# Achieve3000:

## *Comprehensive Evaluation*

November 2022

By Allison M. Bock, Ph.D., Program Evaluation Specialist and
Heidi L. Janicki, Ph.D., Director of Research and Evaluation

Planning, Innovation, and Accountability
Office of Research and Evaluation
Virginia Beach City Public Schools

# Table of Contents

# Tables

# Figures

# Introduction

## Background of Program

Achieve3000 is an online literacy program that provides differentiated non-fiction content to students based on their Lexile level.[1] According to Achieve3000, Inc., the Achieve3000 literacy program is an innovative digital solution proven to accelerate literacy growth across all populations of students.[2] Achieve3000, Inc. indicates that the program is built on scientific research that investigated how learners develop reading and writing skills. In the Achieve3000 literacy program, students first complete a screener that assesses students' Lexile levels. Based on their Lexile level, students are provided articles that match their reading level. After reading the articles, students are provided multiple-choice activity questions that assess their comprehension. Students' Lexile levels are then adjusted based on performance on the activity questions over time.

Virginia Beach City Public Schools (VBCPS) began using the Achieve3000 literacy program during the 2015-2016 school year as a reading resource for students in grades 3 through 12.[3] During the 2021-2022 school year, teachers were expected to use Achieve3000 for Tier I instruction with all students in grades 3 through 8, [4] while teachers could use it as a resource as needed for students in grades 9 through 12.[5] At elementary school specifically, Achieve3000 provides a structured opportunity for students to work individually while small group instruction may be occurring. At the middle school level, students were expected to use the program in both their English and Social Studies courses. A separate Achieve3000, Inc. product, Smarty Ants, was used with students in kindergarten through grade 2, although this product is not within the scope of this evaluation.

## Background and Purpose of Program Evaluation

Achieve3000 was selected and approved for the Program Evaluation Schedule based on criteria specified in School Board Policy 6-26, adopted by the School Board on September 5, 2007. The following excerpt is from School Board Policy 6-26:

Existing programs will be evaluated based on an annual Program Evaluation Schedule which will be developed by the Program Evaluation Committee and approved by the School Board annually….On a yearly basis, the Program Evaluation Committee will present a list of programs recommended for evaluation to the Superintendent and the School Board. This listing will include the rationale for each recommendation based on an approved set of criteria. All programs will be prioritized for evaluation based on the following factors:

1. Alignment with the school division's strategic plan and School Board goals;
2. Program cost;
3. Program scale;
4. Cross-departmental interest;
5. Community/stakeholder interest in the program;
6. Availability of information on the program's effectiveness; and
7. Date of most recent evaluation.

In July 2021, members of the Program Evaluation Committee were emailed with instructions to review a list of 12 existing educational programs and were asked to determine whether the programs have potential to have a large and positive impact on VBCPS reaching its goals and whether the programs maximize VBCPS resources for the community and stakeholders. Based on the criteria in School Board policy 6-26, Achieve3000 was recommended for inclusion on the Program Evaluation Schedule. This recommendation was due to its potential to have a large, positive impact on VBCPS reaching its goals, the cost of the program, and the lack of formal evaluation by the Office of Research and Evaluation. It was determined that Achieve3000 would be scheduled for a comprehensive evaluation during the 2021-2022 school year. The proposed Program

Evaluation Schedule was presented to the School Board on August 24, 2021 and approved on September 14, 2021.

# Program Goal and Objective

The program goal and objective were outlined in collaboration with program managers from the Department of Teaching and Learning following a review of relevant literature and Achieve3000 program information. One goal and one specific objective were developed. The goal focused on student improvement in reading skills. The outcome objective focused on improving reading skills by Lexile growth and reading on grade level in Achieve3000.

# Evaluation Design and Methodology

## Evaluation Design and Data Collection

The evaluation included mixed methodologies to address each of the evaluation questions, including assessing the extent to which the goal and objective were met. Qualitative data were collected through discussions with the program managers, document reviews, and open-ended survey questions. Quantitative data were gathered through a student Achieve3000 usage and performance data file obtained from Achieve3000, Inc., the VBCPS data warehouse, and through closed-ended survey questions. The Office of Research and Evaluation used the following data collection methods:

- Communicated with staff from the Department of Teaching and Learning to gather implementation-related information, including the director of K-12 and gifted programs, executive director of elementary teaching and learning, executive director of secondary teaching and learning, and director of instructional technology.
- Reviewed Achieve3000 program documentation and website.
- Collected data from the VBCPS data warehouse related to student demographic characteristics and academic achievement (i.e., Reading inventory, Standards of Learning assessments).
- Gathered student Achieve3000 usage and performance data from Achieve3000 representatives.
- Administered surveys to grade 3 through 12 classroom teachers, building administrators, students in grades 4 through 12, and parents of students in grades 3 through 12.
- Gathered cost data from the Department of Teaching and Learning.

### Surveys

As part of a larger survey effort of multiple initiatives, the Office of Research and Evaluation invited grade 3 through 12 classroom teachers, administrators, students in grades 4 through 12, and parents of students in grades 3 through 12 to complete survey items regarding their perceptions of Achieve3000. Staff and parents received an email invitation with a link to participate in the online survey in April 2022. Students accessed the survey through a link on their ClassLink dashboard in April 2022.

Of the classroom teachers and administrators invited to complete the survey, 41 percent of grade 3 through 12 teachers and 54 percent of administrators completed the survey. Of the students in grades 4 through 12, 66 percent completed the survey. Of the parents of students in grades 3 through 12, 14 percent completed the survey. See Table 1 for response rates by level.

**Table 1: Survey Response Rates by Respondent Group**

| Group | ES | MS | HS | Total |
|---|---|---|---|---|
| Classroom Teachers (Grades 3-12) | 39% | 46% | 38% | 41% |
| Administrators | 57% | 66% | 42% | 54% |
| Students (Grades 4-12) | 69% | 76% | 57% | 66% |
| Parents (Grades 3-12) | 17% | 13% | 12% | 14% |

All teachers and students were asked an initial question regarding whether they had used Achieve3000 during the 2021-2022 school year. Administrators were asked whether any teachers at their school used the program and parents were asked whether their child used the program during 2021-2022. If stakeholders responded yes to this initial question, they were provided additional questions regarding their perceptions of the program. All survey data provided in this report were based on stakeholders who indicated yes to this item. In addition, for all stakeholders, survey agreement percentages reported in the evaluation are based on those who answered the survey item (i.e., missing responses were excluded from the percentages). Survey results are primarily reported at the school level (i.e., elementary, middle, high) due to anticipated differences in program use by level.

