



A Scalable Model for Improving Kindergarten Readiness

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# Let's Recap

In year one, our All Children Ready network of five Head Start sites tripled Baltimore City Readiness in Reading and quadrupled Baltimore City Readiness in Math. We are excited by these early outcomes, especially considering many Head Start students were coming into the year behind, academically.

End-of-year data at our five Head Start sites shows 71% of our students demonstrated Kindergarten readiness in Reading indicators and 96% demonstrated Kindergarten readiness in Math indicators.

Our All Children Ready network engaged 13 Head Start teachers and 14 Head Start teacher assistants in a year of learning and work to improve student readiness outcomes in reading and math.

# Background

Table 5. Percentage of Kindergartners Demonstrating Readiness In SY 2015 -2019

School Year	KRA Version	% of Children Demonstrating Readiness in Baltimore	% of Children Demonstrating Readiness in Maryland
2014 - 2015	KRA 1.0	48%	47%
2015 - 2016	KRA 1.5	42%	45%
2016 - 2017	KRA 1.5	38%	43%
2017 - 2018	KRA 1.5	41%	45%
2018 - 2019	KRA 2.0	39%	47%
2019 - 2020	KRA 2.0	37%	47%
2020 - 2021	No data due to COVID		
2021 - 2022	KRA 2.0	25%	40%

Source: MSDE Kindergarten Readiness Assessment Report (https://www.readyatfive.org/download-document/getting-ready.html)

Research shows third grade reading proficiency predicts future success. In Baltimore, students who scored a 320 on the Reading portion of the Maryland State Assessment in 2009 were predicted to have only a 40% chance of graduating school in comparison to those who scored a 460, who had a 75-80% chance of graduation.1 Kindergarten Readiness in Baltimore City had dropped 11 percentage points over a 6-year period with only 37% of children demonstrating Kindergarten Readiness in the 19-20 school year, while the state remained at 47%. The gaps are amplified for Latinx and Black students. In 2018-19, 57% of white children were demonstrating Kindergarten Readiness compared to 40% of Black students

and 29% of Latinx students, just perpetuating gaps by race and ethnicity. In 2019, ELL students were only half as likely to demonstrate Kindergarten Readiness.<sup>2</sup>

KRA data from the 2021-22 school year shows a decline in Kindergarten readiness across all 24 Maryland counties. In Baltimore City, only 25% of students demonstrated readiness for Kindergarten, which represents a 12 percentage point decrease from the 2019-20 school year. After remaining constant at 47% for nearly a decade, the statewide percentage of students demonstrating readiness for Kindergarten decreased to 40%.3

 $<sup>^1\,\</sup>textsc{Baltimore}$  City Public Schools, Office of Achievement and Accountability data  $^2\,\textsc{MSDE}$  Kindergarten Readiness Assessment Report, 2018-2019

<sup>&</sup>lt;sup>3</sup> MSDE Kindergarten Readiness Assessment Report, 2021-2022

# Background

#### **All Children Ready**

All Children Ready is an initiative of Improving Education focused on significantly increasing literacy achievement in Head Start, Pre-Kindergarten, and Kindergarten while developing scalable practices that can be used at locations across the city, state, and nation to improve Kindergarten Readiness outcomes.

This project utilizes a team approach consisting of our Improving Education Coordinators and staff at each of our partnering schools. We work with school staff to:

- 1. Understand the existing system and current performance while setting an aim for improvement.
- 2. Engage in designing changes that could improve outcomes while using a Continuous Improvement model and measuring progress toward the aim.
- 3. Test, catalog, and measure successful changes using a Plan-Do-Study-Act (PDSA) cycle while working to create a system that can sustain continuous improvement in outcomes for students.

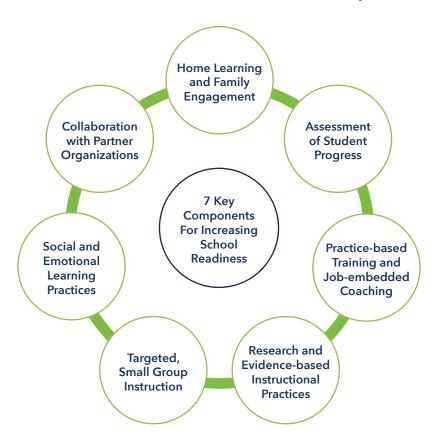
The collective goal of this work is to achieve 80% - 100% of students prepared for Kindergarten by "demonstrating" readiness on the mathematics and language and literacy domains of the Kindergarten Readiness Assessment. MSDE defines children demonstrating readiness as "displaying the foundational skills indicating they are fully ready for kindergarten."

