

# Evaluation of the Council Bluffs Community School District's 2021 Summer Reading Program

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Iowa Reading Research Center  
University of Iowa College of Education



**Student Reading Success Through Research and Collaboration**

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## Summary of Student Outcomes in Grades 1–5

Students participating in the Council Bluffs Community School District’s summer reading program demonstrated stagnation of their Measure of Academic Progress (MAP) reading skills from the May pretest to the end of the program mid-July and from mid-July to the fall posttest. On average, there were no statistically significant changes in any grade level. However, students exhibited substantial variability in individual performance with some students declining and others growing.

Similarly, students who qualified for but did not attend the summer program exhibited variability in performance from spring to fall. In comparing their fall MAP scores to those of the students who attended the summer program, there were no statistically significant differences. On average, students at all grade levels maintained their spring reading performance by fall, regardless of whether or not they attended the 6-week summer program. However, students served in special education had significantly lower MAP scores than their peers at all grade levels.

In contrast to some of the previous years, teachers in the 2021 summer program struggled to implement instruction with fidelity to the full curricular requirements. Rarely did instruction or intervention adhere to the suggested amount of time. Often, few or no components of daily lessons were attempted. Fidelity was particularly problematic in Grades 3–5 of the core *Wonders* instruction, declined to 0% in the Grades 2 and 3 *WonderWorks* intervention during the latter half of the summer, and was nonexistent in Grade 4 and 5 for the full 6 weeks of the *WonderWorks* intervention.

It is important to keep in mind that the 2021 summer program was held after students had experienced inconsistencies in their education for over a year due to the COVID-19 pandemic. Teachers also were out of practice with the usual instructional routines. Thus, it is not advisable to make direct comparisons to previous years’ summer programs.

## Overview

After more than a year of remote, hybrid, and disrupted schooling during the ongoing COVID-19 pandemic, the Council Bluffs Community School District (CBCSD) returned in 2021 to offering an in-person summer learning and enrichment program (summer program) to elementary students. Although students identified by school personnel as being at risk of reading failure were a priority for recruitment, the district did not limit participation in the summer program because all students potentially could benefit from extra learning time. However, the analyses reported here are limited to the students who were considered “eligible” because they were determined to be “not proficient” in reading at the winter benchmark.

The 2021 program included time for math instruction but, for the purposes of this report, only the reading instruction and student reading outcomes were evaluated. In addition, the district offered



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summer programming for a wide range of grade levels, but this report focuses on students who had just completed kindergarten and Grades 1–4. As a reminder, the students are referenced by the grade level they were entering in the fall after the summer program concluded (i.e., Grades 1–5).

### *Reading Assessment*

Students’ reading performance was assessed with the Measures of Academic Progress (MAP) test, which CBCSD has been using as its universal screening measure. All students in Grades 1–5 who were eligible for the summer program were pretested with MAP in the spring of 2021 (between May 10 and May 21) and posttested in the fall of 2021 (between September 7 and September 17). Students who participated in the summer program also took an interim MAP test during the final week of the program (between July 12 and 16). The demographics of the students who did (treatment) and did not participate (control) in the summer program are provided in Table 1. The treatment group numbers include students eventually lost to attrition.

**Table 1. Demographic Characteristics of Treatment and Control Students by Grade Level**

|                       | Female         | White          | Black        | Hispanic      | EL            | FRL            | IEP           |
|-----------------------|----------------|----------------|--------------|---------------|---------------|----------------|---------------|
| <b>Grade 1</b>        |                |                |              |               |               |                |               |
| Treatment<br>(n = 21) | 9<br>(42.9%)   | 18<br>(85.7%)  | 0<br>(0%)    | 2<br>(9.5%)   | 1<br>(4.8%)   | 9<br>(42.9%)   | 3<br>(14.3%)  |
| Control<br>(n = 161)  | 82<br>(50.9%)  | 122<br>(75.8%) | 10<br>(6.2%) | 26<br>(16.1%) | 22<br>(13.7%) | 100<br>(62.1%) | 26<br>(16.1%) |
| <b>Grade 2</b>        |                |                |              |               |               |                |               |
| Treatment<br>(n = 62) | 26<br>(41.9%)  | 42<br>(67.7%)  | 4<br>(6.5%)  | 8<br>(12.9%)  | 5<br>(8.1%)   | 42<br>(67.7%)  | 16<br>(25.8%) |
| Control<br>(n = 273)  | 119<br>(43.6%) | 201<br>(73.6%) | 11<br>(4.0%) | 44<br>(16.1%) | 35<br>(12.8%) | 228<br>(83.5%) | 51<br>(18.7%) |
| <b>Grade 3</b>        |                |                |              |               |               |                |               |
| Treatment<br>(n = 66) | 34<br>(51.5%)  | 48<br>(72.7%)  | 3<br>(4.5%)  | 8<br>(12.1%)  | 4<br>(6.1%)   | 47<br>(71.2%)  | 21<br>(31.8%) |
| Control<br>(n = 349)  | 164<br>(47.0%) | 265<br>(75.9%) | 22<br>(6.3%) | 40<br>(11.5%) | 40<br>(11.5%) | 284<br>(81.4%) | 96<br>(27.5%) |
| <b>Grade 4</b>        |                |                |              |               |               |                |               |
| Treatment<br>(n = 60) | 38<br>(63.3%)  | 47<br>(78.3%)  | 5<br>(8.3%)  | 7<br>(11.7%)  | 3<br>(5.0%)   | 45<br>(75.0%)  | 16<br>(26.7%) |
| Control<br>(n = 289)  | 127<br>(43.9%) | 202<br>(69.9%) | 18<br>(6.2%) | 51<br>(17.6%) | 38<br>(13.1%) | 244<br>(84.4%) | 76<br>(26.3%) |
| <b>Grade 5</b>        |                |                |              |               |               |                |               |
| Treatment<br>(n = 52) | 20<br>(38.5%)  | 38<br>(73.1%)  | 5<br>(9.6%)  | 5<br>(9.6%)   | 3<br>(5.8%)   | 38<br>(73.1%)  | 15<br>(28.8%) |





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|                      | Female         | White          | Black        | Hispanic      | EL           | FRL            | IEP           |
|----------------------|----------------|----------------|--------------|---------------|--------------|----------------|---------------|
| Control<br>(n = 251) | 128<br>(51.0%) | 177<br>(70.5%) | 15<br>(6.0%) | 41<br>(16.3%) | 20<br>(8.0%) | 196<br>(78.1%) | 73<br>(29.1%) |

Note: FRL = free or reduced-price lunch; EL = English learners; IEP = individualized education program.

### ***Providing Structured Core Reading Instruction***

For 2 hours and 20 minutes each morning, the summer program participants participated in reading instruction. CBCSD utilized its *Wonders* comprehensive core reading curriculum from the regular academic year for core instruction. Students spent 60 minutes daily in Whole-Group Reading and 80 minutes daily in Small-Group Differentiated Instruction. An additional 10 minutes per day was allotted for a “brain break,” and teachers were allowed to administer short assessments on Fridays as necessary.

Within each *Wonders* whole-group component, there were multiple lessons and activities, as outlined in the “lesson path” included with the teachers’ materials. Because the summer program participants were considered to be below benchmark, teachers used materials from the grade level students had just completed (i.e., the grade of their spring enrollment). To ensure the lessons were not repetitions of what had been taught during the school year, the district identified the curricular units teachers should deliver:

- Grade 1 used Units 4 and 5.
- Grades 2–5 used Unit 3.

To ensure the lessons were at an appropriate level of difficulty, teachers were advised to use the “approaching level” materials for the whole-group lessons. However, more flexibility was allowed during the small-group lesson time. Within each class, teachers formed small groups based on students’ needs and had discretion to choose either “approaching” or “on-level” lessons from the *Wonders* curriculum that targeted the appropriate skills.

While the teacher met with one group at a time, the other students worked independently on literacy activities such as writing to sources, computer-delivered practice, independent reading, listening comprehension, and fluency. Students were not permitted to spend more than 30 minutes working independently before they received feedback or other instruction from the teacher, so the small-group rotations may have been interspersed with the whole-group lessons. Across the 80 minutes of small-group time, teachers were advised to have 3–4 rotations. This meant that each group might have met with the teacher one time, or one or more of the groups might have met with the teacher twice. This depended on the size of the class and the type of activities students were doing.



### ***Offering More Intensive Supports***

Students with the lowest performance on MAP were prioritized for the small-group, push-in intervention. This was delivered by a reading intervention teacher to small groups of no more than 5 students, taking the place of one small-group segment in which students otherwise would have been working independently for 30 minutes. In other words, students received their usual small-group instruction from the core reading teacher and another rotation of small-group instruction from the interventionist. It is considered a “push-in” model because the interventionist met with the students in their core reading class, rather than pulling the small group out of the class to deliver the instruction in another room.

Intervention lessons were drawn from the *WonderWorks* and, as needed, the *Foundational Skills Kit* materials. In addition, students used apprentice-level readers from the preceding grade level, and some groups in Grades 1 and 2 used decodable texts from kindergarten or Grade 1, respectively.

### ***Length of the Summer Program***

The 2021 summer program lasted for a total of 29 days between June 7 and July 16, with only one day off for Independence Day. This differed from previous years when the program started and ended earlier and the district took a week break for the holiday. Because students attended 5 days per week, the total time in summer reading instruction was about 67 hours and 40 minutes.

## **Results of the Summer Program**

### ***Data Cleaning***

Prior to analysis, we removed students who were not qualified for the summer program, those who were listed with a grade level other than K–4 in the spring or 1–5 in the fall, and students who did not have pretest scores.

### ***Attrition Rates***

Students who were enrolled in the summer program but never attended were subsequently removed from the treatment group and considered instead in the control group. Attrition was calculated only on students who enrolled and showed up for the program but who attended fewer than half of the sessions and were not present for the posttest. Attrition rates for each grade level are reported in Table 2.

**Table 2. Attrition by Grade Level**

| <b>% dropped<br/>Grade 1</b> | <b>% dropped<br/>Grade 2</b> | <b>% dropped<br/>Grade 3</b> | <b>% dropped<br/>Grade 4</b> | <b>% dropped<br/>Grade 5</b> |
|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| 35.0%                        | 21.0%                        | 16.7%                        | 35.6%                        | 26.4%                        |

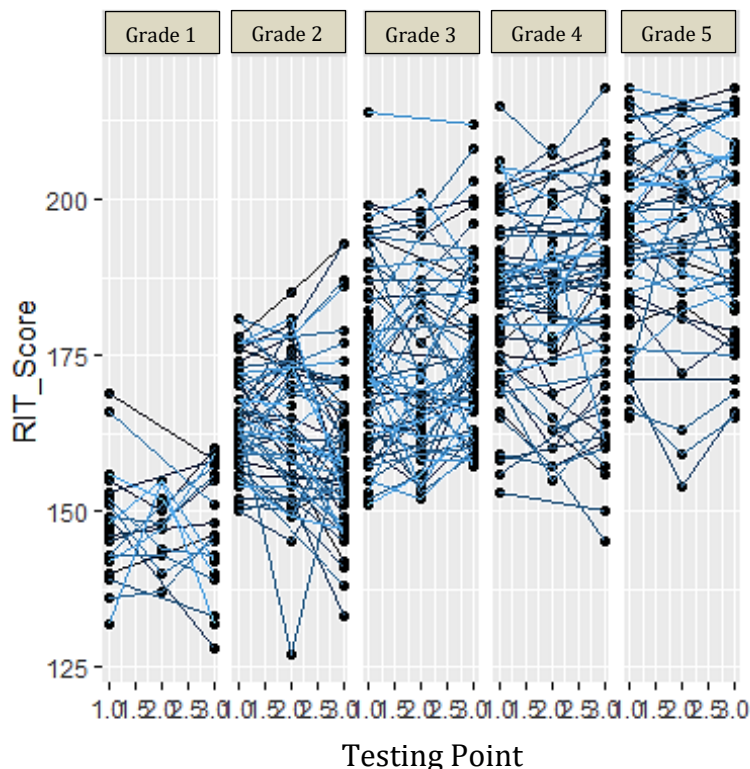
In Grades 2, 3, and 5, attrition rates were comparable to previous summer programs. Attrition was appreciably higher in Grades 1 and 4, but the rate in first grade was partly due to having a smaller group of students. The overall attrition rate was 25.4%.

**MAP Growth for Participating Students**

First, we explored the growth in RIT scores for the group of students who participated in the summer program. The testing vendor describes the RIT scores as vertically scaled, meaning they are on a cross-grade equal-interval scale. This should make them appropriate to use for analyzing data obtained from tests administered at different grade levels pre and post. Students who participated in the summer program had three testing points (i.e., spring, summer, and fall), allowing us to explore the growth from spring to the end of the summer program and from the end of the summer program to fall. Means and standard deviations are reported by grade level and testing point in Appendix A.

Prior to analyzing the data, we plotted individual student scores by testing point to visually examine the trajectories. As shown in Figure 1, there was substantial variation in RIT scores, with some students increasing and others declining in different periods.

**Figure 1. Student Growth Trajectories by Grade Level**





Next, we used mixed effects linear regression to model student growth statistically. These models accounted for the random effects of the teacher providing the instruction at each time point as well as the fixed effects of students’ performance in each preceding testing wave and their gender, race, EL status, FRL status, and IEP status. Full model results are provided by grade level in Appendix B, but the key findings are summarized in Table 3.

