# Analysis of the Enacted Curriculum for the Oklahoma State Department of Education for the collection period February - March, 2008 <br> The Standards Company LLC <br> 575 W. Alluvial Ave. <br> Clovis, CA 93611 <br> (888) 777-1417 <br> October 17, 2008 <br>  <br> THE STANDARDS <br> - COMPANY 


#### Abstract

As part of a 120 -school, statewide curriculum analysis project contracted by the Oklahoma State Department of Education, The Standards Company LLC used its Ruby ${ }^{\mathrm{TM}}$ curriculum analysis service to perform a statistical study of student assignments in English language arts and mathematics collected from Oklahoma public school classroom sessions. This report reflects data specific to student assignments collected from Oklahoma public school students. The data displayed in the tables and figures in this report is complete.


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## 1 Introduction

### 1.1 The need to measure the enacted curriculum

The content taught to students on a daily basis (the enacted curriculum) significantly influences how much they learn. The enacted curriculum is an especially important indicator for analyzing the achievement gap between students. Even in cases where the adopted curriculum is fully aligned with state and national standards, there can be a sharp distinction between the enacted and adopted curriculum. The reasons for such a disparity are fourfold:

1. Teachers sometimes supplement state-adopted content when they feel it falls short of their own expectations of what constitutes rigorous content, or they weaken state-adopted content when they feel it is too difficult for their students.
2. Teachers often find curriculum that they feel compelled to deliver out of their own personal interests or the personal interests of their students.
3. Teacher's perceptions of what the standards expect them to teach may not match the intent of the standards writers.
4. Teachers may assign questions and problems that do not match the levels of rigor expected by the writers of the standards.

### 1.2 The scope of this Ruby ${ }^{\text {TM }}$ report

In December 2008, the Oklahoma State Department of Education contracted with The Standards Company LLC to collect student work for grades K-12 in the areas of mathematics and English language arts from 120 public schools throughout the state of Oklahoma. The service provided by The Standards Company LLC, titled Ruby ${ }^{\mathrm{TM}}$, analyzed the student assignments for the following issues:

1. Alignment-the percentage of student assignments that correspond to academic content standards is one of the most important factors in student success.
2. Extent of coverage (standard sampling) -one means of increasing student success is ensuring that they are taught content spanning a wide range of standards.
3. Cognitive rigor-higher-order thinking skills and sophisticated projects are essential elements of academic rigor.

Statewide collection began in February 2008 and ended in May 2008. Each participating school collected student work for five consecutive days during this period.

## 2 Description of reports

We now describe the reports related to curriculum analysis, beginning in this section with a general discussion of the reports. Throughout this report, the reader should keep in mind the following:

1. The results shown in this executive summary represent finalized data and will not change henceforth.
2. These reports reflect only one week of collection at each participating school, hardly representative of the entire school year.
3. Percentages that should in theory sum to 100 might not due to rounding.

### 2.1 Alignment to Standards

Grade-level instruction provides an equal opportunity for all students to succeed. Curricular materials that are aligned to grade-level standards ensure that students are sufficiently challenged and provide a common baseline for judging student achievement. Therefore, one of the most important curricular measurements is the percentage of assignments aligned to state content standards.

Student assignments often address more than one state standard, so a clear understanding of what constitutes the enacted grade level of an assignment must be established at the outset of any study. The definition of the enacted grade level used in our reports rests on a fundamental premise:

If a student would be able to complete an assignment to proficiency (70\%) by possessing content knowledge aligning to a particular grade level (as defined by the Oklahoma PASS standards), then that grade level is deemed the enacted grade level of the assignment.

Two hypothetical examples will clarify this issue:

1. An assignment collected from a fifth-grade class contains ten questions, with the first question aligned to a firstgrade standard, the second question aligning to a second-grade standard, and the remaining eight questions aligning to fifth-grade standards. In this case, students need a fifth-grade level of knowledge to score proficiently on the assignment-the enacted grade level for this assignment is therefore "fifth grade" (that is, the assignment is "on grade level").
2. The assignment instead comprises eight questions that align to second-grade standards, with the remaining two questions aligning to fifth-grade standards. In this case, a student would only need to possess a second-grade understanding of content to score proficiently on the assignment, so the assignment aligns to second-grade standards (that is, the enacted grade level is "second grade").

### 2.1.1 Reading the alignment-to-standards chart

Using fictitious data, we now describe how one interprets the alignment-to-standards figures in this report.
Alignment to standards


A visual representation of fictitious alignment-to-standards data to demonstrate how one interprets the figures in this report. Percentages reflect the number of grade levels the assignments aligned above or below the class grade level.

### 2.2 Cognitive Rigor

Although coverage of the standards in the classroom is an important indicator of student learning, the enacted curriculum should also display myriad levels of cognitive skill required by the students to complete independent work to proficiency. Therefore, The Standards Company LLC measured the rigor associated with each assignment using two common indicators, Bloom's Taxonomy and depth of knowledge (DOK), then combined the results into a section of the report called cognitive rigor. The Bloom's Taxonomy level associated with a particular student assignment corresponds to the question appearing on the assignment that possesses the highest Bloom's Taxonomy level. The depth-of-knowledge level, on the other hand, corresponds to the assignment as a whole.

### 2.2.1 Bloom's Taxonomy

Higher-order questions form an integral part of quality instruction. Not only do student responses to higher-order questions illustrate their true understanding of academic content, answering higher-order questions can enhance a student's ability to communicate knowledge centered on sophisticated issues. Bloom's Taxonomy[1] is a useful categorization scheme for assessing the cognitive level of questions. Originally published in 1956, the taxonomy was revised in 2001.[2] The Standards Company LLC uses the revised Bloom's Taxonomy. For example, according to the revised Bloom's Taxonomy:

1. asking students to recall who made a specific statement in Romeo and Juliet lies at Level 1, the lowest level ("remember").
2. asking students to recast the statement in their own words raises the Bloom's Taxonomy level to at least Level 2 ("understand").
3. asking students to deconstruct the statement to determine the speaker's motive or intentions would constitute Level 4 ("analyze").

As the Bloom's Taxonomy level of questions increases, student engagement, especially among gifted students, also increases. Higher-order questions can therefore invigorate a classroom by increasing interest in subject material.

### 2.2.2 Depth of knowledge

The depth-of-knowledge levels developed by Norman Webb are often used to correlate the complexity of problems students are expected to be taught and how this complexity coincides with questions found on state tests.[3-13] There are four levels of depth of knowledge, with Level 1 signifying problems of the least complexity. For example:

1. reading a dictionary to find the meanings of an unknown word is a Level 1 depth-of-knowledge activity.
2. analyzing and describing the characteristics of various types of literature corresponds to a Level 3 depth-ofknowledge activity.

### 2.2.3 Reading the cognitive rigor density plot

As stated previously, The Standards Company LLC measures cognitive rigor using Bloom's Taxonomy and depth of knowledge. The figures in this section illustrate how one interprets the resulting density plots.

(revised) Bloom's taxonomy

Each cell in the density plot corresponds to a particular combination of Bloom's Taxonomy and depth of knowledge, expressed as a percentage of overall assignments. Each cell is shaded according to this percentage. (The percentages illustrated here are fictitious.)


Comparing two density plots can illustrate the significance of the information they convey. (a) A hypothetical density plot demonstrating a low cognitive rigor of collected student assignments. (b) The darkening of regions in the upper right indicates that the collected student assignments exhibited higher levels of Bloom's Taxonomy and depth of knowledge, thus representing more rigorous assignments.

## 3 Results of the study

The research scope of The Standards Company LLC is centered on the belief that test scores are driven largely by two factors: curriculum and instruction. The most telling point in the delivery of both occurs at the point of contact between student and teacher, which is denoted with the term "enacted." The purpose of this study was to examine thoroughly the state of the enacted curriculum. We are sure that many of the results of this study provide significant insight into teaching practices taking place inside Oklahoma public school classrooms.

We now present actual results generated in this study, beginning with the sample size data for the one-week collection. Note that the data used to compile the results for the source of assignments (Sec. X) was not ascribed by the teacher but instead estimated by the reviewers of The Standards Company LLC; as a result, the reports for the source of assignments are presented as informal results, with each figure and table labeled as such.

### 3.1 Sample sizes of analyzed assignments by subject

Table 1:
Sample size of collected student assignments. Although teachers submitted assignments for high- and low-performing students, Th

|  | Sample sizes for collected assignments |  |  |
| :---: | :---: | :---: | :---: |
| Grade | ELA | Math | Combined |
| K | $1,610(3 \%)$ | $1,247(2 \%)$ | $2,857(5 \%)$ |
| 1 | $2,504(4 \%)$ | $1,683(3 \%)$ | $4,187(8 \%)$ |
| 2 | $2,661(5 \%)$ | $2,088(4 \%)$ | $4,749(9 \%)$ |
| 3 | $2,626(5 \%)$ | $2,096(4 \%)$ | $4,722(9 \%)$ |
| 4 | $2,506(4 \%)$ | $1,999(3 \%)$ | $4,505(8 \%)$ |
| 5 | $2,147(4 \%)$ | $1,854(3 \%)$ | $4,001(7 \%)$ |
| 6 | $2,780(5 \%)$ | $2,439(4 \%)$ | $5,219(10 \%)$ |
| 7 | $2,432(4 \%)$ | $2,502(4 \%)$ | $4,934(9 \%)$ |
| 8 | $3,221(6 \%)$ | $2,141(4 \%)$ | $5,362(10 \%)$ |
| 9 | $1,589(3 \%)$ | $2,384(4 \%)$ | $3,973(7 \%)$ |
| 10 | $2,323(4 \%)$ | $2,010(3 \%)$ | $4,333(8 \%)$ |
| 11 | $1,663(3 \%)$ | $1,141(2 \%)$ | $2,804(5 \%)$ |
| 12 | $67(0 \%)$ | $102(0 \%)$ | $169(0 \%)$ |
| Total | $28,129(54 \%)$ | $23,686(45 \%)$ | $51,815(100 \%)$ |



### 3.2 Alignment to standards - English language arts (all schools)

Alignment to Oklahoma PASS content standards for assignments in English language arts for Grades K-8 for all participating schools. Columns in the table represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below, where percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown in the figure for clarity.

Enacted grade level for English language arts

## Official grade level/course title

| Enacted <br> grade |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| level | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| $\mathbf{K}$ | $\mathbf{8 5} \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{1}$ | $13 \%$ | $82 \%$ | $7 \%$ | $3 \%$ | $2 \%$ | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{2}$ | $0 \%$ | $11 \%$ | $83 \%$ | $8 \%$ | $3 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{3}$ | $0 \%$ | $0 \%$ | $7 \%$ | $\mathbf{8 4 \%}$ | $9 \%$ | $5 \%$ | $11 \%$ | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{4}$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{8 1 \%}$ | $6 \%$ | $4 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{5}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{8 2 \%}$ | $12 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{6}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $59 \%$ | $6 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{7}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $\mathbf{8 2 \%}$ | $5 \%$ | $6 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{8}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{7 9 \%}$ | $28 \%$ | $3 \%$ | $3 \%$ | $0 \%$ |
| $\mathbf{9}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $4 \%$ | $\mathbf{5 8 \%}$ | $3 \%$ | $2 \%$ | $20 \%$ |
| $\mathbf{1 0}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{8 7 \%}$ | $12 \%$ | $0 \%$ |
| $\mathbf{1 1}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{7 7 \%}$ | $0 \%$ |
| $\mathbf{1 2}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{7 8 \%}$ |




### 3.3 Alignment to standards - mathematics (all schools)

Alignment to Oklahoma PASS content standards for mathematics assignments for grades K-8. Rows represent the official grade level of the classes as denoted by the teachers. Columns represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below. A visual representation of the table above. Values of $1 \%$ or less are not shown for clarity.

Enacted grade level for mathematics
Official grade level/course title

| Enacted    <br> grade level K 1 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{K}$ | $69 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{1}$ | $25 \%$ | $56 \%$ | $7 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{2}$ | $4 \%$ | $33 \%$ | $53 \%$ | $14 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{3}$ | $0 \%$ | $8 \%$ | $30 \%$ | $47 \%$ | $13 \%$ | $2 \%$ | $3 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{4}$ | $0 \%$ | $0 \%$ | $5 \%$ | $26 \%$ | $50 \%$ | $14 \%$ | $4 \%$ | $2 \%$ | $0 \%$ |
| $\mathbf{5}$ | $0 \%$ | $0 \%$ | $2 \%$ | $7 \%$ | $25 \%$ | $59 \%$ | $27 \%$ | $8 \%$ | $10 \%$ |
| $\mathbf{6}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ | $15 \%$ | $\mathbf{4 6 \%}$ | $19 \%$ | $3 \%$ |
| $\mathbf{7}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $5 \%$ | $16 \%$ | $\mathbf{6 1 \%}$ | $16 \%$ |
| $\mathbf{8}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $7 \%$ | $\mathbf{6 7 \%}$ |



### 3.4 Alignment to standards - mathematics (all schools)

Same as the previous section but specific to high school mathematics. Values of $1 \%$ or less are not shown in the figure for clarity.

Discrete course alignments for mathematics

|  | Official grade level/course title |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Enacted level | 8th Grade | 9th Grade | Algebra I | Algebra II | Geometry I Integrated | Algebra |
| Geometry I | $16 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{7 2 \%}$ | $9 \%$ |
| Algebra II | $0 \%$ | $28 \%$ | $21 \%$ | $90 \%$ | $3 \%$ | $0 \%$ |
| Algebra I | $0 \%$ | $53 \%$ | $\mathbf{6 7 \%}$ | $4 \%$ | $8 \%$ | $18 \%$ |
| 8th Grade | $\mathbf{5 6 \%}$ | $0 \%$ | $5 \%$ | $2 \%$ | $8 \%$ | $34 \%$ |
| 7th Grade | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $18 \%$ |
| 6th Grade | $25 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $18 \%$ |
| 5th Grade | $0 \%$ | $10 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $6 \%$ |
| 4th Grade | $0 \%$ | $6 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 3rd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 2nd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 1st Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |



### 3.5 Alignment to NCTM standards - mathematics (all schools)

Alignment to national NCTM content standards for mathematics assignments for grades K-8. Columns represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below. Values of $1 \%$ or less are not shown for clarity.

Enacted grade level for mathematics (National NCTM standards)
Official grade level/course title
Enacted

| grade level | K | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | 5 | 6 | 7 | 8 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{K}$ | $\mathbf{9 3} \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{1}$ | $3 \%$ | $\mathbf{8 4 \%}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{2}$ | $0 \%$ | $3 \%$ | $\mathbf{7 4 \%}$ | $12 \%$ | $5 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{3}$ | $2 \%$ | $11 \%$ | $22 \%$ | $\mathbf{8 1 \%}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{4}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{7 4 \%}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{5}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{5 6 \%}$ | $23 \%$ | $17 \%$ | $3 \%$ |
| $\mathbf{6}$ | $0 \%$ | $0 \%$ | $2 \%$ | $4 \%$ | $17 \%$ | $39 \%$ | $\mathbf{7 5 \%}$ | $6 \%$ | $0 \%$ |
| $\mathbf{7}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{6 5 \%}$ | $0 \%$ |
| $\mathbf{8}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{6 6 \%}$ |
| $\mathbf{9}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $8 \%$ | $27 \%$ |
| $\mathbf{1 1}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |

Alignment to standards for mathematics


### 3.6 Alignment to NCTM standards - mathematics (all schools)

Same as the previous section but specific to high school mathematics.
Discrete course alignments to NCTM standards for mathematics

|  | Official grade level/course title |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enacted level |  | 8th Grade | 9th Grade | Algebra I | Algebra II | Geometry I Integrated | Algebra |
| 12th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Geometry I | $0 \%$ | $0 \%$ | $0 \%$ | $42 \%$ | $\mathbf{1 2 \%}$ | $0 \%$ | $0 \%$ |
| Algebra II | $0 \%$ | $0 \%$ | $3 \%$ | $40 \%$ | $52 \%$ | $0 \%$ | $0 \%$ |
| Algebra I | $0 \%$ | $35 \%$ | $\mathbf{6 9 \%}$ | $4 \%$ | $11 \%$ | $11 \%$ | $11 \%$ |
| 8th Grade | $85 \%$ | $41 \%$ | $23 \%$ | $5 \%$ | $15 \%$ | $59 \%$ | $34 \%$ |
| 7th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $18 \%$ | $35 \%$ |
| 6th Grade | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ |
| 5th Grade | $14 \%$ | $16 \%$ | $0 \%$ | $0 \%$ | $5 \%$ | $8 \%$ | $10 \%$ |
| 4th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 3rd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 2nd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $3 \%$ |



### 3.7 Cognitive rigor results - English language arts (Kindergarten, all schools)

Cognitive rigor of Kindergarten English language arts assignments for all schools participating in the study.


