community and sharing was created.	70, 49%	51, 36%	15, 11%	1, 1%	5, 4%	142

Please comment about any of the above statements and your ratings: (selected responses)

“I felt comfortable sharing, even though it was a tough topic”

“I felt this training was super informative. The information presented is very useful when creating and implementing new material in the classroom virtually.”

“There is so much pain felt by participants around cultural bias, humility and sensitivity”

How will you implement/apply the concepts from today in your current work? (selected responses)

“Be proactive and be willing to have those difficult or uncomfortable conversations that are related to cultural biases in order to be able to redress the imbalance of power”

“Continue with being supportive of parents, students and colleagues as we continue to create change within our educational system”

“I will commit to unlearning, engage in both formal and informal learning, and continue to diversify my life and work experiences.”

**Session 3: Cultural Humility: The Power of Engagement
(Individual Practice and Organizational Implementation – Affinity Groups/Caucus Work)**

	Strongly Agree (N, %)	Agree (N, %)	Neutral (N, %)	Disagree (N, %)	Strongly Disagree (N, %)	Total (N)
The objectives of the day were successfully achieved	73, 46%	64, 40%	22, 14%	0, 0%	1, 1%	160
The content presented will be useful for improving student learning and achievement	76, 48%	61, 38%	16, 10%	3, 2%	4, 3%	160
A supportive climate for professional community and sharing was created.	73, 46%	61, 38%	20, 13%	2, 1%	3, 2%	159

Please comment about any of the above statements and your ratings: (selected responses)

“Dr. Greene is extremely knowledgeable on the topic and creates a supportive climate to tackle the tough questions.”

“Focused heavily on current events and needed more information in order to improve professional practice”

“These presentations are great because they are eye opening and help to see what our students families are going through/feeling like.”

How will you implement/apply the concepts from today in your current work? (selected responses)

“I will be sure to bring my "Authentic Self" to work each day. I am aware of my privilege and will be sure to provide a learning environment where all of my students feel respected and loved and free to be themselves.”

“I will question myself and look for ways to reflect and improve.”

Feedback on Possible Improvements

Though most feedback was positive, there were several comments on areas of potential improvement. A few participants noted that they didn’t feel like the training was a safe space to share their views, but most participants did remark that they felt safe sharing. It may be important in future trainings to ensure that *all* participants feel heard and safe expressing their views. Additionally, although the emphasis on personal reflection was generally appreciated by the audience, several participants noted that this may have taken away from the main points (e.g., “I feel there was a lot of sharing happenings – which can be good – but it seems to have taken a tangent from the main discussion”). Last, a few participants noted they felt the training was one-sided or politically biased. We will work to ensure that in future trainings, all participants feel heard and respected.

DISCUSSION

Conclusions

The 2020-2021 school year was unprecedented in many regards. Students learned through a hybrid learning model, and most of the school year took place in a virtual context. Students and teachers ‘met’ virtually through both asynchronous and synchronous learning modes. In February, classrooms opened for in-person learning, although many students remained in their households to continue virtual schooling. Given the instructional modality changes throughout the pandemic and challenges of teaching prekindergarteners remotely, it is not surprising that less screening data is available for the 2020-2021 year and that attendance and test scores during that time were more varied.

Student Outcomes

2020-21 Student Outcomes

- Due to the constraints that the pandemic placed upon schools, teachers, and administrators (and consequently, the RECAP team), we were unable to collect much data that we typically collect, such as the T-CRS and the COR Advantage. Despite this, we were able to learn about prekindergarten and kindergarten students in two ways: through fall screening data, and through attendance statistics.
- On the Brigance Screening Tool, the distribution of scores for three-year-old prekindergarten students was similar in 2020 compared to prior years. However, for four-year-olds, there was an increase in students who were deemed at risk (from 27.9% in 2019 to 37.0% in 2020). On the other hand, we also see a higher percentage of students who scored in the “possibly talented and in need of extra work” category among three-year-olds in 2021 compared to 2019. Among four-year-olds, this number was consistent with prior years (e.g., from 9.7% in 2019 to 9.5% in 2020).
- On average, attendance declined throughout the school year for students enrolled in prekindergarten. There was no similar decline at sites that had additional resources including family navigators and access to transportation for their families. We were not able to inspect attendance trends for RCSD-based programs.