**Table 3. Growth in RIT Scores by Grade Level**

|                  | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 |
|------------------|---------|---------|---------|---------|---------|
| Spring-to-Summer | -2.75   | -0.701  | 0.083   | -2.54   | -0.048  |
| Summer-to-Fall   | -1.99   | -4.26   | 2.34    | 0.488   | 0.475   |

Although most grade levels show negative growth, indicating students’ scores declined in the reported period, it should be noted that none of the results were statistically significant at the  $p \leq 0.05$  level. Thus, the results can be interpreted as suggesting stagnation in students’ MAP reading performance both during the summer program and when on a break from school before the fall. The only significant results were found for students served in special education. In all but Grade 3, students in special education performed statistically significantly worse relative to peers.

***Effect of Summer Program on MAP Scores***

Means and standard deviations for both the treatment (qualified and participating in summer program) and control students (qualified but not participating in summer program) are reported by grade level and testing point in Appendix A. Because the two groups are not equivalent, we used propensity score weighting to eliminate systematic differences between the groups. The propensity score of a student is the conditional probability of the student attending the summer program, given the student’s characteristics (gender, race, EL, FRL, and IEP). Because gender and race were not found to be significant in the propensity-score weighted assessment model, we excluded these two variables in the weighted assessment model. Appendix C displays a table of the baseline characteristics of the treatment and control group samples before and after propensity score weighting. As can be seen, the groups were more similar after weighting.

We then used mixed effects linear regression models to compare the MAP scores of the eligible students who participated in the summer program and those of their peers who were eligible but did not participate in the summer program. These analyses accounted for the nesting of students within teacher, relevant student characteristics, and students’ pretest abilities. Full model results are provided by grade level in Appendix D, but we found no statistically significant differences between the two groups on their fall MAP performance. Again, the only significant results were found for students served in special education. In all grades, students in special education performed statistically significantly worse relative to peers.



## Fidelity of Teachers' *Wonders* Implementation

There were 11 teachers (Grade 1 = 1; Grade 2 = 3; Grade 3 = 3; Grade 4 = 2; Grade 5 = 2) delivering the summer reading instruction. All were audio recorded weekly to monitor the fidelity with which they implemented *Wonders*. The results in this section represent a sampling of the instruction delivered, rather than a full accounting of all instruction delivered in all classes.

Teachers were scored on their fidelity implementing *Wonders* Whole-Group Reading and Small-Group rotations within core reading instruction. Most teachers were scored twice on each of these components: once in the first 3 weeks of the summer program and once in the last 3 weeks of the summer program.

### *Fidelity of Wonders Whole-Group Reading Implementation*

In 100% of observations, teachers implemented *Wonders* whole-group reading lessons. Table 4 displays the percentage of observations in which teachers at each grade implemented the recommended approximately 60 minutes of whole-group reading instruction. Overall, in 35% of observations, the instruction spanned between 55 and 65 minutes. However, in none of the first-grade observations and only about one-quarter of the third-grade observations did teachers adhere to the timing. By wave (early = first 3 weeks; late = last 3 weeks), teachers in Grade 5 improved their adherence to timing over the summer. By contrast, teachers in Grades 2–4 declined in adherence to the suggested timing.

**Table 4. Percentage of Time Teacher Implemented 55–65 Minutes of *Wonders* Whole-Group Reading by Grade**

| Grade          | Early wave    | Adhered to suggested timing | Late wave     | Adhered to suggested timing | Overall       | Adhered to suggested timing | Did not adhere to suggested timing overall |
|----------------|---------------|-----------------------------|---------------|-----------------------------|---------------|-----------------------------|--|
| 1              | <i>n</i> = 3  | 0 (0%)                      | <i>n</i> = 3  | 0 (0%)                      | <i>n</i> = 6  | 0 (0%)                      | 6 (100%)                                   |
| 2              | <i>n</i> = 8  | 3 (37.5%)                   | <i>n</i> = 7  | 2 (28.6%)                   | <i>n</i> = 15 | 5 (33.3%)                   | 10 (66.7%)                                 |
| 3              | <i>n</i> = 9  | 4 (44.4%)                   | <i>n</i> = 9  | 1 (11.1%)                   | <i>n</i> = 18 | 5 (27.8%)                   | 13 (72.2%)                                 |
| 4              | <i>n</i> = 6  | 3 (50.0%)                   | <i>n</i> = 5  | 2 (40.0%)                   | <i>n</i> = 11 | 5 (45.5%)                   | 6 (54.5%)                                  |
| 5              | <i>n</i> = 6  | 2 (33.3%)                   | <i>n</i> = 4  | 4 (100%)                    | <i>n</i> = 10 | 6 (60.0%)                   | 4 (40.0%)                                  |
| <b>Overall</b> | <i>N</i> = 32 | 12 (37.5%)                  | <i>N</i> = 28 | 9 (32.1%)                   | <i>N</i> = 60 | 21 (35.0%)                  | 39 (65.0%)                                 |

There were different components to each Day of instruction indicated in *Wonders*, and completing all components is not always possible within the allotted instructional time. Therefore, teachers indicated which components they planned to implement on the Day of instruction being observed. The tables in Appendix E display which Days of instruction and components of those Days were observed by grade level. Fidelity was determined based on whether teachers fulfilled all the expectations for those components only—not the components they did not plan to implement. Therefore, there are a number of components and Days for which no data are available to

determine the level of fidelity. In general, teachers seemed to struggle with fidelity to the curriculum in both the early and late waves of the summer program. This was particularly true in Grades 3–5, where very few components were attempted each Day of instruction, and rarely were components implemented according to the vendor’s specifications. More components were attempted in Grades 1 and 2, but teachers demonstrated strong fidelity only with phonemic awareness (Grades 1 and 2) and fluency (Grade 2). There were mixed results for teachers’ fidelity with phonics (Grade 1), structural analysis (Grade 2), and high-frequency words (Grade 2).

In previous years, there was concern that the number of components was preventing teachers from achieving fidelity. However, in 2021, teachers were evaluated based only on the components they planned for that day, so their low fidelity cannot be attributed to having insufficient time to complete required step. Rather, it is more likely that teachers would benefit from refresher training on how to deliver the instruction in each component of *Wonders*.

#### ***Fidelity of Small-Group Rotations Within Core Reading Instruction***

Table 5 displays the percentage of observations in which teachers at each grade implemented the recommended 80 minutes of small-group reading instruction. Overall, in approximately 9% of observations, small groups were taught for between 75 and 85 minutes. Notably, in none of the observations in Grades 3 and 5 did teachers adhere to the timing. Although teachers in Grades 2 and 4 occasionally demonstrated adherence in the early wave (first 3 weeks), they did not adhere to the timing in any of the late-wave observations (last 3 weeks). By contrast, teachers in Grade 1 did not adhere to the timing in any early-wave observations but did in 40% of the observations from the late wave.

**Table 5. Percentage of Time Teacher Implemented 75–85 Minutes of Wonders Small-Group by Grade**

| Grade          | Early wave     | Adhered to suggested timing | Late wave     | Adhered to suggested timing | Overall        | Adhered to suggested timing | Did not adhere to suggested timing overall |
|----------------|----------------|-----------------------------|---------------|-----------------------------|----------------|-----------------------------|--|
| 1              | <i>n</i> = 11  | 0 (0%)                      | <i>n</i> = 10 | 4 (40.0%)                   | <i>n</i> = 21  | 4 (19.0%)                   | 17 (81.0%)                                 |
| 2              | <i>n</i> = 23  | 6 (26.1%)                   | <i>n</i> = 21 | 0 (0%)                      | <i>n</i> = 44  | 6 (13.6%)                   | 38 (86.4%)                                 |
| 3              | <i>n</i> = 31  | 0 (0%)                      | <i>n</i> = 29 | 0 (0%)                      | <i>n</i> = 60  | 0 (0%)                      | 60 (100%)                                  |
| 4              | <i>n</i> = 23  | 8 (34.8%)                   | <i>n</i> = 20 | 0 (0%)                      | <i>n</i> = 43  | 8 (18.6%)                   | 35 (81.4%)                                 |
| 5              | <i>n</i> = 15  | 0 (0%)                      | <i>n</i> = 9  | 0 (0%)                      | <i>n</i> = 24  | 0 (0%)                      | 24 (100%)                                  |
| <b>Overall</b> | <i>N</i> = 103 | 14 (13.6%)                  | <i>N</i> = 89 | 4 (4.5%)                    | <i>N</i> = 192 | 18 (9.4%)                   | 174 (90.6%)                                |

There were different components of small-group instruction indicated in *Wonders*, and teachers were allowed to indicate which components they planned to implement during an observation. The tables in Appendix F display which components were observed by grade level. Fidelity was determined based on whether teachers fulfilled all the expectations for those components only—

not the components they did not plan to implement. Therefore, there are a number of components and Days for which no data are available to determine the level of fidelity.

As with whole-group instruction, teachers generally seemed to struggle with fidelity to the curriculum in both the early and late waves of the summer program. In all grade levels, few components were attempted, as teachers tended to stick with the same components when teaching all groups. Nevertheless, the components attempted mostly were implemented with low fidelity. In Grade 1, teachers improved their adherence to the requirements for phonological and phonemic awareness lessons from the early to the late wave of observations. However, in Grade 2, teachers declined in their adherence to the requirements of comprehension lessons from the early to the late wave of observations.

### Fidelity of Interventionists' *WonderWorks* Implementation

There were 4 interventionists (Grade 1 = 1, Grade 2 = 1, Grade 3 = 1, Grades 4 and 5 = 1) delivering the small-group, push-in intervention. All were audio recorded weekly to monitor the fidelity with which they implemented *WonderWorks*. The results presented below represent a sampling of the instruction delivered, rather than a full accounting of all instruction delivered in all intervention groups.

Table 6 displays the percentage of observations in which teachers at each grade adhered to the suggested 30 minutes of *WonderWorks* intervention. Overall, in approximately 44% of observations, interventionists taught their groups for 25 to 35 minutes. Adherence to the timing declined from the early (first 3 weeks) to the late wave (last 3 weeks) in Grades 1–4. Teachers in Grade 5 slightly increased their adherence to the timing from the early to the late wave.

**Table 6. Percentage of Time Teacher Implemented 25–35 Minutes of *WonderWorks* Intervention Groups by Grade**

| Grade          | Early wave    | Adhered to suggested timing | Late wave     | Adhered to suggested timing | Overall       | Adhered to suggested timing | Did not adhere to suggested timing overall |
|----------------|---------------|-----------------------------|---------------|-----------------------------|---------------|-----------------------------|--|
| 1              | <i>n</i> = 12 | 5 (41.7%)                   | <i>n</i> = 10 | 2 (20.0%)                   | <i>n</i> = 22 | 7 (31.8%)                   | 15 (68.2%)                                 |
| 2              | <i>n</i> = 11 | 8 (72.7%)                   | <i>n</i> = 10 | 5 (50.0%)                   | <i>n</i> = 21 | 13 (61.9%)                  | 8 (38.1%)                                  |
| 3              | <i>n</i> = 11 | 5 (45.5%)                   | <i>n</i> = 11 | 2 (18.2%)                   | <i>n</i> = 22 | 7 (31.8%)                   | 15 (68.2%)                                 |
| 4              | <i>n</i> = 6  | 5 (83.3%)                   | <i>n</i> = 6  | 4 (66.7%)                   | <i>n</i> = 12 | 9 (75.0%)                   | 3 (25.0%)                                  |
| 5              | <i>n</i> = 5  | 1 (20.0%)                   | <i>n</i> = 6  | 2 (33.3%)                   | <i>n</i> = 11 | 3 (27.3%)                   | 8 (72.7%)                                  |
| <b>Overall</b> | <i>N</i> = 45 | 24 (53.3%)                  | <i>N</i> = 43 | 15 (34.9%)                  | <i>N</i> = 88 | 39 (44.3%)                  | 49 (55.7%)                                 |

There were different components of intervention indicated in *WonderWorks*, and teachers were allowed to indicate which components they planned to implement during an observation. The



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tables in Appendix G display which components were observed by grade level. Fidelity was determined based on whether teachers fulfilled all the expectations for those components only—not the components they did not plan to implement. Therefore, there are a number of components and Days for which no data are available to determine the level of fidelity.

To an even greater extent than was observed with the core *Wonders* instruction, interventionists struggled with fidelity to the curriculum in both the early and late waves of the summer program. In all grade levels, few or no components were attempted.

The Grade 1 interventionist demonstrated strong fidelity with implementing phonemic awareness, phonics, and oral vocabulary lessons. Variable fidelity was observed in first grade for shared reading, phonological awareness, fluency, and high-frequency word lessons. The Grades 2 and 3 interventionists had variable fidelity to lessons in the early wave (first 3 weeks), but fidelity declined to 0% in the late wave (last 3 weeks). The Grade 4/5 interventionist demonstrated 0% fidelity throughout the entire summer program.