### 3.8 Cognitive rigor results - English language arts (Grade 1)



### 3.9 Cognitive rigor results - English language arts (Grade 2)


3.10 Cognitive rigor results - English language arts (Grade 3)

| English language arts (Grade 3) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | 1\% |  |  |  | 1\% |
|  | 2\% | 23\% | 5\% | 4\% |  | 1\% |
|  | 30\% | 14\% | 20\% |  |  |  |
|  | $\stackrel{1}{(31 \%)}$ | $\begin{aligned} & 2 \\ & (37 \%) \\ & \text { (revi } \end{aligned}$ | $\stackrel{3}{3}$ <br> ) Bl | $\begin{gathered} 4 \\ (5 \%) \\ \text { 's Ta } \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \text { omy } \end{gathered}$ | $\stackrel{6}{(2 \%)}$ |

3.11 Cognitive rigor results - English language arts (Grade 4)

| English language arts (Grade 4) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1\% |
|  | 2\% | 24\% | 6\% | 5\% |  | 2\% |
|  | 34\% | 9\% | 16\% |  |  |  |
|  | $\stackrel{1}{(37 \%)}$ | $\underset{(33 \%)}{2}$ | $\begin{gathered} 3 \\ (22 \%) \end{gathered}$ | $\underset{(5 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\underset{(3 \%)}{6}$ |
|  |  | (revi | ) Blo | s Ta |  |  |

### 3.12 Cognitive rigor results - English language arts (Grade 5)

| English language arts (Grade 5) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  | 1\% |  |  |  |
|  | 1\% | 26\% | 11\% | 2\% |  | 1\% |
|  | 34\% | 9\% | 13\% |  |  |  |
|  | $\stackrel{1}{(35 \%)}$ | $\begin{aligned} & 2 \\ & (36 \%) \\ & \text { (revi } \end{aligned}$ | $\stackrel{3}{3}$ <br> ) Blo | $\begin{gathered} 4 \\ (3 \%) \\ \text { 's Ta } \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \text { omy } \end{gathered}$ | $\stackrel{6}{(1 \%)}$ |

3.13 Cognitive rigor results - English language arts (Grade 6)

| English language arts (Grade 6) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 1\% |
|  |  | 2\% | 1\% |  |  | 3\% |
|  | 2\% | 28\% | 5\% | 6\% |  | 1\% |
|  | 30\% | 7\% | 14\% |  |  |  |
|  | $\frac{1}{(31 \%)}$ | $\underset{(37 \%)}{2}$ | $\begin{gathered} 3 \\ (20 \%) \end{gathered}$ | $\underset{(6 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\underset{(5 \%)}{6}$ |
|  |  | (revi | ) Blo | ' Ta | my |  |

3.14 Cognitive rigor results - English language arts (Grade 7)

| English language arts (Grade 7) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 2\% |
|  |  | 1\% |  | $3 \%$ |  | 7\% |
|  | 3\% | 29\% | 12\% | 3\% |  | 1\% |
|  | 23\% | 7\% | 10\% |  |  |  |
|  | $\stackrel{1}{(25 \%)}$ | $\begin{gathered} 2 \\ (38 \%) \\ \text { (revi } \end{gathered}$ | 3 $(22 \%)$ <br> ) Blo | $\begin{gathered} 4 \\ (5 \%) \\ \text { 's Ta } \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \text { omy } \end{gathered}$ | $\underset{(10 \%)}{6}$ |

3.15 Cognitive rigor results — English language arts (Grade 8)

| English language arts (Grade 8) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | 2\% | 1\% | 2\% |  | 6\% |
|  | 3\% | 37\% | 14\% | 6\% | 2\% | 5\% |
|  | 13\% | 6\% | 3\% |  |  |  |
|  | $\underset{(16 \%)}{1}$ | $\underset{(45 \%)}{2}$ | $\begin{gathered} 3 \\ (18 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (8 \%) \end{gathered}$ | $\stackrel{5}{(2 \%)}$ | $\stackrel{6}{(11 \%)}$ |
| (revised) Bloom's Taxonomy |  |  |  |  |  |  |

### 3.16 Cognitive rigor results - English language arts (Grade 9)


3.17 Cognitive rigor results - English language arts (Grade 10)

| English language arts (Grade 10) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | 7\% | 3\% | 5\% | 1\% | 4\% |
|  | 1\% | 29\% | 7\% | 6\% |  | 3\% |
|  | 20\% | 10\% | 5\% |  |  |  |
|  | $\underset{(21 \%)}{\frac{1}{2}}$ | $\underset{(45 \%)}{2}$ | $\begin{gathered} 3 \\ (14 \%) \end{gathered}$ | $\underset{(11 \%)}{4}$ | $\stackrel{5}{(1 \%)}$ | $\begin{gathered} 6 \\ (7 \%) \end{gathered}$ |
|  |  | (revi | ) Blo | 's Ta |  |  |

3.18 Cognitive rigor results - English language arts (Grade 11)


### 3.19 Cognitive rigor results - English language arts (Grade 12)

|  | English language arts (Grade 12) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  | 4\% |  |  |
|  |  | 18\% | 5\% | 22\% |  |  |
|  | 38\% | 9\% | 4\% |  |  |  |
|  | $\stackrel{1}{(38 \%)}$ | $\underset{(27 \%)}{2}$ | $\begin{gathered} 3 \\ (9 \%) \end{gathered}$ | $\underset{(25 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\stackrel{6}{6}(0 \%)$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

3.20 Cognitive rigor results - mathematics (Kindergarten)

| Mathematics (Kindergarten) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | 3\% | 4\% |  |  |
|  | 7\% | 5\% | 79\% | 2\% |  |  |
|  | $\stackrel{1}{(5 \%)}$ | $\underset{(5 \%)}{2}$ | $\underset{(84 \%)}{3}$ | $\underset{(5 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\stackrel{6}{(0 \%)}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

3.21 Cognitive rigor results - mathematics (Grade 1)


Same as the previous figure except specific to Grade 1.
3.22 Cognitive rigor results - mathematics (Grade 2)

3.23 Cognitive rigor results - mathematics (Grade 3)

3.24 Cognitive rigor results - mathematics (Grade 4)

| Mathematics (Grade 4) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  | 1\% |  |  |
|  |  | 2\% | 11\% | 14\% | 1\% |  |
|  | 22\% | 22\% | 27\% | 1\% |  |  |
|  | $\frac{1}{(22 \%)}$ | $\begin{gathered} 2 \\ (24 \%) \\ \text { (revi } \end{gathered}$ | 3 $(38 \%)$ <br> ) Blo | $\begin{gathered} 4 \\ (16 \%) \\ \text { 's Ta) } \end{gathered}$ | $\begin{gathered} 5 \\ (1 \%) \\ \text { omy } \end{gathered}$ | $\begin{gathered} 6 \\ (0 \%) \end{gathered}$ |

3.25 Cognitive rigor results - mathematics (Grade 5)


### 3.26 Cognitive rigor results - mathematics (Grade 6)


3.27 Cognitive rigor results - mathematics (Grade 7)

3.28 Cognitive rigor results - mathematics (Grade 8)

3.29 Cognitive rigor results - mathematics (Grade 9)

| Mathematics (Grade 9) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  | 1\% |  |  |
|  |  | 1\% | 4\% | 29\% |  |  |
|  | 2\% | 2\% | 60\% | 1\% |  |  |
|  | $\stackrel{1}{(1 \%)}$ | $\begin{aligned} & 2 \\ & (3 \%) \\ & \text { (revi } \end{aligned}$ | $\underset{(64 \%)}{3}$ <br> ) Blo | $\begin{gathered} 4 \\ (31 \%) \\ \text { 's Ta } \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \text { omy } \end{gathered}$ | $\stackrel{6}{(0 \%)}$ |

### 3.30 Cognitive rigor results - mathematics (Grade 10)



### 3.31 Cognitive rigor results - mathematics (Grade 11)



### 3.32 Cognitive rigor results - mathematics (Grade 12)



### 3.33 Letter-grade analysis - combined subjects (Grades K-12)

Table 6:
Letter grades received by students on English language arts and mathematics assignments for all schools participating in the study.

| Letter grade analysis for all subjects |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Student | A | B | C | D | F |
| All Grades | High-performing | $82 \%$ | $10 \%$ | $3 \%$ | $1 \%$ | $1 \%$ |
|  | Medium-performing | $33 \%$ | $35 \%$ | $16 \%$ | $5 \%$ | $8 \%$ |
|  | Low-performing | $31 \%$ | $14 \%$ | $14 \%$ | $13 \%$ | $26 \%$ |



### 3.34 Letter-grade analysis - combined subjects (Kindergarten)

Table 7:
Same as the previous table, but specific to Kindergarten. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade K | High-performing <br> Medium-performing <br> Low-performing | $98 \%$ |  |  |  | $1 \%$ |  |
|  |  | $77 \%$ | $0 \%$ | $5 \%$ | $5 \%$ | $11 \%$ |  |

Letter grade analysis for all subjects (Kindergarten)


A visual representation of the table above.

### 3.35 Letter-grade analysis - combined subjects (Grade 1)

Table 8:
Same as the previous table but specific to Grade 1. Composite results for all grade levels are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade 1 | High-performing | 94\% | 4\% | 0\% | 0\% | 0\% |
|  | Medium-performing |  |  |  |  |  |
|  | Low-performing | 45\% | 15\% | 11\% | 8\% | 19\% |

Letter grade analysis for all subjects (Grade 1)


A visual representation of the table above.

### 3.36 Letter-grade analysis - combined subjects (Grade 2)

Table 9:
Same as the previous table but specific to Grade 2. Composite results for all grade levels are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 2 | High-performing <br> Medium-performing | $87 \%$ | $7 \%$ | $2 \%$ | $1 \%$ | $1 \%$ |  |
|  | Low-performing | $40 \%$ | $16 \%$ | $11 \%$ | $11 \%$ | $19 \%$ |  |

Letter grade analysis for all subjects (Grade 2)


A visual representation of the table.

### 3.37 Letter-grade analysis - combined subjects (Grade 3)

Table 10:
Same as the previous table but specific to Grade 3. Composite results for all grade levels are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 3 | High-performing <br>  <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $86 \%$ | $8 \%$ | $3 \%$ | $0 \%$ | $1 \%$ |  |

Letter grade analysis for all subjects (Grade 3)


A visual representation of the table above.

### 3.38 Letter-grade analysis - combined subjects (Grade 4)

Table 11:
Same as the previous table but specific to Grade 4. Composite results for all grade levels are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 4 | High-performing <br> Medium-performing | $81 \%$ | $12 \%$ | $3 \%$ | $1 \%$ | $0 \%$ |  |
|  | Low-performing |  |  |  |  |  |  |

Letter grade analysis for all subjects (Grade 4)


A visual representation of the table above.

### 3.39 Letter-grade analysis - combined subjects (Grade 5)

Table 12:
Same as the previous table but specific to Grade 5. Composite results for all grade levels are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 5 | High-performing <br> Medium-performing <br> Low-performing | $77 \%$ | $11 \%$ | $7 \%$ | $2 \%$ | $0 \%$ |  |
|  |  | $30 \%$ | $14 \%$ | $15 \%$ | $15 \%$ | $24 \%$ |  |

Letter grade analysis for all subjects (Grade 5)


A visual representation of the table above.

### 3.40 Letter-grade analysis - combined subjects (Grade 6)

Table 13:
Same as the previous table but specific to Grade 6. Composite results for all grade levels are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 6 | High-performing | $82 \%$ | $11 \%$ | $3 \%$ | $2 \%$ | $1 \%$ |
|  | Medium-performing | $50 \%$ | $8 \%$ | $8 \%$ | $8 \%$ | $25 \%$ |
|  | Low-performing | $24 \%$ | $18 \%$ | $14 \%$ | $15 \%$ | $28 \%$ |

Letter grade analysis for all subjects (Grade 6)


A visual representation of the table above.

### 3.41 Letter-grade analysis - combined subjects (Grade 7)

Table 14:
Same as the previous table but specific to Grade 7. Composite results for all grade levels are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 7 | High-performing | $75 \%$ | $15 \%$ | $4 \%$ | $1 \%$ | $1 \%$ |  |
|  | Medium-performing | $100 \%$ |  |  |  |  |  |
|  | Low-performing | $26 \%$ | $11 \%$ | $20 \%$ | $14 \%$ | $27 \%$ |  |

Letter grade analysis for all subjects (Grade 7)


A visual representation of the table above.

### 3.42 Letter-grade analysis - combined subjects (Grade 8)

Table 15:
Same as the previous table but specific to Grade 8. Composite results for all grade levels are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 8 | High-performing <br> Medium-performing <br> Low-performing | $71 \%$ | $17 \%$ | $6 \%$ | $2 \%$ | $1 \%$ |  |
|  |  | $21 \%$ | $11 \%$ | $15 \%$ | $14 \%$ | $36 \%$ |  |

Letter grade analysis for all subjects (Grade 8)


A visual representation of the table above.

### 3.43 Letter-grade analysis - combined subjects (Grade 9)

Table 16:
Same as the previous table but specific to Grade 9. Composite results for all grade levels are displayed visually in the figure below.

| Letter grade analysis for all subjects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 9 | High-performing | $82 \%$ | $10 \%$ | $3 \%$ | $1 \%$ | $2 \%$ |  |
|  | Medium-performing | $46 \%$ | $7 \%$ | $38 \%$ | $7 \%$ |  |  |
|  | Low-performing | $16 \%$ | $11 \%$ | $14 \%$ | $19 \%$ | $37 \%$ |  |

Letter grade analysis for all subjects (Grade 9)


A visual representation of the table above.

### 3.44 Letter-grade analysis - combined subjects (Grade 10)

Table 17:
Same as the previous table but specific to Grade 10. Composite results for all grade levels are displayed visually in the figure below

| Letter grade analysis for all subjects |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 10 | High-performing | $80 \%$ | $10 \%$ | $4 \%$ | $3 \%$ | $1 \%$ |
|  | Medium-performing | $37 \%$ | $12 \%$ | $25 \%$ |  | $25 \%$ |
|  | Low-performing | $20 \%$ | $10 \%$ | $16 \%$ | $19 \%$ | $33 \%$ |

Letter grade analysis for all subjects (Grade 10)


A visual representation of the table above.

### 3.45 Letter-grade analysis - combined subjects (Grade 11)

Table 18:
Same as the previous table but specific to Grade 11. Composite results for all grade levels are displayed visually in the figure below

| Letter grade analysis for all subjects |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 11 | High-performing | $79 \%$ | $14 \%$ | $2 \%$ | $0 \%$ | $2 \%$ |  |
|  | Medium-performing |  | $89 \%$ | $5 \%$ | $5 \%$ |  |  |
|  | Low-performing | $15 \%$ | $11 \%$ | $12 \%$ | $10 \%$ | $50 \%$ |  |

Letter grade analysis for all subjects (Grade 11)


A visual representation of the table above.

### 3.46 Letter-grade analysis - combined subjects (Grade 12)

Table 19:
Same as the previous table but specific to Grade 12. Composite results for all grade levels are displayed visually in the figure below

| Letter grade analysis for all subjects |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade 12 | High-performing | 80\% |  |  |  | 19\% |
|  | Medium-perform |  |  |  |  |  |
|  | Low-performing | 17\% | 24\% | 9\% | 4\% | 43\% |

Letter grade analysis for all subjects (Grade 12)


A visual representation of the table above.

### 3.47 Source of assignments - English language arts

Table 20:
Source of English language arts assignments for all schools participating in the study. Note that the definition of workbooks shown

|  | Source of assignments for English language arts |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $4 \%$ | $0 \%$ | $6 \%$ | $0 \%$ | $89 \%$ |
| 1 | $3 \%$ | $1 \%$ | $8 \%$ | $0 \%$ | $86 \%$ |
| 2 | $3 \%$ | $1 \%$ | $2 \%$ | $0 \%$ | $91 \%$ |
| 3 | $4 \%$ | $1 \%$ | $4 \%$ | $0 \%$ | $89 \%$ |
| 4 | $3 \%$ | $2 \%$ | $3 \%$ | $0 \%$ | $91 \%$ |
| 5 | $1 \%$ | $7 \%$ | $8 \%$ | $0 \%$ | $81 \%$ |
| 6 | $2 \%$ | $1 \%$ | $19 \%$ | $0 \%$ | $76 \%$ |
| 7 | $5 \%$ | $1 \%$ | $43 \%$ | $0 \%$ | $49 \%$ |
| 8 | $9 \%$ | $1 \%$ | $30 \%$ | $0 \%$ | $58 \%$ |
| 9 | $0 \%$ | $2 \%$ | $28 \%$ | $0 \%$ | $68 \%$ |
| 10 | $3 \%$ | $0 \%$ | $38 \%$ | $0 \%$ | $57 \%$ |
| 11 | $0 \%$ | $0 \%$ | $34 \%$ | $0 \%$ | $64 \%$ |
| 12 | $0 \%$ | $1 \%$ | $16 \%$ | $13 \%$ | $67 \%$ |

Source of assignments for English language arts (Grades K-12)


A visual representation of the table above.

### 3.48 Source of assignments - mathematics

Table 21:
Same as the previous figure but specific to mathematics. These results are displayed visually in the figure below.

|  | Source of assignments for mathematics |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $0 \%$ | $1 \%$ | $1 \%$ | $0 \%$ | $97 \%$ |
| 1 | $2 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $94 \%$ |
| 2 | $7 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $90 \%$ |
| 3 | $2 \%$ | $1 \%$ | $0 \%$ | $1 \%$ | $94 \%$ |
| 4 | $10 \%$ | $3 \%$ | $0 \%$ | $7 \%$ | $77 \%$ |
| 5 | $5 \%$ | $0 \%$ | $0 \%$ | $8 \%$ | $84 \%$ |
| 6 | $4 \%$ | $4 \%$ | $0 \%$ | $3 \%$ | $86 \%$ |
| 7 | $0 \%$ | $3 \%$ | $2 \%$ | $2 \%$ | $92 \%$ |
| 8 | $0 \%$ | $2 \%$ | $4 \%$ | $25 \%$ | $66 \%$ |
| 9 | $1 \%$ | $0 \%$ | $1 \%$ | $17 \%$ | $78 \%$ |
| 10 | $1 \%$ | $1 \%$ | $6 \%$ | $15 \%$ | $75 \%$ |
| 11 | $0 \%$ | $0 \%$ | $3 \%$ | $24 \%$ | $71 \%$ |
| 12 | $0 \%$ | $0 \%$ | $1 \%$ | $40 \%$ | $58 \%$ |



A visual representation of the table above.

## 4 Results - high-performing versus low-performing schools

The Oklahoma State Department of Education requested that the results of this report be disaggregated according to the performance levels of the students at each respective school. The schools in this study were therefore separated into three groups: high-performing (API score of at least 1400, medium-performing (API score between 1200 and 1400), and low-performing (API score less than or equal to 1200). The following tables and figures illustrate the differences in the enacted curriculum between high- and low-performing schools. Note that the sample sizes are significantly smaller than those used to create the figures and tables in the previous section, so more caution should be exercised before generalizing the following results.

The reader should note the following:

1. Due to insufficient sample sizes related to high-performing high schools, results are not shown for high schools.

### 4.1 Sample sizes of analyzed assignments by subject

Table 22:
Sample size of collected student assignments for high-performing schools. Although teachers submitted assignments for high- and

|  | Sample sizes for collected assignments (high-performing schools) |  |  |
| :---: | :---: | :---: | :---: |
| Grade | ELA | Math | Combined |
| K | $508(3 \%)$ | $306(2 \%)$ | $814(6 \%)$ |
| 1 | $1,137(8 \%)$ | $697(5 \%)$ | $1,834(14 \%)$ |
| 2 | $1,018(7 \%)$ | $847(6 \%)$ | $1,865(14 \%)$ |
| 3 | $1,037(8 \%)$ | $788(6 \%)$ | $1,825(14 \%)$ |
| 4 | $832(6 \%)$ | $675(5 \%)$ | $1,507(11 \%)$ |
| 5 | $597(4 \%)$ | $463(3 \%)$ | $1,060(8 \%)$ |
| 6 | $677(5 \%)$ | $635(4 \%)$ | $1,312(10 \%)$ |
| 7 | $767(5 \%)$ | $569(4 \%)$ | $1,336(10 \%)$ |
| 8 | $906(6 \%)$ | $489(3 \%)$ | $1,395(10 \%)$ |
| Total | $7,479(57 \%)$ | $5,469(42 \%)$ | $12,948(100 \%)$ |



A visual representation of the above table.