Preliminary Fall 2021 Results

- The preliminary results from Fall 2021 suggest both good and bad news about the academic and socioemotional wellbeing of prekindergarten children in the city of Rochester.
- We must note, however, that these preliminary results are just that – preliminary – and final data will be presented in the 2021-2022 Annual RECAP Report. These data are also a cross-sectional snapshot, as we do not yet have any mid-year or year-end results to show growth throughout the year.

- Despite this, we can make some conclusions based on this data, particularly when compared to prior years' Fall student cohort data. On the COR, we see some lessening for students in the Fall 2021 cohort (particularly among four-year-olds) compared to the Fall 2019 cohort. However, whether these differences are practically meaningful and important for overall student outcomes is currently unknown. On the T-CRS-sf, there are practically no differences for either three- or four-year old prekindergarten students on any subscale, except for a minor decline in assertiveness among four-year-olds in 2021 compared to 2019. Last, on the Brigance® Early Childhood Screen III, we see a decline in risk for both three-year-old and four-year-old students in 2021 compared to 2020.

Conclusions from Combined Student Results

- Together, we see some evidence that the effects of the pandemic may have been more pronounced for older Pre-K students. This is reflected in the 2020 Brigance data, where we see consistent results for three-year-olds with previous years, but an increase in risk for four-year-olds. This is also reflected in the Fall 2021 results, and particularly in the COR+ results. In this data, there are few differences between three-year-olds in the Fall 2021 cohort and the Fall 2019 cohort (the last pre-pandemic cohort with complete COR data). However, we see consistent and statistically significant declines across COR+ subscales for four-year-olds in the Fall 2021 cohort compared to the Fall 2019 cohort.

COVID-19 Adaptations

Family Engagement

- The *family* was ever-present in the classroom this year. We learned about family-school engagement in the 2020-21 school year through several means. Families reflected similar sentiments as in years past when we spoke to parents in the *Transition to Kindergarten Summit*. We also learned about family engagement, and strategies that educators creatively used to maintain and improve engagement, through our interviews as part of the Caring Connectors program.
- However, we must position any data and conclusions on family engagement in the context of digital disparities.
- Fortunately, the Caring Connectors program was able to provide support services and technology for 319 families of prekindergarten students in the RCSD-prekindergarten system. The positive effects of this program are evident in the attendance results. Schools and students who were involved in the program were more engaged in school, as measured by a higher percentage of attendance throughout the school year, and a lack of a decline in attendance throughout the year.

Professional Development and Cultural Humility

- Consistent with RECAP’s goal of system-wide quality improvement, educators and RECAP team members (e.g., observers) took part in various professional development opportunities throughout the year. Notably, Earl Greene of Children’s Institute led a series on cultural humility and anti-bias and received stellar reviews from attendees. We hope to continue to offer further professional development opportunities to meet the need for diversity, equity, and inclusion initiatives in the RCSD prekindergarten system.

All in all, this annual report reflects the unprecedented nature of the 2020-21 school year. Our data and results are different than in years past, owing to the many constraints placed on us by the pandemic, as well as to the unique opportunities and needs that the school year presented us. We look forward to presenting our full results gained from the 2021-2022 school year in the forthcoming RECAP Annual Report, to be published fall 2022.

Recommendations

Even before the COVID-19 pandemic, our three- and four-year-old Pre-K students were arriving with greater needs than ever before. Unfortunately, this statement has held true for the past several decades. Although by most measures the Rochester Pre-K (at least pre-COVID) program has excelled, we have still seen lags in kindergarten readiness among our students. Despite seeing excellent growth rates from fall to spring on student assessments such as the COR Advantage (with children with greater needs growing at even higher rates), kindergarten readiness rates remain stubbornly low. The most recent pre-COVID estimates show that among those students who attended two years of Pre-K, approximately 57% are kindergarten ready, and of those who attended one year of Pre-K only 50% are ready for kindergarten (Infurna et al., 2019).

In the past half-decade, Rochester's Pre-K system and RECAP have devoted many resources – staff, professional development and the funding required – in the effort to increase kindergarten readiness. With the daunting figures we see with this year's Pre-K students, particularly in social-emotional adjustment, these efforts are more important than they have ever been.

