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Report to the Public Education
Appropriations Subcommittee

K-3 Reading Improvement Program Report

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K-3 Reading Improvement Program Report

STATUTORY REQUIREMENT

U.C.A. Section 53F-2-503 requires the State Board of Education to submit an annual report to the Public Education Appropriations Subcommittee on the K-3 Reading Improvement Program. The report shall include (i) student learning gains in reading for the past school year and the five-year trend; (ii) the percentage of third grade students reading on grade level in the past school year and the five-year trend; (iii) the progress of schools and school districts in meeting goals stated in a school district's or charter school's plan for student reading proficiency; (iv) the correlation between third grade students reading on grade level and results of third grade language arts scores on a criterion-referenced test or computer adaptive test. This report has been submitted annually since 2013.

EXECUTIVE SUMMARY

The K-3 Reading Improvement Program provides instructional resources and supports for students in grades K-3 to support reading proficiency. A significant support provided by this program includes early reading intervention for students who demonstrate risk for not achieving reading competency. For example, students who do not meet reading competency standards on their first reading test and receive a reading intervention are six times more likely to meet reading competency standards on their last reading test than if the student had not received a reading intervention.

Overall, reading competency rates improved across the 2017-2018 school year. Specifically, improvement was noted in kindergarten, first, and third grade. At the beginning of the 2017-2018 school year, the percent of students who met grade-level based reading benchmarks were 62 percent of kindergartners, 59 percent of first graders, 73 percent of second graders, and 70 percent of third graders. By the end of SY 2018, the overall percent of students who met grade-level based reading competency standards were 70 percent of kindergartners, 66 percent of first graders, 72 percent of 2nd graders, and 74 percent of third graders. For Utah third graders, about 72 percent experienced typical or better growth which is a substantial increase from the 2016-2017 school year where about 68 percent of third grade students had typical or better growth.

BACKGROUND

Beginning in school year (SY) 2013, local education agencies (LEAs), school districts and charter schools, were required to assess and report to the state, students' reading competency three times a year (beginning, middle, and end) using the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) assessment. LEAs administered the DIBELS assessment and reported whether each student met reading benchmarks at the time of the testing period and whether the student had received reading interventions at any time during the school year. Beginning in SY 2016, LEAs were additionally required to report composite scores for each testing period. The results of that assessment are reported here for K-3 students who were enrolled in school for the full academic year (FAY), the equivalent of 160 days or more.

The K-3 Reading Improvement Program focuses on the development of early literacy skills in all students, with additional emphasis on the prevention of reading difficulties and early intervention for students who are at risk of not meeting grade-level based reading benchmarks. Resources available to aid students include:

- early intervention;
- standards and assessments for testing and monitoring reading competency;
- optional progress monitoring assessment;
- ongoing professional development;
- coaching, and
- the use of data to inform instruction.

FINDINGS

Student Reading Benchmarks, 2017-2018 School Year

The Utah State Board of Education (USBE) uses the DIBELS assessment to determine whether students met reading benchmarks over the course of the school year.

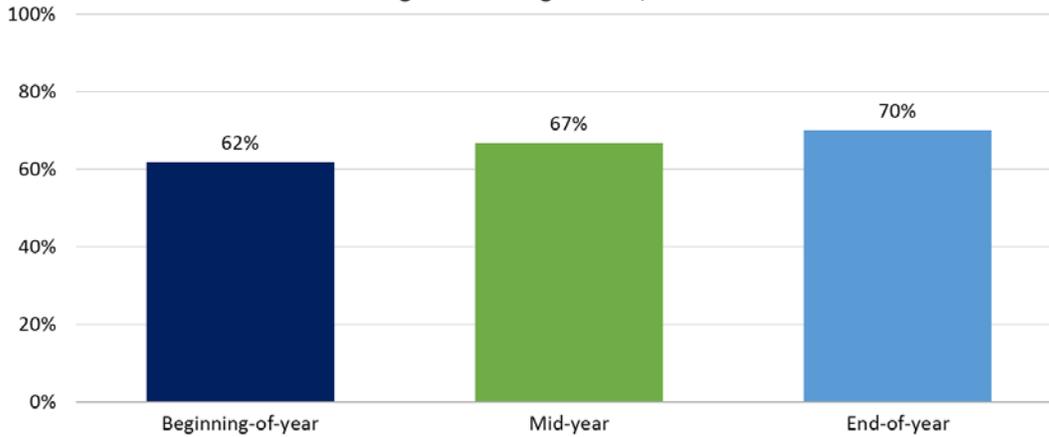
Kindergarten Reading Benchmarks

Figure 1 (on the following page) shows the percent of kindergarten students who met reading benchmarks on the DIBELS assessment at the beginning, middle, and end-of-year assessment during the 2017-2018 school year. Sixty-two percent of kindergarten students met reading benchmarks at the beginning of the year and, by the end of the year, 70 percent of students met reading benchmarks.

