

COVID Factor Analysis

3rd Grade Literacy Network

August 31, 2020

Before the pandemic, L4L's Literacy Network reviewed the factors that predict 3rd grade reading proficiency, narrowed those factors down to three, and identified bright spots in each factor. During COVID-19, Learn4Life plans to identify another layer of bright spots that are supporting students and have potential to scale across metro Atlanta. To do this, Learn4Life is revisiting the original factors and determining whether this pandemic necessitates any new factors or variations of our current factors to find innovative practices. The following document discusses in detail how each of the factors listed below impact third grade reading proficiency during the COVID-19 pandemic.

Factors that predict 3rd grade reading proficiency

- Teacher Preparation
- Attendance
- School and Classroom Climate
- Children's Mental Health
- Summer Learning Loss
- Adult Literacy
- Early Childhood Education
- Student Engagement
- Food Insecurity

Teacher Preparation

Definition

Specialized training, formal education, or advanced professional learning designed to assist administrators, teachers, and other educators improve their professional knowledge, ability, skill, and effectiveness (Great Schools Partnership, 2014).

Impact

- Strong content knowledge in early literacy development is an essential skill for educators in early childhood education. These teachers can effectively identify struggling readers and appropriately differentiate instruction to enhance literacy outcomes (Weyer & Casares, 2019).

Challenges

- Teachers have to adapt traditional content to online platforms (Schwartz, 2020a).
- Teachers have been thrust into online teaching with little to no preparation (Golinkoff, Hadani, & Hirsh-Pasek, 2020).
- A recent study found that more than half of the teachers surveyed (56.7%) expressed that they were not prepared to facilitate online instruction (Newton, 2020).
- Over summer school, district leaders were tasked with trying to create reopening plans in accordance with safety guidelines for in-person learning and had little time to focus on improving online instruction (Natanson & Strauss, 2020).

Attendance

Definition

The number of students who virtually sign-on, and are ready to learn.

Impact

- Poor attendance can influence whether children read proficiently by the end of third grade (Weldon, 2017).
- According to the Georgia Department of Education (GADOE), data from 2015 found that “schools with the lowest percentage of students missing 15 or more days the percent of students who achieved the Proficient Learner or above level on the Georgia Milestones English Language Arts Assessment was 51 percent, compared to only 24 percent in schools with the highest percent of students missing 15 or more days” (Weldon, 2017, p. 5).

Challenges

- Broadly speaking, students continue to struggle with access to technology - computers and connectivity (Winthrop, 2020).
- Black, Hispanic, and low-income students disproportionately experience roadblocks to learning, driven in part by gaps in access to technology and the internet (Barnum & Bryan, 2020).
- There are uneven levels of adult supervision during remote learning (Goldstein, Popescu, & Hannah-Jones, 2020).

August 31, 2020

School and Classroom Climate

Definition

The mood, attitudes, standards, and tone that both teachers and students feel when they are in virtual classrooms.

Impact

- A caring school climate is positively correlated with achievement in both Mathematics and Reading/Language Arts for third and fourth grade students (Smallwood, 2014).
- The classroom climate students experience in first grade significantly and positively predict children’s behavioral engagement, which predicts better reading achievement in third grade (Gou, Connor, Thompkins, & Morrison, 2011).
- According to the GADOE, data from 2016 found that “schools with a School Climate Star Rating of a five, the percent of students who achieved the Proficient Learner or above level on the Georgia Milestones English Language Arts Assessment was 43.5 percent compared to only 12.7 percent in schools with a School Climate Star Rating of one” (Weldon, 2017, p. 7).

Challenges

- Teachers have to forge relationships, and also build classroom culture and routines with students they have never met (Schwartz, 2020b).
- School closures disrupted in-person interactions (Strauss, 2020).

Children's Mental Health

Definition

Students' ability to reach developmental and emotional milestones, learn healthy social skills, and cope when there are problems (Center for Disease Control (CDC), 2020).

Impact

- Children with mental health issues are significantly more likely to exhibit limited reading proficiency (Lincoln et al., 2006; Weldon, 2017).

