# Assessing the Impact of Really Great Reading in Washington: A Correlative Study

## Study Type: ESSA Evidence Level III

Prepared for:
Really Great Reading

Prepared by LearnPlatform:
Alexandra Lee, Ph.D., Researcher, LearnPlatform
Meetal Shah, Ph.D., Senior Researcher, LearnPlatform

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# EXECUTIVE SUMMARY

Really Great Reading (RGR) contracted with LearnPlatform by Instructure, a third-party edtech research company, to examine the impact of usage of its reading program on student literacy outcomes. LearnPlatform designed the study to satisfy Level III requirements (Promising Evidence) according to the Every Student Succeeds Act (ESSA).

## Study Sample, Measures, and Methods

This study occurred during the 2022-23 school year. The sample included 59 kindergarten students from five classes in two schools in a public school district. In terms of demographics, the sample included students who identified as female (53%), male (47%), White (36%), Hispanic/Latino (31%), Asian (15%), Black (12%), and multi-racial (7%). Additionally, 22% of students were eligible for free/reduced lunch, 19% were designated as English language learners (ELL), and 8% were designated as special education (SPED).

Instructional coaches completed brief surveys to provide reports of teachers' level of RGR usage. These measures were used to examine whether increased use of RGR was significantly associated with greater mid-year literacy outcomes. Literacy achievement was measured using DIBELS® 8$^{th}$ Edition scores. Taken together, these measures allowed researchers to investigate patterns in RGR implementation and potential impacts of program use on students' literacy achievement.

Researchers used a variety of quantitative analytic approaches to answer the research questions. First, researchers used descriptive statistics to examine participant characteristics and implementation of the program. Researchers then used regression models to examine whether RGR use was associated with significant differences in students' reading scores in spring 2023, controlling for their baseline scores in fall 2022. The regression analyses also included student-level covariates (i.e., gender and special education status). In addition, researchers calculated standardized improvement index scores to make model-predicted changes in student outcomes more interpretable.

## Student Outcomes

On average, among kindergarten students, having a teacher who used RGR *(Countdown)* as a greater proportion of their reading instruction was significantly associated with increased reading scores at the middle of the year ($\beta$ = 2.33, $p$ = .033).

On average, among kindergarten students, having a teacher who used RGR *(Countdown)* for more minutes per day was positively associated with increased reading scores at the middle of the year; this result was not statistically significant ($\beta$ = 3.76, $p$ = .056).

## Conclusions

This study provides results to satisfy ESSA evidence requirements for Level III (Promising Evidence) given the correlative study design and positive statistically significant finding.

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# Introduction

Recognizing that 65% of students cannot read proficiently by 4th grade (McFarland et al., 2019), which is due in part to the enduring research-practice gap (Schneider, 2018), Really Great Reading (RGR) provides teachers with the tools to implement research-based, science of reading instruction to help students develop word-level literacy skills using phonics, phonemic awareness, orthographic mapping, and deciphering word meaning.

As part of their ongoing efforts to demonstrate the efficacy of its literacy program, RGR contracted with LearnPlatform by Instructure, a third-party edtech research company, to examine the relationship between usage of its program and student outcomes. After collaborating on the development of an updated logic model (Appendix A) for RGR (Lee et al., 2023), LearnPlatform designed a study to satisfy ESSA Level III requirements (Promising Evidence) with the following research questions.

### Program Implementation Research Question

1. How did kindergarten teachers use RGR during the 2022-23 school year?
    a. What proportion of teachers' total reading instruction used RGR?
    b. How many minutes per day was RGR used?
    c. What was the level of implementation of RGR?

### Effectiveness Research Question

2. After controlling for students' prior literacy levels, is the level of RGR instruction significantly associated with students' standardized literacy assessment scores?

# Methods

This section of the report briefly describes the setting, participants, measures, and analysis methods.

## Setting

The study included one public school district in the western U.S. during the 2022-23 school year. The sample included 59 kindergarten students from two schools.

## Participants

. In terms of demographics, the sample included students who identified as female (53%), male (47%), White (36%), Hispanic/Latino (31%), Asian (15%), Black (12%), and multi-racial (7%). Additionally, 22% of students were eligible for free/reduced lunch, 19% were designated as English language learners (ELL), and 8% were designated as special education (SPED).

