

Assessing Really Great Reading in New York: A Correlative Study

Study Type: ESSA Evidence Level III

Prepared for:
Really Great Reading

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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 265 students enrolled in Grades 2-5 from two schools in a small public school district. In terms of demographics, the sample included students who identified as female (54%), male (46%), White (98%), Black (1%), and Multi-racial (1%).

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 end-of-year literacy outcomes. Literacy achievement was measured using i-Ready® scale scores. Taken together, these measures allowed researchers to investigate patterns in RGR implementation and potential impacts of program use on students' reading 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 grade level). In addition, researchers calculated standardized improvement index scores to make the model-predicted changes in student outcomes more interpretable.

Student Outcomes



On average, among students in Grades 2-5, having a teacher who used RGR (*HD Word*) as a greater proportion of their reading instruction was significantly associated with increased reading scores at the end of the year ($\beta = 7.09, p = .045$).



On average, among students in Grades 2-5, having a teacher who used RGR (*HD Word*) for more minutes per day was significantly associated with increased reading scores at the end of the year ($\beta = 12.50, p = .008$).



On average, among students in Grades 2-5, having a teacher who used RGR (*HD Word*) at a higher level of implementation was significantly associated with increased reading scores at the end of the year ($\beta = 7.54, p = .001$).

Conclusions

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

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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 reading skills using phonics, phonemic awareness, orthographic mapping, and deciphering word meaning.

As part of their ongoing efforts to demonstrate the efficacy of its reading 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 Grade 2-5 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 were the levels of RGR implementation?

Effectiveness Research Question

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

Methods

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

Setting

The study included one small public school district in the northeastern U.S. during the 2022-23 school year. The sample included 265 Grades 2-5 students from two schools.

Participants

In terms of demographics, the sample included students who identified as female (54%), male (46%), White (98%), Black (1%), and Multi-racial (1%).

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 level of RGR-implementation (five-point scale from very poor to excellent). These measures were used to examine whether increased use of RGR was significantly associated with greater end-of-year reading outcomes. It was inferred that if a student's 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. Reading achievement was measured using i-Ready® scale scores, which allowed researchers to investigate patterns in RGR implementation and potential impacts of program use on students' reading achievement. The i-Ready® scale scores are reported on a vertical scale that allows for comparing growth within and across years, so the analysis used the full sample of students across the four grades.

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 i-Ready® scale scores, gender, and grade level as covariates to control for potential selection bias. All findings were interpreted as statistically significant at the $p < .05$ level; 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 and level of implementation (see Figures 1-3). However, all teachers were reported as using online tools as their primary resource – specifically, the tools for the HD Word program.