## Appendix A

### MAP Means and Standard Deviations at Each Testing Point

|                  | Spring |          |        |       | Summer |          |        |       | Fall  |          |        |       |
|------------------|--------|----------|--------|-------|--------|----------|--------|-------|-------|----------|--------|-------|
|                  | Grade  | <i>N</i> | Mean   | SD    | Grade  | <i>N</i> | Mean   | SD    | Grade | <i>N</i> | Mean   | SD    |
| <b>Treatment</b> | K      | 22       | 149.77 | 10.30 | 1      | 13       | 147.46 | 5.41  | 1     | 20       | 148.45 | 10.25 |
|                  | 1      | 64       | 165.39 | 8.36  | 2      | 46       | 163.93 | 12.13 | 2     | 61       | 160.44 | 12.72 |
|                  | 2      | 67       | 173.94 | 13.76 | 3      | 47       | 171.13 | 13.69 | 3     | 65       | 175.68 | 13.30 |
|                  | 3      | 61       | 184.03 | 14.00 | 4      | 29       | 181.41 | 16.07 | 4     | 59       | 185.10 | 16.40 |
|                  | 4      | 52       | 193.81 | 13.83 | 5      | 29       | 192.34 | 15.98 | 5     | 48       | 194.92 | 14.34 |
| <b>Control</b>   | K      | 589      | 157.02 | 11.91 |        |          |        |       | 1     | 575      | 156.38 | 12.44 |
|                  | 1      | 569      | 170.97 | 13.14 |        |          |        |       | 2     | 543      | 168.47 | 16.48 |
|                  | 2      | 593      | 184.51 | 16.18 |        |          |        |       | 3     | 573      | 184.39 | 16.56 |
|                  | 3      | 559      | 195.22 | 15.58 |        |          |        |       | 4     | 544      | 195.77 | 15.86 |
|                  | 4      | 537      | 204.35 | 15.84 |        |          |        |       | 5     | 522      | 203.49 | 15.65 |





## Appendix B

### Pre- to Posttest Growth Model Results for Summer Program Participants by Grade Level

#### Grade 1

Model info: Observations: 54

Model fit: AIC = 357.18; BIC = 381.04

Pseudo-R<sup>2</sup> (fixed effects) = 0.15; Pseudo-R<sup>2</sup> (total) = 0.75

#### Fixed Effects

|                  | Est.   | S.E. | t val. | d.f.  | p    |
|------------------|--------|------|--------|-------|------|
| (Intercept)      | 148.43 | 3.83 | 38.71  | 20.53 | 0.00 |
| Spring-to-Summer | -2.75  | 7.13 | -0.39  | 8.47  | 0.71 |
| Summer-to-Fall   | -1.99  | 2.84 | -0.70  | 22.92 | 0.49 |
| Male             | 4.31   | 3.13 | 1.38   | 11.06 | 0.20 |
| Hispanic         | -1.75  | 6.44 | -0.27  | 8.59  | 0.79 |
| Native American  | 4.70   | 6.61 | 0.71   | 9.34  | 0.49 |
| EL               | -17.10 | 9.06 | -1.89  | 11.52 | 0.08 |
| FRL              | 0.18   | 3.26 | 0.06   | 9.74  | 0.96 |
| IEP              | -2.45  | 4.82 | -0.51  | 14.04 | 0.62 |

*p* values calculated using Satterthwaite d.f.

#### Random Effects

| Group    | Parameter   | Std. Dev. |
|----------|-------------|-----------|
| Teacher  | (Intercept) | 6.62      |
| Student  | (Intercept) | 4.64      |
| Residual |             | 5.24      |

#### Grouping Variables

| Group     | # groups | ICC  |
|-----------|----------|------|
| TeacherID | 29       | 0.47 |
| StudentID | 21       | 0.23 |

#### Grade 2

Model info: Observations: 166 Dependent Variable:

Model fit: AIC = 1176.84; BIC = 1223.52

Pseudo-R<sup>2</sup> (fixed effects) = 0.27 Pseudo-R<sup>2</sup> (total) = 0.64



**Fixed Effects**

|                  | <b>Est.</b> | <b>S.E.</b> | <b>t val.</b> | <b>d.f.</b> | <b>p</b> |
|------------------|-------------|-------------|---------------|-------------|----------|
| (Intercept)      | 161.88      | 2.48        | 65.39         | 66.24       | 0.00     |
| Spring-to-Summer | -0.70       | 2.11        | -0.33         | 7.64        | 0.75     |
| Summer-to-Fall   | -4.26       | 1.51        | -2.82         | 32.33       | 0.01     |
| Male             | 4.87        | 2.18        | 2.24          | 50.12       | 0.03     |
| Asian            | 12.80       | 8.34        | 1.54          | 46.31       | 0.13     |
| Black            | -2.68       | 4.36        | -0.61         | 57.91       | 0.54     |
| Hispanic         | -12.32      | 3.89        | -3.17         | 51.22       | 0.00     |
| Native American  | -9.32       | 8.04        | -1.16         | 45.58       | 0.25     |
| Multiracial      | 3.67        | 3.81        | 0.96          | 49.68       | 0.34     |
| EL               | -1.37       | 5.84        | -0.23         | 48.36       | 0.82     |
| FRL              | 5.95        | 2.43        | 2.45          | 49.07       | 0.02     |
| IEP              | -9.78       | 2.54        | -3.85         | 49.54       | 0.00     |

*p* values calculated using Satterthwaite d.f.

**Random Effects**

| <b>Group</b> | <b>Parameter</b> | <b>Std. Dev.</b> |
|--------------|------------------|------------------|
| Student      | (Intercept)      | 6.49             |
| Teacher      | (Intercept)      | 2.83             |
| Residual     |                  | 7.04             |

**Grouping Variables**

| <b>Group</b> | <b># groups</b> | <b>ICC</b> |
|--------------|-----------------|------------|
| Student      | 62              | 0.42       |
| Teacher      | 56              | 0.08       |

**Grade 3**

Model info: Observations: 174

Model fit: AIC = 1255.32; BIC = 1299.54

Pseudo-R<sup>2</sup> (fixed effects) = 0.11 Pseudo-R<sup>2</sup> (total) = 0.83

**Fixed Effects**

|                  | <b>Est.</b> | <b>S.E.</b> | <b>t val.</b> | <b>d.f.</b> | <b>p</b> |
|------------------|-------------|-------------|---------------|-------------|----------|
| (Intercept)      | 177.02      | 3.47        | 51.03         | 63.38       | 0.00     |
| Spring-to-Summer | 0.08        | 1.97        | 0.04          | 46.13       | 0.97     |
| Summer-to-Fall   | 2.34        | 1.40        | 1.68          | 55.99       | 0.10     |
| Male             | 0.81        | 3.30        | 0.25          | 57.38       | 0.81     |
| Asian            | -31.75      | 15.53       | -2.04         | 55.89       | 0.05     |



## Student Reading Success Through Research and Collaboration

|             | <b>Est.</b> | <b>S.E.</b> | <b>t val.</b> | <b>d.f.</b> | <b>p</b> |
|-------------|-------------|-------------|---------------|-------------|----------|
| Black       | -1.58       | 7.56        | -0.21         | 58.61       | 0.84     |
| Hispanic    | -1.03       | 5.98        | -0.17         | 59.10       | 0.86     |
| Multiracial | 4.67        | 5.37        | 0.87          | 57.21       | 0.39     |
| EL          | 12.11       | 9.32        | 1.30          | 58.34       | 0.20     |
| FRL         | -4.00       | 3.46        | -1.15         | 56.03       | 0.25     |
| IEP         | -6.10       | 3.42        | -1.78         | 56.37       | 0.08     |

*p* values calculated using Satterthwaite d.f.

### Random Effects

| <b>Group</b> | <b>Parameter</b> | <b>Std. Dev.</b> |
|--------------|------------------|------------------|
| Student      | (Intercept)      | 11.58            |
| Teacher      | (Intercept)      | 3.32             |
| Residual     |                  | 5.80             |

### Grouping Variables

| <b>Group</b> | <b># groups</b> | <b>ICC</b> |
|--------------|-----------------|------------|
| Student      | 66              | 0.75       |
| Teacher      | 48              | 0.06       |

## Grade 4

Model info: Observations: 149

Model fit: AIC = 1069.35; BIC = 1108.40

Pseudo-R<sup>2</sup> (fixed effects) = 0.37 Pseudo-R<sup>2</sup> (total) = 0.87

### Fixed Effects

|                  | <b>Est.</b> | <b>S.E.</b> | <b>t val.</b> | <b>d.f.</b> | <b>p</b> |
|------------------|-------------|-------------|---------------|-------------|----------|
| (Intercept)      | 193.63      | 3.42        | 56.66         | 57.11       | 0.00     |
| Spring-to-Summer | -2.54       | 2.28        | -1.11         | 9.36        | 0.29     |
| Summer-to-Fall   | 0.49        | 1.27        | 0.38          | 49.78       | 0.70     |
| Male             | -1.31       | 3.33        | -0.39         | 52.00       | 0.70     |
| Black            | 2.50        | 5.57        | 0.45          | 53.43       | 0.66     |
| Hispanic         | -4.57       | 6.50        | -0.70         | 52.20       | 0.49     |
| Native American  | 18.34       | 12.07       | 1.52          | 54.18       | 0.13     |
| EL               | -11.35      | 9.24        | -1.23         | 51.97       | 0.22     |
| FRL              | -5.64       | 3.65        | -1.55         | 53.58       | 0.13     |
| IEP              | -18.14      | 3.62        | -5.01         | 52.32       | 0.00     |

*p* values calculated using Satterthwaite d.f.



**Random Effects**

| Group    | Parameter   | Std. Dev. |
|----------|-------------|-----------|
| Student  | (Intercept) | 10.95     |
| Teacher  | (Intercept) | 2.50      |
| Residual |             | 5.82      |

**Grouping Variables**

| Group   | # groups | ICC  |
|---------|----------|------|
| Student | 61       | 0.75 |
| Teacher | 55       | 0.04 |

**Grade 5**

Model info: Observations: 129

Model fit: AIC = 908.91; BIC = 948.95

Pseudo-R<sup>2</sup> (fixed effects) = 0.26 Pseudo-R<sup>2</sup> (total) = 0.87

**Fixed Effects**

|                  | Est.   | S.E.  | t val. | d.f.  | p    |
|------------------|--------|-------|--------|-------|------|
| (Intercept)      | 196.89 | 4.19  | 47.03  | 45.84 | 0.00 |
| Spring-to-Summer | -0.05  | 1.84  | -0.03  | 7.71  | 0.98 |
| Summer-to-Fall   | 0.48   | 1.27  | 0.37   | 31.84 | 0.71 |
| Male             | 0.58   | 3.80  | 0.15   | 42.84 | 0.88 |
| Black            | -3.16  | 6.37  | -0.50  | 45.44 | 0.62 |
| Hispanic         | -4.57  | 7.17  | -0.64  | 42.66 | 0.53 |
| Native American  | 2.74   | 13.11 | 0.21   | 44.37 | 0.84 |
| Multiracial      | -5.77  | 7.73  | -0.75  | 43.75 | 0.46 |
| EL               | -2.02  | 9.05  | -0.22  | 43.27 | 0.82 |
| FRL              | 3.30   | 4.26  | 0.77   | 44.34 | 0.44 |
| IEP              | -16.63 | 4.12  | -4.04  | 43.53 | 0.00 |

*p* values calculated using Satterthwaite d.f.

**Random Effects**

| Group    | Parameter   | Std. Dev. |
|----------|-------------|-----------|
| Student  | (Intercept) | 11.92     |
| Teacher  | (Intercept) | 1.70      |
| Residual |             | 5.55      |



## Student Reading Success Through Research and Collaboration

### Grouping Variables

| <b>Group</b> | <b># groups</b> | <b>ICC</b> |
|--------------|-----------------|------------|
| Student      | 52              | 0.81       |
| Teacher      | 40              | 0.02       |



