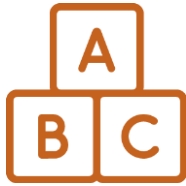


# EXPLORING COVID-19's IMPACT ON KIDANGO PRESCHOOLERS

STUDY OVERVIEW and FINDINGS

June, 2021



**Did the onset of COVID-19 and interruption of in-person learning affect preschool students' early reading skills at the beginning of the 2020 school year?**



When compared to pre-COVID-years, COVID **did not reduce** student early reading skills in fall 2020.



Previously enrolled students' fall 2020 scores were **unaffected by COVID**.

The goal of this exploratory analysis was to test **whether beginning of the academic year (fall) 2020 student early reading scores were affected by the onset of the COVID-19 pandemic in winter 2020**. Data for the analysis comes from a longitudinal randomized controlled trial (RCT) examining the impact of the SEEDS of Learning program (SEEDS) on student and teacher outcomes.

SEEDS is a relationship-based professional development and coaching model rooted in current research in early childhood education, child development, early reading and effective teaching. [Evidence from the RCT](#) obtained two school years prior to the onset of COVID-19 suggests that **SEEDS can significantly contribute to closing the opportunity and school readiness gaps at kindergarten entry**. Specifically, a single year of SEEDS was shown to produce a statistically significant, positive improvement in students' early reading skills.

Student early reading test scores were collected at the beginning (fall) of each school year. For students new to the early childhood program (Kidango), this provided a baseline to measure skill growth. For returning students, this score reflects the influence of prior years' exposure to SEEDS. In this brief, we document patterns in fall student test scores over time, with a particular focus on fall 2020, which was impacted by the onset of COVID-19 in March 2020. **For both new and returning students, there was no evidence of decline in beginning of the academic year (fall) 2020 early reading scores.**

# STUDY DETAILS

## GOALS, BACKGROUND, DESIGN, and SAMPLE.



### GOAL: ASSESS PATTERNS OF ACHIEVEMENT ACROSS YEARS

The goal of this study was to document and describe patterns in early reading scores of SEEDS student participants over time **at the beginning of each school year (fall)**. We were specifically interested in observing any **trend differences in the fall 2020-21 early reading scores**, during which time in-person instruction was stopped in March 2020 due to the COVID-19 pandemic. **We aim to observe whether there was a decline in fall 2020 early reading scores, which may be associated with instructional changes due to the pandemic.**



### BACKGROUND

SEEDS is an evidence-based Response to Intervention (RtI) professional development (PD) program that prepares early childhood educators to **promote kindergarten readiness through the development of children's oral language, early reading, and social-emotional skills.**

NORC at the University of Chicago partnered with Kidango and the Kenneth Rainin Foundation to rigorously assess the impact of SEEDS on Kidango four and five year old students' early reading scores. The first two and a half years of this three year study had been completed by March 2020, when the onset of COVID-19 interrupted in-class instruction. As a result, no data was collected in spring 2020 and the study was postponed. Findings from the first two years of the study show that SEEDS training significantly and positively supported early reading skills.



### DESIGN / WHAT WE DID

This study presents a data exploration of four and five year old students' early reading (i.e., oral language and early reading) scores at preschool entry. These students were studied because they were going to enroll in kindergarten the following year. Data were collected as part of a larger, multi-year within-teacher RCT examining the impact of SEEDS PD on student scores. In the present analysis, **we explore the pattern of student scores over time**, with the specific aim of documenting patterns prior to and during the academic years impacted by the COVID-19 pandemic. While the present exploration is part of a larger RCT, the current analysis is descriptive and extends beyond the RCT. **Our results can speak to observed patterns at the beginning of the academic year (fall) over time in student early reading scores.**

Student score measures included scales from two assessments: **the Individual Growth and Development Indicators (IGDI)**, which assesses fluency in vocabulary and phonological awareness (rhyming and alliteration), and **the FastBridge assessment**, which evaluated fluency in letter name identification and letter sound correspondence. Estimates of scores at **the beginning of the academic year (fall)** were computed using hierarchical linear models of the IGDI and FastBridge skill scores and marginal predictions thereof.