## Research Based Practices

Our Improvement Science methodology is derived from early work of our CEO with the Carnegie Foundation for the Advancement of Teaching. Improvement Science methodology is a process and routine to bring disciplined inquiry to the work schools are currently doing to improve outcomes for their students.

- 1. Clearly defining a problem
- 2. Articulating a theory of improvement that is realistic, achievable and related to the context of the problem
- Designing, running, and interpreting PDSA cycles to test change ideas and learn about ways to create sustainable practices for replicable achievement of outcomes

In addition to the Improvement Science methodology, we focus on our **7** Key Components for Increasing School Readiness that combined, create our working theory of improvement. It is our belief that by improving each component and building a system that reliably supports the whole child, we will achieve our aim of "All Children Ready."



## **Research Based Practices**

#### 7 Key Components

#### 1. Home Learning and Family Engagement

We provide resources, books and materials from our Bedtime and Learning Boxes as well as parent support sessions to provide ongoing connection.

#### 2. Assessment of Student Progress

We facilitate benchmark assessments and progress monitoring of academic skills by a certified teacher.

# 3. Practice-Based Training and Job-Embedded Coaching

We facilitate weekly training and coaching around instructional practices to improve instruction. Instructional refinement is informed by data, which allows us to target student needs.

# 4. Research and Evidence-Based Instructional Practices

We infuse research based programming into daily instruction and help create structures that maximize time and engagement of students.

#### 5. Targeted and Small Group Instruction

We facilitate routine data huddles and provide the structure to ensure equitable opportunities for small group and individualized instruction that meets the needs of all students.

#### 6. Social and Emotional Practices

SEL is prioritized for educators in addition to students. Educators are provided with resources to minimize instructional redundancy and maximize positive outcomes associated with Kindergarten readiness. As literacy remains an equity issue, its mastery, or lack thereof, grossly impacts the future independence, ability to self-advocate, and upward social and financial mobility of our students.

#### 7. Collaboration with Partner Organizations

We connect with existing resources, including Judy Centers, Home Care providers, Libraries, and the City Schools Office of Early Learning to provide necessary resources to families via our home learning opportunities.

# **Approaches and Outcomes**

2021-2022 School Year

During the 2021-22 school year, we worked with 27 educators of 3- and 4-year-old Head Start students at five centers in South Baltimore. Eighty percent of the 350 students we serve identify as Black or Latinx. We utilized our improvement science methodology, combined with the 7 Key Components for Increasing School Readiness to dramatically increase the percentage of students demonstrating Readiness for Kindergarten in Baltimore City. We assessed Head Start students at the beginning of the year; huddled with educators to analyze data, group students and implement instructional strategies and then assessed students again. We also provided additional support including Bedtime and Learning in a Box for all children; we collaborated with community partners to fill gaps in service and we incorporated Social Emotional Learning into daily interactions and instruction.

At the end of the 2021-22 school year

71%

of students demonstrated Readiness on KRA-aligned Reading assessment.

96%

of students demonstrated Readiness on KRA-aligned Math assessment.

This was a significant increase over the KRA Results from 2019-2021. While our results reflect the same standards of the Kindergarten Readiness Assessment, the assessment mechanism is unique. Head Start students are assessed by our Improving Education Coordinators on a KRA-derived assessment, while teachers assess students with the KRA at the beginning of Kindergarten. We assess students in Language/ Literacy and Mathematics indicators, the KRA assesses a full battery of non-academic skills including Social Foundations, Physical Wellbeing, and Motor Development indicators. While it is not the exact same assessment, the standards and skills assessed to demonstrate readiness are the same. As we expand All Children Ready, we aim to utilize KRA data for each of our students to understand how our data compares to city and state data.