First through Third Grade Reading Benchmarks

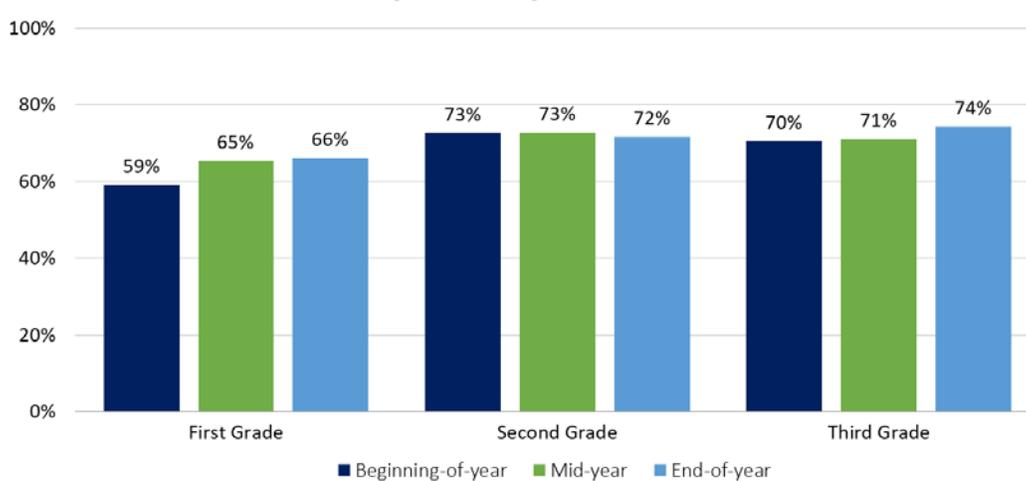
In the 2017-2018 school year, the percent of students who met reading benchmarks at the beginning-of-year assessment was 59 percent of first graders, 73 percent of second graders, and 70 percent of third graders. For first and third grade students, the percent of students who met reading benchmarks increased throughout the year with the largest gains for first grade students. Among first graders, the percent of students who met reading benchmarks on the end-of-year assessment increased by seven percentage points to 66 percent. Similarly, third grade students saw gains of four percentage points by the end-of-year assessment to 74 percent. The percent of second grade students who met reading benchmarks declined across the school year by one percentage point to 72 percent (see Figure 2 on the following page).

Figure 1. Percent of Kindergarten Students Who Met Reading Benchmarks During Each Testing Session, SY 2018



The 2018 percentages of students who met reading competency standards are out of all students who attended a school for a full academic year (FAY; a 160-day equivalency or more), and could be matched to a vendor data record (Beginning: 37,663; Mid-year: 38,824; End: 38,889).

Figure 2. Percent of Students By Grade Who Met Reading Benchmarks During Each Testing Session, SY 2018



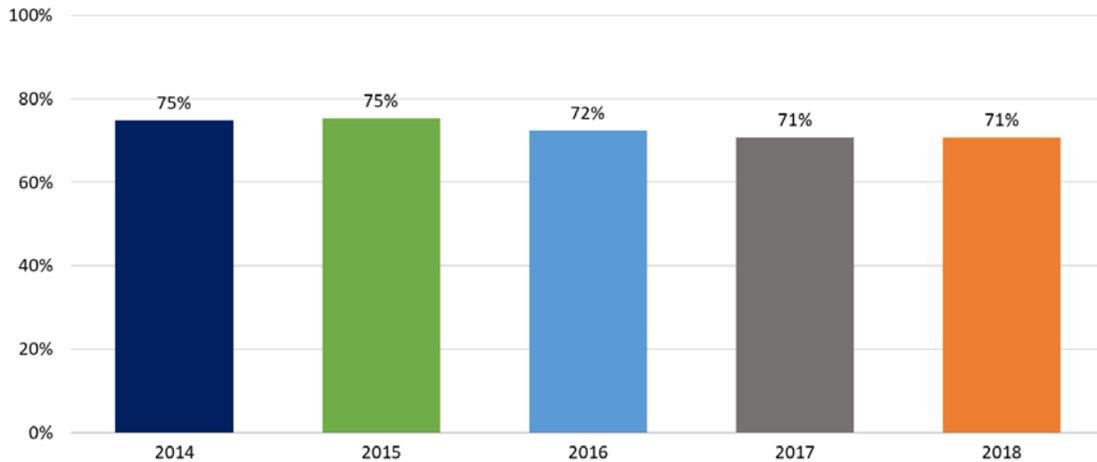
The 2018 percentages of students who met reading competency standards are out of all students who attended a school for a full academic year (FAY; a 160-day equivalency or more), and were tested (about 0.4% of students who were expected to test were untested without a valid reason and 1.4% took an alternate assessment or were excused).