## Measures

This study included the following measures to provide insights into Really Great Reading (RGR) implementation and evidence about the potential impacts of the program on student outcomes.

*RGR Use.* Instructional coaches completed brief surveys to provide reports of teachers' level of RGR usage. The survey included items to assess the proportion of total reading instruction time that used RGR (scale: 0 – 100%), average daily minutes using RGR (scale: 0 – 120+ minutes), and a rating of the level of RGR-implementation (scale: very poor to excellent). These measures were used to examine whether increased use of RGR was significantly associated with greater end-of-year literacy outcomes. It was inferred that if a students' primary reading teacher was using RGR at higher levels, their RGR use was higher as well. RGR usage at the student-level could not be captured at this particular study site due to logistical constraints, therefore researchers inferred that a student's use was aligned with the teacher's use as reported by a third party (i.e., instructional coach).

*Standardized Student Assessments.* Literacy achievement was measured using DIBELS® scores, which allowed researchers to investigate patterns in RGR implementation and potential impacts of program use on students' literacy achievement. DIBELS® is a reliable and validated assessment for measuring students' foundational reading skills including letter naming fluency and phonemic segmentation fluency – both of which were used for the present study.

## Data Analysis

Researchers used a variety of quantitative analytic approaches to answer the research questions. First, researchers used descriptive statistics to examine student characteristics and implementation of the program. Next, researchers used linear regression models for the outcomes analysis. All regression models included beginning-of-year DIBELS® scores, gender, and special education designation as covariates to control for potential selection bias. The other demographic variables (i.e.,

race/ethnicity, free/reduced lunch eligibility, and ELL designation) were not significantly associated with the outcome measure, so they were not included in the final models. All findings were interpreted as statistically significant at the $p < .05$ level and improvement index conversions are included to assist with interpretation.

## Program Implementation Findings

Among teachers who used RGR as part of their reading instruction, there was some variability in the extent of use and resources used (see Figures 1-3). However, all teachers were reported as having the same level of implementation – a rating of "Average".

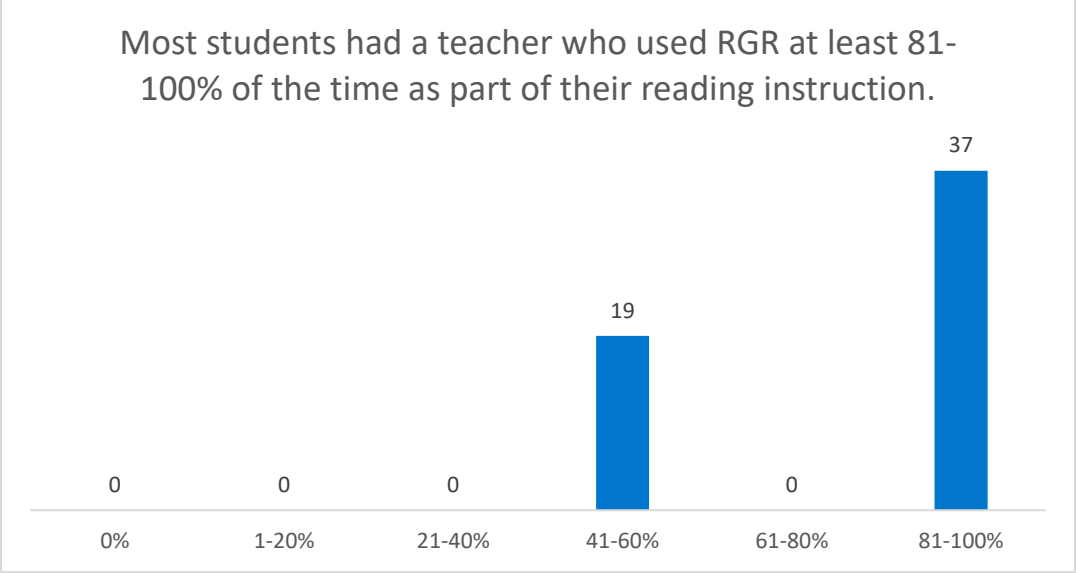


*Figure 1.* Overall distribution of RGR users' extent of use.