While the percentage of students demonstrating readiness in reading was lower than expected, we learned valuable insight that can be incorporated into changes in the future. Additionally, we were surprised at the progress in math. The concreteness of mathematical concepts seems to be well suited for children at this age and by engaging them in multiple activities and practice, these concepts can be quickly built. This has many implications for research and practice that can be used in the design of scalable instructional techniques to replicate the effects in centers across the city, state, and nation.

## **Lessons Learned**

#### Year One

#### Full Year vs. Partial Year Support

We were able to work with two of the five sites from the beginning of the school year. At these two sites, we were able to engage in a full-year of support, including routine huddles and progress monitoring meetings from October through June. We believe this full year of support contributed to stronger end-of-year data at the two sites.

#### **Year-long Educator Retention**

We also saw a correlation between sites where educator retention was strong throughout the year. When we were able to work with the same educators for the entirety of the school year, we saw stronger progress and outcomes. There was one site where a Head Start educator resigned mid-year. This mid-year staff change had an adverse impact on student outcomes in that classroom.

#### **Meeting Head Start Educator Needs**

When speaking with educators at our highest performing site, they cited feeling valued based on constant communication provided throughout the year, immediate access to resources and alignment with stated goals. Intentional relationship building with our educators facilitated transparent communication, which often exposed individual deficits and/or professional development needs. Improving Education coordinators, in turn, provide individual support to meet educator needs. This intentionality ultimately could impact both student performance and educator retention.

#### **Curricular Supplements**

We were able to provide Heggerty Phonological Awareness activities to educators at all of our sites. These high-quality, KRA-aligned activities were supplemental to the Head Start curriculum, which alone, does not cover certain skills covered on the KRA. These skills include CLS (consonant letter sounds), LNF (letter naming fluency), FSF (first sound fluency), onset/rime, math vocabulary terms, or using a number line. We believe that the supplemental Heggerty Phonological Awareness activities at all five sites contributed to strong overall performance. These supplements were especially important for students in their second year of Head Start.

## Lessons Learned

#### Year One

#### iFellowship Opportunity

Seven Head Start educators participated in our Improving Education iFellowship opportunity along with the support we provided on-site. This fellowship experience included additional training and a monetary stipend. Most of our seven fellows were educators at our highest performing site, which shows a correlation between iFellowship participation and student outcomes. The learning here is that when we are providing additional high-quality training for educators and providing a meaningful monetary incentive, we see an increase in both engagement and effectiveness, contributing to stronger student outcomes.

#### **Access to Resources**

Overall, in classrooms where educators had access to resources, ESOL support and IEP-related resources, student outcomes were stronger. At sites with less access to resources, lack of bilingual teachers, or a delayed provision of resources for students with IEPs, there was an adverse effect on student outcomes.

#### **Attendance**

Students with inconsistent attendance made less progress than those who attended Head Start regularly. Anecdotally, educators cited parents' perceptions of Head Start as a daycare opportunity as opposed to pre-Kindergarten as the rationale for inconsistent attendance. Our work will continue to rewrite this narrative and elevate Head Start as a quality, reliable, resource for Baltimore City families.



"Gathering data for learning is relatively new to me, but seeing the improvement the children make from one assessment to another makes me feels so good. It feels like I've done my job."

-Denise Barnes, Arundel Head Start Educator & Improving Education iFellow

## School Year Plan

2022 - 2023

During the 2022-23 school year, we have continued our work with 27 educators at five Head Start sites in South Baltimore. In addition, we have followed our 2021-22 Head Start students as they enrolled in four Baltimore City Public Schools where they matriculated this year. We are working with Pre-K educators at these four schools in the same capacity. By following these cohorts of students, we will begin a longitudinal study to assess the continued impact of improved systems created through our work in Early Childhood education classrooms.

Throughout the 2022-23 school year, our Improving Education Coordinators meet with school staff during their existing team meetings, every three weeks, to focus on the strategies being implemented and to address the identified problem. Meetings focus on reviewing data to identify changes and targeted instruction for students, discussing specific instructional actions, setting short cycle goals for students, and discussing progress (or lack thereof). Improving Education Coordinators meet with school leadership monthly to discuss data and program progress.