Overall Reading Benchmarks over Time, Grades 1-3

Figure 3 (on the following page) shows the percent of all students in grades one through three who met reading benchmarks at year end for SY 2014 through SY 2018. Figure 4 (on the following page) displays year-end reading benchmark results with students by subgroup for the same time period. Compared with the overall percentages of students meeting reading benchmarks in grades one through three, lower percentages of students with risk factors (students who are economically-disadvantaged, students who identify as racial or ethnic minorities, students with a disability, and students who are English learners) met reading benchmarks in grades one through three. In SY 2018, the largest gap was with students with a disability where only 40 percent of students with a disability met reading benchmarks compared to 71 percent of students overall. For all of the disaggregated groups, except for students who are English learners, the percent in that subgroup who met reading benchmarks in SY 2018 is the same as the percent who met reading benchmarks in SY 2017. For students who are English

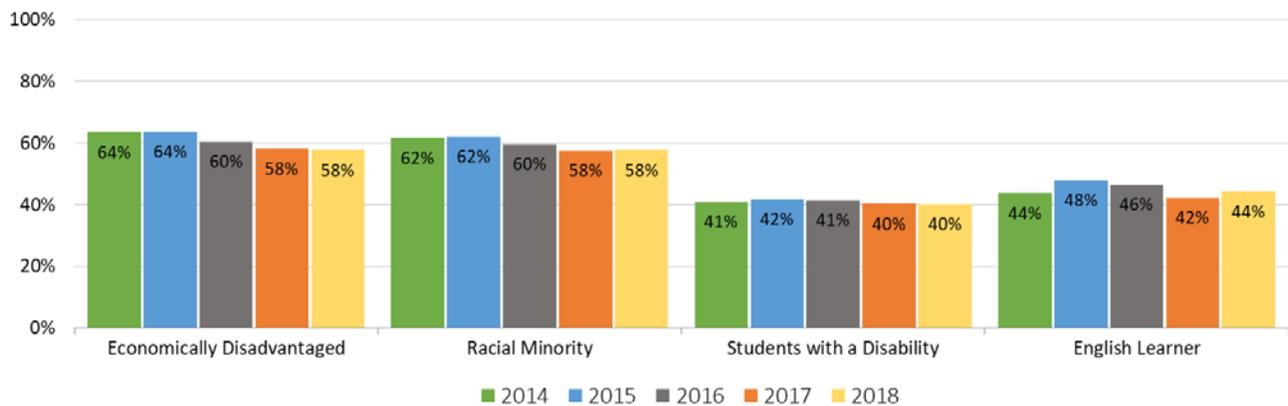
learners, the percent who met reading benchmarks on the end-of-year assessment for SY 2018 increased from SY 2017 by four percentage points to 44 percent.

Figure 3. Percent of Students in Grades 1 through 3, Who Met Reading Benchmarks at Year End, SY 2014 to 2018



The 2018 percentage in this table is out of 136,843 students in grades 1 through 3 who attended a school for a full academic year (FAY; a 160-day equivalency or more).

Figure 4. Percent of Students Who Met Reading Benchmarks on the End-of-Year Test by Student Group, SY 2014 to 2018