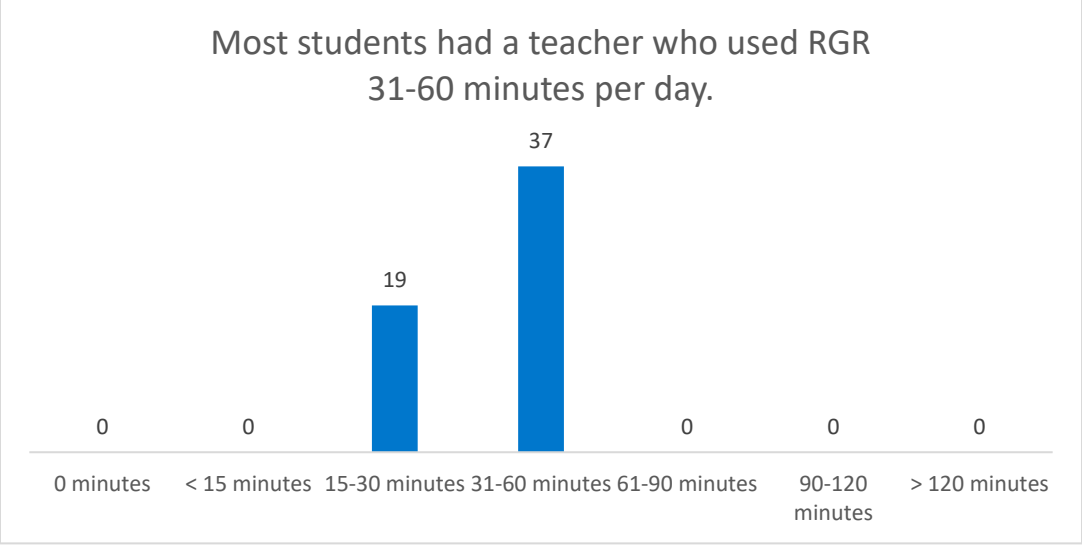


*Figure 2.* Overall distribution of RGR use as an average of daily minutes.

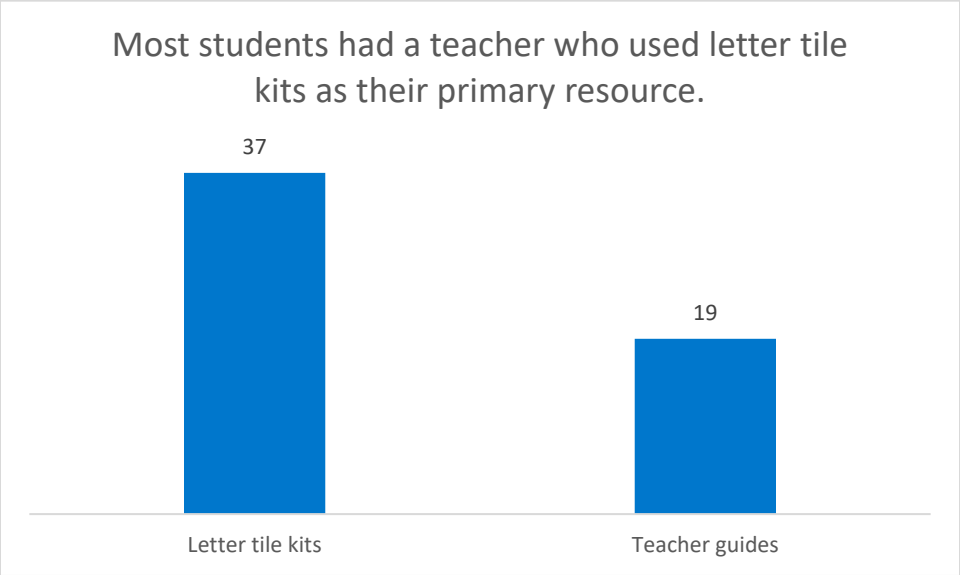


*Figure 3.* Reported use of RGR resources.

## Program Effectiveness Findings

To answer the remaining study research questions, researchers used regression analysis. In addition to examining the statistical significance of the tests used, researchers used the improvement index to determine the magnitude of the relationship between RGR usage and student literacy outcomes. The key study findings are included below, and the full set of results can be found in Appendix B.