### Student Usage and Performance Data From Achieve3000

Student Achieve3000 usage and performance data were obtained from Achieve3000 representatives. Student data were gathered for the full 2021-2022 school year to include all days between the first day of school, September 9, 2021 and the last day of school, June 17, 2022. Student data included: total number of logins, number of logins occurring after school hours, number of activities completed (i.e., set of multiple-choice activity questions), average score on activities, and number of activities passed (i.e., receiving a score of 75 percent or above). The following data points were provided for students' LevelSet pretest assessment and end-of-year Lexile adjustment: Lexile level and whether they were on track to meet the college and career readiness benchmark. The college and career readiness data indicate whether students were on track to be ready for college and career when they finish grade 12 based on college and career readiness Lexile bands developed by MetaMetrics for each grade level. Students were determined to either be "far below grade level," "approaching grade level," "meeting grade level," or "exceeding grade level" benchmarks. This variable aligns with the grade-level expectations based on the Reading Inventory performance bands. Therefore, students who were determined to be "meeting grade level" and "exceeding grade level" Lexiles were categorized as reading on grade level. In addition, students' expected Lexile growth based on students' LevelSet pretest Lexile level was provided by Achieve3000 using an algorithm developed by MetaMetrics. Student Achieve3000 usage and performance data were combined with additional student data from the VBCPS data warehouse.

Data were combined for students who had more than one record in the file obtained from Achieve3000. Students who were identified as having used Achieve3000 at the Juvenile Detention Center and students who were not on record as being in grades 3 through 12 were excluded from all analyses.[6] Students who used the Achieve3000 program were defined as any student who logged in to Achieve3000 at least once during the school year. Consistent with reports provided by Achieve3000, Inc., the following groups of students were *excluded* from all outcome analyses: students who did not complete a LevelSet pretest assessment and students who did not have an adjusted Lexile level. Students included in the outcome analyses in this report were also limited to those who completed the LevelSet pretest assessment in the fall (i.e., September through November) and had an adjusted Lexile level towards the end of the school year (i.e., March through June). In addition, similar to reports provided by Achieve3000, Inc., students whose teachers manually entered their end-of-year Lexile level were excluded from all outcome analyses.[7] This was to ensure that all students' Lexile levels included in the analyses were based on their performance in the Achieve3000 program.

### Student Information From Data Warehouse

Quantitative data collected from the VBCPS data warehouse included student demographic characteristics and academic achievement as measured by the Reading Inventory (RI) and reading SOLs. Reading Inventory data analysis was limited to students in grades 3 through 9 because these are the grades at which the assessment is administered to all students. The reading SOL data analysis included students in grades 3 through 8 and students in grades 10 through 12 who took the End of Course English SOL.

## Evaluation Questions

The evaluation questions for this report were developed by evaluators with input and feedback from the program managers. The evaluation questions established for the comprehensive evaluation were as follows:

1. **What are the main operational components of Achieve3000?**
   a. What are the instructional components of Achieve3000, including the LevelSet assessment and Lesson Routine, and what was the usage of these components?
   b. What are the other components of Achieve3000 (i.e., teacher resources, student components, data center, home edition)?
   c. What professional learning and support are provided for use of Achieve3000?
2. **What were the characteristics of students who used Achieve3000 and students included in the outcome analyses?**
3. **What progress was made meeting Achieve3000's outcome goal of improving students' reading skills?**
4. **How did student usage and performance in Achieve3000 relate to students' performance on other division assessments (e.g., Reading Inventory, reading SOLs)?**
5. **What were the stakeholders' perceptions of Achieve3000 (i.e., classroom teachers, administrators, students, and parents)?**
6. **What were the costs of Achieve3000 during 2021-2022?**

# Evaluation Results and Discussion

## Operational Components

The first evaluation question focused on the operational components of Achieve3000 including the instructional components; resources for teachers, students, and families; and professional learning.

### Instructional Components

To ensure students are provided content that is differentiated based on their Lexile level, students are first assessed on a universal screener, the LevelSet assessment, which is used as a pretest for students' Lexile levels. The LevelSet is automatically provided to students the first time they log in to Achieve3000 during the school year. The LevelSet is a computer-based assessment that includes 30 questions.[8] There are 11 versions of the assessment corresponding to each grade level from grades 2 through 12. If students have used the Achieve3000 system in a prior year, students are provided the assessment that corresponds to their reading grade level from a prior assessment. If students have not used the Achieve3000 system in a prior year, they are provided a 10 question Locator Test prior to the LevelSet assessment to provide an initial gauge of a student's reading ability. This will allow the system to assign students a level of the LevelSet assessment that best matches their ability. If students complete the LevelSet assessment too quickly, too slowly, or with a patterned response (e.g., all first response options chosen on every question), teachers are notified of a potentially

invalid response and can allow students to retake the assessment. Students may only retake the pretest LevelSet assessment once per year if needed.

Based on students' performance on the LevelSet, students are given a numerical Lexile level as well as determination of whether they are on track for meeting the college and career readiness benchmark for their grade level. The college and career readiness variable aligns with grade-level expectations based on the Reading Inventory performance bands; therefore, students who were determined to be on track for meeting grade level benchmarks were categorized as reading on grade level. In addition, students are provided with an expected amount of Lexile growth, which is the amount of Lexile growth that would be typical for a student who started the school year with the same Lexile level.[9] Expected growth is calculated based on a growth model developed by MetaMetrics.

Teachers have access to students' LevelSet assessment Lexile levels and corresponding data in the Achieve3000 data center. The LevelSet assessment can be administered at two additional time points through interim (mid-year) and posttest (end-of-year) administrations. Scheduling of the interim and posttest assessments is managed by the LevelSet scheduler, which is accessible at the division level by administrators.