An important consideration for testing fall scores is the student's prior-year school experience (i.e., program tenure). We may expect that students returning to Kidango may score higher than new students (who may also be brand-new to preschool). Therefore **we test differences in scores by program tenure** by including a statistical control for whether it was the student's first, second, or third year in Kidango.

# STUDY DETAILS

## GOALS, BACKGROUND, DESIGN, and SAMPLE.



### SAMPLE

The present analysis includes Kidango 4 and 5 year old students who participated in the study over three academic years. The number of **participants ranged from 340 to 580 each year**, and reflects the number of students attending a Kidango center that were tested at the beginning of the academic year (fall).

The student sample across years is predominantly Latino and English-speaking. These students also had prior exposure to Kidango. Student demographics are similar across years, with an increase in the proportion of previously enrolled students over time.

Each year, there was a mix of new and returning students. In the 2018-19 academic year, 48% of students were new to Kidango (first year in Kidango). In 2020-21, just 29% of students were added to the program, representing a significant increase in previously enrolled students.

Analyses were run within each academic year, with a statistical control for student program tenure, race/ethnicity, income eligibility, and age.

Study Sample Characteristics	2018-2019	2019-2020	2020-2021
N	580	520	340
Race/Ethnicity			
Hispanic/Latino	54.8%	54.2%	61.5%
White	7.6%	11.1%	6.1%
Black or African American	10.2%	7.5%	11.1%
Asian	24.1%	23.9%	16.3%
Language			
Non-English	33.2%	27.2%	26.8%
Program Tenure			
First year in Kidango	47.8%	38.5%	29.1%

# FINDINGS

## DID COVID AFFECT STUDENTS' FALL ASSESSMENT SCORES AS COMPARED TO PRIOR TWO PRE-COVID YEARS?



### RESULTS

On average, fall scores were relatively consistent across years. Importantly, and central to this analysis, scores **were not significantly different** between 2019 and 2020. This suggests that even a partial year of in-person Kidango attendance and SEEDS exposure (due to the COVID-shortened 2019-20 school year) was associated with similar early reading scores as prior years where students were in-person for a full school year.

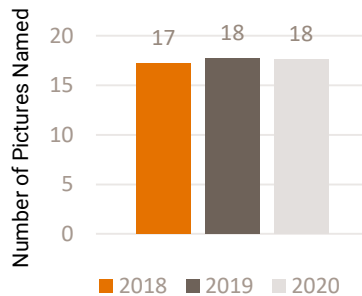
Analyses were conducted using a statistical method that controlled for child age, tenure in program, home language, income eligibility status, and site of care. This procedure aims to remove bias based on these factors.

Overall, COVID did not reduce student early reading skills in fall 2020.

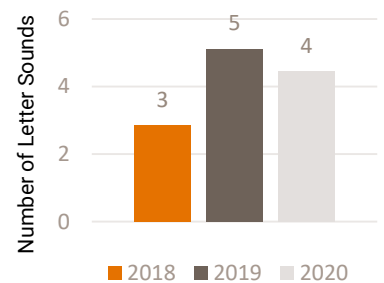
#### Legend

- \* There is a significant difference between 2018-19 and 2019-20 score.