### 4.2 Sample sizes of analyzed assignments by subject

Table 23:
Same as the previous figure but specific to low-performing schools. The data is visually displayed in the below figure.

|  | Sample sizes for collected assignments (low-performing schools) |  |  |
| :---: | :---: | :---: | :---: |
| Grade | ELA | Math | Combined |
| K | $385(3 \%)$ | $295(2 \%)$ | $680(6 \%)$ |
| 1 | $485(4 \%)$ | $244(2 \%)$ | $729(7 \%)$ |
| 2 | $368(3 \%)$ | $300(3 \%)$ | $668(6 \%)$ |
| 3 | $432(4 \%)$ | $313(3 \%)$ | $745(7 \%)$ |
| 4 | $397(3 \%)$ | $251(2 \%)$ | $648(6 \%)$ |
| 5 | $304(3 \%)$ | $192(1 \%)$ | $496(4 \%)$ |
| 6 | $217(2 \%)$ | $176(1 \%)$ | $393(3 \%)$ |
| 7 | $276(2 \%)$ | $232(2 \%)$ | $508(5 \%)$ |
| 8 | $554(5 \%)$ | $384(3 \%)$ | $938(9 \%)$ |
| 9 | $647(6 \%)$ | $891(8 \%)$ | $1,538(15 \%)$ |
| 10 | $976(9 \%)$ | $588(5 \%)$ | $1,564(15 \%)$ |
| 11 | $588(5 \%)$ | $378(3 \%)$ | $966(9 \%)$ |
| 12 | $30(0 \%)$ | $66(0 \%)$ | $96(0 \%)$ |
| Total | $5,659(56 \%)$ | $4,310(43 \%)$ | $9,969(100 \%)$ |



A visual representation of the above table.

### 4.3 Alignment to standards - English language arts (high-performing schools)

Alignment to Oklahoma PASS content standards for student assignments in English language arts for Grades K-8 for high-performing schools. Rows represent the official grade level of the classes as denoted by the teachers. Columns represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below. A visual representation of the table above. Percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown for clarity.

Enacted grade level for English language arts (high-performing schools)
Official grade level/course title

| Enacted <br> grade | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| level | $\mathbf{K 1 \%}$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{K}$ | $\mathbf{9} \%$ | $\mathbf{8 1 \%}$ | $8 \%$ | $3 \%$ | $2 \%$ | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $5 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{1}$ | $0 \%$ | $12 \%$ | $\mathbf{8 1 \%}$ | $9 \%$ | $4 \%$ | $0 \%$ | $5 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{2}$ | $0 \%$ | $0 \%$ | $7 \%$ | $\mathbf{8 3} \%$ | $8 \%$ | $5 \%$ | $14 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{3}$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{8 0 \%}$ | $4 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{4}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{8 6 \%}$ | $13 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{5}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{5 3 \%}$ | $5 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{6}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $5 \%$ | $\mathbf{8 5 \%}$ | $6 \%$ | $6 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{7}$ | $0 \%$ | $0 \%$ |  |  |  |  |  |  |  |  |  |  |  |
| $\mathbf{8}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{8 2 \%}$ | $34 \%$ | $3 \%$ | $3 \%$ | $0 \%$ |
| $\mathbf{9}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $4 \%$ | $\mathbf{5 1 \%}$ | $3 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{1 0}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{8 7 \%}$ | $17 \%$ | $0 \%$ |
| $\mathbf{1 1}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{7 5 \%}$ | $0 \%$ |
| $\mathbf{1 2}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{1 0 0 \%}$ |



### 4.4 Alignment to standards - English language arts (low-performing schools)

Enacted grade level for English language arts (low-performing schools)

## Official grade level/course title

| Enacted <br> grade |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| level | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| $\mathbf{K}$ | $\mathbf{7 3} \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{1}$ | $26 \%$ | $\mathbf{8 9 \%}$ | $3 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{2}$ | $0 \%$ | $6 \%$ | $\mathbf{8 8 \%}$ | $5 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{3}$ | $0 \%$ | $0 \%$ | $5 \%$ | $\mathbf{8 6 \%}$ | $8 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $7 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{4}$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{8 3 \%}$ | $13 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{5}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{7 1 \%}$ | $14 \%$ | $3 \%$ | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{6}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $7 \%$ | $\mathbf{8 0 \%}$ | $7 \%$ | $7 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{7}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $0 \%$ | $\mathbf{7 0 \%}$ | $5 \%$ | $7 \%$ | $2 \%$ | $2 \%$ | $0 \%$ |
| $\mathbf{8}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $7 \%$ | $73 \%$ | $6 \%$ | $3 \%$ | $2 \%$ | $4 \%$ |
| $\mathbf{9}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $5 \%$ | $\mathbf{8 0 \%}$ | $4 \%$ | $3 \%$ | $54 \%$ |
| $\mathbf{1 0}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $87 \%$ | $8 \%$ | $0 \%$ |
| $\mathbf{1 1}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $78 \%$ | $0 \%$ |
| $\mathbf{1 2}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{4 2 \%}$ |



A visual representation of the table above. Percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown for clarity.

### 4.5 Alignment to standards - mathematics (high-performing schools)

Enacted grade level for mathematics (high-performing schools)

Alignment to standards for mathematics high-performing schools


A visual representation of the table above. Values of $1 \%$ or less are not shown for clarity.

### 4.6 Alignment to standards - mathematics (high-performing schools)

Discrete course alignments for mathematics (high-performing schools)

|  | Official grade level/course title |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Enacted level | 8th Grade | Algebra I | Algebra II | Geometry I | Pre-Algebra |
| 12th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Geometry I | $7 \%$ | $0 \%$ | $13 \%$ | $\mathbf{4 4 \%}$ | $4 \%$ |
| Algebra II | $0 \%$ | $10 \%$ | $\mathbf{7 4 \%}$ | $26 \%$ | $4 \%$ |
| Algebra I | $0 \%$ | $\mathbf{6 9 \%}$ | $5 \%$ | $16 \%$ | $21 \%$ |
| 8th Grade | $71 \%$ | $15 \%$ | $3 \%$ | $8 \%$ | $20 \%$ |
| 7th Grade | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $34 \%$ |
| 6th Grade | $11 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $7 \%$ |
| 5th Grade | $7 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $4 \%$ |
| 4th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 3rd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 2nd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 1st Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |

Alignment to standards for mathematics high-performing schools

8th Grade
Algebra I
Algebra II
Geometry I
Pre-Algebra


A visual representation of the table above. Because of the discrete nature of high school mathematics, this figure is read differently than the others. Values of $1 \%$ or less are not shown for clarity.

### 4.7 Alignment to standards - mathematics (low-performing schools)

Enacted grade level for mathematics (low-performing schools)

| Enacted grade level | Official grade level/course title |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| K | 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 1 | 18\% | 81\% | 8\% | 2\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 2 | 7\% | 15\% | 67\% | 21\% | 5\% | 0\% | 0\% | 0\% | 0\% |
| 3 | 3\% | 2\% | 21\% | 59\% | 14\% | 0\% | 0\% | 0\% | 0\% |
| 4 | 0\% | 0\% | 0\% | 12\% | 68\% | 9\% | 3\% | 0\% | 0\% |
| 5 | 0\% | 0\% | 0\% | 2\% | 5\% | 56\% | 31\% | 23\% | 5\% |
| 6 | 0\% | 0\% | 0\% | 0\% | 5\% | 30\% | 54\% | 5\% | 2\% |
| 7 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 10\% | 49\% | 19\% |
| 8 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 3\% | 71\% |
| 9 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 17\% | 0\% |
| 11 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |

Alignment to standards for mathematics
low-performing schools


A visual representation of the table above. Values of $1 \%$ or less are not shown for clarity.

### 4.8 Alignment to standards - mathematics (low-performing schools)

Discrete course alignments for mathematics (low-performing schools)

|  | Official grade level/course title |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Enacted level | 9th Grade | Algebra I | Algebra II | Geometry I | Pre-Algebra |
| 12th Grade | $0 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ |
| Geometry I | $0 \%$ | $0 \%$ | $24 \%$ | $\mathbf{5 4 \%}$ | $0 \%$ |
| Algebra II | $15 \%$ | $18 \%$ | $\mathbf{6 8 \%}$ | $21 \%$ | $0 \%$ |
| Algebra I | $45 \%$ | $\mathbf{6 6 \%}$ | $0 \%$ | $6 \%$ | $5 \%$ |
| 8th Grade | $18 \%$ | $11 \%$ | $0 \%$ | $10 \%$ | $42 \%$ |
| 7th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $10 \%$ |
| 6th Grade | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $17 \%$ |
| 5th Grade | $12 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $14 \%$ |
| 4th Grade | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 3rd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 2nd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $7 \%$ |
| 1st Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |

Alignment to standards for mathematics
low-performing schools

9th Grade
Algebra I
Algebra II
Geometry I
Pre-Algebra


A visual representation of the table above. Because of the discrete nature of high school mathematics, this figure is read differently than the others. Values of $1 \%$ or less are not shown for clarity.
4.9 Cognitive rigor results - English language arts (Kindergarten)


### 4.10 Cognitive rigor results - English language arts (Kindergarten)


4.11 Cognitive rigor results - English language arts (Grade 1)

4.12 Cognitive rigor results - English language arts (Grade 1)

4.13 Cognitive rigor results - English language arts (Grade 2)

4.14 Cognitive rigor results - English language arts (Grade 2)

4.15 Cognitive rigor results - English language arts (Grade 3)

| English language arts high-performing schools (Grade 3) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1\% |
|  | 1\% | 24\% | 5\% | 4\% |  | 1\% |
|  | 30\% | 11\% | 22\% |  |  |  |
|  | $\underset{(30 \%)}{1}$ | $\underset{(36 \%)}{2}$ | $\underset{(28 \%)}{3}$ | $\begin{gathered} 4 \\ (4 \%) \end{gathered}$ | $\stackrel{5}{5}(0 \%)$ | $\underset{(2 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 4.16 Cognitive rigor results - English language arts (Grade 3)


4.17 Cognitive rigor results - English language arts (Grade 4)

| English language arts high-performing schools (Grade 4) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1\% |
|  | 2\% | 22\% | 7\% | 6\% |  | 3\% |
|  | 35\% | 8\% | 16\% |  |  |  |
|  | $\stackrel{1}{(37 \%)}$ | $\underset{(30 \%)}{2}$ | $\underset{(23 \%)}{3}$ | $\begin{gathered} 4 \\ (6 \%) \end{gathered}$ | $\stackrel{5}{5}(0 \%)$ | $\underset{(4 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

4.18 Cognitive rigor results — English language arts (Grade 4)


### 4.19 Cognitive rigor results - English language arts (Grade 5)


4.20 Cognitive rigor results - English language arts (Grade 5)

4.21 Cognitive rigor results - English language arts (Grade 6)

| English language arts high-performing schools (Grade 6) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 1\% |
|  |  | 1\% | 1\% | 1\% |  | 2\% |
|  | 2\% | 33\% | 5\% | 8\% |  | 2\% |
|  | 27\% | 7\% | 10\% |  |  |  |
|  | $\stackrel{1}{(28 \%)}$ | $\begin{gathered} 2 \\ (41 \%) \\ \text { (revi } \end{gathered}$ | $\stackrel{3}{3}$ <br> ) Blo | $\begin{gathered} 4 \\ (9 \%) \\ \text { 's Ta } \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \text { omy } \end{gathered}$ | $\begin{gathered} 6 \\ (5 \%) \end{gathered}$ |

4.22 Cognitive rigor results - English language arts (Grade 6)

4.23 Cognitive rigor results — English language arts (Grade 7)

4.24 Cognitive rigor results - English language arts (Grade 7)

| English language arts low-performing schools (Grade 7) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 9\% |
|  |  |  |  | 7\% |  | 5\% |
|  | 1\% | 31\% | 17\% | 2\% |  |  |
|  | 21\% | 3\% | 3\% |  |  |  |
|  | $\frac{1}{(22 \%)}$ | $\begin{aligned} & 2 \\ & (34 \%) \\ & \text { (rev } \end{aligned}$ | $\stackrel{3}{3}$ <br> ) Blo | $\begin{gathered} 4 \\ (9 \%) \\ \text { 's } \mathrm{Ta} \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \text { omy } \end{gathered}$ | $\stackrel{6}{(14 \%)}$ |

4.25 Cognitive rigor results - English language arts (Grade 8)

4.26 Cognitive rigor results - English language arts (Grade 8)

4.27 Cognitive rigor results - mathematics (Kindergarten)

|  | Mathematics high-performing schools (Grade 0) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | 4\% | 4\% |  |  |
|  | 4\% | 5\% | 81\% | 1\% |  |  |
|  | $\stackrel{1}{(2 \%)}$ | $\underset{(6 \%)}{2}$ | $\underset{(86 \%)}{3}$ | $\underset{(6 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\begin{gathered} 6 \\ (0 \%) \end{gathered}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

4.28 Cognitive rigor results - mathematics (Kindergarten)

4.29 Cognitive rigor results - mathematics (Grade 1)

|  | Mathematics high-performing schools (Grade 1) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 1\% | 1\% | 8\% | 4\% |  |  |
|  | 34\% | 12\% | 38\% | 1\% |  |  |
|  | $\underset{(35 \%)}{1}$ | $\underset{(13 \%)}{2}$ | $\underset{(47 \%)}{3}$ | $\underset{(5 \%)}{4}$ | $\stackrel{5}{5}(0 \%)$ | $\underset{(1 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 4.30 Cognitive rigor results - mathematics (Grade 1)

|  | Mathematics low-performing schools (Grade 1) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | 1\% | 3\% | 2\% |  |  |
|  | 27\% | 9\% | 57\% | 1\% |  |  |
|  | $\stackrel{1}{(27 \%)}$ | $\underset{(9 \%)}{2}$ | $\underset{(60 \%)}{3}$ | $\underset{(3 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\underset{(0 \%)}{6}$ |
|  |  | (rev | ) Blo | 's Ta |  |  |

### 4.31 Cognitive rigor results - mathematics (Grade 2)

|  | Mathematics high-performing schools (Grade 2) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  | 1\% |  |  |  |
|  |  | 2\% | 6\% | 4\% |  |  |
|  | 35\% | 17\% | 32\% | 1\% |  |  |
|  | $\stackrel{1}{(35 \%)}$ | $\underset{(20 \%)}{2}$ | $\begin{gathered} 3 \\ (40 \%) \end{gathered}$ | $\underset{(5 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\begin{gathered} 6 \\ (0 \%) \end{gathered}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

4.32 Cognitive rigor results - mathematics (Grade 2)

4.33 Cognitive rigor results - mathematics (Grade 3)


### 4.34 Cognitive rigor results - mathematics (Grade 3)


4.35 Cognitive rigor results - mathematics (Grade 4)

4.36 Cognitive rigor results - mathematics (Grade 4)


### 4.37 Cognitive rigor results - mathematics (Grade 5)

|  | Mathematics high-performing schools (Grade 5) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | 2\% | 8\% | 18\% |  | 1\% |
|  | 26\% | 12\% | 30\% | 3\% |  |  |
|  | $\underset{(26 \%)}{1}$ | $\underset{(14 \%)}{2}$ | $\begin{gathered} 3 \\ (39 \%) \end{gathered}$ | $\underset{(21 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\underset{(1 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 4.38 Cognitive rigor results - mathematics (Grade 5)

|  | Mathematics low-performing schools (Grade 5) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | 5\% | 14\% | 15\% |  |  |
|  | 23\% | 14\% | 26\% | 2\% |  |  |
|  | $\underset{(21 \%)}{1}$ | $\underset{(20 \%)}{2}$ | $\underset{(41 \%)}{3}$ | $\underset{(18 \%)}{4}$ | $\stackrel{5}{5}(0 \%)$ | $\underset{(0 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 4.39 Cognitive rigor results - mathematics (Grade 6)

|  | Mathematics high-performing schools (Grade 6) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | 1\% | 15\% | 11\% |  |  |
|  | 10\% | 19\% | 44\% | 1\% |  |  |
|  | $\underset{(9 \%)}{1}$ | $\underset{(19 \%)}{2}$ | $\begin{gathered} 3 \\ (59 \%) \end{gathered}$ | $\underset{(12 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | ${ }_{(0 \%)}^{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 4.40 Cognitive rigor results - mathematics (Grade 6)



### 4.41 Cognitive rigor results - mathematics (Grade 7)



### 4.42 Cognitive rigor results - mathematics (Grade 7)



### 4.43 Cognitive rigor results - mathematics (Grade 8)



### 4.44 Cognitive rigor results - mathematics (Grade 8)



### 4.45 Letter-grade analysis - combined subjects (Grades K-12)

Table 17:
Letter grades received by students on English language arts and mathematics assignments for high-performing schools. Composite

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Student | A | B | C | D | F |
| All Grades | High-performing | 85\% | 8\% | 3\% | 1\% | <1\% |
|  | Medium-performing |  |  |  |  |  |
|  | Low-performing | 37\% | 16\% | 14\% | 11\% | 20\% |



### 4.46 Letter-grade analysis - combined subjects (Grades K-12)

Table 17:
Letter grades received by students on English language arts and mathematics assignments for low-performing schools. These result

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Student | A | B | C | D | F |
| All Grades | High-performing | $78 \%$ | $11 \%$ | $5 \%$ | $2 \%$ | $2 \%$ |
|  | Medium-performing | $43 \%$ | $18 \%$ | $31 \%$ | $6 \%$ |  |
|  | Low-performing | $23 \%$ | $10 \%$ | $16 \%$ | $15 \%$ | $34 \%$ |



A visual representation of the table above.

### 4.47 Letter-grade analysis - combined subjects (Kindergarten)

Table 17:
Same as the previous table, but specific to Kindergarten for high-performing schools. These results are displayed visually in the fig

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Subject | A | B | C | D | F |
| Grade K | High-performing <br> Medium-performing | $100 \%$ |  |  |  |  |
|  | Low-performing |  |  |  |  |  |

Letter grade analysis for all subjects (Grade 0) high-performing schools


A visual representation of the table above.

### 4.48 Letter-grade analysis - combined subjects (Kindergarten)

Table 17:
Same as the previous table, but specific to low-performing schools. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade K | High-performing | 94\% |  |  |  | 5\% |
|  | Medium-perform |  |  |  |  |  |
|  | Low-performing | 88\% |  | 2\% | 5\% | 2\% |

Letter grade analysis for all subjects (Grade 0)
low-performing schools


A visual representation of the table above.