The main component of the Achieve3000 literacy program is the differentiated non-fiction content that students read and with which they engage. Based on students' LevelSet pretest Lexile level, students are provided lessons with the level of difficulty (e.g., text complexity) that matches their reading level. Every lesson offered in Achieve3000 has 12 different versions that vary in the level of complexity of the text. Therefore, all students are assigned lessons about the same topics and information, but the degree of difficulty of the passage is tailored to the individual students based on their Lexile level. In response to a survey item about Achieve3000 content matching students' reading level, from 91 to 96 percent of teachers depending on school level agreed that the articles and activities assigned to their students through Achieve3000 matched their reading level.

The core feature of Achieve3000 is a five-step lesson routine that students engage in: Ready, Read, Respond, Reflect, and Write. Students can navigate through the five steps of the lesson routine through a navigation toolbar at the top of the screen when working on a lesson.

- The first step, Ready, involves "getting ready to read with a thoughtful question prompt," in which students are asked to express opinions on the topic that will be presented in the article based on their own prior experience or knowledge.
- The second step, Read, involves a close reading of the article. While reading the article, students can utilize tools that are built into the system to help students develop reading strategies, such as the ability to highlight text and take notes. While at this Read step, students also have access to definitions of vocabulary words that are provided in the article.
- The third step, Respond, involves answering a set of eight multiple-choice comprehension questions. According to Achieve3000, Inc., the items in this assessment are aligned to standards and represent the types of questions that students may encounter on a high-stakes assessment.[10] The questions typically assess comprehension, vocabulary mastery, and higher-order thinking skills.
- The fourth step, Reflect, involves returning to the initial prompt question to express opinions while factoring in any new information they learned through the reading.
- The final step, Write, involves synthesizing the information learned by writing a response to a different prompt that challenges them to provide evidence from the article.

A "stretch article" is also offered for each lesson, which is typically an optional portion of the lesson. Generally, students may read this stretch article when they are finished with the five-step lesson routine. Stretch articles give students the opportunity to work with the same article they saw in the lesson, but at their "stretch level."

Students who are currently below grade-level expectations will be provided the article with the text complexity at their grade level, while students currently meeting grade-level expectations will be provided the article with text complexity at one Lexile band higher. When surveyed about use of the stretch article, from 82 to 84 percent of teachers depending on the school level indicated they used the stretch article in Achieve3000. Of those who indicated they used it, from 84 to 92 percent of teachers depending on school level indicated it was very or somewhat useful.

Students' Lexile levels are continuously monitored and adjusted as appropriate while using Achieve3000 based on student performance on the Respond activity portion of the lesson if students complete at least four lessons within a month timeframe. At the end of the month, if students have completed at least four Respond activities, then they may receive an adjusted Lexile level. Using a Bayesian scoring application, the system monitors students' scores on the Respond activity portion of the lesson and adjusts student Lexile levels when it determines they are not appropriately matched (e.g., it will increase their Lexile level if they are ready for more complex text). The system examines students' responses on these multiple-choice questions and combines that with information it already knows about the student to yield an updated Lexile level. If a student's Lexile level stays the same, this suggests the student is properly placed, while an increase in Lexile level suggests the student has gained reading skills. If a student's Lexile level increases, then more difficult content may be delivered to the student to match the progressing reading level. In general, students need to score routinely with at least 75 percent accuracy on the Respond activity portion of the lesson to increase their Lexile level in any given month.[11] Because students' Lexile levels adjust at the end of each month, Achieve3000, Inc. recommends that teachers review students' Lexile levels at the beginning of each month to examine any changes that have occurred.

Achieve3000, Inc. has created suggestions for program usage based on the number of Respond activities completed during a school year. A high level of usage of the Achieve3000 program has been defined as completing at least 40 activities throughout the school year, which equates to approximately one activity per week. The highest level of usage of the program has been defined to be completing at least 80 activities, which equates to approximately two activities per week. Based on previous research, students who complete at least 40 activities throughout the school year have shown growth in their Lexile levels that have exceeded growth that was expected. Within the Achieve3000 system, teachers can monitor their students' progress toward "Achieve3000's 40-activity usage goal."[12]

In addition, according to Achieve3000, Inc., because the articles are at the appropriate level of difficulty for students, it is the expectation that students should be able to answer the Respond activity questions with at least 75 percent accuracy (i.e., answering at least six of the eight questions correctly). According to Achieve3000, Inc., this accuracy percentage implies that the content is not too difficult to be frustrating but difficult enough to be challenging for the student. Further, according to Achieve3000, Inc., when students have at least a 75 percent on the Respond activity, it is an indication that the texts students read were properly targeted to their individual reading level and that their comprehension of the texts was optimal for growth in reading ability. Information provided by Achieve3000, Inc. encourages teachers to regularly monitor student data to ensure that students are scoring at this level or higher on the Respond activity questions.

### *VBCPS Usage and Performance*

#### *Login and LevelSet Pretest Assessment*

For VBCPS students, the LevelSet pretest assessment is required to be completed at the beginning of the year for students in grades 3 through 8. For middle school students, the LevelSet pretest assessment was administered in social studies classrooms.[13] Both English and social studies middle school teachers are expected to use the Achieve3000 program with their students. According to the director of K-12 and gifted

programs, due to Achieve3000 being used as a resource as needed by teachers at the high school level, there is not an expectation of using the program with students and high school teachers must request access to use Achieve3000. When high school students use the program, they would be prompted to complete the LevelSet pretest assessment when logging in for the first time.[14]

On the survey, 74 percent of elementary school classroom teachers in grades 3 through 5 who responded to the survey indicated they used Achieve3000 during the 2021-2022 school year. Approximately half of middle school classroom teachers (49%) indicated they used Achieve3000. As expected, at the middle school level, higher percentages of English (90%) and social studies teachers (86%) indicated they used Achieve3000 than the other content areas (i.e., science, math, technical and career education, arts, and other: from 0% to 35%). In addition, 69 percent of health and PE middle school teachers indicated they used Achieve3000. At the high school level, 17 percent of classroom teachers indicated they used Achieve3000. The highest percentage of high school teachers who indicated they used Achieve3000 was English teachers (39%) followed by health and PE (21%), social studies (14%), and science (11%) teachers. Less than 10 percent of teachers in the other content areas indicated use (i.e., technical and career education, arts, and math). In addition, of those high school teachers who indicated they taught a content area other than those listed above, 28 percent indicated they used Achieve3000.