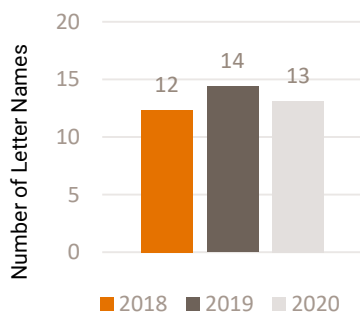
#### Picture Names - Vocabulary



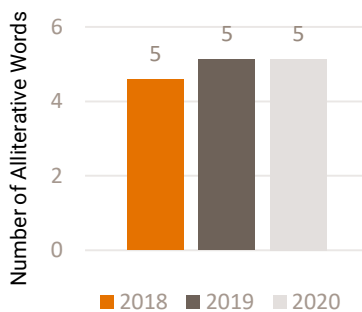
#### Letter Sounds \*



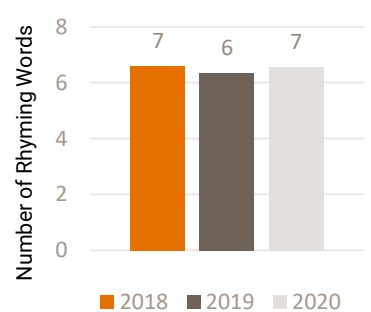
#### Letter Names \*



#### Alliteration



#### Rhyming



# FINDINGS and NEXT STEPS

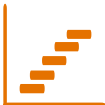
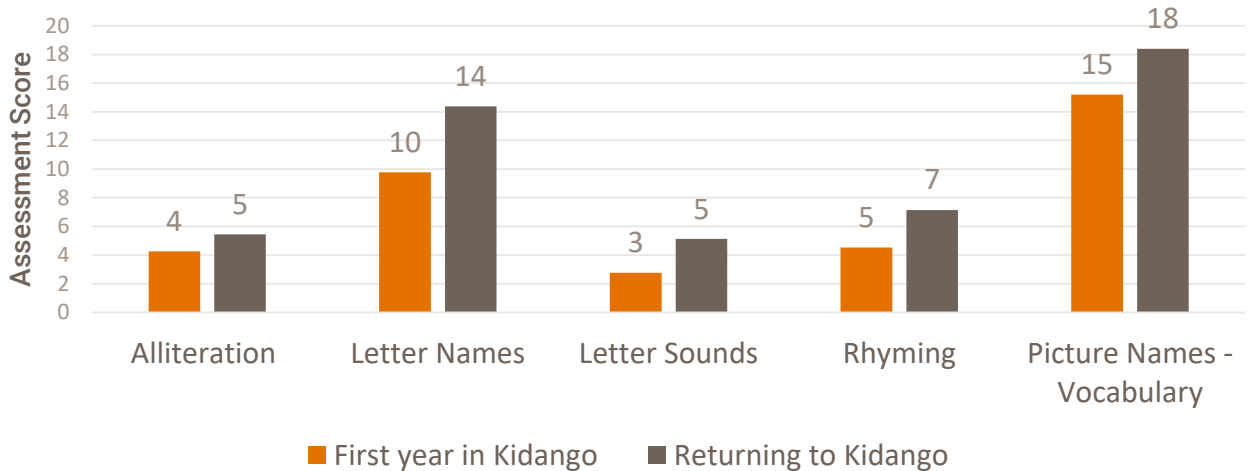
WAS PRIOR (INTERRUPTED) EXPOSURE TO KIDANGO AND SEEDS ASSOCIATED WITH BETTER STUDENT OUTCOME SCORES IN FALL 2020?



## RESULTS

Overall, students returning to Kidango scored higher across all early reading scores tested in the fall 2020 assessment period than children brand-new to Kidango, despite an interrupted in-person learning experience during the 2019-2020 school year.

Assessment Scores in Fall 2020



## NEXT STEPS

Starting in 2018, student assessment data was collected at the end of each school year (with the exception of spring 2020 due to COVID induced school closures). With school reopened, assessment data will be collected again in spring 2021. At the end of the 2020-21 school year, we will analyze collected assessment data to measure and compare rates of growth across years. This analysis will provide insights into school-year student growth and learning amid the pandemic disruption.



Kenneth  
Rainin  
FOUNDATION



We would like to thank the **Kenneth Rainin Foundation** and **KIDANGO** for their support as valued thought-partners, as well as for providing the data and resources to conduct this study. We would like to acknowledge the incredible efforts staff and families made to work through the most difficult circumstances of our lifetimes and provide preschool students with opportunities to learn and grow during the COVID-19 pandemic.

**Suggested Citation:** Hernandez, M., Kabourek, S., Francis, J., & Gupta, R. (2021). *Exploring COVID-19's Impact on Kidango Preschoolers*. NORC at the University of Chicago.

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