In his 2018 report, New York State's Distinguished Educator Dr. Jaime Aquino highlighted the success of Rochester's Pre-K system. He noted the elements that made our pre-K program so successful:

1. *Strong and consistent leadership;*
2. *Continuity of teaching staff;*
3. *Strong professional development;*
4. *Adoption of a common curriculum (HighScope);*
5. *Common assessments;*
6. *A robust evaluation, RECAP, which provides parents, providers and policy-makers with reliable information for informed decision-making;*
7. *The adoption of the Classroom Assessment Scoring System (CLASS), which focuses on the instructional program, teacher-child interactions, concept development, classroom climate, and other key areas; and*
8. *The use of data to monitor and improve the program. (Aquino, 2018, pp. 54-55)*

Beyond these eight elements, RECAP program leaders assert there is a crucial ninth factor: *Pre-K is where we establish the relationships between families and schools.* Rochester's Pre-K system devotes considerable staff, resources, events and other activities, all in the pursuit of solidifying our schools' and families' relationships – which will be in place through elementary and secondary education.

Of these nine areas of strengths in our Pre-K system, a leading area where COVID has taken a toll is in continuity of teachers and staff. This 2021-22 school year sees the greatest turnover in teaching staff in recent memory, with approximately one-third of our teaching staff being new to Pre-K. Over the years Rochester's Pre-K has enjoyed a commendable record on possessing a robust professional development

system that even in 2018-19 where 21% of teaching staff turned over that school year, ECERS and CLASS scores either maintained or improved. Student growth remained on track in 2018-19 as well, highlighting the importance of robust professional development.

Social-emotional wellness was a concern before the pandemic and Fall 2021 data possibly show a greater need than ever before. In Fall 2021, approximately 18-20% of both three- and four-year-olds were screened as having multiple social-emotional risk factors. We have never seen as many children with multiple social-emotional problems. While the successes of the Pyramid Model are not the subject of this report (but will be in the fall, 2022 reporting), prior to COVID, RECAP produced data that unmistakably revealed the Pyramid Model proving to be one component that does help students improve their social-emotional adjustments. Accordingly, we recommend a renewed emphasis on Pyramid Model training for teaching staff.

This report also has implications for dosage of programming. The key to kids “catching up” in the post-COVID era is a higher dosage of programming – in other words, more Pre-K for our students, including summer programming. RECAP has extensively documented the relationship between Pre-K attendance and improved student achievement (for instance, see Infurna & Montes, 2021). This is not only true with respect to number of days attending during the school year – but also attending two years of Pre-K as opposed to one. This is also strikingly true with respect to summer opportunities. Although not directly part of the RECAP reports, we have also documented the clear successes of the summerLEAP program. Summer programs produce documented student growth at a far lower cost than a school year - a cost/benefit ratio unmatched in our local Pre-K system (Lotyczewski & Hightower, 2017). If we expect our youngest learners to effectively catch up after COVID, summer learning opportunities are decidedly an essential component.

Our forthcoming 2021-2022 RECAP Annual Report will provide data from the complete school year on student development, achievement, social emotional skills, and other information on their well-being; information on parent and family engagement; and details on classroom quality. We will also explore further the gaps that we have seen in prior years throughout the history of RECAP and Pre-K.

Together, all of these efforts and at every level – child, family, teacher, principal, agency director, every staff member, all our early childhood leaders – are in the service to restore to our city’s children and their families what is rightfully theirs: a high-quality education.

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APPENDIX I: Screenings

In the 2020-21 school year, screenings took place from early October through the end of December 2020. There were two central screening sites: The Wilson Foundation Academy (on the west side of Rochester on Genesee Street) and Florence Brown Pre-K Center School #33 (on the east side of Rochester on Webster Avenue). Screenings were held by appointment only. There were approximately 8 to 10 families who attended screenings per day. During these screenings parents also completed the Parent Appraisal of Children’s Experiences (PACE) scale. See Table 21 for a list of screening tools that were used for new entrants screening.