A similar pattern of findings by school level was seen when administrators were asked whether any teachers at their school used Achieve3000 during the 2021-2022 school year. Most elementary school (94%) and middle school (86%) administrators indicated that there were teachers at their school who used Achieve3000. At the high school level, 48 percent indicated there were teachers who used Achieve3000, while 48 percent indicated they did not know.

Similarly, most elementary school (92%) and middle school students (89%) indicated they used Achieve3000 during the 2021-2022 school year, whereas 36 percent of high school students indicated they used Achieve3000. At the middle school level, of those who indicated they used Achieve3000, higher percentages of middle school students indicated they used Achieve3000 in their English (98%) and social studies (91%) courses than in the other content areas (i.e., health and PE, science, math, and technical and career education: from 4% to 38%). At the high school level, of those who indicated they used Achieve3000, higher percentages of students indicated they used Achieve3000 in their English course (84%) than in any other course (i.e., social studies, science, health and PE, math, and technical and career education: from 2% to 24%).

Consistent with the survey results, actual login data obtained from Achieve3000 showed that most elementary school (93%) and middle school students (92%) who were enrolled at any point during the 2021-2022 school year logged in to Achieve3000 at least once, whereas 39 percent of high school students logged in at least once (see Table 2). Throughout the school year, on average, elementary school students logged in to Achieve3000 83 times and middle school students logged in to Achieve3000 53 times, whereas high school students logged in to Achieve3000 14 times.

**Table 2: Number and Percentage of Students Who Logged In to Achieve3000**

| Measure | Elementary 3-5 (N=14,953) | | Middle (N=15,638) | | High (N=21,092) | |
|---|---|---|---|---|---|---|
| Students who logged in to Achieve3000 | 13,955 | 93% | 14,411 | 92% | 8,175 | 39% |

Of the students who logged in to Achieve3000 at least once, most students (from 92 to 99 percent depending on school level) completed the LevelSet pretest assessment. Overall, the majority of students who completed the LevelSet pretest assessment did so in the fall during September, October, or November 2021 (93%). Student performance on the LevelSet pretest assessment was also examined, including students' pretest Lexile level and corresponding determination of whether they were reading on grade level. Based on student

LevelSet pretest performance, 25 percent of elementary school students, 32 percent of middle school students, and 26 percent of high school students were determined to be reading on grade level (see Table 3).

**Table 3: Number and Percentage of Students Who Completed LevelSet Pretest and Performance**

| Measure | Elementary (N=13,955) | | Middle (N=14,411) | | High (N=8,175) | |
|---|---|---|---|---|---|---|
| **Students who completed pretest** | 13,836 | 99% | 14,313 | 99% | 7,521 | 92% |
| Reading on grade level* | 3,513 | 25% | 4,638 | 32% | 1,951 | 26% |

Note: *Reading on grade level was determined by students who were on track (i.e., meeting or exceeding) the college and career readiness benchmarks in Achieve3000 data.

Although students can complete the LevelSet assessment three times throughout the year, including a pretest, interim test, and posttest, small percentages of students at each level completed a LevelSet interim test during 2021-2022 (8 percent of elementary school students, 1 percent of middle school students, and less than 1 percent of high school students). No students completed a LevelSet posttest in Achieve3000 during 2021-2022. The LevelSet posttest was disabled to reduce the amount of testing for students in the spring.[15] Although students did not complete the LevelSet posttest, the end-of-year Lexile level adjustment in Achieve3000 served as a measure of students' end-of-year performance.

### *Lessons*

According to Department of Teaching and Learning staff, VBCPS elementary school and middle school students are expected to complete two lessons every week consistent with the Achieve3000, Inc. defined highest level of usage. At middle school, it is expected that students receive one lesson in English and one lesson in social studies each week. As previously noted, at the high school level, although there is not an expectation of using the program with students, high school teachers can request access to Achieve3000 and use it with students or as a resource for articles.

When surveyed about the extent to which students used Achieve3000, the majority of elementary school teachers indicated their students completed two or more articles during a typical week (69%), whereas the majority of middle school (54%) and high school teachers (68%) indicated the number of articles varied during a typical week (see Table 4). Similarly, the majority of elementary school students (62%) indicated they read at least two articles, while the highest percentage of middle school (45%) and high school students (51%) indicated the amount varied.

**Table 4: Percentage of Teachers and Students Indicating Number of Articles Read in Achieve3000 Per Week**

| Number of Articles | Teacher | | | Student | | |
|---|---|---|---|---|---|---|
| | Elementary | Middle | High | Elementary | Middle | High |
| One article | 16% | 34% | 20% | 18% | 23% | 25% |
| Two articles | 45% | 9% | 7% | 33% | 18% | 13% |
| More than two articles | 24% | 3% | 5% | 29% | 14% | 11% |
| Varies | 16% | 54% | 68% | 21% | 45% | 51% |

Based on usage data obtained from Achieve3000, of all students who logged in to Achieve3000, nearly all elementary school (98%) and middle school students (99%) and 82 percent of high school students completed at least one Respond activity portion of a lesson during the 2021-2022 school year. Students' total number of completed Respond activities were obtained from Achieve3000. Overall, as shown in Table 5, approximately half of elementary school students who logged in to Achieve3000 (52%) completed at least 40 Respond activities throughout the school year, while 24 percent of middle school students and 3 percent of high school students completed this many. Overall, 17 percent of elementary school students completed 80 Respond

activities, while 1 percent of middle school and less than 1 percent of high school students did. Of students who completed at least one activity, on average, elementary school students completed 50 activities, middle school students completed 30, and high school students completed 11. The data suggests that more elementary school students are meeting the program usage recommendations than middle school and high school students. However, students may have been engaging with Achieve3000 in ways other than completing Respond portions of lessons.

In addition, as previously noted, students' performance on the Respond activity portion of the lesson is monitored based on whether they reach an average of at least 75 percent accuracy, which Achieve3000, Inc. defines as a passing average score. Overall, 30 percent of elementary school, 42 percent of middle school, and 46 percent of high school students had an average score of at least 75 percent on the Respond activities (see Table 5).