### Greater Use of Really Great Reading was Significantly Associated with Increased Reading Outcomes for Kindergarten Students

The results of regression analyses showed that greater use of RGR was significantly associated with increased mid-year literacy outcomes for kindergarten students controlling for beginning-of-year reading scores, gender, and SPED designation. In other words, the regression results showed that there was a statistically significant, positive effect of using RGR on students' mid-year reading scores above and beyond differences observed due to having different baseline scores, gender, and SPED designation.

*Key Finding.* Having a teacher who used RGR as a greater proportion of their reading instruction was significantly associated with higher DIBELS® *letter naming fluency* scores at the middle of the year (Figure 4). The results showed that a student at the 50th percentile whose teacher used RGR for an additional 20% of reading instruction time would be expected to move up to the 54th percentile (i.e., 4 p.p. improvement). This effect was statistically significant ($p$ = .033).

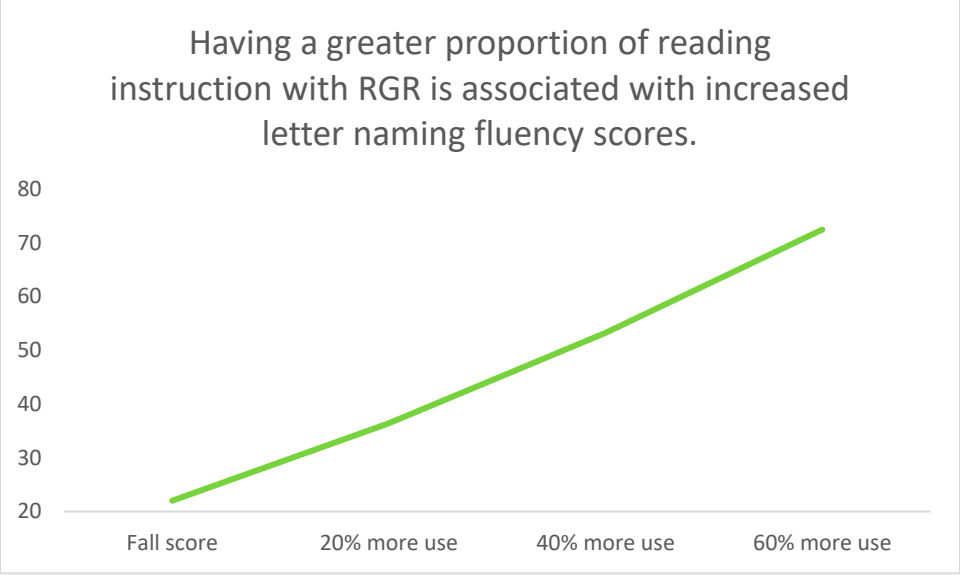


*Figure 4.* Model estimated DIBELS® letter naming fluency scores predicted by proportion of RGR reading instruction.

*Promising Finding.* Having a teacher who used RGR more minutes per day was positively associated with higher DIBELS® *letter naming fluency* scores at the middle of the year (Figure 5). The results showed that a student at the 50th percentile whose teacher used RGR for an additional 15 minutes per day would be expected to move up to the 57th percentile (i.e., 7 p.p. improvement). This effect was not statistically significant ($p$ = .056).