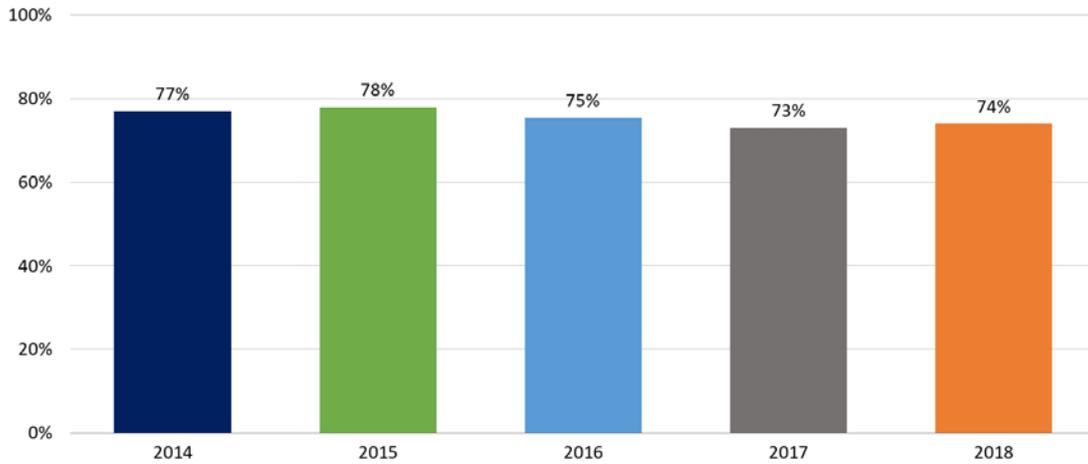


The 2018 percentages in this table are out of all grades 1 through 3 students who attended a school for a full academic year (FAY; a 160-day equivalency or more), were tested in reading at the end-of-year test in 2018, and who fall into the characteristic group in question. Some students may be in multiple groups (Economically Disadvantaged = 48,225; Racial Minority = 34,040; Students with a Disability = 18,922; English Learner = 14,886).

Focus on Third Grade Reading Benchmarks

For students in grade three, the percent of students meeting reading benchmarks reached 74 percent in SY 2018 which is down from 75 percent in SY 2016, but up from 73 percent in SY 2017 (see Figure 5 on the following page). One potential reason for the decrease from SY 2016 is that the percent of students in grade three who were untested decreased substantially since SY 2013 from 6.1 percent to 2.0 percent in SY 2018.

Figure 5. Percent of Third Graders Who Met Reading Benchmarks on the End-of-Year Test, SY 2014 to 2018

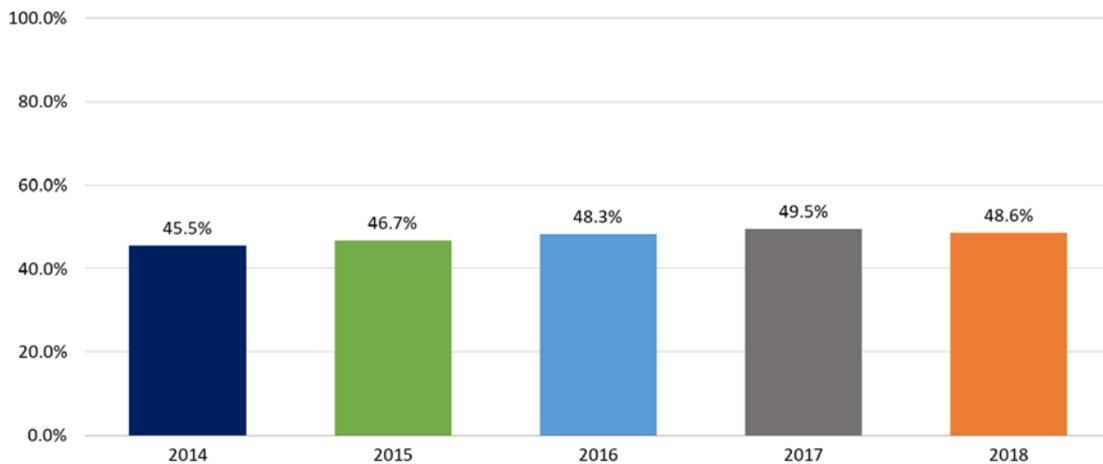


The 2018 percentage of students who met reading competency standards is out of third grade students who attended a school for a full academic year (FAY; a 160-day equivalency or more), and were tested at year-end (the percent untested by year was 2013:6.1%; 2014: 1.8%; 2015: 1.8%; 2016: 1.9%; 2017: 1.7%; 2018: 2.0%).

Results of SAGE

From SY 2014 to SY 2018, there was a three-percentage-point gain in English Language Arts (ELA) proficiency in third grade as measured by the SAGE assessment. Figure 6 shows the percent of third grade students who met proficiency on the English Language Arts SAGE assessment for the previous four years.

Figure 6. Percent of Third Graders Proficient on SAGE English Language Arts, SY 2014 to 2018



The percentages in this table are out of all third grade full academic year students who were tested in SAGE third grade English Language Arts (2018: 45,587)

DIBELS-SAGE Correlation

School year 2014 marked the first year of Utah’s SAGE summative assessment. The third grade ELA SAGE results have a moderate correlation to DIBELS benchmark status, suggesting that overall DIBELS and SAGE data are similar in their ability to indicate a students’ reading performance. Prior to SY 2016, the USBE only collected indicator data from LEAs on whether a student met reading benchmarks. This yes or no measure was adequate for computing a statistically significant measure of how related the reading benchmark indicators are with SAGE

third grade ELA scale scores. Table 1 shows the correlation coefficients for school years 2014 through 2017 between the SAGE scale scores and LEA indicator data. The correlation values are statistically significant and show moderate correlations.