**Table 5: Number and Percentage of Students Who Completed Activities in Achieve3000**

| Measure | Elementary (N=13,955) | | Middle (N=14,411) | | High (N=8,175) | |
|---|---|---|---|---|---|---|
| Completed at least one activity | 13,640 | 98% | 14,220 | 99% | 6,679 | 82% |
| **Activity Frequency** | | | | | | |
| Completed at least 40 activities | 7,301 | 52% | 3,506 | 24% | 237 | 3% |
| Completed at least 80 activities | 2,409 | 17% | 176 | 1% | ^ | ^ |
| **Activity Performance** | | | | | | |
| Average score at least 75 percent | 4,187 | 30% | 6,018 | 42% | 3,788 | 46% |

Note: Less than 10 high school students completed at least 80 activities.

Additional activity performance data were examined for those students who completed at least one activity, including the percentage of completed activities that reached 75 percent accuracy. On average, 56 percent of lessons completed by elementary school students resulted in at least a 75 percent accuracy, while 62 percent of lessons completed by middle school students and 66 percent of lessons completed by high school students met this level (see Table 6). As shown in Table 6, few elementary school (1%) and middle school students (3%) received 75 percent accuracy on **all** of the attempted activities, while 26 percent of high school students did. In addition, nearly all students at all levels received 75 percent accuracy **at least one** activity that had been attempted (from 92% to 99%).

**Table 6: Percentage of Passing Activities and Percentage of Students Who Passed All and At Least One Activity**

| Measure | Elementary | Middle | High |
|---|---|---|---|
| Percentage of activities with 75% or above | 56% | 62% | 66% |
| Percentage of students with 75% or above on ALL attempted activities | 1% | 3% | 26% |
| Percentage of students with 75% or above on at least one activity | 98% | 99% | 92% |

Additional analyses examined the percentage of students who completed the LevelSet pretest and had at least one additional adjustment of their Lexile level. Therefore, these students had at least two Lexile level measures completed in Achieve3000. As previously noted, an adjustment to students' Lexile level would have occurred *only* if students completed at least four Respond activities within a month timeframe. Of all students who logged in to Achieve3000, most elementary school (91%) and middle school students (92%) had at least one additional adjustment of their Lexile level (see Table 7). Approximately half of high school students (53%) who logged into Achieve3000 completed the lessons with this level of frequency to have an adjustment to their Lexile level.

**Table 7: Number and Percentage of Students With One Adjustment to Lexile Level in Achieve3000**

| Measure | Elementary (N=13,955) | | Middle (N=14,411) | | High (N=8,175) | |
|---|---|---|---|---|---|---|
| At least one adjustment of their Lexile level | 12,608 | 91% | 13,188 | 92% | 3,983 | 53% |

Most students who had at least one adjustment to their Lexile level had their last adjustment occur in the spring, between March 2022 and June 2022 (84%). For the purposes of this evaluation, the final adjustment to students' Lexile level within this timeframe from March 2022 to June 2022 was considered their end-of-year Lexile level. To be included in the outcome goal analyses, students must have completed the LevelSet pretest assessment in the fall (i.e., between September and November) and have the end-of-year Lexile adjustment (i.e., between March and June) from the Achieve3000 system. Of the students who logged in to Achieve3000 at least once, 75 percent of elementary school, 78 percent of middle school, and 31 percent of high school students were included in this group for the analyses. As shown in Table 8, 63 percent of elementary school students who were included in the outcome analyses completed at least 40 activities, while 30 percent of middle school and 9 percent of high school students did. On average, the elementary school students completed 57 activities, while middle school students completed 34 activities, and high school students completed 18 activities. Regarding activity performance, 35 percent of elementary school students in this group had an average activity score of 75 percent, while 47 percent of middle school students and 60 percent of high school students reached this average score. On average, elementary school students in this group scored 75 percent or higher on 61 percent of the activities they attempted, while this average was 66 percent for middle school students and 71 percent for high school students.

**Table 8: Activity Usage and Performance Data of Students Included in Outcome Analyses**

| Measure | Elementary (N=10,440) | Middle (N=11,232) | High (N=2,523) |
|---|---|---|---|
| **Activity Frequency** | | | |
| Completed at least 40 activities | 63% | 30% | 9% |
| Average activities completed | 57 | 34 | 18 |
| **Activity Performance** | | | |
| Average score at least 75 percent | 35% | 47% | 60% |
| Percentage of activities with at least 75% | 61% | 66% | 71% |

### *Independent Student Work vs. Teacher-Directed Instruction*

According to Achieve3000, Inc., the program can be used for independent student work or teacher-directed instruction. According to the director of K-12 and gifted programs, in general, it is the expectation that students use Achieve3000 more frequently for independent work. At elementary school specifically, Achieve3000 provides a structured opportunity for students to work individually while small group instruction may be occurring. Although independent student work is at the center of the lesson routine, teachers can use direct instruction and provide guidance through the lessons. Achieve3000 provides teachers with materials that can help them guide students through the lesson routine, such as helping to introduce the topic, building background knowledge, and reinforcing the vocabulary.

Most teachers at all school levels who indicated they used Achieve3000 also indicated they used it for the purpose of independent student work during school hours (see Table 9). Additionally, 65 percent of middle school, 53 percent of elementary school, and 47 percent of high school teachers indicated they used Achieve3000 as part of direct instruction. From 15 to 20 percent of teachers, depending on school level, indicated they used Achieve3000 for the purpose of independent student homework.

**Table 9: Percentages of Teachers Who Indicated They Used Achieve3000 for Various Purposes**

| Indicated Purpose | Elementary | Middle | High |
|---|---|---|---|
| Independent student usage at school | 97% | 91% | 85% |
| As part of direct instruction | 53% | 65% | 47% |
| Independent student usage as homework | 15% | 20% | 20% |

When students were surveyed about use beyond school hours, such as using for homework, from 40 to 48 percent, depending on school level, indicated they read Achieve3000 articles at home (ES: 48%, MS: 45%, HS: 40%). Based on login information in Achieve3000, of the students who used Achieve3000, 79 percent of middle school students logged into Achieve3000 after school hours at least once, while around half of elementary school (53%) and high school students (42%) did.

Another potential use for Achieve30000 is for teachers to use it as a resource for articles. Overall, slightly more than half of teachers who indicated they used Achieve3000 also indicated they used it as a resource for articles (see Table 10).