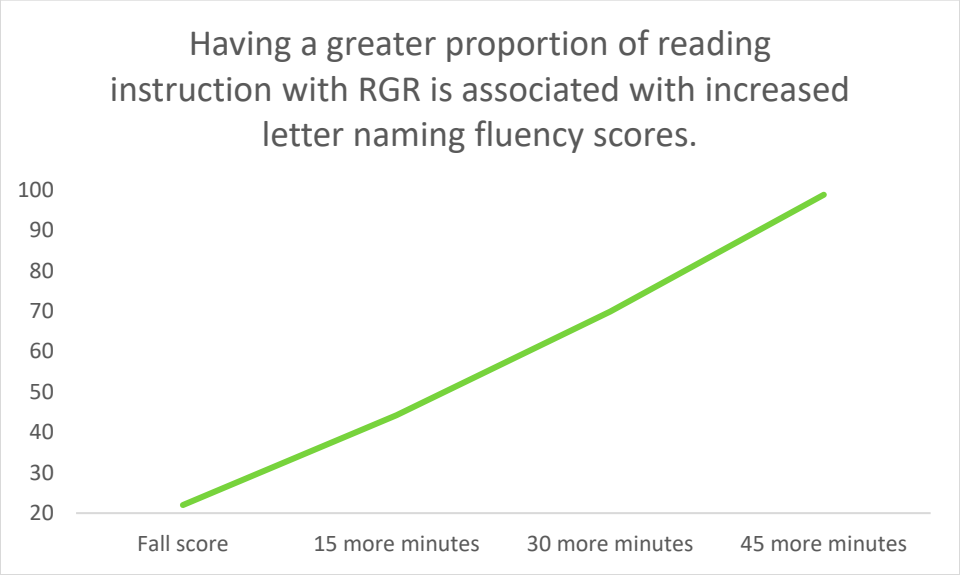


*Figure 5.* Model estimated letter naming fluency scores predicted by average minutes per day using RGR.

## Conclusions and Recommendations

In sum, the results of this study suggest that there is a positive effect of Really Great Reading-aligned literacy instruction on kindergarten students' reading outcomes, specifically their letter naming fluency. The data indicate that having a teacher who used RGR as a greater proportion of reading instruction was significantly associated with significantly increased reading scores at the end of the year, controlling for baseline reading scores. Furthermore, having a teacher who used RGR for more minutes per day on average was marginally associated with increased letter naming fluency. It is notable that these positive findings were found within a relatively short time frame (four months) between pre- and post-test.

Given the positive outcome findings of the impact analysis among the sample, this study provides results to satisfy ESSA evidence requirements for Level III (*Promising Evidence*). Specifically, this study met the following criteria:

- ✓ Correlative design
- ✓ Proper design and implementation
- ✓ Statistical controls through covariates
- ✓ At least one statistically significant, positive finding
- ✓ No statistically significant, negative findings

Researchers recommend the following next steps for the RGR team:

- gather data for a full school year to examine how RGR use is related to students' end-of-year test scores (vs. mid-year only); and,
- follow-up with students who received RGR-aligned instruction in kindergarten for a second year to investigate longer term impacts.

### Acknowledgements

The authors of this report would like to thank Avery Wall for helping prepare the data set for analysis and the school district staff who helped with data collection efforts.

# References

Lee, A., Wall, A., & Shah, M. (2023). *Really Great Reading logic model: ESSA level IV study.* LearnPlatform by Instructure.