### 4.49 Letter-grade analysis - combined subjects (Grade 1)

Table 17:
Same as the previous table, but specific to first grade for high-performing schools. These results are displayed visually in the figure

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D |  |  |
| Grade 1 | High-performing <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $93 \%$ | $5 \%$ |  | $0 \%$ |  |  |

Letter grade analysis for all subjects (Grade 1) high-performing schools


A visual representation of the table above.

### 4.50 Letter-grade analysis - combined subjects (Grade 1)

Table 17:
Same as the previous table, but specific to low-performing schools. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 1 | High-performing <br>  <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $95 \%$ | $1 \%$ | $1 \%$ | $1 \%$ | $0 \%$ |  |

## Letter grade analysis for all subjects (Grade 1) low-performing schools



A visual representation of the table above.

### 4.51 Letter-grade analysis - combined subjects (Grade 2)

Table 17:
Same as the previous table, but specific to second grade for high-performing schools. These results are displayed visually in the fig

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 2 | High-performing <br> Medium-performing | $89 \%$ | $6 \%$ | $2 \%$ | $1 \%$ | $0 \%$ |  |
|  | Low-performing |  |  |  |  |  |  |

Letter grade analysis for all subjects (Grade 2) high-performing schools


A visual representation of the table above.

### 4.52 Letter-grade analysis - combined subjects (Grade 2)

Table 17:
Same as the previous table, but specific to low-performing schools. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  | Subject | A | B | C | D | F |
| Grade 2 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $83 \%$ | $13 \%$ | $1 \%$ |  | $0 \%$ |

Letter grade analysis for all subjects (Grade 2)
low-performing schools


A visual representation of the table above.

### 4.53 Letter-grade analysis - combined subjects (Grade 3)

Table 17:
Same as the previous table, but specific to third grade for high-performing schools. These results are displayed visually in the figur

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade 3 | High-performing | 86\% | 8\% | 3\% | 0\% | 1\% |
|  | Medium-perform |  |  |  |  |  |
|  | Low-performing | 41\% | 16\% | 11\% | 11\% | 18\% |

Letter grade analysis for all subjects (Grade 3)
high-performing schools


A visual representation of the table above.

### 4.54 Letter-grade analysis - combined subjects (Grade 3)

Table 17:
Same as the previous table, but specific to low-performing schools. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade 3 | High-performing | 84\% | 8\% | 4\% |  | 2\% |
|  | Medium-perform |  |  |  |  |  |
|  | Low-performing | 19\% | 12\% | 18\% | 10\% | 37\% |

## Letter grade analysis for all subjects (Grade 3) low-performing schools



A visual representation of the table above.

### 4.55 Letter-grade analysis - combined subjects (Grade 4)

Table 17:
Same as the previous table, but specific to fourth grade for high-performing schools. These results are displayed visually in the figu

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 4 | High-performing <br> Medium-performing | $80 \%$ | $12 \%$ | $4 \%$ | $1 \%$ | $0 \%$ |  |
|  | Low-performing |  |  |  |  |  |  |

## Letter grade analysis for all subjects (Grade 4) high-performing schools



A visual representation of the table above.

### 4.56 Letter-grade analysis - combined subjects (Grade 4)

Table 17:
Same as the previous table, but specific to low-performing schools. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 4 | High-performing <br> Medium-performing | $85 \%$ | $7 \%$ | $4 \%$ | $2 \%$ |  |  |
|  | Low-performing | $14 \%$ | $11 \%$ | $23 \%$ | $16 \%$ | $33 \%$ |  |

## Letter grade analysis for all subjects (Grade 4) low-performing schools



A visual representation of the table above.

### 4.57 Letter-grade analysis - combined subjects (Grade 5)

Table 17:
Same as the previous table, but specific to fifth grade for high-performing schools. These results are displayed visually in the figure

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 5 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $75 \%$ | $12 \%$ | $9 \%$ | $2 \%$ | $0 \%$ |  |

Letter grade analysis for all subjects (Grade 5) high-performing schools


A visual representation of the table above.

### 4.58 Letter-grade analysis - combined subjects (Grade 5)

Table 17:
Same as the previous table, but specific to low-performing schools. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 5 | High-performing <br> Medium-performing <br> Low-performing | $74 \%$ | $10 \%$ | $2 \%$ | $11 \%$ | $1 \%$ |  |
|  |  | $28 \%$ | $4 \%$ | $5 \%$ | $17 \%$ | $44 \%$ |  |

Letter grade analysis for all subjects (Grade 5)
low-performing schools


A visual representation of the table above.

### 4.59 Letter-grade analysis - combined subjects (Grade 6)

Table 17:
Same as the previous table, but specific to sixth grade for high-performing schools. These results are displayed visually in the figur

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 6 | High-performing | $84 \%$ | $10 \%$ | $2 \%$ | $2 \%$ | $0 \%$ |  |
|  | Medium-performing | $100 \%$ |  |  |  |  |  |
|  | Low-performing | $28 \%$ | $17 \%$ | $13 \%$ | $13 \%$ | $26 \%$ |  |

Letter grade analysis for all subjects (Grade 6)
high-performing schools


A visual representation of the table above.

### 4.60 Letter-grade analysis - combined subjects (Grade 6)

Table 17:
Same as the previous table, but specific to low-performing schools. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 6 | High-performing | $67 \%$ | $13 \%$ | $7 \%$ | $7 \%$ | $4 \%$ |
|  | Medium-performing | $40 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $30 \%$ |
|  | Low-performing | $13 \%$ | $19 \%$ | $12 \%$ | $20 \%$ | $34 \%$ |

Letter grade analysis for all subjects (Grade 6) low-performing schools


A visual representation of the table above.

### 4.61 Letter-grade analysis - combined subjects (Grade 7)

Table 17:
Same as the previous table, but specific to seventh grade for high-performing schools. These results are displayed visually in the fig

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 7 | High-performing | $76 \%$ | $15 \%$ | $4 \%$ | $1 \%$ | $1 \%$ |  |
|  | Medium-performing | $100 \%$ |  |  |  |  |  |
|  | Low-performing | $30 \%$ | $11 \%$ | $20 \%$ | $12 \%$ | $26 \%$ |  |

Letter grade analysis for all subjects (Grade 7)
high-performing schools high-performing schools


A visual representation of the table above.

### 4.62 Letter-grade analysis - combined subjects (Grade 7)

Table 17:
Same as the previous table, but specific to low-performing schools. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade 7 | High-performing | 68\% | 18\% | 6\% | 3\% | 3\% |
|  | Medium-perform |  |  |  |  |  |
|  | Low-performing | 19\% | 9\% | 16\% | 19\% | 35\% |

## Letter grade analysis for all subjects (Grade 7) low-performing schools



A visual representation of the table above.

### 4.63 Letter-grade analysis - combined subjects (Grade 8)

Table 17:
Same as the previous table, but specific to eighth grade for high-performing schools. These results are displayed visually in the figu

| Letter grade analysis for all subjects (high-performing schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 8 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $75 \%$ | $16 \%$ | $4 \%$ | $2 \%$ | $1 \%$ |  |

Letter grade analysis for all subjects (Grade 8)
high-performing schools


A visual representation of the table above.

### 4.64 Letter-grade analysis - combined subjects (Grade 8)

Table 17:
Same as the previous table, but specific to low-performing schools. These results are displayed visually in the figure below.

| Letter grade analysis for all subjects (low-performing schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade 8 | High-performing | 61\% | 20\% | 11\% | 2\% | 3\% |
|  | Medium-perform |  |  |  |  |  |
|  | Low-performing | 26\% | 5\% | 18\% | 8\% | 40\% |

## Letter grade analysis for all subjects (Grade 8) low-performing schools



A visual representation of the table above.

### 4.65 Source of assignments - English language arts

Table 21:
Source of English language arts assignments for high-performing schools. Note that the definition of workbooks shown here was n

|  | Source of assignments for English language arts (high-performing schools) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $4 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $90 \%$ |
| 1 | $1 \%$ | $1 \%$ | $9 \%$ | $0 \%$ | $88 \%$ |
| 2 | $2 \%$ | $1 \%$ | $1 \%$ | $0 \%$ | $93 \%$ |
| 3 | $2 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $92 \%$ |
| 4 | $1 \%$ | $2 \%$ | $2 \%$ | $0 \%$ | $94 \%$ |
| 5 | $0 \%$ | $8 \%$ | $5 \%$ | $0 \%$ | $86 \%$ |
| 6 | $0 \%$ | $1 \%$ | $18 \%$ | $0 \%$ | $77 \%$ |
| 7 | $2 \%$ | $2 \%$ | $46 \%$ | $0 \%$ | $48 \%$ |
| 8 | $2 \%$ | $1 \%$ | $41 \%$ | $0 \%$ | $54 \%$ |
| 9 | $0 \%$ | $0 \%$ | $23 \%$ | $0 \%$ | $76 \%$ |
| 10 | $6 \%$ | $0 \%$ | $32 \%$ | $0 \%$ | $60 \%$ |
| 11 | $0 \%$ | $0 \%$ | $14 \%$ | $1 \%$ | $83 \%$ |
| 12 | $0 \%$ | $3 \%$ | $21 \%$ | $3 \%$ | $71 \%$ |



A visual representation of the table above.

### 4.66 Source of assignments - English language arts

Table 21:
Same as the previous figure but specific to low-performing schools. These results are displayed visually in the figure below.

|  | Source of assignments for English language arts (low-performing schools) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $3 \%$ | $0 \%$ | $12 \%$ | $0 \%$ | $84 \%$ |
| 1 | $12 \%$ | $2 \%$ | $4 \%$ | $0 \%$ | $80 \%$ |
| 2 | $12 \%$ | $0 \%$ | $1 \%$ | $0 \%$ | $85 \%$ |
| 3 | $11 \%$ | $2 \%$ | $2 \%$ | $0 \%$ | $83 \%$ |
| 4 | $15 \%$ | $0 \%$ | $7 \%$ | $0 \%$ | $77 \%$ |
| 5 | $10 \%$ | $9 \%$ | $3 \%$ | $0 \%$ | $75 \%$ |
| 6 | $11 \%$ | $0 \%$ | $12 \%$ | $0 \%$ | $75 \%$ |
| 7 | $14 \%$ | $0 \%$ | $37 \%$ | $0 \%$ | $47 \%$ |
| 8 | $21 \%$ | $0 \%$ | $11 \%$ | $0 \%$ | $66 \%$ |
| 9 | $0 \%$ | $4 \%$ | $32 \%$ | $0 \%$ | $63 \%$ |
| 10 | $0 \%$ | $0 \%$ | $44 \%$ | $0 \%$ | $54 \%$ |
| 11 | $0 \%$ | $0 \%$ | $48 \%$ | $0 \%$ | $51 \%$ |
| 12 | $0 \%$ | $0 \%$ | $9 \%$ | $28 \%$ | $61 \%$ |



A visual representation of the table above.

### 4.67 Source of assignments - mathematics

## Table :

Source of mathematics assignments for high-performing schools. Note that the definition of workbooks shown here was not limited


### 4.68 Source of assignments - mathematics

Table 22:
Same as the previous figure but specific to low-performing schools. These results are displayed visually in the figure below.

|  | Source of assignments for mathematics $\mathbf{c}$ (low-performing schools) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $96 \%$ |
| 1 | $0 \%$ | $5 \%$ | $0 \%$ | $0 \%$ | $94 \%$ |
| 2 | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $99 \%$ |
| 3 | $0 \%$ | $0 \%$ | $0 \%$ | $7 \%$ | $91 \%$ |
| 4 | $0 \%$ | $8 \%$ | $0 \%$ | $16 \%$ | $74 \%$ |
| 5 | $0 \%$ | $1 \%$ | $4 \%$ | $0 \%$ | $94 \%$ |
| 6 | $0 \%$ | $9 \%$ | $0 \%$ | $0 \%$ | $89 \%$ |
| 7 | $0 \%$ | $1 \%$ | $0 \%$ | $0 \%$ | $98 \%$ |
| 8 | $0 \%$ | $0 \%$ | $4 \%$ | $43 \%$ | $52 \%$ |
| 9 | $0 \%$ | $0 \%$ | $1 \%$ | $14 \%$ | $83 \%$ |
| 10 | $0 \%$ | $0 \%$ | $5 \%$ | $11 \%$ | $81 \%$ |
| 11 | $0 \%$ | $0 \%$ | $3 \%$ | $26 \%$ | $69 \%$ |
| 12 | $0 \%$ | $0 \%$ | $1 \%$ | $40 \%$ | $57 \%$ |



A visual representation of the table above.

## 5 Results - high-socioeconomic versus low-socioeconomic schools

Socioeconomic conditions have long been correlated with student achievement. The results of this study were therefore disaggregated according to socio-economic status, using the percentage of students eligible for free or reduced-price lunches as a measure, with high socioeconomic status correlated to low percentages. Therefore, high socioeconomic status results correspond to schools residing in relatively affluent areas.

The reader should note that some twelfth grade results in regards to socioeconomic status were small and are therefore not shown.

### 5.1 Sample sizes of analyzed assignments by subject

Table 1:
Sample size of collected student assignments for schools located in relatively affluent communities. Although teachers submitted a

|  | Sample sizes for collected assignments (high socioeconomic schools) |  |  |
| :---: | :---: | :---: | :---: |
| Grade | ELA | Math | Combined |
| K | $759(4 \%)$ | $676(4 \%)$ | $1,435(8 \%)$ |
| 1 | $1,107(6 \%)$ | $659(3 \%)$ | $1,766(10 \%)$ |
| 2 | $1,211(7 \%)$ | $783(4 \%)$ | $1,994(11 \%)$ |
| 3 | $1,046(6 \%)$ | $834(5 \%)$ | $1,880(11 \%)$ |
| 4 | $1,195(7 \%)$ | $880(5 \%)$ | $2,075(12 \%)$ |
| 5 | $731(4 \%)$ | $593(3 \%)$ | $1,324(7 \%)$ |
| 6 | $825(4 \%)$ | $838(5 \%)$ | $1,663(10 \%)$ |
| 7 | $804(4 \%)$ | $977(5 \%)$ | $1,781(10 \%)$ |
| 8 | $586(3 \%)$ | $454(2 \%)$ | $568(6 \%)$ |
| 9 | $195(1 \%)$ | $373(2 \%)$ | $711(4 \%)$ |
| 10 | $350(2 \%)$ | $361(2 \%)$ | $321(1 \%)$ |
| 11 | $136(0 \%)$ | $185(1 \%)$ | $62(0 \%)$ |
| 12 | $30(0 \%)$ | $32(0 \%)$ | $16,620(100 \%)$ |
| Total | $8,975(54 \%)$ | $7,645(45 \%)$ |  |

### 5.2 Sample sizes of analyzed assignments by subject

Table 1:
Same as the previous figure but specific to schools located in relatively poor communities. The data is visually displayed in the bel

|  | Sample sizes for collected assignments (low socioeconomic schools) |  |  |
| :---: | :---: | :---: | :---: |
| Grade | ELA | Math | Combined |
| K | $234(1 \%)$ | $71(0 \%)$ | $305(2 \%)$ |
| 1 | $383(3 \%)$ | $304(2 \%)$ | $687(5 \%)$ |
| 2 | $180(1 \%)$ | $270(2 \%)$ | $450(3 \%)$ |
| 3 | $284(2 \%)$ | $296(2 \%)$ | $580(4 \%)$ |
| 4 | $213(1 \%)$ | $180(1 \%)$ | $393(3 \%)$ |
| 5 | $168(1 \%)$ | $102(0 \%)$ | $270(2 \%)$ |
| 6 | $1,059(8 \%)$ | $672(5 \%)$ | $1,731(14 \%)$ |
| 7 | $1,169(9 \%)$ | $884(7 \%)$ | $2,053(17 \%)$ |
| 8 | $1,817(15 \%)$ | $903(7 \%)$ | $2,720(22 \%)$ |
| 9 | $109(0 \%)$ | $731(6 \%)$ | $840(7 \%)$ |
| 10 | $507(4 \%)$ | $569(4 \%)$ | $1,076(9 \%)$ |
| 11 | $430(3 \%)$ | $283(2 \%)$ | $713(6 \%)$ |
| 12 | $23(0 \%)$ | $6(0 \%)$ | $29(0 \%)$ |
| Total | $6,576(55 \%)$ | $5,271(44 \%)$ | $11,847(100 \%)$ |



A visual representation of the above table.

### 5.3 Alignment to standards - English language arts (high socioeconomic status)

Alignment to Oklahoma PASS content standards for student assignments in English language arts for schools located in relatively affluent communities. Columns represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below, where percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown in the figure for clarity.


Alignment of Student Assignments

Alignment to standards for English language arts high socioeconomic schools

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| Grade <br> Level <br> 81\% | 92\% | 85\% | 42\% |
| $\begin{array}{c\|c} -1) 5 \% \\ -2 & \end{array}$ | $\begin{aligned} & 4 \% \\ & 2 \% \end{aligned}$ | $\begin{aligned} & 5 \% \\ & 8 \% \end{aligned}$ |  |
| -3 |  |  | 54\% |
| $-4 \bigcirc 9 \%$ |  |  | 4\% |

### 5.4 Alignment to standards - English language arts (low socioeconomic status)

Alignment to Oklahoma PASS content standards for student assignments in English language arts for schools located in relatively poor communities. Columns represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below, where percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown in the figure for clarity.


Alignment to standards for English language arts low socioeconomic schools


### 5.5 Alignment to standards - mathematics (high socioeconomic status)

Alignment to Oklahoma PASS content standards for student assignments in mathematics for Grades K-8 for schools located in relatively affluent communities. Columns represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below, where percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown in the figure for clarity.


### 5.6 Alignment to standards - mathematics (high socioeconomic status)

Same as the previous section but specific to high school discrete courses.

|  | Official grade level/course title |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Enacted level | 9th Grade | Algebra I | Algebra II | Geometry I | Pre-Algebra |
| Geometry I | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{8 0 \%}$ | $0 \%$ |
| Algebra II | $28 \%$ | $43 \%$ | $93 \%$ | $0 \%$ | $8 \%$ |
| Algebra I | $53 \%$ | $\mathbf{4 6 \%}$ | $2 \%$ | $0 \%$ | $36 \%$ |
| 8th Grade | $0 \%$ | $6 \%$ | $3 \%$ | $14 \%$ | $11 \%$ |
| 7th Grade | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $30 \%$ |
| 6th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ |
| 5th Grade | $10 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ |
| 4th Grade | $6 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $4 \%$ |
| 3rd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 2nd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 1st Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |



### 5.7 Alignment to standards - mathematics (low socioeconomic status)

Alignment to Oklahoma PASS content standards for student assignments in mathematics for Grades $\mathrm{K}-8$ for schools located in relatively poor communities. Columns represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below, where percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown in the figure for clarity.