Table 1. Correlation between SAGE Scale Scores and DIBELS Benchmark Indicators

School Year	Enrollment	Correlation
2014	43,309	0.561
2015	44,708	0.570
2016	46,262	0.581
2017	45,870	0.593

The DIBELS composite scores were reported to the USBE for the first time in SY 2016. Examining the relationship between students’ DIBELS composite scores and SAGE scale scores produces more precise results. Table 2 illustrates the correlation coefficient for SY 2016 through SY 2018 using the DIBELS composite score data correlated with SAGE scale scores. The correlation coefficients suggest a stronger relationship between the two tests than what resulted from the previous correlation analyses. This strong correlation suggests that students who achieve reading proficiency as measured by DIBELS are likely to be proficient on SAGE, but it is not a guarantee. One possible explanation for this is DIBELS assesses reading only; whereas, SAGE is more comprehensive as it also assesses writing (29 percent of a student’s score).

Table 2. Correlation between SAGE Scale Scores and DIBELS Composite Scores

School Year	Enrollment	Correlation
2016	46,262	0.736
2017	45,870	0.741
2018	45,650	0.747

Local Education Agency Student Reading Proficiency Progress

To evaluate the performance of LEAs, the Board analyzes each LEA’s progress toward meeting state goals for reading growth and proficiency. This goal, the uniform growth goal (UGG), which was 47.83 percent for the 2017-2018 school year, measures the percent of third grade students making typical or better growth when compared to other students in the nation with the same beginning-of-year reading composite score. Table 3 shows the percent of full academic year (FAY) third grade students in each LEA who made typical or better growth from beginning-of-year to end-of-year on the DIBELS assessment. Untested and excluded students are not included in the reading growth calculations. Overall, Utah third grade students are at 74 percent proficiency and 71.74 percent typical or better growth which is a substantial increase from SY 2017 where about 68 percent of third grade students had typical or better growth.

Table 3. Local Education Agency Reading Growth for Third Grade Students

Local Education Agency (LEA)	LEA Type	Typical or Better Pathway Percent	95% CI Upper Bound	2018 UGG Met ¹
Alpine District	District	73.53%	74.11%	Yes
American International School of Utah	Charter	39.22%	46.05%	No
American Leadership Academy	Charter	61.42%	65.74%	Yes
American Preparatory Academy	Charter	53.60%	56.10%	Yes
Ascent Academies of Utah	Charter	78.11%	81.03%	Yes
Athenian eAcademy	Charter	28.57%	37.11%	No
Athlos Academy of Utah	Charter	79.83%	83.51%	Yes
Bear River Charter School	Charter	88.89%	96.30%	Yes
Beaver District	District	89.19%	92.14%	Yes
Bonneville Academy	Charter	66.04%	72.54%	Yes
Box Elder District	District	79.49%	80.83%	Yes
C.S. Lewis Academy	Charter	44.44%	52.73%	Yes
Cache District	District	82.27%	83.32%	Yes
Canyon Grove Academy	Charter	50.98%	57.98%	Yes
Canyon Rim Academy	Charter	78.67%	83.40%	Yes
Canyons District	District	64.17%	65.14%	Yes
Carbon District	District	66.02%	68.98%	Yes
Channing Hall	Charter	85.14%	89.27%	Yes
Daggett District	District	66.67%	80.27%	Yes
DaVinci Academy	Charter	77.92%	82.65%	Yes
Davis District	District	74.72%	75.32%	Yes
Dixie Montessori Academy	Charter	72.55%	78.80%	Yes
Dual Immersion Academy	Charter	47.06%	54.05%	Yes
Duchesne District	District	85.08%	86.90%	Yes
Early Light Academy at Daybreak	Charter	79.21%	83.25%	Yes
Edith Bowen Laboratory School	Charter	75.00%	81.00%	Yes
Emery District	District	89.63%	92.01%	Yes
Endeavor Hall	Charter	56.25%	63.41%	Yes
Entheos Academy	Charter	64.58%	69.46%	Yes
Esperanza School	Charter	54.55%	60.22%	Yes
Excelsior Academy	Charter	53.97%	60.25%	Yes
Franklin Discovery Academy	Charter	45.90%	52.28%	Yes
Freedom Preparatory Academy	Charter	72.97%	76.62%	Yes
Garfield District	District	81.97%	86.89%	Yes
Gateway Preparatory Academy	Charter	83.33%	88.40%	Yes
George Washington Academy	Charter	90.52%	93.24%	Yes
Good Foundations Academy	Charter	66.13%	72.14%	Yes
Grand District	District	73.74%	78.16%	Yes
Granite District	District	69.90%	70.55%	Yes
Greenwood Charter School	Charter	61.70%	68.79%	Yes

Table 3. Local Education Agency Reading Growth for Third Grade Students, *continued*