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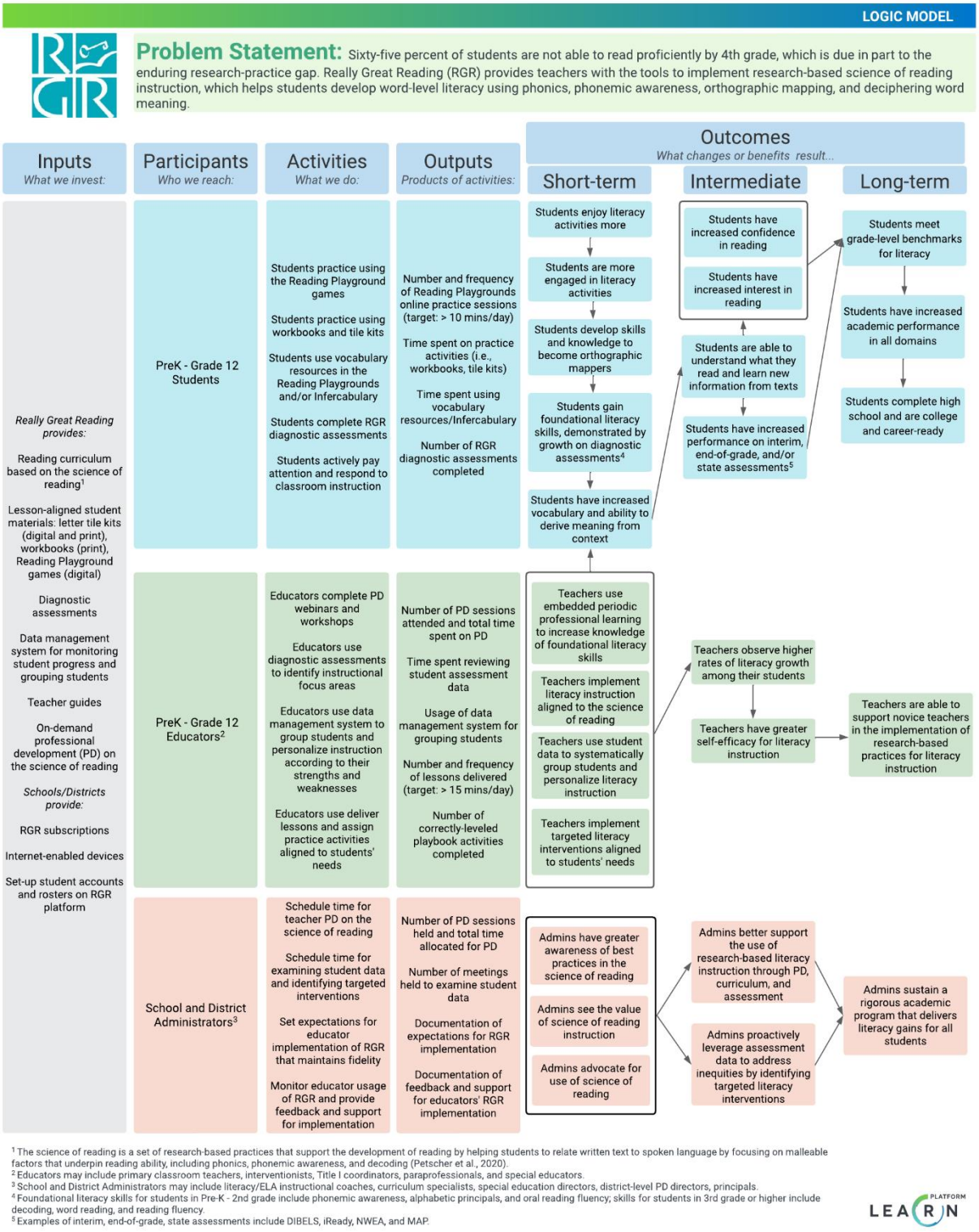
# Appendix A. Really Great Reading Logic Model



# Appendix B. Additional Information on Kindergarten Outcome Findings

## Examining the Associations between RGR Usage and Reading Outcomes for Kindergarten Students

Table B1. DIBELS® scores predicted by RGR usage indicators

| Outcome | Predictor | Unstandardized Beta Coefficient | Standardized beta coefficient of Y | Standard Error | t-statistic | *p*-value |
|---|---|---|---|---|---|---|
| Letter naming fluency | Proportion of reading instruction *(Countdown)* | 2.33 | 0.12 | 1.07 | 2.19 | .033 |
| | BOY score | 0.87 | 0.04 | 0.09 | 10.00 | <.001 |
| | Gender | -0.88 | -0.04 | 2.88 | -0.31 | .761 |
| | SPED designation | -17.47 | -0.88 | 5.44 | -3.28 | .002 |
| | Daily minutes of use *(Countdown)* | 3.74 | 0.19 | 1.92 | 1.95 | .056 |
| | BOY score | 0.87 | 0.04 | 0.09 | 9.94 | <.001 |
| | Gender | -0.90 | -0.05 | 2.91 | -0.31 | .758 |
| | SPED designation | -17.39 | -0.87 | 5.40 | -3.22 | .002 |
| Phonemic segmentation fluency | Proportion of reading instruction *(Countdown)* | 1.03 | 0.08 | 1.17 | 0.88 | .385 |
| | BOY score | 0.29 | 0.02 | 0.17 | 1.74 | .090 |
| | Gender | 7.31 | 0.60 | 3.01 | 2.43 | .020 |
| | SPED designation | -35.57 | -2.91 | 11.19 | -3.18 | <.001 |
| | Daily minutes of use *(Countdown)* | 1.84 | 0.15 | 2.12 | 0.87 | .389 |
| | BOY score | 0.29 | 0.02 | 0.17 | 1.73 | .092 |
| | Gender | 7.31 | 0.60 | 3.01 | 2.43 | .004 |
| | SPED designation | -35.16 | -2.87 | 11.40 | -3.08 | <.001 |