### 5.8 Alignment to standards - mathematics (low socioeconomic status)

Same as the previous section but specific to high school discrete courses.
Discrete course alignments for mathematics (low socioeconomic schools)

|  | Official grade level/course title |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Enacted level | Algebra I | Algebra II | Geometry I | Pre-Algebra |
| Geometry I | $3 \%$ | $4 \%$ | $65 \%$ | $13 \%$ |
| Algebra II | $31 \%$ | $\mathbf{9 0 \%}$ | $5 \%$ | $6 \%$ |
| Algebra I | $\mathbf{5 2 \%}$ | $3 \%$ | $12 \%$ | $13 \%$ |
| 8th Grade | $6 \%$ | $0 \%$ | $0 \%$ | $23 \%$ |
| 7th Grade | $2 \%$ | $0 \%$ | $12 \%$ | $15 \%$ |
| 6th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $23 \%$ |
| 5th Grade | $2 \%$ | $0 \%$ | $0 \%$ | $3 \%$ |
| 4th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 3rd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 2nd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 1st Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |

Alignment to standards for mathematics
low socioeconomic schools


### 5.9 Cognitive rigor results - English language arts (Kindergarten)



### 5.10 Cognitive rigor results - English language arts (Kindergarten)

| English language arts low socioeconomic schools (Kindergarten) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 4\% | 13\% | 1\% | 6\% |  | 8\% |
|  | 44\% | 11\% | 14\% |  |  |  |
|  | $\underset{(48 \%)}{1}$ | $\underset{(24 \%)}{2}$ | $\underset{(15 \%)}{3}$ | $\underset{(6 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\underset{(8 \%)}{6}$ |
|  |  | (revi | d) Blo | 's Ta | omy |  |

### 5.11 Cognitive rigor results - English language arts (Grade 1)


5.12 Cognitive rigor results - English language arts (Grade 1)


### 5.13 Cognitive rigor results - English language arts (Grade 2)



### 5.14 Cognitive rigor results - English language arts (Grade 2)

English language arts low socioeconomic schools (Kindergarten)


### 5.15 Cognitive rigor results - English language arts (Grade 3)



### 5.16 Cognitive rigor results - English language arts (Grade 3)



### 5.17 Cognitive rigor results - English language arts (Grade 4)



### 5.18 Cognitive rigor results - English language arts (Grade 4)



### 5.19 Cognitive rigor results - English language arts (Grade 5)



### 5.20 Cognitive rigor results - English language arts (Grade 5)



### 5.21 Cognitive rigor results - English language arts (Grade 6)



### 5.22 Cognitive rigor results - English language arts (Grade 6)



### 5.23 Cognitive rigor results - English language arts (Grade 7)



### 5.24 Cognitive rigor results - English language arts (Grade 7)



### 5.25 Cognitive rigor results - English language arts (Grade 8)



### 5.26 Cognitive rigor results - English language arts (Grade 8)



### 5.27 Cognitive rigor results - English language arts (Grade 9)



### 5.28 Cognitive rigor results - English language arts (Grade 9)


5.29 Cognitive rigor results - English language arts (Grade 10)


### 5.30 Cognitive rigor results - English language arts (Grade 10)



### 5.31 Cognitive rigor results - English language arts (Grade 11)

| English language arts high socioeconomic schools (Grade 11) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 4 \\ (1 \%) \end{gathered}$ |  |  |  |  | 1\% |  |
| $\frac{1}{3}\left(\begin{array}{c} 3 \\ (10 \%) \end{array}\right.$ |  |  |  | 1\% | 1\% | 8\% |
| $\begin{array}{cc} \text { 옫 } & 2 \\ \hline \end{array}$ | 1\% | 26\% | 23\% | 7\% |  | 5\% |
| $\frac{1}{(27 \%)}$ | 25\% | 2\% |  |  |  |  |
| $\underset{(26 \%)}{1}$ |  | $\begin{gathered} \underset{(28 \%)}{2} \\ \text { (revi } \end{gathered}$ | (23\%) ${ }_{\text {d }}^{3}$ | 4 $(8 \%)$ s Ta | $\begin{gathered} 5 \\ (2 \%) \\ \text { omy } \end{gathered}$ | $\underset{(13 \%)}{6}$ |
| Cognitive rigor of eleventh-grade English language arts assignments for schools located in relatively affluent communities. |  |  |  |  |  |  |

5.32 Cognitive rigor results - English language arts (Grade 11)


### 5.33 Cognitive rigor results - mathematics (Kindergarten)

| Mathematics high socioeconomic schools (Kindergarten) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | 2\% | 3\% |  |  |
|  | 4\% | 6\% | 82\% | 2\% |  |  |
|  | $\underset{(4 \%)}{1}$ | $\underset{(6 \%)}{2}$ | $\begin{gathered} 3 \\ (85 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (5 \%) \end{gathered}$ | $\stackrel{5}{(0 \%)}$ | $\stackrel{6}{(0 \%)}$ |
| (revised) Bloom's Taxonomy |  |  |  |  |  |  |
| Cognitive rigor of Kindergarten English language arts assignments for schools located in relatively affluent communities. |  |  |  |  |  |  |

### 5.34 Cognitive rigor results - mathematics (Kindergarten)



### 5.35 Cognitive rigor results - mathematics (Grade 1)



### 5.36 Cognitive rigor results - mathematics (Grade 1)

| Mathematics low socioeconomic schools (Grade 1) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | 20\% | 15\% |  |  |
|  | 27\% | 5\% | 33\% | 1\% |  |  |
|  | $\frac{1}{(27 \%)}$ | $\underset{(5 \%)}{2}$ | $\begin{gathered} 3 \\ (52 \%) \end{gathered}$ | $\underset{(16 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\begin{gathered} 6 \\ (0 \%) \end{gathered}$ |
|  |  | (rev | ) Blo | 's Tax | omy |  |

### 5.37 Cognitive rigor results - mathematics (Grade 2)



### 5.38 Cognitive rigor results - mathematics (Grade 2)



### 5.39 Cognitive rigor results - mathematics (Grade 3)



### 5.40 Cognitive rigor results - mathematics (Grade 3)



### 5.41 Cognitive rigor results - mathematics (Grade 4)

| Mathematics high socioeconomic schools (Grade 4) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1\% |
|  |  |  | 5\% | 8\% | 1\% |  |
|  | 29\% | 40\% | 16\% |  |  |  |
|  | $\underset{(29 \%)}{1}$ | $\underset{(41 \%)}{2}$ | $\begin{gathered} 3 \\ (21 \%) \end{gathered}$ | $\underset{(8 \%)}{4}$ | $\stackrel{5}{5}$ | $\stackrel{6}{(1 \%)}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 5.42 Cognitive rigor results - mathematics (Grade 4)



### 5.43 Cognitive rigor results - mathematics (Grade 5)



### 5.44 Cognitive rigor results - mathematics (Grade 5)



### 5.45 Cognitive rigor results - mathematics (Grade 6)



### 5.46 Cognitive rigor results - mathematics (Grade 6)



### 5.47 Cognitive rigor results - mathematics (Grade 7)



### 5.48 Cognitive rigor results - mathematics (Grade 7)



### 5.49 Cognitive rigor results - mathematics (Grade 8)

|  | Mathematics high socioeconomic schools (Grade 8) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  | 1\% | 2\% |  |
|  |  |  | 8\% | 23\% |  |  |
|  | 4\% | 10\% | 48\% | 3\% |  |  |
|  | $\stackrel{1}{(4 \%)}$ | $\underset{(10 \%)}{2}$ | $\begin{gathered} 3 \\ (57 \%) \end{gathered}$ | $\underset{(28 \%)}{4}$ | $\stackrel{5}{5}$ | $\begin{gathered} 6 \\ (0 \%) \end{gathered}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 5.50 Cognitive rigor results - mathematics (Grade 8)



### 5.51 Cognitive rigor results - mathematics (Grade 9)

| Mathematics high socioeconomic schools (Grade 9) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  | 1\% |  |  |
|  |  | 2\% | 4\% | 26\% |  |  |
|  | 1\% | 3\% | 63\% |  |  |  |
|  | $\stackrel{1}{(1 \%)}$ | $\stackrel{2}{(5 \%)}$ | $\underset{(67 \%)}{3}$ | $\underset{(27 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\begin{gathered} 6 \\ (0 \%) \end{gathered}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 5.52 Cognitive rigor results - mathematics (Grade 9)



### 5.53 Cognitive rigor results - mathematics (Grade 10)



### 5.54 Cognitive rigor results - mathematics (Grade 10)



### 5.55 Cognitive rigor results - mathematics (Grade 11)



### 5.56 Cognitive rigor results - mathematics (Grade 11)



### 5.57 Letter-grade analysis - combined subjects (Grades K-12)

Table 17:
Letter grades received by students on English language arts and mathematics assignments for schools located in relatively affluent

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Student | A | B | C | D | F |
| All Grades | High-performing | $80 \%$ | $10 \%$ | $4 \%$ | $2 \%$ | $1 \%$ |
|  | Medium-performing | $60 \%$ | $3 \%$ | $21 \%$ | $3 \%$ | $10 \%$ |
|  | Low-performing | $31 \%$ | $13 \%$ | $11 \%$ | $13 \%$ | $30 \%$ |

## Letter grade analysis for all subjects (All Grades) high socioeconomic schools



A visual representation of the table above.

### 5.58 Letter-grade analysis - combined subjects (Grades K-12)

Table 17:
Letter grades received by students on English language arts and mathematics assignments for schools located in relatively poor con

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Student | A | B | C | D | F |
| All Grades | High-performing | $81 \%$ | $11 \%$ | $4 \%$ | $1 \%$ | $1 \%$ |
|  | Medium-performing | $4 \%$ | $71 \%$ | $14 \%$ |  | $9 \%$ |
|  | Low-performing | $30 \%$ | $14 \%$ | $15 \%$ | $11 \%$ | $27 \%$ |

Letter grade analysis for all subjects (All Grades) low socioeconomic schools


A visual representation of the table above.

### 5.59 Letter-grade analysis - combined subjects (Kindergarten)

Table 17:
Same as the previous table, but specific to Kindergarten for schools located in relatively affluent communities. These results are dis

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D |  |  |
| Grade K | High-performing <br> Medium-performing <br> Low-performing | $97 \%$ |  |  |  |  |  |
|  |  | $88 \%$ | $1 \%$ | $3 \%$ | $5 \%$ |  |  |

Letter grade analysis for all subjects (Kindergarten) high socioeconomic schools


A visual representation of the table above.

### 5.60 Letter-grade analysis - combined subjects (Kindergarten)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Subject | A | B | C | D |
| Grade K | High-performing <br>  <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $100 \%$ |  |  |  |

Letter grade analysis for all subjects (Kindergarten) low socioeconomic schools


A visual representation of the table above.

### 5.61 Letter-grade analysis - combined subjects (Grade 1)

Table 17:
Same as the previous table, but specific to first grade for schools located in relatively affluent communities. These results are displa

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 1 | High-performing <br> Medium-performing | $93 \%$ | $3 \%$ | $0 \%$ | $1 \%$ | $0 \%$ |  |
|  | Low-performing | $38 \%$ | $14 \%$ | $14 \%$ | $10 \%$ | $21 \%$ |  |

## Letter grade analysis for all subjects (Grade 1) high socioeconomic schools



A visual representation of the table above.

### 5.62 Letter-grade analysis - combined subjects (Grade 1)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D |  |  |
| Grade 1 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $86 \%$ | $13 \%$ |  | $1 \%$ |  |  |

Letter grade analysis for all subjects (Grade 1)
low socioeconomic schools


A visual representation of the table above.

### 5.63 Letter-grade analysis - combined subjects (Grade 2)

Table 17:
Same as the previous table, but specific to second grade for schools located in relatively affluent communities. These results are dis

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 2 | High-performing <br> Medium-performing | $89 \%$ | $7 \%$ | $1 \%$ | $0 \%$ | $1 \%$ |  |
|  | Low-performing |  |  |  |  |  |  |

Letter grade analysis for all subjects (Grade 2)
high socioeconomic schools


A visual representation of the table above.

### 5.64 Letter-grade analysis - combined subjects (Grade 2)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 2 | High-performing <br> Medium-performing | $96 \%$ | $2 \%$ |  | $1 \%$ |  |  |
|  | Low-performing | $30 \%$ | $11 \%$ | $10 \%$ | $14 \%$ | $33 \%$ |  |

## Letter grade analysis for all subjects (Grade 2) low socioeconomic schools



A visual representation of the table above.

### 5.65 Letter-grade analysis - combined subjects (Grade 3)

Table 17:
Same as the previous table, but specific to third grade for schools located in relatively affluent communities. These results are displ

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 3 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $81 \%$ | $10 \%$ | $5 \%$ | $0 \%$ | $1 \%$ |  |

Letter grade analysis for all subjects (Grade 3)
high socioeconomic schools


A visual representation of the table above.

### 5.66 Letter-grade analysis - combined subjects (Grade 3)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D |  |  |  |
| Grade 3 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $95 \%$ | $2 \%$ | $1 \%$ |  |  |  |  |

Letter grade analysis for all subjects (Grade 3)
low socioeconomic schools


A visual representation of the table above.

### 5.67 Letter-grade analysis - combined subjects (Grade 4)

Table 17:
Same as the previous table, but specific to fourth grade for schools located in relatively affluent communities. These results are disf

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 4 | High-performing <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $80 \%$ | $11 \%$ | $2 \%$ | $3 \%$ | $1 \%$ |  |

## Letter grade analysis for all subjects (Grade 4) high socioeconomic schools



A visual representation of the table above.

### 5.68 Letter-grade analysis - combined subjects (Grade 4)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 4 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $78 \%$ | $9 \%$ | $8 \%$ | $2 \%$ |  |  |

## Letter grade analysis for all subjects (Grade 4) low socioeconomic schools



A visual representation of the table above.

### 5.69 Letter-grade analysis - combined subjects (Grade 5)

Table 17:
Same as the previous table, but specific to fifth grade for schools located in relatively affluent communities. These results are displ

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 5 | High-performing <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $68 \%$ | $14 \%$ | $8 \%$ | $8 \%$ | $0 \%$ |  |

Letter grade analysis for all subjects (Grade 5)
high socioeconomic schools


A visual representation of the table above.

### 5.70 Letter-grade analysis - combined subjects (Grade 5)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade 5 | High-performing | 80\% | 7\% | 9\% | 1\% | 0\% |
|  | Medium-perform |  |  |  |  |  |
|  | Low-performing | 51\% | 15\% | 7\% | 9\% | 15\% |

Letter grade analysis for all subjects (Grade 5)
low socioeconomic schools


A visual representation of the table above.

### 5.71 Letter-grade analysis - combined subjects (Grade 6)

Table 17:
Same as the previous table, but specific to sixth grade for schools located in relatively affluent communities. These results are displ

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 6 | High-performing | $71 \%$ | $15 \%$ | $6 \%$ | $5 \%$ | $2 \%$ |
|  | Medium-performing | $50 \%$ | $8 \%$ | $8 \%$ | $8 \%$ | $25 \%$ |
|  | Low-performing | $15 \%$ | $14 \%$ | $10 \%$ | $20 \%$ | $38 \%$ |

Letter grade analysis for all subjects (Grade 6) high socioeconomic schools


A visual representation of the table above.

### 5.72 Letter-grade analysis - combined subjects (Grade 6)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 6 | High-performing <br> Medium-performing | $86 \%$ | $9 \%$ | $1 \%$ | $1 \%$ | $1 \%$ |  |
|  | Low-performing |  |  |  |  |  |  |

## Letter grade analysis for all subjects (Grade 6) low socioeconomic schools



A visual representation of the table above.

### 5.73 Letter-grade analysis - combined subjects (Grade 7)

Table 17:
Same as the previous table, but specific to seventh grade for schools located in relatively affluent communities. These results are di

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 7 | High-performing | $76 \%$ | $15 \%$ | $4 \%$ | $1 \%$ | $2 \%$ |  |
|  | Medium-performing | $100 \%$ |  |  |  |  |  |
|  | Low-performing | $23 \%$ | $12 \%$ | $15 \%$ | $20 \%$ | $28 \%$ |  |

Letter grade analysis for all subjects (Grade 7)
high socioeconomic schools


A visual representation of the table above.

### 5.74 Letter-grade analysis - combined subjects (Grade 7)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 7 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $75 \%$ | $14 \%$ | $6 \%$ | $2 \%$ | $2 \%$ |  |

## Letter grade analysis for all subjects (Grade 7) low socioeconomic schools



A visual representation of the table above.

### 5.75 Letter-grade analysis - combined subjects (Grade 8)

Table 17:
Same as the previous table, but specific to eighth grade for schools located in relatively affluent communities. These results are dis

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 8 | High-performing <br> Medium-performing | $67 \%$ | $19 \%$ | $9 \%$ | $3 \%$ | $0 \%$ |  |
|  | Low-performing |  |  |  |  |  |  |

## Letter grade analysis for all subjects (Grade 8) high socioeconomic schools



A visual representation of the table above.

### 5.76 Letter-grade analysis - combined subjects (Grade 8)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 8 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $66 \%$ | $19 \%$ | $7 \%$ | $4 \%$ | $1 \%$ |  |

## Letter grade analysis for all subjects (Grade 8) low socioeconomic schools



A visual representation of the table above.

### 5.77 Letter-grade analysis - combined subjects (Grade 9)

Table 17:
Same as the previous table, but specific to ninth grade for schools located in relatively affluent communities. These results are disp

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade 9 | High-performing | 60\% | 23\% | 5\% | 6\% | 5\% |
|  | Medium-performing | 50\% |  | 50\% |  |  |
|  | Low-performing | 7\% | 13\% | 6\% | 23\% | 49\% |

Letter grade analysis for all subjects (Grade 9)
high socioeconomic schools


A visual representation of the table above.

### 5.78 Letter-grade analysis - combined subjects (Grade 9)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 9 | High-performing <br> Medium-performing | $89 \%$ | $7 \%$ | $2 \%$ |  |  |  |
|  | Low-performing |  |  |  |  |  |  |

## Letter grade analysis for all subjects (Grade 9) low socioeconomic schools



A visual representation of the table above.

### 5.79 Letter-grade analysis - combined subjects (Grade 10)

Table 17:
Same as the previous table, but specific to tenth grade for schools located in relatively affluent communities. These results are displ

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :--- | :---: | :---: |
|  | Subject | A | B | C | D | F |  |  |
| Grade 10 | High-performing | $86 \%$ | $7 \%$ | $6 \%$ |  |  |  |  |
|  | Medium-performing | $100 \%$ |  |  |  |  |  |  |
|  | Low-performing | $15 \%$ | $25 \%$ | $7 \%$ | $23 \%$ | $28 \%$ |  |  |

## Letter grade analysis for all subjects (Grade 10) high socioeconomic schools



A visual representation of the table above.