## Appendix C

### Comparison of the Baseline MAP Means, Standard Deviations, and Demographic Variables of the Treatment and Control Students Before and After Propensity Score Weighting

|             |                 | Before Weighting |      |      |       |          |          |       | After Weighting |      |      |      |      |          |          |       |      |
|-------------|-----------------|------------------|------|------|-------|----------|----------|-------|-----------------|------|------|------|------|----------|----------|-------|------|
|             |                 | Mean             |      | SD   |       |          |          |       | Mean            |      | SD   |      |      |          |          |       |      |
|             |                 | Tr               | Ctr  | Tr   | Ctr   | $\Delta$ | SD Ratio | $d$   | $p$             | Tr   | Ctr  | Tr   | Ctr  | $\Delta$ | SD Ratio | $d$   | $p$  |
| Grade 1     | EL              | 0.05             | 0.14 | 0.03 | 0.02  | -0.09    | 1.73     | -2.34 | 0.99            | 0.08 | 0.13 | 0.04 | 0.02 | -0.05    | 2.22     | -1.13 | 0.87 |
|             | FRL             | 0.44             | 0.62 | 0.08 | 0.03  | -0.18    | 2.85     | -2.20 | 0.99            | 0.58 | 0.60 | 0.08 | 0.03 | -0.02    | 2.81     | -0.22 | 0.59 |
|             | IEP             | 0.15             | 0.16 | 0.06 | 0.02  | -0.02    | 2.67     | -0.29 | 0.61            | 0.10 | 0.16 | 0.05 | 0.02 | -0.06    | 2.31     | -1.10 | 0.86 |
|             | Female          | 0.44             | 0.50 | 0.08 | 0.03  | -0.06    | 2.77     | -0.77 | 0.78            | 0.49 | 0.49 | 0.08 | 0.03 | 0.00     | 2.79     | 0.00  | 0.50 |
|             | White           | 0.85             | 0.75 | 0.06 | 0.02  | 0.10     | 2.28     | 1.70  | 0.04            | 0.88 | 0.77 | 0.05 | 0.02 | 0.12     | 2.11     | 2.10  | 0.02 |
|             | Asian           | 0.00             | 0.02 | 0.00 | 0.01  | -0.02    | 0.00     | -2.47 | 0.99            | 0.00 | 0.02 | 0.00 | 0.01 | -0.02    | 0.00     | -2.33 | 0.99 |
|             | Black           | 0.00             | 0.06 | 0.00 | 0.01  | -0.06    | 0.00     | -4.62 | 1.00            | 0.00 | 0.06 | 0.00 | 0.01 | -0.06    | 0.00     | -4.33 | 1.00 |
|             | Hispanic        | 0.10             | 0.17 | 0.05 | 0.02  | -0.07    | 2.22     | -1.34 | 0.91            | 0.11 | 0.16 | 0.05 | 0.02 | -0.05    | 2.38     | -0.93 | 0.82 |
|             | Native American | 0.05             | 0.00 | 0.03 | 0.00  | 0.05     | --       | 1.43  | 0.08            | 0.01 | 0.00 | 0.01 | 0.00 | 0.01     | --       | 0.50  | 0.31 |
| Multiracial | 0.00            | 0.00             | 0.00 | 0.00 | 0.00  | --       | --       | --    | 0.00            | 0.00 | 0.00 | 0.00 | 0.00 | --       | --       | --    |      |
| Grade 2     | EL              | 0.08             | 0.14 | 0.03 | 0.02  | -0.05    | 1.66     | -1.83 | 0.97            | 0.12 | 0.12 | 0.03 | 0.01 | -0.01    | 2.03     | -0.16 | 0.56 |
|             | FRL             | 0.69             | 0.84 | 0.04 | 0.02  | -0.15    | 2.59     | -3.31 | 1.00            | 0.80 | 0.81 | 0.04 | 0.02 | -0.01    | 2.09     | -0.17 | 0.57 |
|             | IEP             | 0.26             | 0.19 | 0.04 | 0.02  | 0.08     | 2.34     | 1.77  | 0.04            | 0.21 | 0.20 | 0.04 | 0.02 | 0.01     | 2.11     | 0.30  | 0.38 |
|             | Female          | 0.42             | 0.43 | 0.05 | 0.02  | -0.01    | 2.06     | -0.26 | 0.60            | 0.42 | 0.43 | 0.05 | 0.02 | -0.01    | 2.06     | -0.25 | 0.60 |
|             | White           | 0.68             | 0.73 | 0.04 | 0.02  | -0.06    | 2.18     | -1.18 | 0.88            | 0.71 | 0.72 | 0.04 | 0.02 | -0.02    | 2.10     | -0.36 | 0.64 |
|             | Asian           | 0.03             | 0.00 | 0.02 | 0.00  | 0.03     | 5.93     | 1.76  | 0.04            | 0.01 | 0.01 | 0.01 | 0.00 | 0.00     | 2.41     | 0.25  | 0.40 |
|             | Black           | 0.07             | 0.04 | 0.02 | 0.01  | 0.03     | 2.65     | 1.12  | 0.13            | 0.04 | 0.04 | 0.02 | 0.01 | 0.00     | 1.98     | -0.18 | 0.57 |
| Hispanic    | 0.13            | 0.17             | 0.03 | 0.02 | -0.04 | 1.87     | -1.01    | 0.84  | 0.18            | 0.16 | 0.03 | 0.02 | 0.02 | 2.15     | 0.43     | 0.33  |      |



## Student Reading Success Through Research and Collaboration

|         |                 | Before Weighting |      |      |      |          |          |          |          | After Weighting |      |      |      |          |          |          |          |
|---------|-----------------|------------------|------|------|------|----------|----------|----------|----------|-----------------|------|------|------|----------|----------|----------|----------|
|         |                 | Mean             |      | SD   |      |          |          |          |          | Mean            |      | SD   |      |          |          |          |          |
|         |                 | Tr               | Ctr  | Tr   | Ctr  | $\Delta$ | SD Ratio | <i>d</i> | <i>p</i> | Tr              | Ctr  | Tr   | Ctr  | $\Delta$ | SD Ratio | <i>d</i> | <i>p</i> |
| Grade 3 | Native American | 0.02             | 0.01 | 0.01 | 0.00 | 0.01     | 2.68     | 0.55     | 0.29     | 0.01            | 0.01 | 0.01 | 0.00 | 0.00     | 2.16     | 0.10     | 0.46     |
|         | Multiracial     | 0.07             | 0.05 | 0.02 | 0.01 | 0.03     | 2.57     | 1.07     | 0.14     | 0.05            | 0.05 | 0.02 | 0.01 | 0.00     | 2.07     | 0.01     | 0.50     |
|         | EL              | 0.06             | 0.12 | 0.02 | 0.01 | -0.05    | 1.72     | -2.16    | 0.98     | 0.09            | 0.11 | 0.03 | 0.01 | -0.02    | 2.11     | -0.63    | 0.73     |
|         | FRL             | 0.71             | 0.81 | 0.04 | 0.02 | -0.11    | 2.66     | -2.46    | 0.99     | 0.79            | 0.79 | 0.04 | 0.02 | -0.01    | 2.30     | -0.13    | 0.55     |
|         | IEP             | 0.33             | 0.28 | 0.04 | 0.02 | 0.05     | 2.39     | 1.05     | 0.15     | 0.27            | 0.28 | 0.04 | 0.02 | -0.01    | 2.25     | -0.28    | 0.61     |
|         | Female          | 0.51             | 0.47 | 0.04 | 0.02 | 0.04     | 2.29     | 0.86     | 0.19     | 0.48            | 0.48 | 0.04 | 0.02 | 0.00     | 2.28     | 0.04     | 0.48     |
|         | White           | 0.73             | 0.76 | 0.04 | 0.02 | -0.04    | 2.39     | -0.85    | 0.80     | 0.75            | 0.76 | 0.04 | 0.02 | -0.01    | 2.32     | -0.28    | 0.61     |
|         | Asian           | 0.02             | 0.01 | 0.01 | 0.00 | 0.00     | 2.59     | 0.30     | 0.38     | 0.01            | 0.01 | 0.01 | 0.00 | 0.00     | 2.42     | 0.14     | 0.45     |
|         | Black           | 0.05             | 0.06 | 0.02 | 0.01 | -0.02    | 1.96     | -0.85    | 0.80     | 0.06            | 0.06 | 0.02 | 0.01 | 0.00     | 2.27     | -0.03    | 0.51     |
|         | Hispanic        | 0.12             | 0.11 | 0.03 | 0.01 | 0.01     | 2.38     | 0.37     | 0.35     | 0.13            | 0.11 | 0.03 | 0.01 | 0.01     | 2.38     | 0.35     | 0.36     |
| Grade 4 | Native American | 0.00             | 0.00 | 0.00 | 0.00 | 0.00     | --       | --       | --       | 0.00            | 0.00 | 0.00 | 0.00 | 0.00     | --       | --       | --       |
|         | Multiracial     | 0.09             | 0.05 | 0.02 | 0.01 | 0.04     | 3.03     | 1.50     | 0.07     | 0.05            | 0.05 | 0.02 | 0.01 | 0.00     | 2.28     | -0.01    | 0.50     |
|         | EL              | 0.05             | 0.13 | 0.02 | 0.01 | -0.08    | 1.37     | -3.37    | 1.00     | 0.12            | 0.12 | 0.03 | 0.01 | 0.00     | 2.12     | -0.08    | 0.53     |
|         | FRL             | 0.76             | 0.84 | 0.04 | 0.02 | -0.09    | 2.52     | -2.01    | 0.98     | 0.84            | 0.83 | 0.03 | 0.02 | 0.01     | 2.10     | 0.22     | 0.41     |
|         | IEP             | 0.26             | 0.27 | 0.04 | 0.02 | -0.01    | 2.12     | -0.19    | 0.57     | 0.22            | 0.27 | 0.04 | 0.02 | -0.04    | 2.02     | -0.98    | 0.84     |
|         | Female          | 0.63             | 0.44 | 0.04 | 0.02 | 0.19     | 2.08     | 3.78     | 0.00     | 0.48            | 0.48 | 0.05 | 0.02 | 0.00     | 2.14     | 0.03     | 0.49     |
|         | White           | 0.78             | 0.70 | 0.04 | 0.02 | 0.08     | 1.93     | 1.91     | 0.03     | 0.71            | 0.71 | 0.04 | 0.02 | 0.00     | 2.15     | -0.02    | 0.51     |
|         | Asian           | 0.00             | 0.01 | 0.00 | 0.00 | -0.01    | 0.00     | -2.24    | 0.99     | 0.00            | 0.01 | 0.00 | 0.00 | -0.01    | 0.00     | -2.03    | 0.98     |
|         | Black           | 0.08             | 0.06 | 0.03 | 0.01 | 0.02     | 2.49     | 0.85     | 0.20     | 0.07            | 0.06 | 0.02 | 0.01 | 0.00     | 2.20     | 0.15     | 0.44     |
|         | Hispanic        | 0.12             | 0.18 | 0.03 | 0.02 | -0.06    | 1.80     | -1.85    | 0.97     | 0.21            | 0.17 | 0.04 | 0.02 | 0.04     | 2.31     | 0.90     | 0.18     |



## Student Reading Success Through Research and Collaboration

|            |                 | Before Weighting |      |      |      |          |          |       |      | After Weighting |      |      |      |          |          |       |      |
|------------|-----------------|------------------|------|------|------|----------|----------|-------|------|-----------------|------|------|------|----------|----------|-------|------|
|            |                 | Mean             |      | SD   |      |          |          |       |      | Mean            |      | SD   |      |          |          |       |      |
|            |                 | Tr               | Ctr  | Tr   | Ctr  | $\Delta$ | SD Ratio | $d$   | $p$  | Tr              | Ctr  | Tr   | Ctr  | $\Delta$ | SD Ratio | $d$   | $p$  |
| Grade<br>5 | Native American | 0.02             | 0.01 | 0.01 | 0.00 | 0.00     | 2.44     | 0.31  | 0.38 | 0.01            | 0.01 | 0.01 | 0.00 | 0.00     | 2.02     | -0.14 | 0.55 |
|            | Multiracial     | 0.00             | 0.04 | 0.00 | 0.01 | -0.04    | 0.00     | -4.55 | 1.00 | 0.00            | 0.03 | 0.00 | 0.01 | -0.03    | 0.00     | -4.11 | 1.00 |
|            | EL              | 0.06             | 0.08 | 0.02 | 0.01 | -0.02    | 1.91     | -0.84 | 0.80 | 0.07            | 0.08 | 0.03 | 0.01 | -0.01    | 2.09     | -0.31 | 0.62 |
|            | FRL             | 0.75             | 0.78 | 0.04 | 0.02 | -0.03    | 2.30     | -0.61 | 0.73 | 0.78            | 0.77 | 0.04 | 0.02 | 0.00     | 2.20     | 0.04  | 0.48 |
|            | IEP             | 0.28             | 0.30 | 0.05 | 0.02 | -0.02    | 2.17     | -0.35 | 0.64 | 0.32            | 0.30 | 0.05 | 0.02 | 0.03     | 2.26     | 0.50  | 0.31 |
|            | Female          | 0.39             | 0.51 | 0.05 | 0.02 | -0.12    | 2.15     | -2.19 | 0.99 | 0.45            | 0.49 | 0.05 | 0.02 | -0.04    | 2.20     | -0.75 | 0.77 |
|            | White           | 0.73             | 0.70 | 0.04 | 0.02 | 0.03     | 2.14     | 0.56  | 0.29 | 0.72            | 0.71 | 0.05 | 0.02 | 0.01     | 2.18     | 0.27  | 0.39 |
|            | Asian           | 0.00             | 0.01 | 0.00 | 0.00 | -0.01    | 0.00     | -2.01 | 0.98 | 0.00            | 0.01 | 0.00 | 0.00 | -0.01    | 0.00     | -1.82 | 0.97 |
|            | Black           | 0.09             | 0.06 | 0.03 | 0.01 | 0.03     | 2.62     | 0.91  | 0.18 | 0.07            | 0.07 | 0.03 | 0.01 | 0.00     | 2.25     | 0.10  | 0.46 |
|            | Hispanic        | 0.10             | 0.17 | 0.03 | 0.02 | -0.07    | 1.78     | -1.89 | 0.97 | 0.14            | 0.15 | 0.03 | 0.02 | -0.02    | 2.12     | -0.39 | 0.65 |
|            | Native American | 0.02             | 0.01 | 0.01 | 0.01 | 0.01     | 2.79     | 0.51  | 0.31 | 0.02            | 0.01 | 0.01 | 0.01 | 0.00     | 2.34     | 0.13  | 0.45 |
|            | Multiracial     | 0.06             | 0.05 | 0.02 | 0.01 | 0.01     | 2.42     | 0.40  | 0.34 | 0.06            | 0.05 | 0.02 | 0.01 | 0.00     | 2.29     | 0.15  | 0.44 |

*Note.* Tr = students who qualified for and attended the summer program; Ctr = students who qualified for but did not attend the summer program; EL = English learner; FRL = student qualifies for free or reduced-priced lunch, a proxy for economic disadvantage; IEP = student is served in special education



## Appendix D

### Comparison of Treatment and Control MAP Outcomes by Grade Level

#### Grade 1

Model Info: Observations: 353

Model Fit: AIC = 2463.89; BIC = 2502.55

Pseudo-R<sup>2</sup> (fixed effects) = 0.05 Pseudo-R<sup>2</sup> (total) = 0.63

#### Fixed Effects

|   | Est.   | S.E. | t val. | d.f.   | p    |
|---|--------|------|--------|--------|------|
| (Intercept)                               | 148.79 | 1.14 | 130.59 | 164.07 | 0.00 |
| Spring-to-Fall Change of Control Students | -1.65  | 0.92 | -1.79  | 61.94  | 0.08 |
| Summer                                    | 1.04   | 2.02 | 0.52   | 271.04 | 0.61 |
| EL  | -1.05  | 1.68 | -0.63  | 172.69 | 0.53 |
| FRL                                       | -0.13  | 1.17 | -0.11  | 178.15 | 0.91 |
| IEP                                       | -4.77  | 1.56 | -3.07  | 178.96 | 0.00 |
| Treatment vs. Control                     | 0.31   | 1.94 | 0.16   | 159.92 | 0.87 |

*p* values calculated using Satterthwaite d.f.