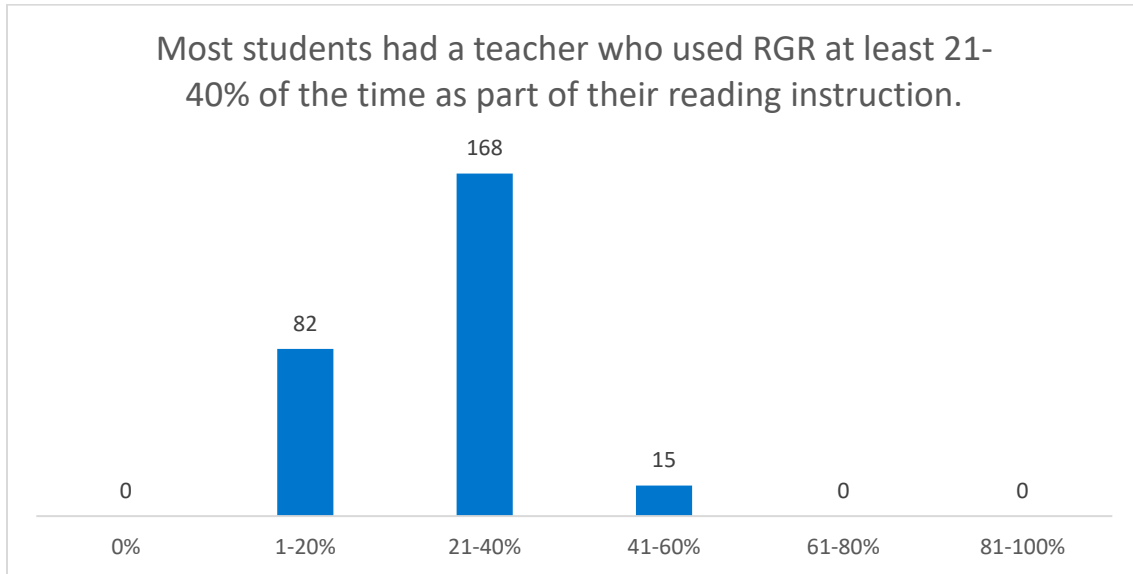


Figure 1. Overall distribution of RGR users' extent of use.

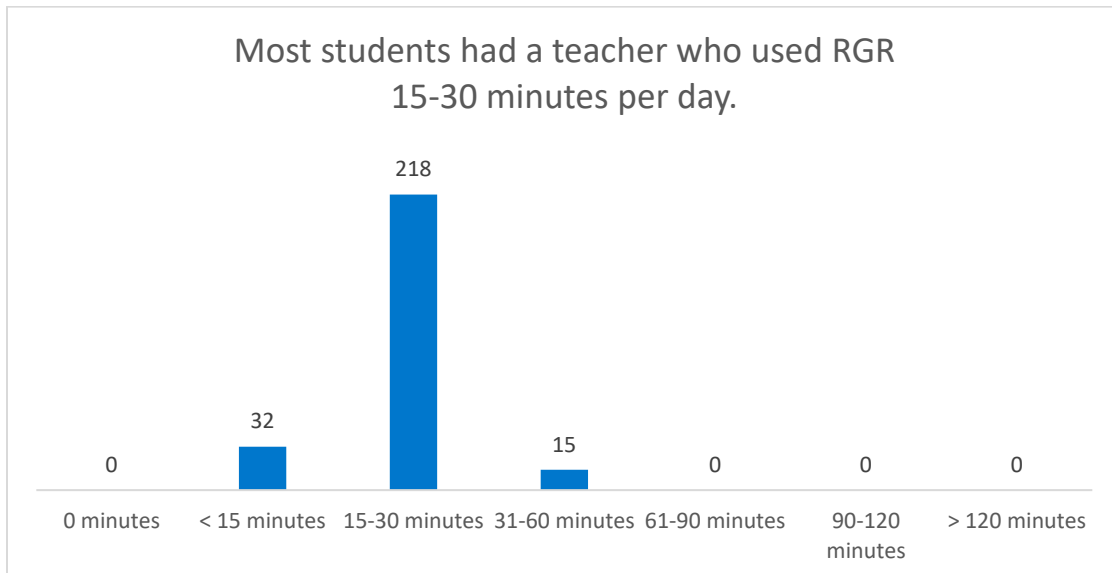


Figure 2. Overall distribution of RGR use as an average of daily minutes.