**Table 10: Percentages of Teachers Who Indicated They Used Achieve3000 as a Resource for Articles**

| Indicated Purpose | Elementary | Middle | High |
|---|---|---|---|
| As a resource for articles | 56% | 55% | 56% |

## Other Features

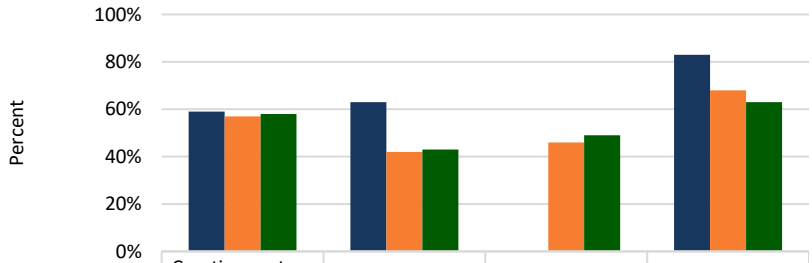
### *Teacher Resources*

The Achieve3000 program offers other components that provide teachers with resources for supporting students including the standard edition, the support edition, or the enrichment edition. If students need additional support or enrichment, teachers can select the option that students receive support or enrichment features when completing their Achieve3000 lessons rather than the standard features. At any point, teachers can adjust this for students to receive additional features in the system. For the standard edition, content is appropriate for students with at least a 250 Lexile level. For the support edition, content would be appropriate for students with a Lexile level below 250. In addition, support features provide students with a vocabulary preview at the beginning of the lesson and extra time for completion of the activity. Through the support edition, English language learners can also receive language support with access to full Spanish translations or partial Spanish translations. For the enrichment edition, students are provided with additional extension activities and links to outside related information for additional exploration. Overall, the majority of students used the standard Achieve3000 edition features (ES: 78%; MS: 91%; HS: 88%). Approximately 20 percent of elementary school, 7 percent of middle school, and 12 percent of high school students were identified as using the support edition features at one point during the 2021-2022 school year, while 2 percent of elementary school and middle school students were identified as using the enrichment edition (54 students were identified having used both editions). Less than one percent of high school students were identified as using the enrichment edition. There were some students at all levels who used the Spanish support feature of the support edition, although, this equated to less than one percent of students at each level. Overall, 102 students used an English version with Spanish support and 53 students used a Full Spanish version.

Primarily, teachers search for, select, and assign lessons for their students. Although some lessons are automatically assigned to students in the Achieve3000 system, teachers have the ability to remove these lessons. To assist teachers with searching for, selecting, and assigning specific lessons for their students, Achieve3000 offers several resources and tools. These resources and tools include the ability to create a collection of lessons by selecting several lessons and organizing them, to utilize a collection of lessons created by Achieve3000, and to search by a Virginia SOL standard for suggested lessons. Examples of already created

collections advertised by Achieve3000 include the poetry collection, which focuses on rhyming, and word studio, which is offered only for secondary students who need to build foundational literacy skills. Overall, slightly more than half of teachers at all levels indicated they utilized the feature of creating their own lesson collections (see Figure 1). At the elementary school level, 63 percent of teachers indicated they utilized the poetry collection lessons, while slightly less than half of middle school and high school teachers indicated they used the poetry or word studio collections. Overall, 83 percent of elementary school teachers indicated they used the suggested lessons by SOL standard, while 68 percent of middle school and 63 percent of high school teachers indicated they did. When surveyed about the lessons assigned to students, from 87 to 94 percent of teachers depending on school level agreed that the articles assigned to their students are aligned to the curriculum.

**Figure 1: Percentage of Teachers Who Indicated They Used Achieve3000 Lesson Collections**

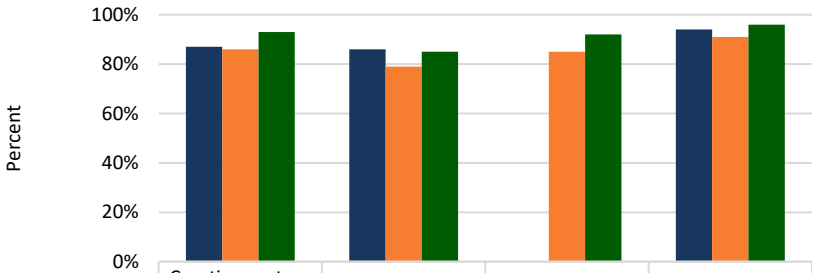



| | Creating custom lesson collections | Poetry collection | Word studio collection | SOL lesson collections |
|---|---|---|---|---|
| Elementary | 59% | 63% | | 83% |
| Middle | 57% | 42% | 46% | 68% |
| High | 58% | 43% | 49% | 63% |

Note: Only middle school and high school teachers were surveyed about word studio collection.

Of those who used the feature, at least 79 percent of teachers at each level indicated that the Achieve3000 lesson collection features were very or somewhat useful (see Figure 2). Most notably, at least 91 percent of teachers indicated that the SOL lesson collections were useful.

**Figure 2: Percentage of Teachers Who Indicated Achieve3000 Lesson Collections Were Very or Somewhat Useful**

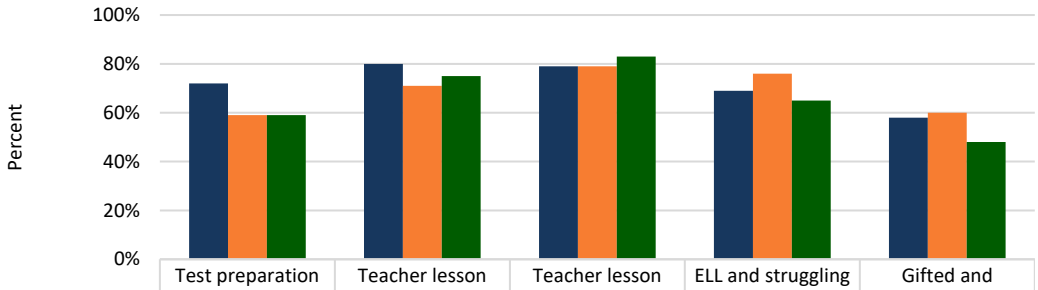



| | Creating custom lesson collections | Poetry collection | Word studio collection | SOL lesson collections |
|---|---|---|---|---|
| Elementary | 87% | 86% | | 94% |
| Middle | 86% | 79% | 85% | 91% |
| High | 93% | 85% | 92% | 96% |

Note: Only middle school and high school teachers were surveyed about word studio collection.