Table 21. Screening Tools for New Entrants Screening, 2020-21

Domain	Screening Tools
Vision	PlusOptix Spot
Hearing	Pure tone screening test
Motor	Preschool Student Test of Motor Proficiencies (Pre-STOMP) Motor subscale of the Developmental Indicators for Assessment of Learning (DIAL)
Language	Preschool Language Scales Fifth Edition (PLS-5)

Screenings resumed in the on-site when buildings reopened on February 9th, 2021. Child Development Associates administered vision, motor, language, and hearing screenings, and teachers administered the Brigance III. Ultimately, due to COVID-19, most Pre-K students were not screened in 2021.

Screening Results

Pre-K-3 Screening Results

Among Pre-K-3 students who were screened in the year 2020-2021 (see Table 22), there was a high percentage of referrals on vision and hearing (22.6% and 28.1%, respectively). Notably more students were screened on the Brigance than other screening tools, as this screening was conducted by prekindergarten teachers. The 494 students screened on the Brigance represent 62.9% of the entire Pre-K-3 enrollment.

Table 22. Pre-K-3 Screening, Total and Referral Rates

	N (total screened) / N (total scheduled)	Percent Screened of Pre-K-3 Population (N = 785)*	Percent with Referral
Vision	195 / 336	24.8%	22.6%
Hearing	196 / 336	25.0%	28.1%
Cognition (Brigance Levels 1 and 2)	494	62.9%	25.9%

**Note that the Pre-K-3 population size was obtained from the January 2021 pull of data from the RCSD Office of Early Childhood. This number is smaller than number scheduled for screenings due to variations in enrollment, mobility, dropout, and other factors.*

Pre-K-4 Screening Results

Due to the constraints of the pandemic, only in-district (RCSD) four-year-olds were screened in 2020-2021 (see Table 23). There were 44.7% of all Pre-K-4 students in the district, and 55.3% in CBOs.

Table 23. Pre-K-4 Screening, Total and Referral Rates

	N (total screened) / N (total scheduled)	Percent Screened of RCSD Pre-K-4 Population (N = 696)*	Percent Referred
Vision	407 / 719	58.5%	29.7%
Hearing	408 / 718	58.6%	15.0%
Cognition (Brigance Levels 1 and 2)*	938		40.4%
Fine Motor	321 / 571	46.1%	19.0%
Gross Motor	320 / 571	46.0%	9.1%
Articulation (PLS-5)	310 / 555	44.5%	14.2%
Language (PLS-5)	225 / 392	32.3%	40.0%

Note: The Pre-K-4 population size was obtained from the January 2021 pull of data from the RCSD Office of Early Childhood. This number is smaller than number scheduled for screenings due to variations in enrollment, mobility, dropout, and other factors.

**This number includes the entire Pre-K-4 student enrollment (RCSD and CBO sites).*

Kindergarten Screening Results

There were an estimated 1,350 students in kindergarten in RCSD in the 2020-21 school year, according to BEDS data. This number decreased from the previous year which was 1,910 in 2019-20. There were an estimated 2,900-3,000 five-year-olds in the City of Rochester.

Vision problems were exceptionally high in this cohort compared to previous years (See Table 24). This may have been affected by the adoption of new screening technologies via PlusOptix, Spot, and other devices that can more accurately detect vision problems in young children.

Table 24. Kindergarten Screening Referral Rates

	N (total screened) / N (total scheduled)	% With referral
Vision	499 / 970	28.5%
Hearing	496 / 971	11.9%
Fine Motor	373 / 780	20.1%
Gross Motor	339 / 741	3.2%
Articulation	372 / 783	11.8%
Language (PLS-5)	158 / 328	29.1%

Discussion of Results

New Entrant Screening (covered under Chapter 53, Part 117 of the Commissioner’s Regulations) is our students’ first line of defense, and is especially cost-effective, against early school failure. Problems are detected and corrected.

Of those who were enrolled in Pre-K and K in 2020-21, (compared to 2019-20, Pre-K was down over one thousand, Kindergarten was down around 500), *most* were not screened. Of those who were screened, *most were referred* in one or more area of Vision, Hearing, Motor (gross and fine), Language (Articulation, Expressive and Receptive), and Cognition (learning, done through the Brigance). Details are presented below.

In an end-of-year interview with the RCSD Screening Team (CDAs), they reported observing higher referral rates than in typical (non-COVID) years, particularly in language and motor skills. These data support these observations – in particular, in regard to the higher rates of referral in vision, hearing, and in Pre-K-4, higher rates of screening as “at-risk” on Brigance metrics (cognition).