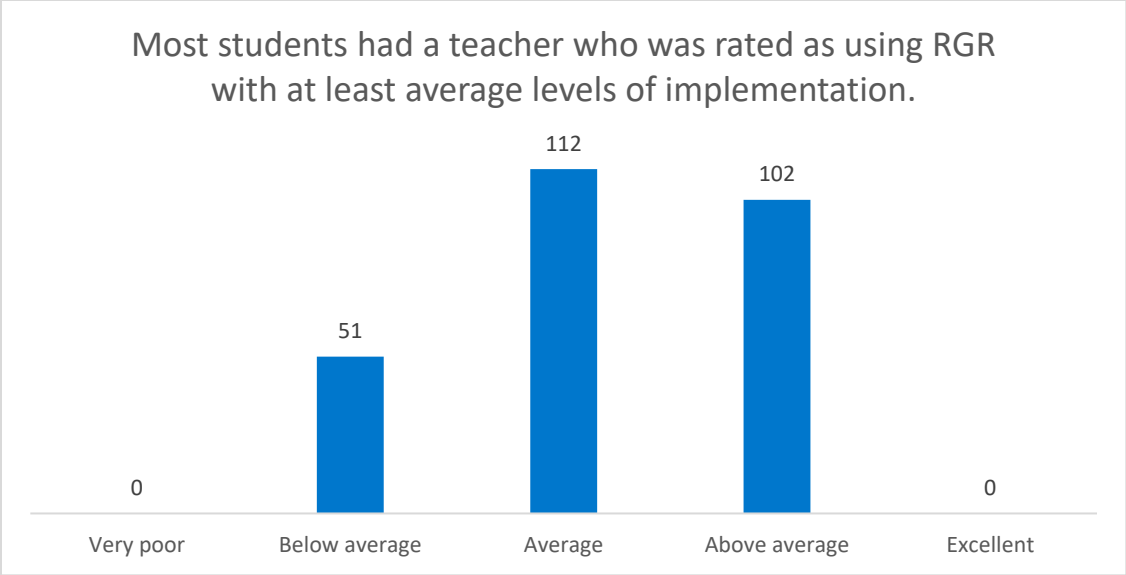


Figure 3. Overall distribution of RGR level of implementation rating.

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 reading 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 Grade 2-5 Students

The results of regression analyses showed that greater use of RGR was significantly associated with increased end-of-year reading outcomes for Grade 2-5 students controlling for beginning-of-year reading scores, gender, and grade level. In other words, the regression results showed that there was a statistically significant, positive effect of using RGR on students' end-of-year reading scores above and beyond differences observed due to having different baseline score, gender, and grade level.

Key Finding 1. Having a teacher who used RGR as a greater proportion of their reading instruction was significantly associated with higher i-Ready® reading scale scores (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 55th percentile (i.e., 5 p.p. improvement).

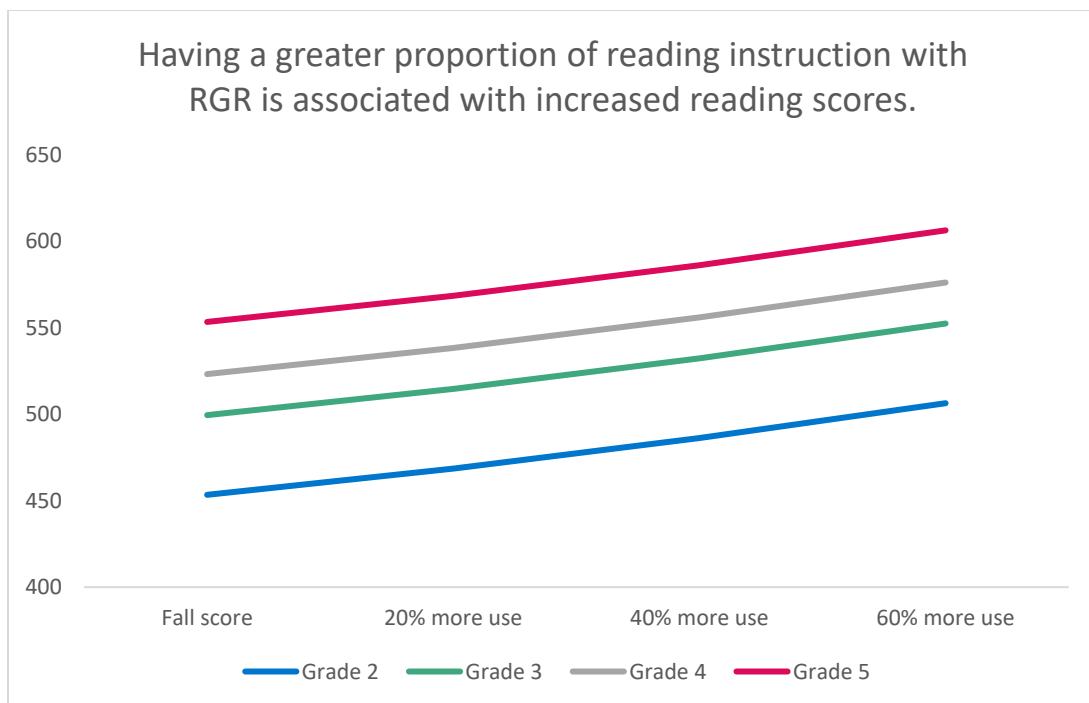


Figure 4. Model estimated i-Ready® scores predicted by proportion of reading instruction using RGR.