Achieve3000 also offers teachers various resources to help them prepare and teach lessons. These features are primarily utilized if teachers are working directly with students to assist them with going through the lessons. Test preparation recommendations provide suggestions for how to use the lesson to prepare students for the SOL test, specifically when working with students on the Read, Respond, and Write steps of the lesson. Teacher lesson recommendations include suggestions for ways to engage students, including how to introduce the topic or instructional focus as well as questions for discussion. Teacher materials provide supplemental information to help prepare for the lesson, including the answer key, and additional supports that could be offered for EL students, struggling readers, students who are identified as gifted, or students who would benefit from enrichment. Overall, at least 71 percent of teachers at all levels indicated they used the teacher lesson recommendations and teacher lesson materials in general (see Figure 3). While 72 percent of elementary school teachers indicated they used the test preparation recommendations, 59 percent of middle school and high school teachers indicated they did. For the specific teacher lesson materials focused on additional supports, from 65 to 76 percent of teachers indicated they used the supports for EL students or struggling readers, while from 48 to 60 percent of teachers indicated they used the supports for students identified as gifted or those who would benefit from enrichment.

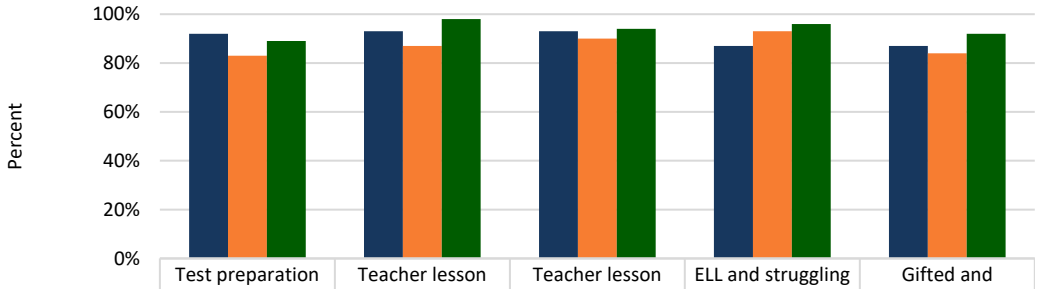
**Figure 3: Percentage of Teachers Who Indicated They Used Achieve3000 Teacher Materials**




| | Test preparation recommendation | Teacher lesson recommendations | Teacher lesson materials | ELL and struggling reader supports | Gifted and talented supports |
|---|---|---|---|---|---|
| Elementary | 72% | 80% | 79% | 69% | 58% |
| Middle | 59% | 71% | 79% | 76% | 60% |
| High | 59% | 75% | 83% | 65% | 48% |

As shown in Figure 4, of those who used the additional resources to support teachers in providing lessons, at least 83 percent of teachers at each level indicated that were very or somewhat useful.

**Figure 4: Percentage of Teachers Who Indicated Achieve3000 Teacher Materials Were Very or Somewhat Useful**




| | Test preparation recommendation | Teacher lesson recommendations | Teacher lesson materials | ELL and struggling reader supports | Gifted and talented supports |
|---|---|---|---|---|---|
| Elementary | 92% | 93% | 93% | 87% | 87% |
| Middle | 83% | 87% | 90% | 93% | 84% |
| High | 89% | 98% | 94% | 96% | 92% |

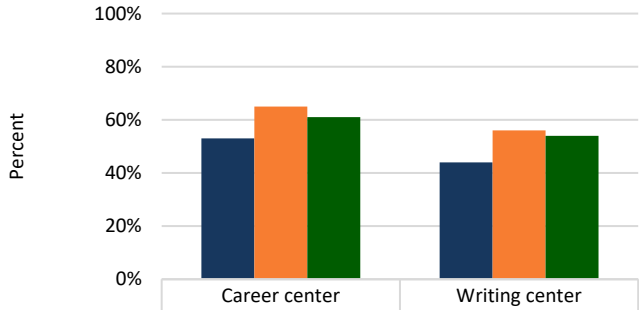
### *Student Components*

When students log in to Achieve3000, they are able to navigate to their assigned lessons as well as several additional features offered to students. Students can also choose between the classes in which they use Achieve3000. When viewing their lessons homepage, students are able to see the lessons assigned by their teachers and the progress in completing the five steps for each lesson. One additional feature for students is the Student Scoreboard and Lexile tracker, which allows students to track their Lexile measures, badges, and points, and how many lessons they have completed with a score of 75 percent or above. When surveyed, at least 85 percent of students at all levels agreed that they can check their progress in Achieve3000 through their points and achievements (ES: 93%, MS: 88%, HS: 85%).

Another feature on a student's dashboard is the career center, which allows students to explore various careers. Students can select a career category of interest from a list of 16 career areas (e.g., Arts, Human Services) as well as various individual careers within those career areas, which is a more specific job title (e.g., Actor, Counselor). Once students select a career category and specific career in which they are interested, they are provided with details about the job as well as the median Lexile level for the career. There is also a scale in which students can see their current Lexile level and how far they are from the goal of the median Lexile level for that career. Through the career center, students can track their progress toward this goal. There is also a list of the typical educational requirements for their career of choice. Another feature offered to students is a separate writing center in which students are provided with additional resources to develop their writing skills. Students can access various articles and prompts in this center at any time; however, teachers may also assign articles to students in this center.

Teachers were surveyed about their students' usage of the career center and writing center. From 53 to 65 percent of teachers depending on school level indicated their students used the career center, while from 44 to 56 percent of teachers depending on school level indicated their students used the writing center. Slightly higher percentages of secondary teachers indicated their students used the career and writing centers than elementary school students (see Figure 5).