Local Education Agency (LEA)	LEA Type	Typical or Better Pathway Percent	95% CI Upper Bound	2018 UGG Met ¹
Guadalupe School	Charter	82.61%	88.20%	Yes
Hawthorn Academy	Charter	67.10%	70.87%	Yes
Highmark Charter School	Charter	68.75%	75.44%	Yes
Iron District	District	77.40%	79.04%	Yes
Jefferson Academy	Charter	84.21%	88.39%	Yes
John Hancock Charter School	Charter	66.67%	76.29%	Yes
Jordan District	District	69.63%	70.38%	Yes
Juab District	District	78.71%	81.59%	Yes
Kane District	District	83.70%	87.55%	Yes
Lakeview Academy	Charter	81.25%	85.23%	Yes
Leadership Learning Academy	Charter	43.48%	48.10%	Yes
Legacy Preparatory Academy	Charter	65.45%	69.99%	Yes
Lincoln Academy	Charter	78.08%	82.92%	Yes
Logan City District	District	77.00%	79.03%	Yes
Lumen Scholar Institute	Charter	60.00%	69.80%	Yes
Mana Academy Charter School	Charter	81.48%	88.96%	Yes
Maria Montessori Academy	Charter	61.54%	67.57%	Yes
Millard District	District	83.80%	86.30%	Yes
Moab Charter School	Charter	81.25%	91.01%	Yes
Monticello Academy	Charter	83.33%	87.73%	Yes
Morgan District	District	80.48%	82.98%	Yes
Mountain West Montessori Academy	Charter	58.82%	65.72%	Yes
Mountainville Academy	Charter	89.53%	92.84%	Yes
Murray District	District	76.67%	78.66%	Yes
Navigator Pointe Academy	Charter	68.63%	75.12%	Yes
Nebo District	District	71.54%	72.46%	Yes
Noah Webster Academy	Charter	84.93%	89.12%	Yes
North Davis Preparatory Academy	Charter	48.98%	54.03%	Yes
North Sanpete District	District	78.38%	81.40%	Yes
North Star Academy	Charter	92.00%	95.84%	Yes
North Summit District	District	79.35%	83.57%	Yes
Odyssey Charter School	Charter	67.74%	73.68%	Yes
Ogden City District	District	65.65%	67.25%	Yes
Ogden Preparatory Academy	Charter	81.90%	85.66%	Yes
Open Classroom	Charter	62.22%	69.45%	Yes
Pacific Heritage Academy	Charter	50.00%	57.37%	Yes
Park City District	District	70.99%	73.39%	Yes
Pinnacle Canyon Academy	Charter	77.42%	84.93%	Yes
Piute District	District	100.00%	100.00%	Yes
Promontory School of Expeditionary Learning	Charter	79.63%	85.11%	Yes

Table 3. Local Education Agency Reading Growth for Third Grade Students, *continued*

Local Education Agency (LEA)	LEA Type	Typical or Better Pathway Percent	95% CI Upper Bound	2018 UGG Met ¹
Providence Hall	Charter	80.33%	83.93%	Yes
Provo District	District	76.24%	77.53%	Yes
Quest Academy	Charter	64.41%	68.81%	Yes
Ranches Academy	Charter	71.70%	77.89%	Yes
Reagan Academy	Charter	69.33%	74.66%	Yes
Renaissance Academy	Charter	67.65%	72.28%	Yes
Rich District	District	89.74%	94.60%	Yes
Salt Lake District	District	61.59%	62.77%	Yes
San Juan District	District	71.43%	74.55%	Yes
Scholar Academy	Charter	72.41%	77.21%	Yes
Sevier District	District	78.53%	80.67%	Yes
Soldier Hollow Charter School	Charter	78.79%	85.90%	Yes
South Sanpete District	District	87.22%	89.44%	Yes
South Summit District	District	82.35%	85.85%	Yes
Spectrum Academy	Charter	91.49%	95.56%	Yes
Summit Academy	Charter	58.55%	61.52%	Yes
Syracuse Arts Academy	Charter	58.01%	61.68%	Yes
Terra Academy	Charter	64.58%	71.49%	Yes
The Center for Creativity, Innovation and Discovery	Charter	43.24%	51.39%	Yes
Thomas Edison	Charter	65.08%	69.33%	Yes
Timpanogos Academy	Charter	76.79%	82.43%	Yes
Tintic District	District	90.00%	96.71%	Yes
Tooele District	District	71.32%	72.74%	Yes
Treeside Charter School	Charter	44.12%	52.63%	Yes
Uintah District ²	District	75.40%	77.20%	No
Utah Connections Academy	Charter	38.89%	50.38%	Yes
Utah Virtual Academy	Charter	56.86%	63.80%	Yes
Valley Academy	Charter	66.67%	73.47%	Yes
Venture Academy	Charter	79.55%	85.63%	Yes
Vista at Entrada School of Performing Arts and Technology	Charter	56.04%	61.25%	Yes
Voyage Academy	Charter	75.00%	79.97%	Yes
Walden School of Liberal Arts	Charter	72.73%	80.48%	Yes
Wallace Stegner Academy	Charter	60.61%	66.62%	Yes
Wasatch District	District	72.80%	74.79%	Yes
Wasatch Peak Academy	Charter	81.63%	87.16%	Yes
Wasatch Waldorf Charter School	Charter	65.38%	70.77%	Yes
Washington District	District	69.79%	70.80%	Yes
Wayne District	District	90.48%	96.88%	Yes
Weber District	District	72.10%	73.04%	Yes
Weilenmann School of Discovery	Charter	76.06%	81.12%	Yes