Key Finding 2. Having a teacher who used RGR more minutes per day was significantly associated with higher i-Ready® reading scale scores (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 58th percentile (i.e., 8 p.p. improvement).

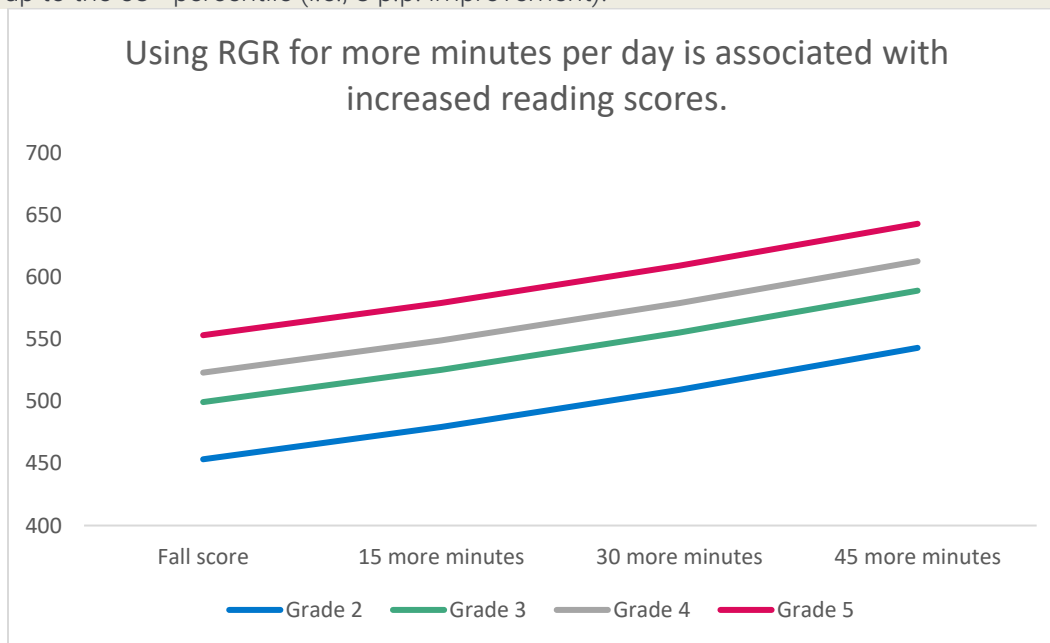


Figure 5. Model estimated i-Ready® scores predicted by average minutes per day using RGR.

Key Finding 3. Having a teacher who was rated as using RGR with a higher level of implementation was significantly associated with increased i-Ready® reading scale scores (Figure 6). The results showed that a student at the 50th percentile whose teacher was rated at one level higher for implementation would be expected to move up to the 55th percentile (i.e., 5 p.p. improvement).