#### Random Effects

| Group    | Parameter   | Std. Dev. |
|----------|-------------|-----------|
| Student  | (Intercept) | 6.23      |
| Teacher  | (Intercept) | 2.87      |
| Residual |             | 5.45      |

#### Grouping Variables

| Group   | # groups | ICC  |
|---------|----------|------|
| Student | 182      | 0.51 |
| Teacher | 58       | 0.11 |

#### Grade 2

Model Info: Observations: 634

Model Fit: AIC = 4643.85; BIC = 4688.37

Pseudo-R<sup>2</sup> (fixed effects) = 0.08 Pseudo-R<sup>2</sup> (total) = 0.57



**Fixed Effects**

|   | <b>Est.</b> | <b>S.E.</b> | <b>t val.</b> | <b>d.f.</b> | <b>p</b> |
|---|-------------|-------------|---------------|-------------|----------|
| (Intercept)                               | 163.97      | 1.28        | 128.60        | 341.58      | 0.00     |
| Spring-to-Fall Change of Control Students | -4.35       | 0.77        | -5.66         | 43.48       | 0.00     |
| Summer                                    | 2.61        | 1.44        | 1.82          | 481.46      | 0.07     |
| EL  | -0.30       | 1.51        | -0.20         | 319.56      | 0.84     |
| FRL                                       | -0.92       | 1.26        | -0.74         | 329.40      | 0.46     |
| IEP                                       | -4.06       | 1.24        | -3.27         | 326.56      | 0.00     |
| Treatment vs. Control                     | -0.01       | 1.43        | -0.01         | 304.73      | 0.99     |

*p* values calculated using Satterthwaite d.f.

**Random Effects**

| <b>Group</b> | <b>Parameter</b> | <b>Std. Dev.</b> |
|--------------|------------------|------------------|
| Student      | (Intercept)      | 7.22             |
| Teacher      | (Intercept)      | 1.78             |
| Residual     |                  | 6.91             |

**Grouping Variables**

| <b>Group</b> | <b># groups</b> | <b>ICC</b> |
|--------------|-----------------|------------|
| Student      | 335             | 0.51       |
| Teacher      | 61              | 0.03       |

**Grade 3**

Model Info: Observations: 797

Model Fit: AIC = 5941.21; BIC = 5988.02

Pseudo-R<sup>2</sup> (fixed effects) = 0.12 Pseudo-R<sup>2</sup> (total) = 0.77

**Fixed Effects**

|   | <b>Est.</b> | <b>S.E.</b> | <b>t val.</b> | <b>d.f.</b> | <b>p</b> |
|---|-------------|-------------|---------------|-------------|----------|
| (Intercept)                               | 178.93      | 1.38        | 130.09        | 425.22      | 0.00     |
| Spring-to-Fall Change of Control Students | -0.40       | 0.70        | -0.57         | 46.23       | 0.57     |
| Summer                                    | -2.18       | 1.62        | -1.35         | 532.06      | 0.18     |
| EL  | -5.08       | 1.78        | -2.85         | 416.67      | 0.00     |
| FRL                                       | 0.05        | 1.37        | 0.04          | 406.78      | 0.97     |
| IEP                                       | -9.41       | 1.22        | -7.68         | 405.66      | 0.00     |
| Treatment vs. Comparison                  | 2.37        | 1.23        | 1.92          | 380.72      | 0.06     |

*p* values calculated using Satterthwaite d.f.





**Random Effects**

| Group    | Parameter   | Std. Dev. |
|----------|-------------|-----------|
| Student  | (Intercept) | 10.15     |
| Teacher  | (Intercept) | 2.18      |
| Residual |             | 6.08      |

**Grouping Variables**

| Group   | # groups | ICC  |
|---------|----------|------|
| Student | 418      | 0.71 |
| Teacher | 64       | 0.03 |

**Grade 4**

Model Info: Observations: 662

Model Fit: AIC = 4905.05; BIC = 4950.00

Pseudo-R<sup>2</sup> (fixed effects) = 0.23 Pseudo-R<sup>2</sup> (total) = 0.83

**Fixed Effects**

|   | Est.   | S.E. | t val. | d.f.   | p    |
|---|--------|------|--------|--------|------|
| (Intercept)                               | 192.97 | 1.60 | 120.25 | 352.14 | 0.00 |
| Spring-to-Fall Change of Control Students | 1.01   | 0.68 | 1.48   | 58.74  | 0.14 |
| Summer                                    | -3.42  | 1.72 | -1.99  | 427.21 | 0.05 |
| EL  | -7.02  | 1.92 | -3.66  | 346.54 | 0.00 |
| FRL                                       | -3.18  | 1.65 | -1.93  | 344.28 | 0.05 |
| IEP                                       | -13.47 | 1.41 | -9.57  | 346.86 | 0.00 |
| Treatment vs. Comparison                  | -0.18  | 1.19 | -0.15  | 294.72 | 0.88 |

*p* values calculated using Satterthwaite d.f.

**Random Effects**

| Group    | Parameter   | Std. Dev. |
|----------|-------------|-----------|
| Student  | (Intercept) | 10.56     |
| Teacher  | (Intercept) | 2.13      |
| Residual |             | 5.64      |

**Grouping Variables**

| Group   | # groups | ICC  |
|---------|----------|------|
| Student | 350      | 0.75 |
| Teacher | 57       | 0.03 |



## Grade 5

Model Info: Observations: 584

Model Fit: AIC = 4342.05; BIC = 4385.75

Pseudo-R<sup>2</sup> (fixed effects) = 0.23 Pseudo-R<sup>2</sup> (total) = 0.82

### Fixed Effects

|   | Est.   | S.E. | <i>t</i> val. | d.f.   | <i>p</i> |
|---|--------|------|---------------|--------|----------|
| (Intercept)                               | 196.37 | 1.55 | 127.06        | 307.66 | 0.00     |
| Spring-to-Fall Change of Control Students | -0.15  | 0.60 | -0.25         | 18.73  | 0.80     |
| Summer                                    | 0.28   | 1.88 | 0.15          | 366.15 | 0.88     |
| EL  | -4.05  | 2.48 | -1.64         | 294.91 | 0.10     |
| FRL                                       | 2.27   | 1.60 | 1.42          | 294.56 | 0.16     |
| IEP                                       | -14.68 | 1.46 | -10.04        | 293.18 | 0.00     |
| Treatment vs. Comparison                  | 0.37   | 1.34 | 0.28          | 272.46 | 0.78     |

*p* values calculated using Satterthwaite d.f.

### Random Effects

| Group    | Parameter   | Std. Dev. |
|----------|-------------|-----------|
| Student  | (Intercept) | 10.77     |
| Teacher  | (Intercept) | 0.91      |
| Residual |             | 5.91      |

### Grouping Variables

| Group   | # groups | ICC  |
|---------|----------|------|
| Student | 305      | 0.76 |
| Teacher | 57       | 0.01 |



## Appendix E

### Teachers' Fidelity to *Wonders* Whole-Group Instruction by Grade Level

#### Grade 1

| Whole-Group Reading                         | Wave One  |         |          |     | Wave Two  |         |          |      |
|---|-----------|---------|----------|-----|-----------|---------|----------|------|
|   | # of obs. | On plan | Fidelity | %   | # of obs. | On plan | Fidelity | %    |
| <b>Day 1</b>                                |           |         |          |     |           |         |          |      |
| 1) Introduce the Concept – Build Background | 0         | N/A     | N/A      | N/A | 1         | 1       | 1        | 100% |
| 2) Close Reading – Listening Comprehension  | 0         | N/A     | N/A      | N/A | 1         | 1       | 0        | 0%   |
| 3) Quick Review – Sound-Spelling            | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| 4) Phonemic Awareness                       | 0         | N/A     | N/A      | N/A | 1         | 1       | 1        | 100% |
| 5) Phonics                                  | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| 6) Handwriting                              | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| 7) High-Frequency Words                     | 0         | N/A     | N/A      | N/A | 1         | 1       | 1        | 100% |
| <b>Day 2</b>                                |           |         |          |     |           |         |          |      |
| 1) Build the Concept – Oral Language        | 0         | N/A     | N/A      | N/A | 1         | 1       | 0        | 0%   |
| 2) Category Words                           | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| 3) Vocabulary Strategy                      | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| 4) Close Reading – Listening Comprehension  | 0         | N/A     | N/A      | N/A | 1         | 1       | 0        | 0%   |
| 5) Phonemic Awareness                       | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| 6) Phonics                                  | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| 7) Close Reading or Shared Reading          | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| Optional:                                   |           |         |          |     |           |         |          |      |
| 8) High-Frequency Words                     | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| 9) Quick Review – Sound-Spelling            | 0         | N/A     | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| <b>Day 3</b>                                |           |         |          |     |           |         |          |      |



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|   |   |   |     |      |   |     |     |      |
|---|---|---|-----|------|---|-----|-----|------|
| 1) Close Reading – Listening Comprehension – Interactive Read Aloud | 1 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A  |
| 2) Phonemic Awareness   | 1 | 1 | 1   | 100% | 0 | N/A | N/A | N/A  |
| 3) Phonics  | 1 | 1 | 1   | 100% | 0 | N/A | N/A | N/A  |
| 4) High-Frequency Words   | 1 | 1 | 0   | 0%   | 0 | N/A | N/A | N/A  |
| Optional:   |   |   |     |      |   |     |     |      |
| 5) Build the Concept – Oral Language                                | 1 | 1 | 1   | 100% | 0 | N/A | N/A | N/A  |
| 6) Phonics – Picture Sort   | 1 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A  |
| <b>Day 4</b>  |   |   |     |      |   |     |     |      |
| 1) Extend the Concept   | 1 | 0 | N/A | N/A  | 1 | 1   | 0   | 0%   |
| 2) Category Words   | 1 | 0 | N/A | N/A  | 1 | 0   | N/A | N/A  |
| 3) Vocabulary   | 1 | 0 | N/A | N/A  | 1 | 0   | N/A | N/A  |
| 3) Close Reading – Listening Comprehension                          | 1 | 1 | 0   | 0%   | 1 | 0   | N/A | N/A  |
| 4) Phonemic Awareness   | 1 | 1 | 1   | 100% | 1 | 1   | 1   | 100% |
| 5) Phonics  | 1 | 1 | 0   | 0%   | 1 | 1   | 1   | 100% |
| 6) Shared Reading   | 1 | 1 | 0   | 0%   | 1 | 0   | N/A | N/A  |
| 7) Integrate Ideas – Research and Inquiry                           | 1 | 0 | N/A | N/A  | 1 | 0   | N/A | N/A  |
| Optional:   |   |   |     |      |   |     |     |      |
| 8) Quick Review – Build Fluency                                     | 1 | 0 | N/A | N/A  | 1 | 0   | N/A | N/A  |
| 9) High-Frequency Words   | 1 | 1 | 1   | 100% | 1 | 0   | N/A | N/A  |
| <b>Day 5</b>  |   |   |     |      |   |     |     |      |
| 1) Phonemic Awareness   | 1 | 1 | 1   | 100% | 0 | N/A | N/A | N/A  |
| 2) Phonics  | 1 | 1 | 1   | 100% | 0 | N/A | N/A | N/A  |
| 3) Quick Review – Build Fluency                                     | 1 | 1 | 1   | 100% | 0 | N/A | N/A | N/A  |
| 4) High-Frequency Words   | 1 | 1 | 0   | 0%   | 0 | N/A | N/A | N/A  |
| 5) Integrate Ideas  | 1 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A  |
| Optional:   |   |   |     |      |   |     |     |      |
| 6) Integrate Ideas – Speaking and Listening                         | 1 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A  |