Notes:

¹Uniform growth goal met represents meeting the 2018 uniform growth goal or the uniform growth goal with 95% confidence interval.²Uintah District has a DIBELS waiver and is using an old UGG calculation methodology based on Benchmarks.

The Effect of Reading Interventions

In this report, the information presented above provides a good description of student learning gains in reading for the past school year and the five-year trend, the progress of schools in meeting student reading goals, and the correlation between third grade students reading on grade level and the results of third grade language arts SAGE scores. What the above information cannot tell us is what factors affect the likelihood of a student meeting reading benchmarks at year end. To analyze this likelihood of reaching reading benchmarks by the end of the year, an analysis was conducted of students for the 2017-2018 school year using logistic regression.

This analysis finds that interventions provided to students who did not meet reading benchmarks at the beginning of the year are critical in getting them to meet benchmarks on the end-of-year assessment. A student who did not meet reading benchmarks at the beginning of the year and did not receive a reading intervention is one-third as likely to meet the reading benchmark at year end, holding the other indicators constant. A student who did not meet reading benchmarks at the beginning of the year and did receive a reading intervention is six times more likely to meet reading benchmarks at year end, holding the other indicators constant. Table 4 contains the indicators included in the analysis and whether they predicted an increase or decrease in the likelihood of meeting reading benchmarks. All of the indicators predicted a decrease in the likelihood of meeting reading benchmarks at year end except for the interaction between not meeting the reading benchmark on the beginning-of-the-year assessment and receiving a reading intervention.

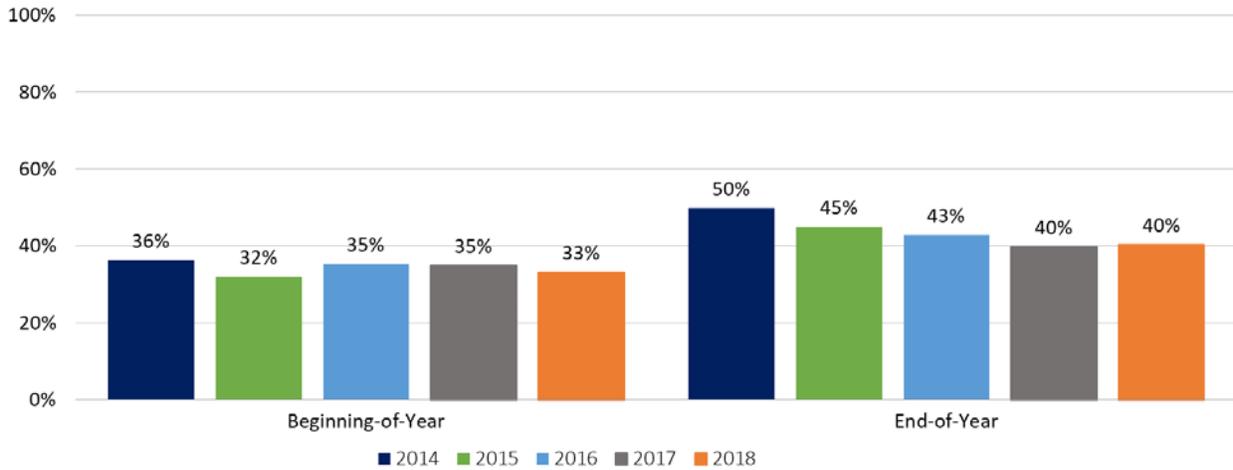
Table 4. Likelihood of Meeting Reading Benchmarks

Factors Predicted to Increase the Odds of Meeting Reading Benchmarks	Factors Predicted to Decrease the Odds of Meeting Reading Benchmarks
Did not meet reading benchmarks at the time of the first test, and received reading intervention	Did not meet reading benchmarks at the time of the first test (and did not receive reading intervention) Reading intervention received Students with a disability Students who are English learners Students who are economically disadvantaged Students who identify as a racial minority

Among first through third grade students who received a reading intervention and were tested in reading at the beginning of the year and end of the year during SY 2018, there was a seven percentage point increase overall (from 33% to 40%), in the percent of students who met reading competency standards from the students' beginning-of-year test to the end-of-year test (see Figure 7 on the following page).