### 5.80 Letter-grade analysis - combined subjects (Grade 10)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 10 | High-performing | $85 \%$ | $11 \%$ | $1 \%$ | $0 \%$ | $0 \%$ |  |
|  | Medium-performing | $16 \%$ | $16 \%$ | $33 \%$ |  | $33 \%$ |  |
|  | Low-performing | $22 \%$ | $7 \%$ | $28 \%$ | $12 \%$ | $28 \%$ |  |

## Letter grade analysis for all subjects (Grade 10) low socioeconomic schools



A visual representation of the table above.

### 5.81 Letter-grade analysis — combined subjects (Grade 11)

Table 17:
Same as the previous table, but specific to eleventh grade for schools located in relatively affluent communities. These results are d

| Letter grade analysis for all subjects (high socioeconomic schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade 11 | High-performing | 72\% |  | 18\% |  | 8\% |
|  | Medium-perform |  |  |  |  |  |
|  | Low-performing | 5\% | 1\% | 5\% | 7\% | 79\% |

Letter grade analysis for all subjects (Grade 11) high socioeconomic schools


A visual representation of the table above.

### 5.82 Letter-grade analysis - combined subjects (Grade 11)

Table 17:
Same as the previous table, but specific to schools located in relatively poor communities. These results are displayed visually in th

| Letter grade analysis for all subjects (low socioeconomic schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  | Subject | A | B | C | D | F |
| Grade 11 | High-performing | $84 \%$ | $11 \%$ | $0 \%$ |  | $2 \%$ |
|  | Medium-performing |  | $93 \%$ | $6 \%$ |  |  |
|  | Low-performing | $19 \%$ | $19 \%$ | $9 \%$ | $10 \%$ | $40 \%$ |

## Letter grade analysis for all subjects (Grade 11) low socioeconomic schools



A visual representation of the table above.

### 5.83 Source of assignments - English language arts

Table 203:
Source of English language arts assignments for schools located in relatively affluent communities. Note that the definition of work

|  | Source of assignments for English language arts (high socioeconomic schools) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook |
| K | $7 \%$ | $0 \%$ | $10 \%$ | $0 \%$ |
| 1 | $1 \%$ | $2 \%$ | $12 \%$ | $0 \%$ |
| 2 | $2 \%$ | $0 \%$ | $1 \%$ | $0 \%$ |
| 3 | $3 \%$ | $1 \%$ | $1 \%$ | $0 \%$ |
| 4 | $3 \%$ | $1 \%$ | $5 \%$ | $82 \%$ |
| 5 | $4 \%$ | $15 \%$ | $2 \%$ | $95 \%$ |
| 6 | $7 \%$ | $0 \%$ | $22 \%$ | $0 \%$ |
| 7 | $9 \%$ | $3 \%$ | $39 \%$ | $0 \%$ |
| 8 | $9 \%$ | $3 \%$ | $22 \%$ | $0 \%$ |
| 9 | $0 \%$ | $10 \%$ | $14 \%$ | $0 \%$ |
| 10 | $1 \%$ | $0 \%$ | $46 \%$ | $0 \%$ |
| 11 | $0 \%$ | $0 \%$ | $58 \%$ | $77 \%$ |
| 12 | $0 \%$ | $0 \%$ | $9 \%$ | $0 \%$ |



A visual representation of the table above.

### 5.84 Source of assignments - English language arts

Table 21:
Same as the previous figure but specific to schools located in relatively poor communities. These results are displayed visually in th

|  | Source of assignments for English language arts (low socioeconomic schools) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $5 \%$ | $0 \%$ | $7 \%$ | $0 \%$ | $86 \%$ |
| 1 | $6 \%$ | $1 \%$ | $12 \%$ | $0 \%$ | $78 \%$ |
| 2 | $0 \%$ | $2 \%$ | $4 \%$ | $0 \%$ | $93 \%$ |
| 3 | $0 \%$ | $0 \%$ | $8 \%$ | $0 \%$ | $90 \%$ |
| 4 | $0 \%$ | $7 \%$ | $1 \%$ | $0 \%$ | $90 \%$ |
| 5 | $0 \%$ | $6 \%$ | $6 \%$ | $0 \%$ | $87 \%$ |
| 6 | $1 \%$ | $2 \%$ | $15 \%$ | $0 \%$ | $79 \%$ |
| 7 | $5 \%$ | $0 \%$ | $36 \%$ | $0 \%$ | $58 \%$ |
| 8 | $4 \%$ | $0 \%$ | $48 \%$ | $0 \%$ | $45 \%$ |
| 9 | $0 \%$ | $0 \%$ | $72 \%$ | $0 \%$ | $27 \%$ |
| 10 | $0 \%$ | $0 \%$ | $50 \%$ | $0 \%$ | $49 \%$ |
| 11 | $0 \%$ | $0 \%$ | $33 \%$ | $2 \%$ | $63 \%$ |
| 12 | $0 \%$ | $5 \%$ | $36 \%$ | $5 \%$ | $52 \%$ |



A visual representation of the table above.

### 5.85 Source of assignments - mathematics

Table 21:
Source of mathematics assignments for schools located in relatively affluent communities. Note that the definition of workbooks sh

|  | Source of assignments for mathematics $\mathbf{c}$ (high socioeconomic schools) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $0 \%$ | $1 \%$ | $2 \%$ | $0 \%$ | $96 \%$ |
| 1 | $1 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $93 \%$ |
| 2 | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $93 \%$ |
| 3 | $0 \%$ | $1 \%$ | $0 \%$ | $3 \%$ | $94 \%$ |
| 4 | $6 \%$ | $4 \%$ | $1 \%$ | $9 \%$ | $77 \%$ |
| 5 | $0 \%$ | $0 \%$ | $1 \%$ | $0 \%$ | $97 \%$ |
| 6 | $0 \%$ | $7 \%$ | $0 \%$ | $4 \%$ | $86 \%$ |
| 7 | $0 \%$ | $6 \%$ | $4 \%$ | $3 \%$ | $85 \%$ |
| 8 | $0 \%$ | $2 \%$ | $3 \%$ | $5 \%$ | $88 \%$ |
| 9 | $0 \%$ | $0 \%$ | $2 \%$ | $18 \%$ | $78 \%$ |
| 10 | $0 \%$ | $0 \%$ | $8 \%$ | $3 \%$ | $87 \%$ |
| 11 | $0 \%$ | $0 \%$ | $11 \%$ | $22 \%$ | $66 \%$ |
| 12 | $0 \%$ | $0 \%$ | $9 \%$ | $9 \%$ | $81 \%$ |



A visual representation of the table above.

### 5.86 Source of assignments - mathematics

Table 21:
Same as the previous figure but specific to schools located in relatively poor communities. These results are displayed visually in th

|  | Source of assignments for mathematics |  |  |  | (low socioeconomic schools) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |  |  |
| K | $0 \%$ | $6 \%$ | $6 \%$ | $0 \%$ | $87 \%$ |  |  |
| 1 | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $97 \%$ |  |  |
| 2 | $15 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $84 \%$ |  |  |
| 3 | $7 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $92 \%$ |  |  |
| 4 | $27 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $72 \%$ |  |  |
| 5 | $16 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $83 \%$ |  |  |
| 6 | $0 \%$ | $0 \%$ | $1 \%$ | $7 \%$ | $90 \%$ |  |  |
| 7 | $0 \%$ | $2 \%$ | $0 \%$ | $2 \%$ | $95 \%$ |  |  |
| 8 | $0 \%$ | $0 \%$ | $4 \%$ | $35 \%$ | $59 \%$ |  |  |
| 9 | $3 \%$ | $0 \%$ | $2 \%$ | $24 \%$ | $68 \%$ |  |  |
| 10 | $4 \%$ | $3 \%$ | $7 \%$ | $25 \%$ | $59 \%$ |  |  |
| 11 | $0 \%$ | $0 \%$ | $5 \%$ | $31 \%$ | $62 \%$ |  |  |
| 12 | $0 \%$ | $0 \%$ | $0 \%$ | $33 \%$ | $66 \%$ |  |  |



A visual representation of the table above.

## 6 Results - rural versus urban schools

It has been an open question as to whether students in rural areas receive the same enacted curriculum as those in urban areas. The Standards Company LLC divided schools into two major categories of rurality defined by the National Center for Educational Statistics and produced the following reports.

### 6.1 Sample sizes of analyzed assignments by subject

Table 1:
Sample size of collected student assignments for schools located in relatively rural areas. Although teachers submitted assignments

|  | Sample sizes for collected assignments (rural schools) |  |  |
| :---: | :---: | :---: | :---: |
| Grade | ELA | Math | Combined |
| K | $1,244(3 \%)$ | $1,050(2 \%)$ | $2,294(6 \%)$ |
| 1 | $2,052(5 \%)$ | $1,326(3 \%)$ | $3,378(9 \%)$ |
| 2 | $2,179(6 \%)$ | $1,691(4 \%)$ | $3,870(10 \%)$ |
| 3 | $2,084(5 \%)$ | $1,716(4 \%)$ | $3,800(10 \%)$ |
| 4 | $1,858(5 \%)$ | $1,625(4 \%)$ | $3,483(9 \%)$ |
| 5 | $1,219(3 \%)$ | $1,023(2 \%)$ | $2,242(6 \%)$ |
| 6 | $1,788(5 \%)$ | $1,296(3 \%)$ | $3,084(8 \%)$ |
| 7 | $1,499(4 \%)$ | $1,553(4 \%)$ | $3,052(8 \%)$ |
| 8 | $2,319(6 \%)$ | $1,398(3 \%)$ | $3,717(10 \%)$ |
| 9 | $737(2 \%)$ | $1,495(4 \%)$ | $2,232(6 \%)$ |
| 10 | $1,325(3 \%)$ | $1,288(3 \%)$ | $2,613(7 \%)$ |
| 11 | $906(2 \%)$ | $606(1 \%)$ | $1,512(4 \%)$ |
| 12 | $44(0 \%)$ | $41(0 \%)$ | $85(0 \%)$ |
| Total | $19,254(54 \%)$ | $16,108(45 \%)$ | $35,362(100 \%)$ |



A visual representation of the above table.

### 6.2 Sample sizes of analyzed assignments by subject

Table 1:
Same as the previous figure but specific to schools located in relatively urban areas. The data is visually displayed in the below fig

|  | Sample sizes for collected assignments (urban schools) |  |  |
| :---: | :---: | :---: | :---: |
| Grade | ELA | Math | Combined |
| K | $278(2 \%)$ | $151(1 \%)$ | $429(3 \%)$ |
| 1 | $387(3 \%)$ | $284(2 \%)$ | $671(5 \%)$ |
| 2 | $398(3 \%)$ | $335(2 \%)$ | $733(5 \%)$ |
| 3 | $443(3 \%)$ | $318(2 \%)$ | $761(5 \%)$ |
| 4 | $493(3 \%)$ | $272(2 \%)$ | $765(6 \%)$ |
| 5 | $312(2 \%)$ | $227(1 \%)$ | $539(4 \%)$ |
| 6 | $379(2 \%)$ | $509(4 \%)$ | $888(6 \%)$ |
| 7 | $835(6 \%)$ | $801(6 \%)$ | $1,636(12 \%)$ |
| 8 | $844(6 \%)$ | $591(4 \%)$ | $1,435(11 \%)$ |
| 9 | $852(6 \%)$ | $889(7 \%)$ | $1,741(13 \%)$ |
| 10 | $998(7 \%)$ | $722(5 \%)$ | $1,720(13 \%)$ |
| 11 | $757(5 \%)$ | $535(4 \%)$ | $1,292(10 \%)$ |
| 12 | $23(0 \%)$ | $61(0 \%)$ | $84(0 \%)$ |
| Total | $6,999(55 \%)$ | $5,695(44 \%)$ | $12,694(100 \%)$ |



### 6.3 Alignment to standards - English language arts (rural schools)

Alignment to Oklahoma PASS content standards for student assignments in mathematics for schools located in relatively rural areas. Columns represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below, where percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown in the figure for clarity.

Enacted grade level for English language arts (rural schools)
Official grade level/course title

| Enacted <br> grade | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| level | K | 1 | 2 |  |  |  |  |  |  |  |  |  |  |
| $\mathbf{K}$ | $\mathbf{9 0} \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{1}$ | $8 \%$ | $\mathbf{8 1 \%}$ | $5 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{2}$ | $0 \%$ | $11 \%$ | $\mathbf{8 4 \%}$ | $8 \%$ | $3 \%$ | $0 \%$ | $6 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{3}$ | $0 \%$ | $0 \%$ | $7 \%$ | $\mathbf{8 4 \%}$ | $9 \%$ | $4 \%$ | $15 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{4}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{8 1 \%}$ | $7 \%$ | $5 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{5}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{8 1 \%}$ | $12 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{6}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ | $\mathbf{5 2 \%}$ | $7 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{7}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $\mathbf{7 5 \%}$ | $6 \%$ | $7 \%$ | $0 \%$ | $2 \%$ | $0 \%$ |
| $\mathbf{8}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ | $\mathbf{7 8 \%}$ | $31 \%$ | $3 \%$ | $3 \%$ | $2 \%$ |
| $\mathbf{9}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ | $4 \%$ | $\mathbf{5 4 \%}$ | $4 \%$ | $2 \%$ | $29 \%$ |
| $\mathbf{1 0}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{8 7 \%}$ | $5 \%$ | $0 \%$ |
| $\mathbf{1 1}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{8 2 \%}$ | $0 \%$ |
| $\mathbf{1 2}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{6 8 \%}$ |



Alignment of Student Assignments


### 6.4 Alignment to standards - English language arts (urban schools)

Alignment to Oklahoma PASS content standards for student assignments in mathematics for schools located in relatively urban areas. Columns represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below, where percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown in the figure for clarity.

Enacted grade level for English language arts (urban schools)
Official grade level/course title

| Enacted <br> grade |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| level | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| $\mathbf{K}$ | $\mathbf{6 0} \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{1}$ | $39 \%$ | $\mathbf{8 9 \%}$ | $12 \%$ | $3 \%$ | $7 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{2}$ | $0 \%$ | $7 \%$ | $\mathbf{7 8 \%}$ | $8 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{3}$ | $0 \%$ | $2 \%$ | $6 \%$ | $\mathbf{8 3 \%}$ | $4 \%$ | $5 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{4}$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $\mathbf{8 1 \%}$ | $4 \%$ | $0 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{5}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $85 \%$ | $14 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{6}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{7 9 \%}$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{7}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $6 \%$ | $\mathbf{9 1 \%}$ | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{8}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $83 \%$ | $0 \%$ | $2 \%$ | $2 \%$ | $0 \%$ |
| $\mathbf{9}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $6 \%$ | $95 \%$ | $0 \%$ | $2 \%$ | $0 \%$ |
| $\mathbf{1 0}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $87 \%$ | $17 \%$ | $0 \%$ |
| $\mathbf{1 1}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $73 \%$ | $0 \%$ |
| $\mathbf{1 2}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $\mathbf{1 0 0 \%}$ |




### 6.5 Alignment to standards - mathematics (rural schools)

Alignment to Oklahoma PASS content standards for student assignments in mathematics for Grades $\mathrm{K}-8$ for schools located in relatively rural areas. Columns represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below, where percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown in the figure for clarity.

## Enacted grade level for mathematics (rural schools)

|  | Official grade level/course title |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enacted |  |  | 0 | 3 | 4 | 5 | 6 | 7 | 8 |
| grade level | K | 1 | 2 | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{K}$ | $\mathbf{6 9 \%}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |  |  |  |  |
| $\mathbf{1}$ | $26 \%$ | $\mathbf{6 1 \%}$ | $8 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{2}$ | $4 \%$ | $30 \%$ | $\mathbf{5 4 \%}$ | $15 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{3}$ | $0 \%$ | $6 \%$ | $27 \%$ | $\mathbf{4 4 \%}$ | $12 \%$ | $2 \%$ | $5 \%$ | $0 \%$ | $0 \%$ |
| $\mathbf{4}$ | $0 \%$ | $0 \%$ | $6 \%$ | $29 \%$ | $\mathbf{5 2 \%}$ | $17 \%$ | $0 \%$ | $3 \%$ | $0 \%$ |
| $\mathbf{5}$ | $0 \%$ | $0 \%$ | $3 \%$ | $7 \%$ | $25 \%$ | $\mathbf{5 8 \%}$ | $27 \%$ | $8 \%$ | $13 \%$ |
| $\mathbf{6}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $3 \%$ | $15 \%$ | $\mathbf{4 2 \%}$ | $25 \%$ | $3 \%$ |
| $\mathbf{7}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $2 \%$ | $19 \%$ | $\mathbf{5 4 \%}$ | $21 \%$ |
| $\mathbf{8}$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $7 \%$ | $\mathbf{6 0 \%}$ |

Alignment to standards for mathematics
rural schools
$\begin{array}{lllllllll}\text { Grade K } & \text { Grade } 1 & \text { Grade } 2 & \text { Grade } 3 & \text { Grade } 4 & \text { Grade } 5 & \text { Grade } 6 & \text { Grade 7 } & \text { Grade } 8\end{array}$


### 6.6 Alignment to standards - mathematics (high school)

Same as the previous section but specific to high school discrete courses.

|  | Official grade level/course title |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Enacted level | 9th Grade | Algebra I | Algebra II | Geometry I | Pre-Algebra |
| Geometry I | $0 \%$ | $2 \%$ | $4 \%$ | $\mathbf{7 1 \%}$ | $6 \%$ |
| Algebra II | $28 \%$ | $29 \%$ | $89 \%$ | $3 \%$ | $4 \%$ |
| Algebra I | $53 \%$ | $59 \%$ | $2 \%$ | $7 \%$ | $19 \%$ |
| 8th Grade | $0 \%$ | $5 \%$ | $3 \%$ | $9 \%$ | $26 \%$ |
| 7th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $6 \%$ | $20 \%$ |
| 6th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $16 \%$ |
| 5th Grade | $10 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $4 \%$ |
| 4th Grade | $6 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 3rd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 2nd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 1st Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |



### 6.7 Alignment to standards - mathematics (urban schools)

Alignment to Oklahoma PASS content standards for student assignments in mathematics for Grades $\mathrm{K}-8$ for schools located in relatively urban areas. Columns represent the official grade level of the classes as denoted by the teachers; rows represent the enacted grade level of the assignments as determined by state content standards. Percentages in bold correspond to grade-level content. These results are displayed visually in the figure below, where percentages reflect the number of grade levels the assignments aligned above or below the class grade level. Values of $1 \%$ or less are not shown in the figure for clarity.