Grade 2

| Whole-Group Reading                                 | Wave One  |         |          |      | Wave Two  |         |          |      |
|---|-----------|---------|----------|------|-----------|---------|----------|------|
|   | # of obs. | On plan | Fidelity | %    | # of obs. | On plan | Fidelity | %    |
| <b>Day 1</b>  |           |         |          |      |           |         |          |      |
| 1) Introduce the Concept – Build Background         | 1         | 0       | N/A      | N/A  | 4         | 4       | 1        | 25%  |
| 2) Phonological Awareness                           | 1         | 1       | 1        | 100% | 4         | 4       | 4        | 100% |
| 3) Phonics  | 1         | 0       | N/A      | N/A  | 4         | 4       | 0        | 0%   |
| 4) Spelling   | 1         | 0       | N/A      | N/A  | 4         | 3       | 0        | 0%   |
| 5) High-Frequency Words                             | 1         | 1       | 0        | 0%   | 4         | 4       | 1        | 25%  |
| 6) Close Reading or Shared Reading                  | 1         | 0       | N/A      | N/A  | 4         | 3       | 0        | 0%   |
| Optional:   |           |         |          |      |           |         |          |      |
| 7) Listening Comprehension                          | 1         | 0       | N/A      | N/A  | 4         | 4       | 0        | 0%   |
| <b>Day 2</b>  |           |         |          |      |           |         |          |      |
| 1) Build the Concept – Oral Language                | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A  |
| 2) Phonemic Awareness                               | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A  |
| 3) Structural Analysis                              | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A  |
| 4) Comprehension Skill                              | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A  |
| Optional:   |           |         |          |      |           |         |          |      |
| 5) Listening Comprehension – Interactive Read Aloud | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A  |
| 6) Phonics  | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A  |
| 7) Spelling   | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A  |
| 8) High-Frequency Words                             | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A  |
| <b>Day 3</b>  |           |         |          |      |           |         |          |      |
| 1) Phonemic Awareness                               | 2         | 2       | 2        | 100% | 1         | 0       | N/A      | N/A  |
| 2) Phonics  | 2         | 2       | 0        | 0%   | 1         | 0       | N/A      | N/A  |
| 3) Spelling   | 2         | 2       | 1        | 50%  | 1         | 0       | N/A      | N/A  |
| 4) Close Reading                                    | 2         | 1       | 0        | 0%   | 1         | 0       | N/A      | N/A  |
| 5) Respond to Text                                  | 2         | 0       | N/A      | N/A  | 1         | 0       | N/A      | N/A  |
| 6) Build the Concept – Oral Language                | 2         | 0       | N/A      | N/A  | 1         | 0       | N/A      | N/A  |
| 7) Listening Comprehension                          | 2         | 0       | N/A      | N/A  | 1         | 0       | N/A      | N/A  |

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|                            |   |   |     |     |   |   |     |     |
|----------------------------|---|---|-----|-----|---|---|-----|-----|
| 8) Fluency – Quick Reviews | 2 | 0 | N/A | N/A | 1 | 0 | N/A | N/A |
| 9) Structural Analysis     | 2 | 2 | 0   | 0%  | 1 | 0 | N/A | N/A |
| 10) High-Frequency Words   | 2 | 2 | 0   | 0%  | 1 | 0 | N/A | N/A |

### Day 4

|   |   |   |     |      |   |   |     |      |
|---|---|---|-----|------|---|---|-----|------|
| 1) Extend the Concept                     | 2 | 0 | N/A | N/A  | 3 | 1 | 1   | 100% |
| 2) Close Reading                          | 2 | 0 | N/A | N/A  | 3 | 2 | 1   | 50%  |
| 3) Phonemic Awareness                     | 2 | 2 | 2   | 100% | 3 | 3 | 3   | 100% |
| 4) Structural Analysis                    | 2 | 2 | 0   | 0%   | 3 | 3 | 2   | 67%  |
| 5) Integrate Ideas – Research and Inquiry | 2 | 0 | N/A | N/A  | 3 | 0 | N/A | N/A  |
| Optional:                                 |   |   |     |      |   |   |     |      |
| 6) Quick Review – Build Fluency           | 2 | 1 | 1   | 100% | 3 | 1 | 1   | 100% |
| 7) Phonics                                | 2 | 2 | 2   | 100% | 3 | 2 | 2   | 100% |
| 8) Spelling                               | 2 | 2 | 0   | 0%   | 3 | 2 | 0   | 0%   |
| 9) High-Frequency Words                   | 2 | 2 | 2   | 100% | 3 | 3 | 3   | 100% |
| 10) Close Reading                         | 2 | 0 | N/A | N/A  | 3 | 0 | N/A | N/A  |

### Day 5

|                                       |   |   |     |      |   |     |     |     |
|---------------------------------------|---|---|-----|------|---|-----|-----|-----|
| 1) Phonemic Awareness                 | 4 | 4 | 4   | 100% | 0 | N/A | N/A | N/A |
| 2) Phonics                            | 4 | 4 | 1   | 25%  | 0 | N/A | N/A | N/A |
| 3) Structural Analysis                | 4 | 3 | 3   | 100% | 0 | N/A | N/A | N/A |
| 4) Spelling                           | 4 | 2 | 0   | 0%   | 0 | N/A | N/A | N/A |
| 5) High-Frequency Words               | 4 | 4 | 1   | 25%  | 0 | N/A | N/A | N/A |
| 6) Integrate Ideas – Text Connections | 4 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A |
| Optional:                             |   |   |     |      |   |     |     |     |
| 7) Quick Review – Build Fluency       | 4 | 1 | 1   | 100% | 0 | N/A | N/A | N/A |
| 8) Integrate Ideas                    | 4 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A |



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### Grade 3

| Whole-Group Reading                                 | Wave One  |         |          |     | Wave Two  |         |          |      |
|---|-----------|---------|----------|-----|-----------|---------|----------|------|
|   | # of obs. | On plan | Fidelity | %   | # of obs. | On plan | Fidelity | %    |
| <b>Day 1</b>  |           |         |          |     |           |         |          |      |
| 1) Introduce the Concept                            | 0         | N/A     | N/A      | N/A | 4         | 3       | 0        | 0%   |
| 2) Build the Concept – Oral Language                | 0         | N/A     | N/A      | N/A | 4         | 0       | N/A      | N/A  |
| 3) Phonemic Awareness                               | 0         | N/A     | N/A      | N/A | 4         | 3       | 1        | 33%  |
| 4) Phonics  | 0         | N/A     | N/A      | N/A | 4         | 3       | 0        | 0%   |
| 5) Spelling   | 0         | N/A     | N/A      | N/A | 4         | 1       | 0        | 0%   |
| 6) High-Frequency Words                             | 0         | N/A     | N/A      | N/A | 4         | 3       | 0        | 0%   |
| 7) Vocabulary:                                      | 0         | N/A     | N/A      | N/A | 4         | 3       | 0        | 0%   |
| 8) Close Reading – Comprehension                    | 0         | N/A     | N/A      | N/A | 4         | 3       | 0        | 0%   |
| Optional:   |           |         |          |     |           |         |          |      |
| 9) Listening Comprehension – Interactive Read Aloud | 0         | N/A     | N/A      | N/A | 4         | 1       | 0        | 0%   |
| <b>Day 2</b>  |           |         |          |     |           |         |          |      |
| 1) Build the Concept – Oral Language                | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 2) Structural Analysis                              | 1         | 1       | 0        | 0%  | 0         | N/A     | N/A      | N/A  |
| 3) Comprehension Strategy                           | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 4) Comprehension Skill                              | 1         | 1       | 0        | 0%  | 0         | N/A     | N/A      | N/A  |
| 5) Genre  | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 6) Vocabulary Strategy                              | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| Optional:   |           |         |          |     |           |         |          |      |
| 1) Build the Concept – Oral Language                | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 2) Listening Comprehension                          | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 3) Phonemic Awareness                               | 1         | 1       | 0        | 0%  | 0         | N/A     | N/A      | N/A  |
| 4) Phonics  | 1         | 1       | 0        | 0%  | 0         | N/A     | N/A      | N/A  |
| 5) Spelling   | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 6) High-Frequency Words                             | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 7) Expand Vocabulary                                | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| <b>Day 3</b>  |           |         |          |     |           |         |          |      |
| 1) Phonemic Awareness                               | 3         | 2       | 1        | 50% | 2         | 1       | 1        | 100% |
| 2) Phonics  | 3         | 2       | 0        | 0%  | 2         | 2       | 0        | 0%   |

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|   |   |   |     |      |   |     |     |     |
|---|---|---|-----|------|---|-----|-----|-----|
| 3) Spelling                                   | 3 | 2 | 0   | 0%   | 2 | 1   | 0   | 0%  |
| 4) Fluency                                    | 3 | 0 | N/A | N/A  | 2 | 0   | N/A | N/A |
| 5) Close Reading                              | 3 | 1 | 0   | 0%   | 2 | 1   | 0   | 0%  |
| 6) Respond to Text                            | 3 | 1 | 0   | 0%   | 2 | 0   | N/A | N/A |
| Optional:                                     |   |   |     |      |   |     |     |     |
| 7) Build the Concept – Interactive Read Aloud | 3 | 0 | N/A | N/A  | 2 | 0   | N/A | N/A |
| 8) Comprehension                              | 3 | 3 | 0   | 0%   | 2 | 2   | 0   | 0%  |
| 9) Structural Analysis                        | 3 | 2 | 0   | 0%   | 2 | 1   | 0   | 0%  |
| 10) Reinforce Vocabulary                      | 3 | 0 | N/A | N/A  | 2 | 0   | N/A | N/A |
| <b>Day 4</b>                                  |   |   |     |      |   |     |     |     |
| 1) Phonemic Awareness                         | 3 | 3 | 1   | 33%  | 0 | N/A | N/A | N/A |
| 2) Vocabulary Strategy                        | 3 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A |
| 3) Close Reading                              | 3 | 1 | 0   | 0%   | 0 | N/A | N/A | N/A |
| Optional:                                     |   |   |     |      |   |     |     |     |
| 4) Build the Concept – Oral Language          | 3 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A |
| 5) Phonics                                    | 3 | 3 | 0   | 0%   | 0 | N/A | N/A | N/A |
| 6) Structural Analysis                        | 3 | 2 | 1   | 50%  | 0 | N/A | N/A | N/A |
| 7) Spelling                                   | 3 | 3 | 2   | 67%  | 0 | N/A | N/A | N/A |
| 8) High-Frequency Words                       | 3 | 1 | 0   | 0%   | 0 | N/A | N/A | N/A |
| 9) Fluency                                    | 3 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A |
| 10) Integrated ideas – Research and Inquiry   | 3 | 0 | N/A | N/A  | 0 | N/A | N/A | N/A |
| <b>Day 5</b>                                  |   |   |     |      |   |     |     |     |
| 1) Phonemic Awareness                         | 2 | 2 | 2   | 100% | 3 | 3   | 2   | 67% |
| 2) Phonics                                    | 2 | 2 | 0   | 0%   | 3 | 3   | 0   | 0   |
| 3) Structural Analysis                        | 2 | 2 | 1   | 50%  | 3 | 3   | 1   | 33% |
| 4) Spelling                                   | 2 | 2 | 1   | 50%  | 3 | 3   | 1   | 33% |
| 5) High-Frequency Words                       | 2 | 1 | 1   | 100% | 3 | 3   | 2   | 67% |
| 6) Vocabulary Words                           | 2 | 1 | 0   | 0%   | 3 | 0   | N/A | N/A |
| 7) Integrate Ideas                            | 2 | 0 | N/A | N/A  | 3 | 0   | N/A | N/A |
| 8) Integrate Ideas – Text Connections         | 2 | 0 | N/A | N/A  | 3 | 0   | N/A | N/A |
| Optional:                                     |   |   |     |      |   |     |     |     |
| 9) Integrate Ideas                            | 2 | 0 | N/A | N/A  | 3 | 0   | N/A | N/A |



**Grade 4**

| Whole-Group Reading                                 | Wave One  |         |          |      | Wave Two  |         |          |     |
|---|-----------|---------|----------|------|-----------|---------|----------|-----|
|   | # of obs. | On plan | Fidelity | %    | # of obs. | On plan | Fidelity | %   |
| <b>Day 1</b>  |           |         |          |      |           |         |          |     |
| 1) Introduce the Concept – Build Background         | 2         | 1       | 1        | 100% | 1         | 1       | 0        | 0%  |
| 2) Vocabulary – Words in Context                    | 2         | 1       | 0        | 0%   | 1         | 0       | N/A      | N/A |
| 3) Close Reading – Comprehension                    | 2         | 2       | 0        | 0%   | 1         | 0       | N/A      | N/A |
| Optional:   |           |         |          |      |           |         |          |     |
| 4) Listening Comprehension – Interactive Read Aloud | 2         | 1       | 0        | 0%   | 1         | 1       | 0        | 0%  |
| <b>Day 2</b>  |           |         |          |      |           |         |          |     |
| 1) Close Reading – Comprehension                    | 0         | N/A     | N/A      | N/A  | 2         | 0       | N/A      | N/A |
| 2) Comprehension Strategy                           | 0         | N/A     | N/A      | N/A  | 2         | 2       | 0        | 0%  |
| 3) Comprehension Skill                              | 0         | N/A     | N/A      | N/A  | 2         | 2       | 0        | 0%  |
| 4) Vocabulary Strategy                              | 0         | N/A     | N/A      | N/A  | 2         | 2       | 0        | 0%  |
| Optional:   |           |         |          |      |           |         |          |     |
| 5) Genre  | 0         | N/A     | N/A      | N/A  | 2         | 0       | N/A      | N/A |
| <b>Day 3</b>  |           |         |          |      |           |         |          |     |
| 1) Close Reading                                    | 2         | 2       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| 2) Respond to Text                                  | 2         | 1       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| Optional:   |           |         |          |      |           |         |          |     |
| 3) Phonics  | 2         | 1       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| <b>Day 4</b>  |           |         |          |      |           |         |          |     |
| 1) Close Reading                                    | 2         | 2       | 0        | 0%   | 2         | 1       | 0        | 0%  |
| 2) Fluency  | 2         | 1       | 0        | 0%   | 2         | 1       | 0        | 0%  |
| 3) Integrate Ideas – Research and Inquiry           | 2         | 1       | 0        | 0%   | 2         | 0       | N/A      | N/A |
| Optional:   |           |         |          |      |           |         |          |     |
| 4) Close Reading                                    | 2         | 0       | N/A      | N/A  | 2         | 0       | N/A      | N/A |
| <b>Day 5</b>  |           |         |          |      |           |         |          |     |
| 1) Integrate ideas                                  | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A |