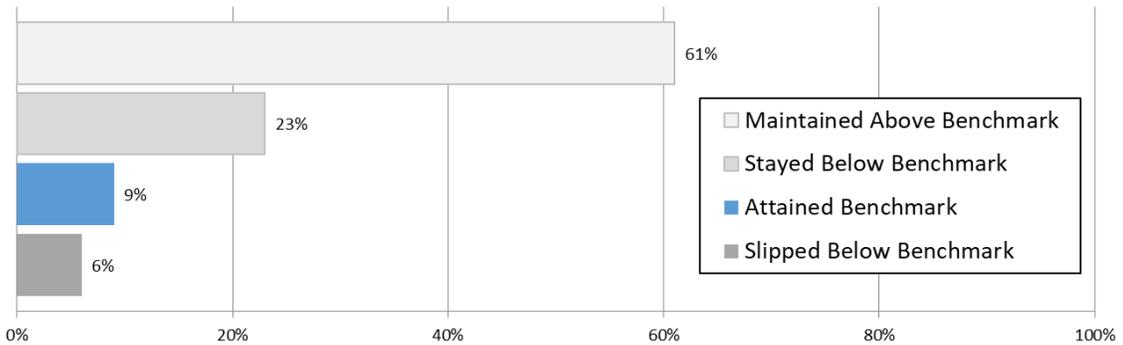
Figure 8 (on the following page) shows the change in reading benchmark status among all first through third grade students from the beginning of the year to the end of SY 2018. The majority of students, 61 percent, maintained a status above benchmark. About 23 percent of students were below or well below benchmark at the beginning and end of the year. Six percent of students fell below benchmark at the end of the year and nine percent attained benchmark after starting the year below benchmark. Among the nine percent of students who attained benchmark, 78 percent had received an intervention during SY 2018.

Figure 7. Percent of Students Who Met Reading Benchmarks at Beginning and End of Year, SY 2014 to SY 2018



The 2018 percentages are out of all grade 1 through 3 students who attended a school for a full academic year (FAY; a 160-day equivalency or more), who were tested in reading at least twice, and received an intervention (2018: 56,374 students).

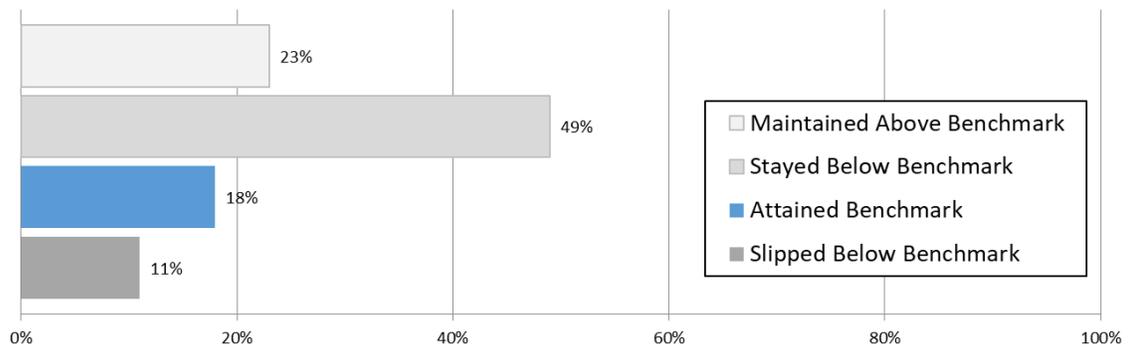
Figure 8. Change in Benchmark Status from Beginning to End of Year, SY 2018



The percentages in this table are out of all FAY students who were tested at the beginning of the year and end of the year (136,217 students).

Figure 9 (on the following page) shows the change in reading benchmark status among all first through third grade students who received a reading intervention and were tested in reading at the beginning and end of year. A plurality of the students who received a reading intervention stayed below benchmark throughout the school year (49 percent). However, 18 percent of the students who were provided with a reading intervention showed gains in reading benchmark status from the beginning to the end-of-year assessment which is a much larger percentage than the nine percent of students achieving benchmark status among all first through third grade students who were tested at the beginning of the year and at year end (Figure 8).

Figure 9. Change in Benchmark Status from Beginning to End of Year
Among Students who Received a Reading Intervention , SY 2018



The percentages in this table are out of all FAY students who were tested at the beginning of the year and end of the year and received a reading intervention (56,374 students).