

## January 2021

#### Strategy

Provide an 8-week fifth quarter in the summer of 2021 with a focus on English/Language Arts (ELA) and mathematics.

### Description

Targeted students in grades Kindergarten to 11<sup>th</sup> grade that are below a specific academic threshold will attend an 8-week fifth quarter in the summer of 2021 that focuses on ELA and mathematics instructional support.

#### Recommendations

- A significant portion of funds should focus on the instruction of mathematics and reading.<sup>7, 11, 14, 15, 16</sup>
- Funds should be set aside for fostering the participation of disadvantaged students.<sup>7, 11, 12, 14, 15, 16</sup> Districts should encourage students to attend the program consecutive summers to increase the academic impact.<sup>12</sup>
- "Resist the temptation to micromanage programs and give local schools and teachers leeway in how to structure and deliver programs." 7; 11, 14, 15, 16
- Begin planning summer programming as early in the year as possible and ensure needed materials are delivered on time.<sup>7, 12, 15, 16</sup>
- Give hiring preference to teachers who have taught past summer programs; "effective and motivated teachers."<sup>7, 13, 15, 16</sup>

#### Background

The summer learning gap is uniquely American; although the summer break is lengthy, it does not significantly lower in-class time to learn in comparison to other nations.<sup>1</sup> A study that assessed summer learning loss found that children's test scores were on average at least one month lower in the fall than scores taken the previous spring.<sup>2</sup> The summer learning gap does not affect all students equally; as one study observed it is low socioeconomic status (SES) students who show the greatest loss of learning. Jencks and Phillips also estimate that half or more of the gap measured in the 12<sup>th</sup> grade reflects continuity of differences evident at the start of 1<sup>st</sup> grade.<sup>4</sup> However, as noted by Kendi, when speaking of the gap between Black and white students' scores, it is important to make the distinction that, "the racial problem is the opportunity gap...not the achievement gap."<sup>5</sup> Because of this, it is evident that some kind of intervention is needed to help students, specifically historically oppressed students, from falling behind. A study done about the cost of summer programming found that districts tend to spend less per-week, per-pupil on summer programming than they do on education during the academic year.<sup>6</sup> "We conclude that providing a summer learning program can cost between \$1,109 and \$2,801 per student per summer for a five-week schedule that includes food, transportation, and facilities." They noted that the key cost driver was staffing so lowering the student-to-instructor ratio has significant cost implications.

Summer programs have shown mixed results on both the long- and short-term academic benefits.

A well cited<sup>9, 11, 15, 17, 18</sup> meta-analysis of almost 100 studies<sup>7</sup> found that students who completed remedial summer programs can be expected to score about one fifth of a standard deviation higher than the control group on outcome measures. They also found that middle-class students had more positive effects than students from disadvantaged backgrounds. Summer programs that provided small group or individual instruction produced the largest impact on student outcomes. The study showed that remedial summer programs may have a larger effect on math achievement than on reading. However, the achievement advantage gained by students who attended summer school may diminish over time.

- A study of Durham Public Schools' summer school program found similar results.<sup>8</sup> Students who needed to pass both the mathematics and the reading portion in order to promote to the next grade only had a one in ten chance of being successful, while students who only needed the mathematics portion stood a much greater chance at promotion. Put differently, reading had a low success rate.
- The long-term effects of summer learning programs are still unknown.<sup>6</sup> "There are not enough studies on large-scale summer learning programs to provide evidence that urban districts' students make achievement gains commensurate with the district's investment."<sup>19</sup>
- Contrasting the above findings that summer programs had better outcomes for math than for reading, another study found that in their study of summer school programs in charter schools in Kansas City, MO, students' reading achievement increased significantly.<sup>9</sup> Data analysis showed that students' STAR Reading scale scores increased significantly between pre- and post-tests. Students self-reported that they improved their math skills more than their reading skills, however, the math scores were not available for analysis.
- Locally, the Superintendent's Summer Learning Academy (SSLA) has been in effect for three years in Shelby County Schools. After the second year, the research department evaluated the program to see if any gains achieved during the program persisted.<sup>10</sup> No statistically significant differences were found between the SSLA participants and the comparison cohort, with the exception of NWEA MAP Reading in the spring 2019. This shows that while there were not immediate academic benefits for rising Kindergarteners who participated in SSLA, participation in SSLA combined with a year of Kindergarten instruction gave students a boost in the end of the year reading formative assessment.
- A study more generally about out-of-school-time (OST) programs found that these programs can have positive effects on at-risk students' reading and mathematics achievements.<sup>11</sup> OST programs that have one-on-one tutoring also have positive effects on at-risk students' achievement in reading.
- Lastly, in the longest study of summer learning programs, beginning in 2011 and ending in 2017, researchers tracked outcomes for three years after students entered the second and final year of summer programming.<sup>12</sup> The program offered short-term benefits to students in mathematics after one summer. Those who were high attenders outperformed the control group of students in mathematics in the fall and again the following spring. After two summers in the program, high attenders were rated higher on social-emotional skills than the comparable control group, however this did not continue into spring 2017. They found that three school years after the summer program, high attenders' academic benefits decreased in magnitude and were not statistically significant. Also, they did not find evidence that the program affected anything that was not specifically targeted such as suspension or attendance rates during the school year.

# What does a Successful Summer Program Look Like? Small Class Sizes, Support Services, & Enriching

- Some form of parent involvement produced larger effect than programs without<sup>7</sup>; gaining 'parental buy-in' potentially increases enrollment and attendance.<sup>13</sup>
- Small learning groups were cited often as being successful<sup>7; 9, 12, 13, 14, 15, 20</sup>; Individualized instruction produce the largest impact on student outcomes<sup>7; 9, 11, 14</sup> Classes capped at 20 students were found to be more effective in producing achievement gains.<sup>7, 13</sup>
- Support services were provided (meals, transportation, childcare, etc.)<sup>7, 9, 10, 11, 12, 13, 14, 15, 16</sup> "Policymaker should earmark funds for transportation...and for food services...and to provide childcare for younger family members."
- Teachers have creative freedom with lessons;<sup>7, 9, 13, 14, 15, 16</sup> Teachers are encouraged to use new teaching strategies and use more hands-on activities to encourage student engagement.<sup>9, 13</sup>
- A fun atmosphere; time for educational games, extra-curricular activities, opportunities for enrichment, etc.<sup>7, 9, 10, 11, 12, 13, 14, 15, 16</sup> "The programs provided many students with opportunities



that they might not have had otherwise, such as to swim, rock climb, cook, and experience new environments."<sup>12; 9</sup> "Programs should address the developmental needs of the whole child and offer a variety of activities."<sup>11</sup>

At least five weeks of programming with at least three hours of instruction per day; increasing the weeks could increase attendance rate.<sup>12, 13</sup> Debate around the amount of hours/weeks a program should be differ greatly<sup>21, 22</sup> but most agree that 5 weeks can produce short-term benefits<sup>12, 13, 21</sup>

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