## Student Reading Success Through Research and Collaboration

### Grade 5

| Whole-Group Reading                                 | Wave One  |         |          |     | Wave Two  |         |          |      |
|---|-----------|---------|----------|-----|-----------|---------|----------|------|
|   | # of obs. | On plan | Fidelity | %   | # of obs. | On plan | Fidelity | %    |
| <b>Day 1</b>  |           |         |          |     |           |         |          |      |
| 1) Introduce the Concept – Build Background         | 1         | 1       | 0        | 0%  | 1         | 1       | 0        | 0%   |
| 2) Vocabulary – Words in Context                    | 1         | 1       | 0        | 0%  | 1         | 1       | 0        | 0%   |
| 3) Close Reading – Shared Reading                   | 1         | 1       | 0        | 0%  | 1         | 1       | 1        | 100% |
| Optional:   |           |         |          |     |           |         |          |      |
| 4) Listening Comprehension – Interactive Read Aloud | 1         | 0       | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| <b>Day 2</b>  |           |         |          |     |           |         |          |      |
| 1) Close Reading – Comprehension                    | 0         | N/A     | N/A      | N/A | 2         | 0       | N/A      | N/A  |
| 2) Comprehension Strategy                           | 0         | N/A     | N/A      | N/A | 2         | 2       | 1        | 50%  |
| 3) Comprehension Skill                              | 0         | N/A     | N/A      | N/A | 2         | 2       | 1        | 50%  |
| 4) Vocabulary Strategy                              | 0         | N/A     | N/A      | N/A | 2         | 2       | 0        | 0%   |
| Optional:   |           |         |          |     |           |         |          |      |
| 5) Genre  | 0         | N/A     | N/A      | N/A | 2         | 0       | N/A      | N/A  |
| <b>Day 3</b>  |           |         |          |     |           |         |          |      |
| 1) Close Reading                                    | 1         | 1       | 0        | 0%  | 0         | N/A     | N/A      | N/A  |
| 2) Respond to Text                                  | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| Optional:   |           |         |          |     |           |         |          |      |
| 3) Phonics  | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| <b>Day 4</b>  |           |         |          |     |           |         |          |      |
| 1) Close Reading                                    | 3         | 3       | 0        | 0%  | 1         | 1       | 0        | 0%   |
| 2) Fluency  | 3         | 0       | N/A      | N/A | 1         | 1       | 1        | 100% |
| 3) Integrate Ideas – Research and Inquiry           | 3         | 0       | N/A      | N/A | 1         | 0       | N/A      | N/A  |
| Optional:   |           |         |          |     |           |         |          |      |
| 4) Close Reading                                    | 3         | N/A     | N/A      | N/A | 1         | 1       | 0        | 0%   |
| <b>Day 5</b>  |           |         |          |     |           |         |          |      |
| 1) Integrate Ideas                                  | 1         | N/A     | N/A      | N/A | 0         | N/A     | N/A      | N/A  |

## Appendix F

### Teachers' Fidelity to *Wonders* Small-Group Instruction by Grade Level

#### Grade 1

| Small-Group Reading        | # of obs. | Wave One |          |     | Wave Two  |         |          |      |
|----------------------------|-----------|----------|----------|-----|-----------|---------|----------|------|
|                            |           | On plan  | Fidelity | %   | # of obs. | On plan | Fidelity | %    |
| 2.1 Leveled Reading        | 12        | 8        | 0        | 0%  | 10        | 6       | 0        | 0%   |
| 2.2 Phonological Awareness | 12        | 12       | 4        | 33% | 10        | 4       | 4        | 100% |
| 2.3 Phonics                | 12        | 6        | 1        | 17% | 10        | 10      | 6        | 60%  |
| 2.4 High-Frequency Words   | 12        | 0        | N/A      | N/A | 10        | 0       | N/A      | N/A  |
| 2.5 Oral Vocabulary        | 12        | 0        | N/A      | N/A | 10        | 0       | N/A      | N/A  |
| 2.6 Comprehension          | 12        | 0        | N/A      | N/A | 10        | 0       | N/A      | N/A  |
| 2.7 Phonemic Awareness     | 12        | 4        | 1        | 25% | 10        | 4       | 4        | 100% |
| 2.8 Vocabulary             | 12        | 0        | N/A      | N/A | 10        | 0       | N/A      | N/A  |
| 2.9 Category Words (EL) *  | 12        | 0        | N/A      | N/A | 10        | 0       | N/A      | N/A  |
| 2.10 Writing (EL) *        | 12        | 0        | N/A      | N/A | 10        | 0       | N/A      | N/A  |
| 2.11 Grammar (EL) *        | 12        | 0        | N/A      | N/A | 10        | 0       | N/A      | N/A  |

*Note.* \* This component is provided only for the EL small groups.



## Grade 2

| Small-Group Reading      | # of obs. | Wave One |          |      | Wave Two  |         |          |     |
|--------------------------|-----------|----------|----------|------|-----------|---------|----------|-----|
|                          |           | On plan  | Fidelity | %    | # of obs. | On plan | Fidelity | %   |
| 2.1 Leveled Reading      | 23        | 13       | 0        | 0%   | 21        | 8       | 0        | 0%  |
| 2.2 Phonemic Awareness   | 23        | 1        | 0        | 0%   | 21        | 0       | N/A      | N/A |
| 2.3 Phonics              | 23        | 3        | 0        | 0%   | 21        | 3       | 0        | 0%  |
| 2.4 Structural Analysis  | 23        | 0        | N/A      | N/A  | 21        | 0       | N/A      | N/A |
| 2.5 High-Frequency Words | 23        | 0        | N/A      | N/A  | 21        | 6       | 0        | 0%  |
| 2.6 Comprehension        | 23        | 7        | 7        | 100% | 21        | 3       | 0        | 0%  |
| 2.7 Shared Read*         | 23        | 0        | N/A      | N/A  | 21        | 0       | N/A      | N/A |
| 2.8 Vocabulary           | 23        | 0        | N/A      | N/A  | 21        | 0       | N/A      | N/A |
| 2.9 Writing*             | 23        | 0        | N/A      | N/A  | 21        | 0       | N/A      | N/A |
| 2.10 Spelling*           | 23        | 0        | N/A      | N/A  | 21        | 0       | N/A      | N/A |
| 2.11 Grammar*            | 23        | 0        | N/A      | N/A  | 21        | 0       | N/A      | N/A |

Note. \* This component is provided only for the EL small groups.

## Grade 3

| Small-Group Reading      | # of obs. | Wave One |          |      | Wave Two  |         |          |     |
|--------------------------|-----------|----------|----------|------|-----------|---------|----------|-----|
|                          |           | On plan  | Fidelity | %    | # of obs. | On plan | Fidelity | %   |
| 2.1. Leveled Reading     | 32        | 2        | 0        | 0%   | 29        | 4       | 0        | 0%  |
| 2.2 Phonemic Awareness   | 32        | 0        | N/A      | N/A  | 29        | 0       | N/A      | N/A |
| 2.3 Phonics              | 32        | 18       | 3        | 17%  | 29        | 12      | 0        | 0%  |
| 2.4 Structural Analysis  | 32        | 1        | 0        | 0%   | 29        | 0       | N/A      | N/A |
| 2.5 High-Frequency Words | 32        | 9        | 0        | 0%   | 29        | 1       | 0        | 0%  |
| 2.6 Vocabulary           | 32        | 1        | 0        | 0%   | 29        | 0       | N/A      | N/A |
| 2.7 Comprehension        | 32        | 1        | 1        | 100% | 29        | 0       | N/A      | N/A |
| 2.8 Shared Read*         | 32        | 0        | N/A      | N/A  | 29        | 0       | N/A      | N/A |
| 2.9 Writing*             | 32        | 0        | N/A      | N/A  | 29        | 0       | N/A      | N/A |
| 2.10 Spelling*           | 32        | 0        | N/A      | N/A  | 29        | 0       | N/A      | N/A |
| 2.11 Grammar*            | 32        | 0        | N/A      | N/A  | 29        | 0       | N/A      | N/A |

Note. \* This component is provided only for the EL small groups.



## Student Reading Success Through Research and Collaboration

### Grade 4

| Small-Group Reading  | # of obs. | Wave One |          |     | Wave Two  |         |          |     |
|----------------------|-----------|----------|----------|-----|-----------|---------|----------|-----|
|                      |           | On plan  | Fidelity | %   | # of obs. | On plan | Fidelity | %   |
| 2.1. Leveled Reading | 23        | 6        | 0        | 0%  | 20        | 8       | 0        | 0%  |
| 2.2 Phonics/Decoding | 23        | 4        | 0        | 0%  | 20        | 6       | 1        | 17% |
| 2.3 Vocabulary       | 23        | 9        | 2        | 22% | 20        | 4       | 1        | 25% |
| 2.4. Comprehension   | 23        | 10       | 3        | 30% | 20        | 10      | 3        | 30% |
| 2.5 Fluency          | 23        | 7        | 1        | 14% | 20        | 4       | 0        | 0%  |
| 2.6 Shared Read*     | 23        | 0        | N/A      | N/A | 20        | 0       | N/A      | N/A |
| 2.7 Writing*         | 23        | 0        | N/A      | N/A | 20        | 0       | N/A      | N/A |
| 2.8 Spelling*        | 23        | 0        | N/A      | N/A | 20        | 0       | N/A      | N/A |
| 2.9 Grammar*         | 23        | 4        | 0        | 0%  | 20        | 0       | N/A      | N/A |

Note. \* This component is provided only for the EL small groups.

### Grade 5

| Small-Group Reading  | # of obs. | Wave One |          |     | Wave Two  |         |          |     |
|----------------------|-----------|----------|----------|-----|-----------|---------|----------|-----|
|                      |           | On plan  | Fidelity | %   | # of obs. | On plan | Fidelity | %   |
| 2.1. Leveled Reading | 15        | 10       | 0        | 0%  | 13        | 9       | 0        | 0%  |
| 2.2 Phonics/Decoding | 15        | 6        | 1        | 17% | 13        | 0       | N/A      | N/A |
| 2.3 Vocabulary       | 15        | 0        | N/A      | N/A | 13        | 0       | N/A      | N/A |
| 2.4. Comprehension   | 15        | 4        | 0        | 0%  | 13        | 4       | 0        | 0%  |
| 2.5 Fluency          | 15        | 3        | 0        | 0%  | 13        | 3       | 0        | 0%  |
| 2.6 Shared Read*     | 15        | 0        | N/A      | N/A | 13        | 0       | N/A      | N/A |
| 2.7 Writing*         | 15        | 0        | N/A      | N/A | 13        | 0       | N/A      | N/A |
| 2.8. Spelling*       | 15        | 3        | 0        | 0%  | 13        | 3       | 0        | 0%  |
| 2.9. Grammar*        | 15        | 0        | N/A      | N/A | 13        | 0       | N/A      | N/A |

Note. \* This component is provided only for the EL small groups.