## Enacted grade level for mathematics (urban schools)

| Enacted grade level | Official grade level/course title |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| K | 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 1 | 22\% | 31\% | 5\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 2 | 7\% | 39\% | 51\% | 14\% | 3\% | 0\% | 0\% | 0\% | 0\% |
| 3 | 0\% | 25\% | 38\% | 57\% | 18\% | 0\% | 0\% | 0\% | 0\% |
| 4 | 0\% | 0\% | 3\% | 21\% | 37\% | 8\% | 2\% | 0\% | 0\% |
| 5 | 0\% | 0\% | 0\% | 5\% | 37\% | 58\% | 18\% | 8\% | 0\% |
| 6 | 0\% | 2\% | 0\% | 0\% | 0\% | 18\% | 70\% | 2\% | 4\% |
| 7 | 0\% | 0\% | 0\% | 0\% | 0\% | 13\% | 6\% | 72\% | 0\% |
| 8 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 14\% | 93\% |

Alignment to standards for mathematics
urban schools


### 6.8 Alignment to standards - mathematics (urban schools)

|  | Official grade level/course title |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Enacted level | 8th Grade | Algebra I | Algebra II | Geometry I | Pre-Algebra |
| Geometry I | $16 \%$ | $0 \%$ | $0 \%$ | $\mathbf{7 5} \%$ | $0 \%$ |
| Algebra II | $0 \%$ | $6 \%$ | $\mathbf{9 1 \%}$ | $3 \%$ | $16 \%$ |
| Algebra I | $0 \%$ | $\mathbf{8 3 \%}$ | $7 \%$ | $12 \%$ | $25 \%$ |
| 8th Grade | $\mathbf{5 6 \%}$ | $5 \%$ | $0 \%$ | $8 \%$ | $21 \%$ |
| 7th Grade | $2 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $21 \%$ |
| 6th Grade | $25 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $4 \%$ |
| 5th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $8 \%$ |
| 4th Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 3rd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 2nd Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| 1st Grade | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |

Alignment to standards for mathematics urban schools


### 6.9 Cognitive rigor results - English language arts (Kindergarten)

|  | English language arts rural schools (Kindergarten) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1\% |
|  | 6\% | 9\% | 14\% | 1\% |  |  |
|  | 36\% | 6\% | 26\% | 1\% |  |  |
|  | $\frac{1}{(42 \%)}$ | $\underset{(15 \%)}{2}$ | $\begin{gathered} 3 \\ (40 \%) \end{gathered}$ | $\underset{(2 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\underset{(1 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.10 Cognitive rigor results - English language arts (Kindergarten)

| English language arts urban schools (Kindergarten) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | 5\% |  | 2\% |  | 6\% |
|  | 51\% | 18\% | 18\% |  |  | 1\% |
|  | $\stackrel{1}{(51 \%)}$ | $\underset{(23 \%)}{2}$ | $\begin{gathered} 3 \\ (18 \%) \end{gathered}$ | $\underset{(2 \%)}{4}$ | $\stackrel{5}{5}(0 \%)$ | $\underset{(7 \%)}{6}$ |
| (revised) Bloom's Taxonomy |  |  |  |  |  |  |

### 6.11 Cognitive rigor results - English language arts (Grade 1)

| English language arts rural schools (Grade 1) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 2\% | 11\% | 10\% | 1\% |  |  |
|  | 33\% | 19\% | 23\% |  |  |  |
|  | $\underset{(35 \%)}{1}$ | $\underset{(30 \%)}{2}$ | $\begin{gathered} 3 \\ (33 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (1 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \end{gathered}$ | $\underset{(1 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.12 Cognitive rigor results - English language arts (Grade 1)



### 6.13 Cognitive rigor results - English language arts (Grade 2)

| English language arts rural schools (Grade 2) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 2\% | 16\% | 8\% | 2\% |  |  |
|  | 32\% | 14\% | 25\% |  |  |  |
|  | $\underset{(34 \%)}{1}$ | $\underset{(31 \%)}{2}$ | $\underset{(34 \%)}{3}$ | $\underset{(2 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\begin{gathered} 6 \\ (0 \%) \end{gathered}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.14 Cognitive rigor results - English language arts (Grade 2)

| English language arts urban schools (Kindergarten) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | 5\% |  | 2\% |  | 6\% |
|  | 51\% | 18\% | 18\% |  |  | 1\% |
|  | $\stackrel{1}{(51 \%)}$ | $\underset{(23 \%)}{2}$ | $\underset{(18 \%)}{3}$ | $\underset{(2 \%)}{4}$ | $\begin{gathered} 5 \\ (0 \%) \end{gathered}$ | $\underset{(7 \%)}{6}$ |
| (revised) Bloom's Taxonomy |  |  |  |  |  |  |

### 6.15 Cognitive rigor results - English language arts (Grade 3)

| English language arts rural schools (Grade 3) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 2\% | 24\% | 4\% | 4\% |  |  |
|  | 29\% | 14\% | 22\% |  |  |  |
|  | $\frac{1}{(30 \%)}$ | $\underset{(39 \%)}{2}$ | $\underset{(27 \%)}{3}$ | $\begin{gathered} 4 \\ (4 \%) \end{gathered}$ | $\stackrel{5}{5}(0 \%)$ | $\underset{(0 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.16 Cognitive rigor results - English language arts (Grade 3)



### 6.17 Cognitive rigor results — English language arts (Grade 4)



### 6.18 Cognitive rigor results — English language arts (Grade 4)

|  | English language arts urban schools (Grade 4) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 1\% | 5\% | 6\% | 2\% |  | 1\% |
|  | 45\% | 19\% | 21\% |  |  |  |
|  | $\underset{(46 \%)}{1}$ | $\underset{(24 \%)}{2}$ | $\underset{(27 \%)}{3}$ | $\underset{(2 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\underset{(1 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.19 Cognitive rigor results - English language arts (Grade 5)

| English language arts rural schools (Grade 5) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  | 1\% |  |  |  |
|  | 1\% | 32\% | 9\% | $3 \%$ |  | 1\% |
|  | 30\% | 8\% | 12\% |  |  |  |
|  | $\frac{1}{(31 \%)}$ | $\underset{(40 \%)}{2}$ | $\underset{(23 \%)}{3}$ | $\begin{gathered} 4 \\ (4 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \end{gathered}$ | $\underset{(2 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.20 Cognitive rigor results - English language arts (Grade 5)



### 6.21 Cognitive rigor results - English language arts (Grade 6)

| English language arts rural schools (Grade 6) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | 2\% |  | 1\% |  | 2\% |
|  | 1\% | 31\% | 5\% | 4\% |  |  |
|  | 30\% | 8\% | 15\% |  |  |  |
|  | $\stackrel{1}{(30 \%)}$ | $\underset{(42 \%)}{2}$ | $\begin{gathered} 3 \\ (21 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (5 \%) \end{gathered}$ | $\stackrel{5}{(0 \%)}$ | $\stackrel{6}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

6.22 Cognitive rigor results - English language arts (Grade 6)

| English language arts urban schools (Grade 6) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 5\% |
|  |  | 1\% | 4\% |  |  | 9\% |
|  | 5\% | 38\% | 4\% | 17\% | 2\% | 8\% |
|  | 6\% | 1\% |  |  |  |  |
|  | $\stackrel{1}{(11 \%)}$ | $\begin{gathered} 2 \\ (40 \%) \\ \text { (revi } \end{gathered}$ | 3 <br> $(8 \%)$ <br> ) Blo | $\begin{gathered} \underset{(17 \%)}{4} \\ \text { 's Tas } \end{gathered}$ | $\begin{gathered} 5 \\ (2 \%) \\ \text { omy } \end{gathered}$ | $\stackrel{6}{(22 \%)}$ |

6.23 Cognitive rigor results - English language arts (Grade 7)

| English language arts rural schools (Grade 7) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  | 1\% | 3\% |  | 4\% |
|  | 2\% | 27\% | 14\% | 2\% |  |  |
|  | 27\% | 7\% | 12\% |  |  |  |
|  | $\stackrel{1}{(29 \%)}$ | $\underset{(35 \%)}{2}$ | $\underset{(27 \%)}{3}$ | $\underset{(5 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\stackrel{6}{(4 \%)}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

6.24 Cognitive rigor results - English language arts (Grade 7)

| English language arts urban schools (Grade 7) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 6\% |
|  |  | 4\% |  | 2\% |  | 15\% |
|  | 4\% | 33\% | 7\% | $3 \%$ |  | 2\% |
|  | 13\% | 8\% | 4\% |  |  |  |
|  | $\frac{1}{(17 \%)}$ | $\begin{aligned} & 2 \\ & (46 \%) \\ & \text { (rev } \end{aligned}$ | 3 $(10 \%)$ <br> ) Blo | $\begin{gathered} 4 \\ (5 \%) \\ \text { 's Ta } \end{gathered}$ | $\begin{gathered} 5 \\ (0 \%) \\ \text { omy } \end{gathered}$ | $\underset{(22 \%)}{6}$ |

6.25 Cognitive rigor results - English language arts (Grade 8)

| English language arts rural schools (Grade 8) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | 2\% | 1\% | 1\% | 1\% | 5\% |
|  | 4\% | 41\% | 13\% | 5\% |  |  |
|  | 17\% | 7\% | 4\% |  |  |  |
|  | $\underset{(20 \%)}{1}$ | $\underset{(49 \%)}{2}$ | $\begin{gathered} 3 \\ (19 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (6 \%) \end{gathered}$ | $\stackrel{5}{5}(1 \%)$ | $\underset{(5 \%)}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.26 Cognitive rigor results - English language arts (Grade 8)

| English language arts urban schools (Grade 8) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | 3\% |  | 5\% |  | 11\% |
|  |  | 21\% | 17\% | 11\% | 6\% | 19\% |
|  | 3\% | 3\% | 1\% |  |  |  |
|  | $\frac{1}{(3 \%)}$ | $\begin{gathered} { }_{(27 \%)}^{2} \\ \text { (revi } \end{gathered}$ | 3 $(18 \%)$ <br> ) Blo | $\begin{gathered} 4 \\ (15 \%) \\ \text { 's Ta) } \end{gathered}$ | $\begin{gathered} 5 \\ (6 \%) \\ \text { omy } \end{gathered}$ | $\stackrel{6}{6}$ |

6.27 Cognitive rigor results - English language arts (Grade 9)

| English language arts rural schools (Grade 9) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 2\% |
|  |  | 1\% | 2\% | $1 \%$ | 2\% | 2\% |
|  | 5\% | 27\% | 5\% | 2\% |  | 3\% |
|  | 39\% | 6\% | 5\% |  |  |  |
|  | $\underset{(44 \%)}{1}$ | $\begin{gathered} \underset{(34 \%)}{2} \\ \text { (revi } \end{gathered}$ | $\begin{gathered} 3 \\ (12 \%) \end{gathered}$ <br> ) Blo | $\begin{gathered} \underset{(2 \%)}{4} \\ \text { 's Ta } \end{gathered}$ | $\begin{gathered} 5 \\ (2 \%) \\ \text { omy } \end{gathered}$ | $\stackrel{6}{(6 \%)}$ |

### 6.28 Cognitive rigor results - English language arts (Grade 9)

|  | English language arts urban schools (Grade 9) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  | 1\% |  | 5\% |
|  | 2\% | 27\% | 15\% | 2\% |  | 14\% |
|  | 30\% | 2\% | 3\% |  |  |  |
|  | $\frac{1}{(32 \%)}$ | $\begin{gathered} { }_{(29 \%)}^{2} \\ \text { (revi } \end{gathered}$ | (18\%) ${ }_{\text {d }}^{3}$ | 4 $(2 \%)$ s Ta | $\begin{gathered} 5 \\ (0 \%) \\ \text { omy } \end{gathered}$ | $\stackrel{6}{(19 \%)}$ |

6.29 Cognitive rigor results - English language arts (Grade 10)

| English language arts rural schools (Grade 10) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | 5\% | 1\% | 3\% | 1\% | 6\% |
|  | 2\% | 32\% | 3\% | 6\% |  | 1\% |
|  | 21\% | 14\% | 4\% |  |  |  |
|  | $\frac{1}{(22 \%)}$ | $\underset{(52 \%)}{2}$ | $\stackrel{3}{3}(8)$ | $\begin{gathered} 4 \\ (9 \%) \end{gathered}$ | $\stackrel{5}{(1 \%)}$ | $\begin{gathered} 6 \\ (7 \%) \end{gathered}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.30 Cognitive rigor results - English language arts (Grade 10)



### 6.31 Cognitive rigor results - English language arts (Grade 11)

| English language arts rural schools (Grade 11) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | 3\% |  | 1\% | 1\% | 10\% |
|  | 1\% | 18\% | 5\% | 6\% |  | 3\% |
|  | 33\% | 12\% | 6\% |  |  |  |
|  | $\frac{1}{(34 \%)}$ | $\begin{gathered} 2 \\ (34 \%) \\ \text { (rev } \end{gathered}$ | 3 $(10 \%)$ <br> ) Bl | $\begin{gathered} \underset{(7 \%)}{4} \\ \text { 's Ta } \end{gathered}$ | $\begin{gathered} 5 \\ (1 \%) \\ \text { omy } \end{gathered}$ | $\underset{(13 \%)}{6}$ |

6.32 Cognitive rigor results - English language arts (Grade 11)

| English language arts urban schools (Grade 11) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1\% |  | 4\% |
|  |  |  |  | 16\% | 2\% | 7\% |
|  |  | 20\% | 12\% | 3\% |  | 8\% |
|  | 14\% | 1\% | 10\% |  |  |  |
|  | $\frac{1}{(14 \%)}$ | $\begin{gathered} 2 \\ (21 \%) \\ \text { (revi } \end{gathered}$ | $\stackrel{3}{(22 \%)}$ <br> ) Blo | $\begin{gathered} 4 \\ (20 \%) \\ \text { 's Tax } \end{gathered}$ | $\begin{gathered} 5 \\ (3 \%) \\ \text { omy } \end{gathered}$ | $\begin{gathered} 6 \\ (19 \%) \end{gathered}$ |

6.33 Cognitive rigor results - mathematics (Kindergarten)


Cognitive rigor of Kindergarten English language arts assignments for schools located in relatively rural areas.

### 6.34 Cognitive rigor results - mathematics (Kindergarten)



### 6.35 Cognitive rigor results - mathematics (Grade 1)



### 6.36 Cognitive rigor results - mathematics (Grade 1)



### 6.37 Cognitive rigor results - mathematics (Grade 2)



### 6.38 Cognitive rigor results - mathematics (Grade 2)



### 6.39 Cognitive rigor results - mathematics (Grade 3)



### 6.40 Cognitive rigor results - mathematics (Grade 3)



Same as the previous figure, but specific to schools located in relatively urban areas

### 6.41 Cognitive rigor results — mathematics (Grade 4)



### 6.42 Cognitive rigor results - mathematics (Grade 4)



### 6.43 Cognitive rigor results - mathematics (Grade 5)



### 6.44 Cognitive rigor results - mathematics (Grade 5)



Same as the previous figure, but specific to schools located in relatively urban areas.

### 6.45 Cognitive rigor results - mathematics (Grade 6)



### 6.46 Cognitive rigor results - mathematics (Grade 6)



Same as the previous figure, but specific to schools located in relatively urban areas.

### 6.47 Cognitive rigor results - mathematics (Grade 7)

| Mathematics rural schools (Grade 7) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  | 1\% |  |  |
|  |  | 1\% | 9\% | 12\% |  |  |
|  | 29\% | 11\% | 37\% |  |  |  |
|  | $\underset{(29 \%)}{1}$ | $\underset{(12 \%)}{2}$ | $\underset{(46 \%)}{3}$ | $\underset{(13 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\stackrel{6}{(0 \%)}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.48 Cognitive rigor results - mathematics (Grade 7)



### 6.49 Cognitive rigor results - mathematics (Grade 8)

| Mathematics rural schools (Grade 8) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  | 1\% | 1\% |  |
|  |  |  | 9\% | 29\% |  | 1\% |
|  | 10\% | 5\% | 43\% | 1\% |  |  |
|  | $\stackrel{1}{(10 \%)}$ | $\underset{(5 \%)}{2}$ | $\begin{gathered} 3 \\ (52 \%) \end{gathered}$ | $\begin{gathered} 4 \\ (31 \%) \end{gathered}$ | $\begin{gathered} 5 \\ (1 \%) \end{gathered}$ | $\begin{gathered} 6 \\ (1 \%) \end{gathered}$ |
| (revised) Bloom's Taxonomy |  |  |  |  |  |  |

### 6.50 Cognitive rigor results - mathematics (Grade 8)



### 6.51 Cognitive rigor results - mathematics (Grade 9)



### 6.52 Cognitive rigor results - mathematics (Grade 9)



Same as the previous figure, but specific to schools located in relatively urban areas

### 6.53 Cognitive rigor results - mathematics (Grade 10)

| Mathematics rural schools (Grade 10) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  |  |  | 4\% |  | 1\% |
|  |  | 1\% | 7\% | 43\% |  |  |
|  | 1\% | 3\% | 40\% |  |  |  |
|  | $\stackrel{1}{(1 \%)}$ | $\underset{(4 \%)}{2}$ | $\begin{gathered} 3 \\ (46 \%) \end{gathered}$ | $\underset{(47 \%)}{4}$ | $\stackrel{5}{(0 \%)}$ | $\stackrel{6}{6}$ |
|  | (revised) Bloom's Taxonomy |  |  |  |  |  |

### 6.54 Cognitive rigor results - mathematics (Grade 10)



### 6.55 Cognitive rigor results - mathematics (Grade 11)



### 6.56 Cognitive rigor results - mathematics (Grade 11)



### 6.57 Letter-grade analysis - combined subjects (Grades K-12)

Table 17:
Letter grades received by students on English language arts and mathematics assignments for schools located in relatively rural are

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Student | A | B | C | D | F |
| All Grades | High-performing | $81 \%$ | $11 \%$ | $4 \%$ | $2 \%$ | $1 \%$ |
|  | Medium-performing | $43 \%$ | $15 \%$ | $20 \%$ | $7 \%$ | $12 \%$ |
|  | Low-performing | $31 \%$ | $14 \%$ | $14 \%$ | $13 \%$ | $27 \%$ |

Letter grade analysis for all subjects (All Grades) rural schools


A visual representation of the table above.

