## STUDY OF READING OUTCOMES AT ARAGON ELEMENTARY SCHOOL



**The Study.** Between the 2015/16 and 2018/19 school years, Aragon Elementary School in the Fountain-Fort Carson (Colorado) School District implemented Really Great Reading programs in Grades K through 4. Specifically, *Countdown* was implemented in Kindergarten, *Blast Foundations* in Grades 1 and 2, and *HD Word* in Grades 2 through 4. This study examined available district data from the Dynamic Indicators of Basic Early Literacy Skills Next (DIBELS) assessment as well as student demographic data collected by the district. The percentage of students who met DIBELS benchmark goals in composite scores and individual subtests in each year and grade was calculated. Analyses use DIBELS data from the fall and spring of each school year.<sup>2</sup>

#### **FINDINGS**

Most comparisons show pre/post increases in the percentages of students who met DIBELS benchmark goals in the 2015/16 and 2016/17 school years when Really Great Reading was implemented.

In the 2016/17 school year, all grades except for Grade 2 demonstrated an increase in the percentage of students who met DIBELS composite benchmark goals. Statistically significant increases were observed for students in Kindergarten and Grades 3 and 4.

Similar patterns were observed for individual DIBELS subtest measures, including Oral Reading Fluency (ORF), Nonsense Word Fluency (NWF), Retell Fluency (RTF), and Daze. Statistically significant increases for the ORF measure were observed for students in Grades 3 and 4 and for the RTF measure in Grades 2 and 4.

#### **KEY FINDINGS**

Analyses of the percentages of students who met DIBELS composite benchmark goals suggest student growth in the 2015/16 and 2016/17 school years.

 Similar patterns were observed for individual DIBELS subtest measures

Percentages of students who met DIBELS benchmark goals did not vary by demographics.

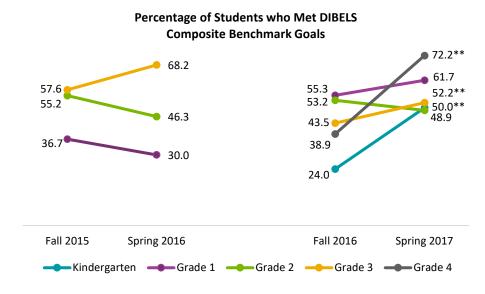
Descriptive findings indicate that the percentage of students who met DIBELS benchmark goals did not vary by gender, race/ethnicity, English language learner status, free-and reduced-priced lunch eligibility, or special education status.

<sup>&</sup>lt;sup>2</sup> Fall and spring data with the same group of students in each school year were analyzed to examine student growth. Analysis of growth during 2017/18 was not conducted due to missing spring data in that year. The earliest reported data for Kindergarten and fourth grade is fall 2016/17 because that was the first year that Really Great Reading was implemented in those grades. Sample sizes (respectively, by year for each grade) with both fall and spring data in each year are as follows: Kindergarten (50 in 2016/17), first grade (60 in 2015/16 and 47 in 2016/17), second grade (67 in 2015/16 and 47 in 2016/17), third grade (66 in 2015/16 and 69 in 2016/17), and fourth grade (54 in 2016/17).



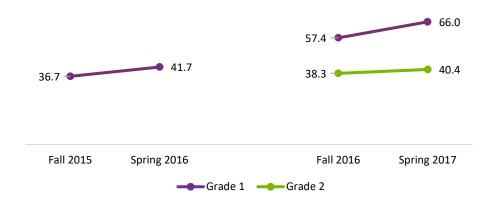
<sup>&</sup>lt;sup>1</sup> DIBELS benchmark goals are criterion-referenced target scores for the DIBELS composite measure and subtests that represent adequate reading progress.

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Note: Paired sample *t*-tests<sup>3</sup> were conducted to examine fall-to-spring differences. Statistically significant results are noted as follows: \*\*p < .01, \*\*\*p < .001.<sup>4</sup>

#### Percentage of Students who Met DIBELS Nonsense Word Fluency Benchmark Goals



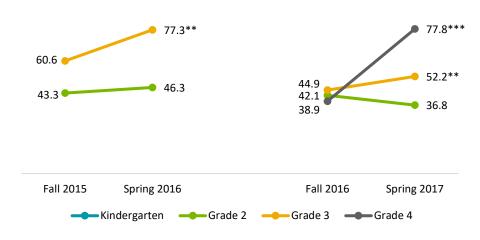
<sup>&</sup>lt;sup>4</sup> p-value is an indicator that represents the likelihood that observed results occurred by chance. In education research, values of p < .05 (i.e., values indicating that observed results had a less than 5% chance of occurring by chance) are typically used to identify results that are statistically significant. Lower p-values indicate a smaller likelihood that observed results occurred by chance and are therefore associated with statistically significant findings.



<sup>&</sup>lt;sup>3</sup> Paired samples *t*-tests are used to compare differences between matched pretest and posttest scores for a group. They compare the difference between the scores for each case and test to see if the average difference is significantly different from zero.

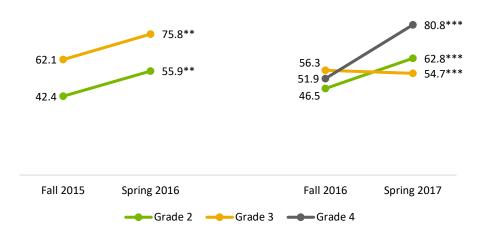
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#### Percentage of Students who Met DIBELS **Oral Reading Fluency Benchmark Goals**



Note: Paired sample t-tests were conducted to examine fall-to-spring differences. Statistically significant results are noted as follows: \*\*p < .01, \*\*\*p < .001.

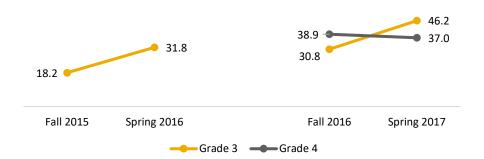
#### **Percentage of Students who Met DIBELS Retell Fluency Benchmark Goals**



Note: Paired sample t-tests were conducted to examine fall-to-spring differences. Statistically significant results are noted as follows: \*\*p < .01, \*\*\*p < .001.

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#### Percentage of Students who Met DIBELS **Daze Benchmark Goals**



### Subgroup analysis among students showed the percentage of students who met DIBELS benchmark goals did not vary by student demographics.

Subgroup analysis was conducted to examine if the percentage of students who met DIBELS benchmark goals differed by student demographics. Descriptive findings indicate that the percentage of students who met DIBELS benchmark goals did not vary by gender, ethnicity, English language learner status, free and reduced-priced lunch eligibility, or special education status.

#### Study Limitations and Implications for Future Research

Because DIBELS score calculation varies by grade and time of year, DIBELS scores may not be used to calculate student growth over time. Therefore, these analyses compare the percentages of students who met DIBELS benchmark goals for each implementation year. Future studies may target districts using scores from outcome measures that can be reliably compared over time.

The analyses in this study are descriptive and do not indicate causal relationships. Changes in student performance may be related to implementation of Really Great Reading, typical student growth, or other factors. Future research that compares outcomes among Really Great Reading participants and nonparticipants using a rigorous design would allow for stronger statements about impact.