## Appendix G

### Teachers' Fidelity to *WonderWorks* Instruction by Grade Level

#### Grade 1

| Intervention              | Wave 1    |         |          |      | Wave 2    |         |          |      |
|---------------------------|-----------|---------|----------|------|-----------|---------|----------|------|
|                           | # of obs. | On plan | Fidelity | %    | # of obs. | On plan | Fidelity | %    |
| <b>Day 1</b>              |           |         |          |      |           |         |          |      |
| 1) Phonological Awareness | 0         | N/A     | N/A      | N/A  | 4         | 4       | 2        | 50%  |
| 2) Phonemic Awareness     | 0         | N/A     | N/A      | N/A  | 4         | 4       | 4        | 100% |
| 3) Phonics                | 0         | N/A     | N/A      | N/A  | 4         | 4       | 3        | 75%  |
| 4) Build Fluency          | 0         | N/A     | N/A      | N/A  | 4         | 4       | 4        | 100% |
| 5) High-Frequency Words   | 0         | N/A     | N/A      | N/A  | 4         | 4       | 4        | 100% |
| 6) Shared Read            | 0         | N/A     | N/A      | N/A  | 4         | 4       | 4        | 100% |
| 7) Oral Vocabulary        | 0         | N/A     | N/A      | N/A  | 4         | 4       | 4        | 100% |
| <b>Day 2</b>              |           |         |          |      |           |         |          |      |
| 1) Phonemic Awareness     | 4         | 4       | 4        | 100% | 0         | N/A     | N/A      | N/A  |
| 2) Phonics                | 4         | 4       | 4        | 100% | 0         | N/A     | N/A      | N/A  |
| 3) Build Fluency          | 4         | 4       | 1        | 25%  | 0         | N/A     | N/A      | N/A  |
| 4) High-Frequency Words   | 4         | 4       | 0        | 0%   | 0         | N/A     | N/A      | N/A  |
| 5) Shared Read            | 4         | 4       | 2        | 50%  | 0         | N/A     | N/A      | N/A  |
| 6) Oral Vocabulary        | 4         | 4       | 4        | 100% | 0         | N/A     | N/A      | N/A  |
| <b>Day 3</b>              |           |         |          |      |           |         |          |      |
| 1) Phonological Awareness | 0         | N/A     | N/A      | N/A  | 2         | 2       | 2        | 100% |
| 2) Phonemic Awareness     | 0         | N/A     | N/A      | N/A  | 2         | 2       | 2        | 100% |
| 3) Phonics                | 0         | N/A     | N/A      | N/A  | 2         | 2       | 2        | 100% |
| 4) Build Fluency          | 0         | N/A     | N/A      | N/A  | 2         | 2       | 0        | 0%   |
| 5) High-Frequency Words   | 0         | N/A     | N/A      | N/A  | 2         | 2       | 1        | 50%  |
| 6) Shared Read            | 0         | N/A     | N/A      | N/A  | 2         | 2       | 0        | 0%   |
| 7) Oral Vocabulary        | 0         | N/A     | N/A      | N/A  | 2         | 2       | 2        | 100% |
| <b>Day 4</b>              |           |         |          |      |           |         |          |      |
| 1) Phonemic Awareness     | 0         | N/A     | N/A      | N/A  | 4         | 4       | 4        | 100% |
| 2) Phonics                | 0         | N/A     | N/A      | N/A  | 4         | 4       | 4        | 100% |
| 3) Build Fluency          | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%   |
| 4) High-Frequency Words   | 0         | N/A     | N/A      | N/A  | 4         | 4       | 4        | 100% |
| 5) Shared Read            | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%   |
| 6) Oral Vocabulary        | 0         | N/A     | N/A      | N/A  | 4         | 4       | 4        | 100% |
| <b>Day 5</b>              |           |         |          |      |           |         |          |      |
| 1) Phonological Awareness | 8         | 8       | 8        | 100% | 0         | N/A     | N/A      | N/A  |
| 2) Phonemic Awareness     | 8         | 8       | 5        | 63%  | 0         | N/A     | N/A      | N/A  |





## Student Reading Success Through Research and Collaboration

|                         |   |   |   |      |   |     |     |     |
|-------------------------|---|---|---|------|---|-----|-----|-----|
| 3) Phonics              | 8 | 8 | 5 | 63%  | 0 | N/A | N/A | N/A |
| 4) Build Fluency        | 8 | 8 | 8 | 100% | 0 | N/A | N/A | N/A |
| 5) High-Frequency Words | 8 | 8 | 7 | 88%  | 0 | N/A | N/A | N/A |
| 6) Shared Read          | 8 | 8 | 3 | 38%  | 0 | N/A | N/A | N/A |
| 7) Oral Vocabulary      | 8 | 8 | 0 | 0%   | 0 | N/A | N/A | N/A |

### Grade 2

| Intervention                      | Wave 1    |         |          |      | Wave 2    |         |          |     |
|-----------------------------------|-----------|---------|----------|------|-----------|---------|----------|-----|
|                                   | # of obs. | On plan | Fidelity | %    | # of obs. | On plan | Fidelity | %   |
| <b>Day 1</b>                      |           |         |          |      |           |         |          |     |
| 1) Phonological Awareness         | 0         | N/A     | N/A      | N/A  | 1         | 0       | N/A      | N/A |
| 2) Phonemic Awareness             | 0         | N/A     | N/A      | N/A  | 1         | 0       | N/A      | N/A |
| 3) Phonics                        | 0         | N/A     | N/A      | N/A  | 1         | 0       | N/A      | N/A |
| 4) Build Fluency                  | 0         | N/A     | N/A      | N/A  | 1         | 0       | N/A      | N/A |
| 5) High-Frequency Words           | 0         | N/A     | N/A      | N/A  | 1         | 0       | N/A      | N/A |
| 6) Shared Read                    | 0         | N/A     | N/A      | N/A  | 1         | 0       | N/A      | N/A |
| 7) Oral Vocabulary                | 0         | N/A     | N/A      | N/A  | 1         | 0       | N/A      | N/A |
| <b>Day 2</b>                      |           |         |          |      |           |         |          |     |
| 1) Phonemic Awareness             | 4         | 4       | 2        | 50%  | 0         | N/A     | N/A      | N/A |
| 2) Phonics                        | 4         | 3       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| 3) Build Fluency                  | 4         | 3       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| 4) High-Frequency Words           | 4         | 3       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| 5) Shared Read                    | 4         | 2       | 2        | 100% | 0         | N/A     | N/A      | N/A |
| 6) Oral Vocabulary                | 4         | 2       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| <b>Day 3</b>                      |           |         |          |      |           |         |          |     |
| 1) Phonemic Awareness             | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%  |
| 2) Phonics                        | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%  |
| 3) Build Fluency                  | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%  |
| 4) High-Frequency Words           | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%  |
| 5) Shared Read                    | 0         | N/A     | N/A      | N/A  | 4         | 2       | 0        | 0%  |
| 6) Build Fluency – Connected Text | 0         | N/A     | N/A      | N/A  | 4         | 2       | 0        | 0%  |
| 7) Oral Vocabulary                | 0         | N/A     | N/A      | N/A  | 4         | 3       | 0        | 0%  |
| <b>Day 4</b>                      |           |         |          |      |           |         |          |     |
| 1) Phonemic Awareness             | 4         | 4       | 2        | 50%  | 4         | 3       | 0        | 0%  |
| 2) Phonics                        | 4         | 3       | 0        | 0%   | 4         | 4       | 0        | 0%  |
| 3) Build Fluency                  | 4         | 3       | 2        | 67%  | 4         | 4       | 0        | 0%  |

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## Student Reading Success Through Research and Collaboration

|                                   |   |   |   |      |   |   |     |     |
|-----------------------------------|---|---|---|------|---|---|-----|-----|
| 4) High-Frequency Words           | 4 | 3 | 0 | 0%   | 4 | 3 | 0   | 0%  |
| 5) Shared Read                    | 4 | 3 | 0 | 0%   | 4 | 3 | 0   | 0%  |
| 6) Build Fluency – Connected Text | 4 | 4 | 0 | 0%   | 4 | 0 | N/A | N/A |
| 7) Oral Vocabulary                | 4 | 4 | 3 | 75%  | 4 | 1 | 0   | 0%  |
| <b>Day 5</b>                      |   |   |   |      |   |   |     |     |
| 1) Phonological Awareness         | 4 | 4 | 4 | 100% | 1 | 0 | N/A | N/A |
| 2) Phonemic Awareness             | 4 | 4 | 4 | 100% | 1 | 0 | N/A | N/A |
| 3) Phonics                        | 4 | 4 | 0 | 0%   | 1 | 0 | N/A | N/A |
| 4) High-Frequency Words           | 4 | 4 | 0 | 0%   | 1 | 0 | N/A | N/A |
| 5) Shared Read                    | 4 | 3 | 0 | 0%   | 1 | 0 | N/A | N/A |
| 6) Build Fluency – Connected Text | 4 | 2 | 0 | 0%   | 1 | 0 | N/A | N/A |
| 7) Oral Vocabulary                | 4 | 4 | 0 | 0%   | 1 | 0 | N/A | N/A |

### Grade 3

| Intervention                          | Wave 1    |         |          |      | Wave 2    |         |          |     |
|---------------------------------------|-----------|---------|----------|------|-----------|---------|----------|-----|
|                                       | # of obs. | On plan | Fidelity | %    | # of obs. | On plan | Fidelity | %   |
| <b>Day 1</b>                          |           |         |          |      |           |         |          |     |
| 1) Weekly Concept                     | 4         | 4       | 3        | 75%  | 0         | N/A     | N/A      | N/A |
| 2) Review Vocabulary                  | 4         | 4       | 4        | 100% | 0         | N/A     | N/A      | N/A |
| 3) High-Frequency Words               | 4         | 4       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| 4) Read Complex Text                  | 2         | 2       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| <b>Day 2</b>                          |           |         |          |      |           |         |          |     |
| 1) Reread Complex Text                | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%  |
| 2) Respond to Reading                 | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%  |
| <b>Day 3</b>                          |           |         |          |      |           |         |          |     |
| 1) Before Reading                     | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%  |
| 2) During Reading                     | 0         | N/A     | N/A      | N/A  | 4         | 4       | 0        | 0%  |
| <b>Day 4</b>                          |           |         |          |      |           |         |          |     |
| 1) During Reading                     | 4         | 4       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| 2) After Reading – Respond to Reading | 4         | 4       | 0        | 0%   | 0         | N/A     | N/A      | N/A |
| <b>Day 5</b>                          |           |         |          |      |           |         |          |     |
| 1) Review and Reteach                 | 4         | 4       | 3        | 75%  | 3         | 3       | 0        | 0%  |
| 2) Write About Reading                | 4         | 4       | 1        | 25%  | 3         | 3       | 0        | 0%  |
| 3) Write an Analysis                  | 0         | N/A     | N/A      | N/A  | 0         | N/A     | N/A      | N/A |



## Student Reading Success Through Research and Collaboration

### Grade 4

| Intervention                          | Wave 1    |         |          |     | Wave 2    |         |          |     |
|---------------------------------------|-----------|---------|----------|-----|-----------|---------|----------|-----|
|                                       | # of obs. | On plan | Fidelity | %   | # of obs. | On plan | Fidelity | %   |
| <b>Day 1</b>                          |           |         |          |     |           |         |          |     |
| 1) Weekly Concept                     | 2         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A |
| 2) Review Vocabulary                  | 2         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A |
| 3) High-Frequency Words               | 2         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A |
| 4) Read Complex Text                  | 2         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A |
| <b>Day 2</b>                          |           |         |          |     |           |         |          |     |
| 1) Reread Complex Text                | 0         | N/A     | N/A      | N/A | 2         | 0       | N/A      | N/A |
| 2) Respond to Reading                 | 0         | N/A     | N/A      | N/A | 2         | 1       | 0        | 0%  |
| <b>Day 3</b>                          |           |         |          |     |           |         |          |     |
| 1) Before Reading                     | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A |
| 2) During Reading                     | 1         | 1       | 0        | 0%  | 0         | N/A     | N/A      | N/A |
| <b>Day 4</b>                          |           |         |          |     |           |         |          |     |
| 1) Before Reading – Expand Vocabulary | 1         | 1       | 0        | 0%  | 2         | 0       | N/A      | N/A |
| 2) During Reading                     | 1         | 1       | 0        | 0%  | 2         | 0       | N/A      | N/A |
| 3) After Reading – Respond to Reading | 1         | 0       | N/A      | N/A | 2         | 0       | N/A      | N/A |
| <b>Day 5</b>                          |           |         |          |     |           |         |          |     |
| 1) Review and Reteach                 | 2         | 0       | N/A      | N/A | 2         | 0       | N/A      | N/A |
| 2) Write About Reading                | 2         | 0       | N/A      | N/A | 2         | 0       | N/A      | N/A |
| 3) Write an Analysis                  | 2         | 0       | N/A      | N/A | 2         | 0       | N/A      | N/A |



## Student Reading Success Through Research and Collaboration

### Grade 5

| Intervention                          | Wave 1    |         |          |     | Wave 2    |         |          |      |
|---------------------------------------|-----------|---------|----------|-----|-----------|---------|----------|------|
|                                       | # of obs. | On plan | Fidelity | %   | # of obs. | On plan | Fidelity | %    |
| <b>Day 1</b>                          |           |         |          |     |           |         |          |      |
| 1) Weekly Concept                     | 2         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 2) Review Vocabulary                  | 2         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 3) High-Utility Words                 | 2         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 4) Read Complex Text                  | 2         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| <b>Day 2</b>                          |           |         |          |     |           |         |          |      |
| 1) Reread Complex Text                | 0         | N/A     | N/A      | N/A | 2         | 0       | N/A      | N/A  |
| 2) Respond to Reading                 | 0         | N/A     | N/A      | N/A | 2         | 0       | N/A      | N/A  |
| <b>Day 3</b>                          |           |         |          |     |           |         |          |      |
| 1) Before Reading                     | 1         | 0       | N/A      | N/A | 0         | N/A     | N/A      | N/A  |
| 2) During Reading                     | 1         | 1       | 0        | 0%  | 0         | N/A     | N/A      | N/A  |
| <b>Day 4</b>                          |           |         |          |     |           |         |          |      |
| 1) Before Reading – Expand Vocabulary | 0         | N/A     | N/A      | N/A | 2         | 1       | 1        | 100% |
| 2) During Reading                     | 0         | N/A     | N/A      | N/A | 2         | 1       | 0        | 0%   |
| 3) After Reading – Respond to Reading | 0         | N/A     | N/A      | N/A | 2         | 0       | N/A      | N/A  |
| <b>Day 5</b>                          |           |         |          |     |           |         |          |      |
| 1) Review and Reteach                 | 2         | 0       | N/A      | N/A | 2         | 0       | N/A      | N/A  |
| 2) Write About Reading                | 2         | 0       | N/A      | N/A | 2         | 0       | N/A      | N/A  |
| 3) Write an Analysis                  | 2         | 0       | N/A      | N/A | 2         | 0       | N/A      | N/A  |