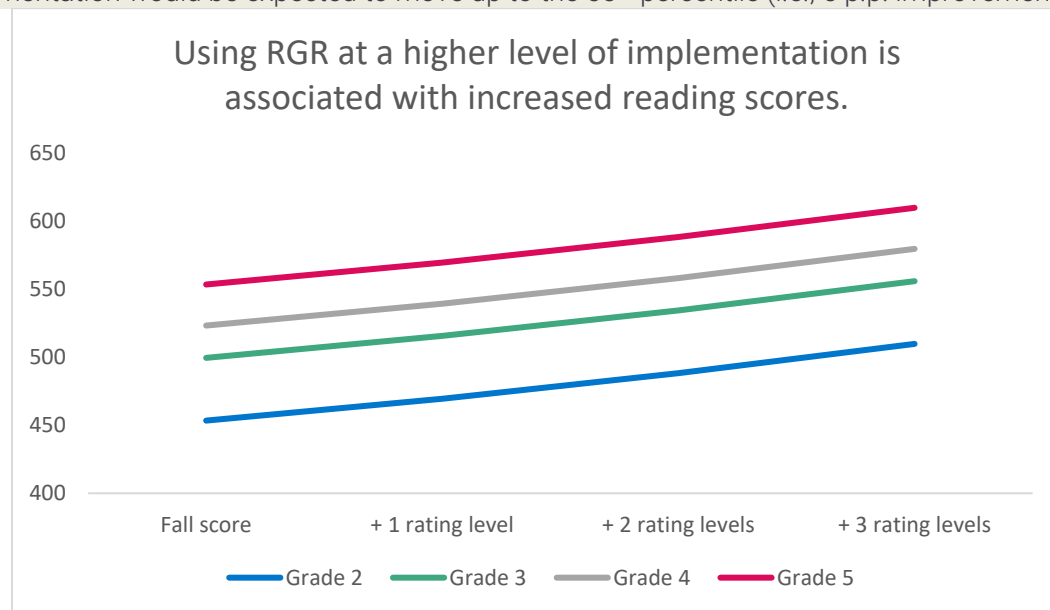


Figure 6. Model estimated i-Ready® scores predicted by level of RGR implementation rating.

Conclusions and Recommendations

In sum, the results of this study suggest that there is a positive effect of Really Great Reading-aligned reading instruction on Grade 2-5 students' reading outcomes. The data indicate that having a teacher who used RGR as a greater proportion of reading instruction, for more minutes per day, and with greater fidelity was associated with significantly increased reading scores at the end of the year, controlling for baseline reading scores.

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:

- recruit a comparison site similar to this one to examine whether there are significant differences in reading outcomes between students who used RGR and those who used an alternative program (i.e., quasi-experimental design).

Acknowledgements

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References

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

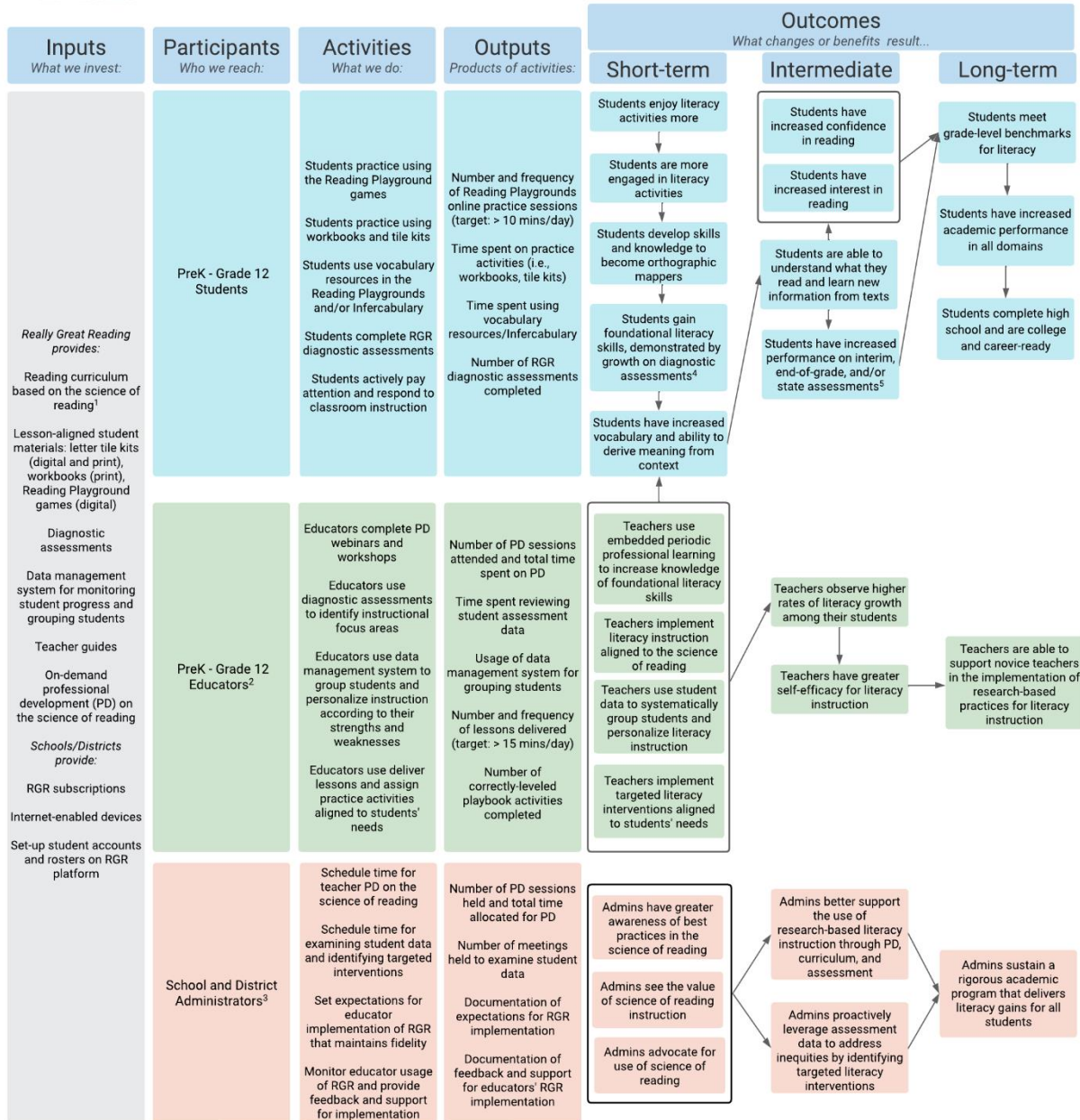
What Works Clearinghouse. (2022). *What Works Clearinghouse procedures and standards handbook, version 5.0*. U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance (NCEE). This report is available on the What Works Clearinghouse website at <https://ies.ed.gov/ncee/wwc/Handbooks>