# Each school and Head Start site are engaging in the following activities during the 2022-23 School Year:

- » Initial meeting between Improving Education staff and school/center leadership to coordinate the work for the year
- » Co-development of plans to collect data prior to tri-weekly meetings
- » 45-minute grade level team meetings, about every 3 weeks with Head Start educators, and Pre-K educators
- » Weekly, individualized coaching (as needed) with educators in classrooms by Improving Education staff
- » Group training (as needed) with educators and support staff
- » Monthly 45-minute Leadership meetings
- » Quarterly meetings to share learning across All Children Ready participating sites

## School Year Plan

2022 - 2023

#### Our Improving Education staff engage in the following activities:

- » Lead sessions with educators approximately every 3 weeks to examine data and identify instructional changes
- » Support during assessment windows to ensure quality data collection
- » Support parents by providing high quality material and training to extend all learning into the home, through the incorporation of Bedtime in a Box, Learning in a Box, and additional resources
- » Provide coaching support in the school (as needed) to educators or staff
- » Provide group training (as needed) for educators and support staff
- » Provide capacity building opportunities for Pre-K teachers through the iFellowship program
- » Facilitate monthly leadership meetings to review progress and alignment to program initiatives
- » Share successful practices with city, state and national leadership and support the scale of these practices to other programs
- » Provide each school with an allocation of \$1,000 to be used to purchase materials to support changes in schools and classrooms
- » Purchase additional materials or instructional tools to support learning and supplement existing curriculum as identified by the school and staff

## School Year Plan

2022 - 2023

Assessment: Students are assessed in Math and Reading skills approximately every three weeks. Assessments align directly with KRA parameters. Improving Education coordinators assist with data collection.

#### **Huddle:**

Head Start, Pre-K educators and Improving Education Coordinators meet approximately every three weeks, to analyze data and make instructional decisions based on student need. We organize these meetings into rapid huddles that allow for us to discuss changes, identify progress, learn from PDSAs, and make adjustments.

### Leadership **Check In:**

Site and school leaders meet with Improving Education Coordinators each month to review data, mitigate barriers, and identify changes.

# **Anticipated Outcome**

The collective goal of this work is to achieve

# 80% or more

of Head Start and Pre-K students prepared for Kindergarten by demonstrating readiness indicators on all math and literacy domains of the Kindergarten Readiness Assessment each year.

## Conclusion

In our first year, the All Children Ready initiative successfully improved Readiness levels for Head Start students across the sites where we worked.

We engaged educators, leaders, and parents in designing improvements and successfully measured the progress, using data collected to improve the instruction and support for students.

The initiative has caught the eye of many organizations in Baltimore and we are actively working on larger collaborations to expand beyond our current sites.

This year also served as a proof point, showcasing that improvement in Kindergarten readiness is possible and the structures and routines created through this work can be scaled in future years.

It is our plan to initiate a longitudinal study of this work to track the progress of students through the next 12 years of formal schooling.

## Recommendations

Based on our learnings from the first year of our All Children Ready work, we recommend the following three actions.

#### Build systems in Head Start to improve student academic outcomes

To prepare students for Kindergarten, we must intentionally focus on academics at Head Start sites. This focus on academics includes understanding where students are academically, providing targeted instruction, and measuring progress toward academic expectations. We must put systems in place to collect and track student academic data that allow educators to review student progress and make instructional adjustments based on that data. We must provide structured professional learning opportunities for educators around academics to improve educator quality and instruction to students. We also must develop a better coordinated system of support for students and families to build awareness of expectations and skills to support students at home.

#### Increase funding to Head Start sites

We must either increase or re-allocate existing funding to increase salaries for Head Start educators. Our Head Start educators are working closely with students to prepare them to meet Kindergarten benchmarks in Reading and Math that will put them on path to continued academic success. They are preparing the future generation and we must compensate them accordingly. Increased salaries will help increase both recruitment and retention of Head Start educators. We must also allocate greater funding for coaching and instructional support for Head Start educators so they have the training necessary to prepare each student for Kindergarten.

#### Coordinate Head Start with home childcare and PreK programs

There is currently a lack of alignment between early education programming and academic outcomes. We must not only set academic goals for student learning, but we must align programming to those goals across all early learning programs. In addition to this alignment, we must create a coordinated transition plan to support matriculation of students into Head Start and PreKindergarten from child care or home situations and into future educational settings. We must all work together to increase the enrollment of students in PreKindergarten and provide access to more students across Maryland.

For more information about this report or our work at Improving Education, please visit us at www.improvingeducation.org

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