### 6.58 Letter-grade analysis - combined subjects (Grades K-12)

Table 17:
Letter grades received by students on English language arts and mathematics assignments for schools located in relatively urban ar

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Student | A | B | C | D | F |
| All Grades | High-performing | $85 \%$ | $9 \%$ | $2 \%$ | $1 \%$ | $<1 \%$ |
|  | Medium-performing | $11 \%$ | $82 \%$ | $5 \%$ |  |  |
|  | Low-performing | $33 \%$ | $14 \%$ | $13 \%$ | $13 \%$ | $25 \%$ |



### 6.59 Letter-grade analysis - combined subjects (Kindergarten)

Table 17:
Same as the previous table, but specific to Kindergarten for schools located in relatively rural areas. These results are displayed vis

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subject |  | A | B | C | D | F |
| Grade K | High-performing | 100\% |  |  |  |  |
|  | Medium-performing |  |  |  |  |  |
|  | Low-performing | 89\% | 1\% | 3\% | 4\% | 2\% |

Letter grade analysis for all subjects (Kindergarten) rural schools


A visual representation of the table above.

### 6.60 Letter-grade analysis - combined subjects (Kindergarten)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Subject | A | B | C | D | F |
| Grade K | High-performing  <br>  Medium-performing <br>  Low-performing | $92 \%$ |  |  |  | $7 \%$ |
|  |  | $36 \%$ |  | $12 \%$ | $8 \%$ | $44 \%$ |

Letter grade analysis for all subjects (Kindergarten) urban schools


A visual representation of the table above.

### 6.61 Letter-grade analysis - combined subjects (Grade 1)

Table 17:
Same as the previous table, but specific to first grade for schools located in relatively rural areas. These results are displayed visual

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 1 | High-performing <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $95 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |

Letter grade analysis for all subjects (Grade 1) rural schools


A visual representation of the table above.

### 6.62 Letter-grade analysis - combined subjects (Grade 1)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 1 | High-performing <br> Medium-performing | $83 \%$ | $14 \%$ |  | $1 \%$ |  |
|  | Low-performing |  |  |  |  |  |

Letter grade analysis for all subjects (Grade 1) urban schools


A visual representation of the table above.

### 6.63 Letter-grade analysis - combined subjects (Grade 2)

Table 17:
Same as the previous table, but specific to second grade for schools located in relatively rural areas. These results are displayed vis

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 2 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $87 \%$ | $8 \%$ | $2 \%$ | $1 \%$ | $0 \%$ |

Letter grade analysis for all subjects (Grade 2) rural schools


A visual representation of the table above.

### 6.64 Letter-grade analysis - combined subjects (Grade 2)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 2 | High-performing <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $94 \%$ | $4 \%$ |  | $0 \%$ |  |

## Letter grade analysis for all subjects (Grade 2) urban schools



A visual representation of the table above.

### 6.65 Letter-grade analysis - combined subjects (Grade 3)

Table 17:
Same as the previous table, but specific to third grade for schools located in relatively rural areas. These results are displayed visua

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 3 | High-performing <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $84 \%$ | $9 \%$ | $3 \%$ | $0 \%$ | $1 \%$ |

Letter grade analysis for all subjects (Grade 3) rural schools


A visual representation of the table above.

### 6.66 Letter-grade analysis - combined subjects (Grade 3)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 3 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $91 \%$ | $5 \%$ | $2 \%$ |  | $0 \%$ |

## Letter grade analysis for all subjects (Grade 3) urban schools



A visual representation of the table above.

### 6.67 Letter-grade analysis - combined subjects (Grade 4)

Table 17:
Same as the previous table, but specific to fourth grade for schools located in relatively rural areas. These results are displayed visu

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 4 | High-performing <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $79 \%$ | $12 \%$ | $4 \%$ | $2 \%$ | $0 \%$ |

## Letter grade analysis for all subjects (Grade 4) rural schools



A visual representation of the table above.

### 6.68 Letter-grade analysis - combined subjects (Grade 4)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 4 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $88 \%$ | $8 \%$ | $1 \%$ | $0 \%$ | $0 \%$ |

## Letter grade analysis for all subjects (Grade 4) urban schools



A visual representation of the table above.

### 6.69 Letter-grade analysis - combined subjects (Grade 5)

Table 17:
Same as the previous table, but specific to fifth grade for schools located in relatively rural areas. These results are displayed visual

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |  |
| Grade 5 | High-performing <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $74 \%$ | $12 \%$ | $8 \%$ | $4 \%$ | $0 \%$ |  |

Letter grade analysis for all subjects (Grade 5) rural schools


A visual representation of the table above.

### 6.70 Letter-grade analysis - combined subjects (Grade 5)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  | Subject | A | B | C | D | F |
| Grade 5 | High-performing  <br>  Medium-performing <br>  Low-performing | $77 \%$ | $12 \%$ | $7 \%$ | $1 \%$ | $0 \%$ |
|  |  | $44 \%$ | $13 \%$ | $7 \%$ | $17 \%$ | $17 \%$ |

Letter grade analysis for all subjects (Grade 5) urban schools


A visual representation of the table above.

### 6.71 Letter-grade analysis - combined subjects (Grade 6)

Table 17:
Same as the previous table, but specific to sixth grade for schools located in relatively rural areas. These results are displayed visua

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 6 | High-performing | $79 \%$ | $11 \%$ | $3 \%$ | $2 \%$ | $1 \%$ |
|  | Medium-performing | $50 \%$ | $8 \%$ | $8 \%$ | $8 \%$ | $25 \%$ |
|  | Low-performing | $20 \%$ | $17 \%$ | $13 \%$ | $16 \%$ | $31 \%$ |



### 6.72 Letter-grade analysis - combined subjects (Grade 6)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 6 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $85 \%$ | $9 \%$ | $1 \%$ | $3 \%$ | $0 \%$ |

Letter grade analysis for all subjects (Grade 6) urban schools


A visual representation of the table above.

### 6.73 Letter-grade analysis - combined subjects (Grade 7)

Table 17:
Same as the previous table, but specific to seventh grade for schools located in relatively rural areas. These results are displayed vis

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  | Subject | A | B | C | D | F |
| Grade 7 | High-performing | $71 \%$ | $17 \%$ | $6 \%$ | $2 \%$ | $2 \%$ |
|  | Medium-performing | $100 \%$ |  |  |  |  |
|  | Low-performing | $26 \%$ | $11 \%$ | $18 \%$ | $14 \%$ | $29 \%$ |

Letter grade analysis for all subjects (Grade 7) rural schools


A visual representation of the table above.

### 6.74 Letter-grade analysis - combined subjects (Grade 7)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 7 | High-performing  <br>  Medium-performing <br>  Low-performing | $84 \%$ | $11 \%$ | $1 \%$ | $2 \%$ | $0 \%$ |
|  | $32 \%$ | $11 \%$ | $20 \%$ | $12 \%$ | $23 \%$ |  |

## Letter grade analysis for all subjects (Grade 7) urban schools



A visual representation of the table above.

### 6.75 Letter-grade analysis - combined subjects (Grade 8)

Table 17:
Same as the previous table, but specific to eighth grade for schools located in relatively rural areas. These results are displayed visu

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  | Subject | A | B | C | D | F |
| Grade 8 | High-performing <br>  <br>  <br>  <br>  <br>  <br> Medium-performing <br> Low-performing | $69 \%$ | $17 \%$ | $7 \%$ | $3 \%$ | $2 \%$ |

Letter grade analysis for all subjects (Grade 8) rural schools


A visual representation of the table above.

### 6.76 Letter-grade analysis - combined subjects (Grade 8)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 8 | High-performing  <br>  Medium-performing <br>  Low-performing | $78 \%$ | $18 \%$ | $2 \%$ | $0 \%$ |  |
|  |  | $16 \%$ | $10 \%$ | $10 \%$ | $19 \%$ | $42 \%$ |

Letter grade analysis for all subjects (Grade 8) urban schools


A visual representation of the table above.

### 6.77 Letter-grade analysis - combined subjects (Grade 9)

Table 17:
Same as the previous table, but specific to ninth grade for schools located in relatively rural areas. These results are displayed visua

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 9 | High-performing | $79 \%$ | $11 \%$ | $4 \%$ | $1 \%$ | $3 \%$ |
|  | Medium-performing | $46 \%$ | $7 \%$ | $38 \%$ | $7 \%$ |  |
|  | Low-performing | $15 \%$ | $9 \%$ | $15 \%$ | $21 \%$ | $37 \%$ |



### 6.78 Letter-grade analysis - combined subjects (Grade 9)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 9 | High-performing  <br>  Medium-performing <br>  Low-performing | $88 \%$ | $7 \%$ | $1 \%$ | $1 \%$ | $0 \%$ |
|  | $18 \%$ | $16 \%$ | $14 \%$ | $13 \%$ | $35 \%$ |  |

## Letter grade analysis for all subjects (Grade 9) urban schools



A visual representation of the table above.

### 6.79 Letter-grade analysis - combined subjects (Grade 10)

Table 17:
Same as the previous table, but specific to tenth grade for schools located in relatively rural areas. These results are displayed visua

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 10 | High-performing | $80 \%$ | $11 \%$ | $2 \%$ | $4 \%$ | $1 \%$ |
|  | Medium-performing | $16 \%$ | $16 \%$ | $33 \%$ |  | $33 \%$ |
|  | Low-performing | $23 \%$ | $10 \%$ | $20 \%$ | $11 \%$ | $33 \%$ |



A visual representation of the table above.

### 6.80 Letter-grade analysis - combined subjects (Grade 10)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Subject | A | B | C | D | F |
| Grade 10 | High-performing | $82 \%$ | $8 \%$ | $8 \%$ |  |  |
|  | Medium-performing | $100 \%$ |  |  |  |  |
|  | Low-performing | $10 \%$ | $9 \%$ | $7 \%$ | $38 \%$ | $33 \%$ |



A visual representation of the table above.

### 6.81 Letter-grade analysis - combined subjects (Grade 11)

Table 17:
Same as the previous table, but specific to eleventh grade for schools located in relatively rural areas. These results are displayed vi

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 11 | High-performing | $77 \%$ | $16 \%$ | $2 \%$ | $0 \%$ | $2 \%$ |
|  | Medium-performing |  | $75 \%$ |  | $25 \%$ |  |
|  | Low-performing | $15 \%$ | $13 \%$ | $11 \%$ | $10 \%$ | $49 \%$ |



### 6.82 Letter-grade analysis - combined subjects (Grade 11)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | ---: |
|  | Subject | A | B | C | D | F |
| Grade 11 | High-performing | $83 \%$ | $8 \%$ | $4 \%$ |  | $3 \%$ |
|  | Medium-performing |  | $93 \%$ | $6 \%$ |  |  |
|  | Low-performing | $16 \%$ | $8 \%$ | $14 \%$ | $8 \%$ | $52 \%$ |

Letter grade analysis for all subjects (Grade 11) urban schools


A visual representation of the table above.

### 6.83 Letter-grade analysis - combined subjects (Grade 12)

Table 17:
Same as the previous table, but specific to twelfth grade for schools located in relatively rural areas. These results are displayed vis

| Letter grade analysis for all subjects (rural schools) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Subject | A | B | C | D | F |
| Grade 12 | High-performing <br> Medium-performing | $75 \%$ |  |  |  | $25 \%$ |
|  | Low-performing |  |  |  |  |  |

Letter grade analysis for all subjects (Grade 12) rural schools


A visual representation of the table above.

### 6.84 Letter-grade analysis - combined subjects (Grade 12)

Table 17:
Same as the previous table, but specific to schools located in relatively urban areas. These results are displayed visually in the figur

| Letter grade analysis for all subjects (urban schools) |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Subject | A | B | C | D |
| Grade 12 | High-performing  <br>  Medium-performing <br>  Low-performing | $88 \%$ |  | F |  |
|  |  | $83 \%$ |  | $11 \%$ |  |
|  |  |  | $16 \%$ |  |  |

Letter grade analysis for all subjects (Grade 12) urban schools


A visual representation of the table above.

### 6.85 Source of assignments - English language arts

Table 21:
Source of English language arts assignments for schools located in relatively rural areas. The definition of workbooks shown here

|  | Source of assignments for English language arts (rural schools) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $4 \%$ | $0 \%$ | $7 \%$ | $0 \%$ | $87 \%$ |
| 1 | $3 \%$ | $1 \%$ | $7 \%$ | $0 \%$ | $87 \%$ |
| 2 | $3 \%$ | $1 \%$ | $1 \%$ | $0 \%$ | $93 \%$ |
| 3 | $5 \%$ | $1 \%$ | $2 \%$ | $0 \%$ | $90 \%$ |
| 4 | $4 \%$ | $2 \%$ | $3 \%$ | $0 \%$ | $89 \%$ |
| 5 | $3 \%$ | $9 \%$ | $4 \%$ | $0 \%$ | $82 \%$ |
| 6 | $3 \%$ | $1 \%$ | $15 \%$ | $0 \%$ | $78 \%$ |
| 7 | $5 \%$ | $2 \%$ | $31 \%$ | $0 \%$ | $60 \%$ |
| 8 | $9 \%$ | $1 \%$ | $24 \%$ | $0 \%$ | $64 \%$ |
| 9 | $0 \%$ | $2 \%$ | $23 \%$ | $0 \%$ | $74 \%$ |
| 10 | $4 \%$ | $0 \%$ | $36 \%$ | $0 \%$ | $58 \%$ |
| 11 | $0 \%$ | $0 \%$ | $31 \%$ | $0 \%$ | $68 \%$ |
| 12 | $0 \%$ | $0 \%$ | $5 \%$ | $17 \%$ | $76 \%$ |



A visual representation of the table above.

### 6.86 Source of assignments - English language arts

Table 21:
Same as the previous figure but specific to schools located in relatively urban areas. These results are displayed visually in the figu

|  | Source of assignments for English language arts (urban schools) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $97 \%$ |
| 1 | $2 \%$ | $1 \%$ | $12 \%$ | $0 \%$ | $82 \%$ |
| 2 | $7 \%$ | $0 \%$ | $4 \%$ | $0 \%$ | $86 \%$ |
| 3 | $0 \%$ | $0 \%$ | $11 \%$ | $0 \%$ | $88 \%$ |
| 4 | $0 \%$ | $0 \%$ | $1 \%$ | $0 \%$ | $98 \%$ |
| 5 | $0 \%$ | $6 \%$ | $4 \%$ | $0 \%$ | $88 \%$ |
| 6 | $1 \%$ | $0 \%$ | $30 \%$ | $0 \%$ | $68 \%$ |
| 7 | $5 \%$ | $0 \%$ | $70 \%$ | $0 \%$ | $23 \%$ |
| 8 | $7 \%$ | $0 \%$ | $60 \%$ | $0 \%$ | $31 \%$ |
| 9 | $0 \%$ | $1 \%$ | $54 \%$ | $0 \%$ | $43 \%$ |
| 10 | $0 \%$ | $0 \%$ | $44 \%$ | $0 \%$ | $55 \%$ |
| 11 | $0 \%$ | $0 \%$ | $43 \%$ | $1 \%$ | $54 \%$ |
| 12 | $0 \%$ | $5 \%$ | $36 \%$ | $5 \%$ | $52 \%$ |



A visual representation of the table above.

### 6.87 Source of assignments - mathematics

Table 21:
Source of mathematics assignments for schools located in relatively rural areas. The definition of workbooks shown here was not li

|  | Source of assignments for mathematics (rural schools) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $0 \%$ | $1 \%$ | $1 \%$ | $0 \%$ | $97 \%$ |
| 1 | $3 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $94 \%$ |
| 2 | $3 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $94 \%$ |
| 3 | $1 \%$ | $1 \%$ | $0 \%$ | $0 \%$ | $97 \%$ |
| 4 | $8 \%$ | $1 \%$ | $0 \%$ | $10 \%$ | $79 \%$ |
| 5 | $5 \%$ | $0 \%$ | $1 \%$ | $12 \%$ | $80 \%$ |
| 6 | $8 \%$ | $4 \%$ | $0 \%$ | $5 \%$ | $80 \%$ |
| 7 | $0 \%$ | $4 \%$ | $2 \%$ | $3 \%$ | $89 \%$ |
| 8 | $0 \%$ | $0 \%$ | $2 \%$ | $26 \%$ | $69 \%$ |
| 9 | $0 \%$ | $0 \%$ | $1 \%$ | $7 \%$ | $90 \%$ |
| 10 | $0 \%$ | $0 \%$ | $10 \%$ | $2 \%$ | $86 \%$ |
| 11 | $0 \%$ | $0 \%$ | $5 \%$ | $10 \%$ | $84 \%$ |
| 12 | $0 \%$ | $0 \%$ | $6 \%$ | $6 \%$ | $87 \%$ |



A visual representation of the table above.

### 6.88 Source of assignments - mathematics

Table 21:
Same as the previous figure but specific to schools located in relatively urban areas. These results are displayed visually in the figu

|  | Source of assignments for mathematics (urban schools) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade | district | internet | teacher | textbook | workbook |
| K | $0 \%$ | $0 \%$ | $2 \%$ | $0 \%$ | $97 \%$ |
| 1 | $0 \%$ | $3 \%$ | $0 \%$ | $0 \%$ | $96 \%$ |
| 2 | $24 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $74 \%$ |
| 3 | $9 \%$ | $0 \%$ | $1 \%$ | $10 \%$ | $78 \%$ |
| 4 | $28 \%$ | $8 \%$ | $0 \%$ | $0 \%$ | $62 \%$ |
| 5 | $15 \%$ | $1 \%$ | $0 \%$ | $0 \%$ | $83 \%$ |
| 6 | $0 \%$ | $0 \%$ | $3 \%$ | $0 \%$ | $96 \%$ |
| 7 | $0 \%$ | $2 \%$ | $0 \%$ | $0 \%$ | $97 \%$ |
| 8 | $0 \%$ | $9 \%$ | $0 \%$ | $30 \%$ | $60 \%$ |
| 9 | $3 \%$ | $0 \%$ | $2 \%$ | $29 \%$ | $64 \%$ |
| 10 | $3 \%$ | $3 \%$ | $0 \%$ | $32 \%$ | $59 \%$ |
| 11 | $0 \%$ | $0 \%$ | $3 \%$ | $35 \%$ | $61 \%$ |
| 12 | $0 \%$ | $0 \%$ | $0 \%$ | $52 \%$ | $47 \%$ |

Source of assignments for mathematics (Grades K-12) urban schools


A visual representation of the table above.

## 7 Tables of Special Interest

### 7.1 Appearance of depth-of-knowledge level 1 - mathematics



Appearance of the lowest level of depth of knowledge (that is, DOK-1) in the collected student assignments for mathematics. Here, high percentages correspond to relatively low rigor in regards to depth of knowledge. With the exception of eighth grade, low-performing schools featured significantly higher levels of low-level assignments. These results indicate that depth-of-knowledge is a signature of academic achievement in mathematics and could form the scope for future professional development. (Results for English language arts did not display similar trends.)