Appendix A. Really Great Reading Logic Model

LOGIC MODEL



Problem Statement: Sixty-five percent of students are not able to read proficiently by 4th grade, which is due in part to the enduring research-practice gap. Really Great Reading (RGR) provides teachers with the tools to implement research-based science of reading instruction, which helps students develop word-level literacy using phonics, phonemic awareness, orthographic mapping, and deciphering word meaning.



¹ The science of reading is a set of research-based practices that support the development of reading by helping students to relate written text to spoken language by focusing on malleable factors that underpin reading ability, including phonics, phonemic awareness, and decoding (Peterscher et al., 2020).

² Educators may include primary classroom teachers, interventionists, Title I coordinators, paraprofessionals, and special educators.

³ School and District Administrators may include literacy/ELA instructional coaches, curriculum specialists, special education directors, district-level PD directors, principals.

⁴ Foundational literacy skills for students in Pre-K - 2nd grade include phonemic awareness, alphabetic principals, and oral reading fluency, skills for students in 3rd grade or higher include decoding, word reading, and reading fluency.

⁵ Examples of interim, end-of-grade, state assessments include DIBELS, iReady, NWEA, and MAP.



Appendix B. Additional Information on Grade 2-5 Outcome Findings

Examining the Associations between RGR Usage and Reading Outcomes for Grade 2-5 Students

Table B1. i-Ready® scores predicted by RGR usage indicators

Predictor	Unstandardized Beta Coefficient	Standardized beta coefficient of Y	Standard Error	t-statistic	p-value
Proportion of reading instruction (<i>HD Word</i>)	7.09	0.13	3.52	2.01	.045
BOY reading score	0.86	0.90	0.04	23.87	<.001
Gender	1.41	0.03	3.29	0.43	.669
Grade level	0.47	0.01	2.04	0.23	.818
Daily minutes of use (<i>HD Word</i>)	12.49	0.22	4.65	2.69	.008
BOY reading score	0.86	0.02	0.04	23.99	<.001
Gender	1.56	0.03	3.27	0.48	.633
Grade level	1.14	0.02	2.04	0.56	.577
Fidelity rating (<i>HD Word</i>)	7.54	0.13	2.20	3.43	.001
BOY reading score	0.85	0.02	0.04	23.82	<.001
Gender	0.87	0.02	3.23	0.27	.787
Grade level	-0.60	-0.01	1.80	-0.33	.739