Challenges

- In remote settings, it is difficult for students to access the mental health resources they usually have through schools, which serve as protective factors for students' social, emotional, and physical well-being (Capaldi, Knoble, Shortt, & Kim, 2012).
- More than half of the students surveyed in a recent study said they were in need of mental health support since school closures began in mid-March (Jones, 2020)
- Students are experiencing isolation from social networks (Loades et al., 2020)
- School personnel grapple with identifying and reporting signs of abuse and neglect, as well as identifying, monitoring, and connecting homeless youth to necessary services and supports (Hoffman & Miller, 2020).
- Students are not forthcoming about the problems they are experiencing because there is very little privacy at home (Jones, 2020).
- There is a shortage in school nurses since many are volunteering with local hospitals and health boards (Yates, 2020).

Summer Learning Loss

Definition

The academic ground students lose during the summer (Kuhfeld, 2018).

Impact

- Research shows that “low-income children fall further behind academically during the summer by as much as two months of reading achievement, while other children make slight gains because of the lack of learning opportunities and access to books and less interaction with other students” (Weldon, 2017, p. 15).

Challenges

- COVID slide is expected to yield a 30% loss in learning compared to a normal school year (Hathaway, 2020).
- Students from under-resourced backgrounds may experience a greater impact (Golinkoff et al., 2020)
- There was limited access to summer school, driven in large part by gaps in technology (Winthrop, 2020).
- School districts are experiencing budget cuts (Partelow, Yin, & Sargrad, 2020).

Adult Literacy

Definition

The ability to use printed and written information to function in society, achieve goals, and develop knowledge and potential (National Center for Education Statistics, 2003).

Impact

- The existing evidence highlights a “direct link between parents’ education levels and children’s academic achievement and that the most significant predictor of children’s literacy is their mother’s literacy level” (Weldon, 2017, p. 16).

Challenges

- Large scores of parents had to turn into teachers overnight (Seale, 2020).
- Children with illiterate parents will likely experience more challenges during remote learning (Seale, 2020).
- Students in earlier grades require more adult facilitation (Seale, 2020).

Early Childhood Education

Definition

Activities and/or experiences that are intended to effect developmental changes in children prior to their entry into elementary school (Encyclopedia of Children’s Health, 2020).

Impact

- The existing evidence indicates that “a year or two of developmentally appropriate early childhood education for three- and four-year-olds will improve children’s early language, literacy, and mathematics skills” (Weldon, 2017, p. 14).

Challenges

- Child care facilities are closing because they are unable to balance operational costs with the reduced enrollment that came with the pandemic (North, 2020).
- Child care options are more expensive as facilities try to make up for drops in enrollment (North, 2020).
- Parents are not equipped to provide the educational experiences that benefit early learners (Cavanagh & Goldberg Fox, 2020).

Student Engagement

Definition

The degree of attention, curiosity, interest, optimism, and passion students exhibit when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education (Great Schools Partnership, 2014).

Impact

- Classroom quality significantly and positively impacted children’s behavioral engagement, which in turn impacted greater reading achievement (Gou et al., 2011).

Challenges

- Keeping students on task remotely is a challenge, especially for early learners (Schwartz, 2020a).
- Teachers of low-income students and students of color are more likely to report that their students are not regularly engaged in virtual learning, citing access to technology, responsibilities at home, stress from the pandemic, and decreased interest in work that was not graded as possible reasons (Barnum & Bryan, 2020)
- Low-income students of color spend more time reviewing material, rather than learning new concepts (Barnum & Bryan, 2020).

Food Insecurity

Definition

A household's inability to provide enough food for every person to live an active, healthy life (Feeding America, 2020).

Impact

- Food insecurity is predictive of diverse developmental trajectories.
- Research indicates that “food insecurity in kindergarten predict[s] impaired academic performance in reading and mathematics for third grade students” (Jyoti, Frongillo, & Jones, 2005, abstract).
- School lunch is positively correlated with improvements in academic performance (Van Lancker & Parolin, 2020).

Challenges

- School closures have exacerbated existing inequalities in food insecurity as students who are dependent on school meal programs continue to struggle with access to nutrition (Van Lancker & Parolin, 2020).

COVID Factor Analysis

3rd Grade Literacy Network

August 31, 2020

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COVID Factor Analysis

3rd Grade Literacy Network

August 31, 2020

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COVID Factor Analysis

3rd Grade Literacy Network

August 31, 2020

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