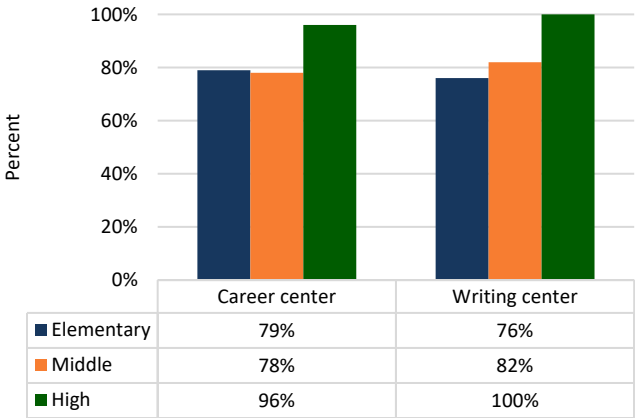
**Figure 5: Percentage of Teachers Who Indicated Their Students Used Achieve3000 Student Features**




| | Career center | Writing center |
|---|---|---|
| Elementary | 53% | 44% |
| Middle | 65% | 56% |
| High | 61% | 54% |

Of those who indicated their students used the career and writing centers, nearly all high school teachers indicated the career and writing centers were either very or somewhat useful, while from 76 to 82 percent of elementary school and middle school teachers indicated they were useful (see Figure 6).

**Figure 6: Percentage of Teachers Who Indicated Achieve3000 Student Features Were Very or Somewhat Useful**




Based on student data obtained from Achieve3000, as shown in Table 11, a higher percentage of high school students (40%) who used Achieve3000 selected a career category and individual career of interest in Achieve3000 than middle school (26%) and elementary school students (8%).

**Table 11: Number and Percentage of Students Who Entered Career-Related Information in Achieve3000**

| Measure | Elementary (N=13,955) | | Middle (N=14,411) | | High (N=8,175) | |
|---|---|---|---|---|---|---|
| Selected career cluster and job information | 1,185 | 8% | 3,782 | 26% | 3,293 | 40% |

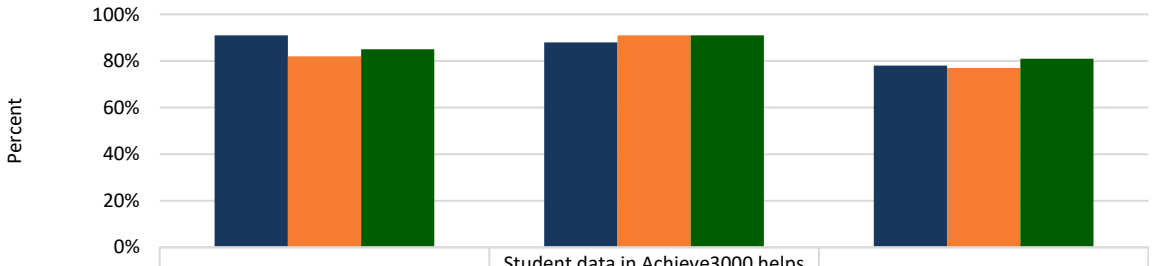
### *Data Center*

Achieve3000 allows teachers to access all student usage and performance information through the system. As previously noted, teachers may access students' LevelSet pretest assessment information and corresponding data. Teachers also have access to three different types of reports, including student work reports, usage reports, and performance reports. Student work reports provide student data on the lessons completed, which include data on all five steps of the lesson routine. For usage and performance reports, teachers can click on data-related questions provided by Achieve3000 that allow teachers to view student data reports that answer the set questions. For usage reports, teachers can view reports related to the frequency of use, such as how usage has changed over time and how students are progressing towards the 40-activity usage goal. For performance reports, teachers can view reports related to how students are performing on lessons and their reading skills, such as how likely students are to be on track for the college and career benchmarks and how Lexile performance has changed over time. In addition, there is a data center that provides a review of students' completed activities, average scores, and Lexile records, including year-to-date Lexile progress.

Teachers were surveyed about their use of student reports in the data center, including the student work and usage reports. Most elementary school (95%), middle school (93%), and high school teachers (89%) indicated that they accessed student reports in the data center. Of those who indicated they used the data center, nearly all indicated that the reports were either very or somewhat useful (from 95% to 98%).

In addition, teachers were surveyed about the ease of access and the use of student data in Achieve3000. As shown in Figure 7, at least 82 percent of teachers at all school levels agreed that student data in Achieve3000 was easy to access. At least 88 percent agreed that student data helped keep them informed about their students' reading progress, whereas 77 to 81 percent of teachers depending on school level agreed that they used Achieve3000 data to make instructional decisions for their students.

**Figure 7: Teacher Agreement Percentages Regarding Use of Student Data in Achieve3000**




| | Student data in Achieve3000 is easy to access. | Student data in Achieve3000 helps keep me informed about my students' reading progress. | I use Achieve3000 data to make instructional decisions. |
|---|---|---|---|
| Elementary | 91% | 88% | 78% |
| Middle | 82% | 91% | 77% |
| High | 85% | 91% | 81% |

Administrators at the school and division level can also view reports at the overall school or division level. Additionally, administrators have access to a separate edition of Achieve3000 called the leadership edition, which provides a data dashboard at the overall school or division level. On the survey, administrators who indicated teachers at their school used Achieve3000 were asked whether they had accessed data in Achieve3000. Overall, 94 percent of elementary school administrators, 83 percent of middle school administrators, and 87 percent of high school administrators indicated they accessed data in Achieve3000. Administrators who indicated they accessed data in Achieve3000 were also surveyed about the ease of access and their use of the data. All or nearly all administrators at all school levels (from 98% to 100%) indicated that student data is easy to access, that the data helps keep them informed about students' reading progress, and that they use Achieve3000 data to discuss student Lexile progress during conversations with teachers and/or literacy coaches.

### *Home Edition*

Achieve3000 offers a Home Edition in which parents can access three types of reports for their children: work submitted to their teacher, frequency of usage and most frequently used features, and monitoring students' Lexile performance and college and career readiness throughout the year.[16] For parents to obtain access, teachers need to provide them with information on how to create a login for the Home Edition. Teachers can access this information within the Achieve3000 system to provide to parents. Teachers can create, print, and send home to parents a customized set of instructions that includes the student's name and username information. Additionally, teachers have access to a welcome letter that can be distributed to parents that provides them with general information about Achieve3000, including an overview of the 5-step lesson routine, as well as their child's username information.

Another feature available to parents through the Home Edition includes sending emails to the Achieve3000 team, their children, and their children's administrators and teachers, although the parent/teacher message option can be disabled.[17] Parents also have access to the Home Edition Learning Center, which provides parents with additional resources to supplement school instruction and extend learning beyond the typical school day.

A usage report obtained from the Achieve3000 system showed that 185 parents across the division had an Achieve3000 username; however, no parents had a recorded login to the system during the 2021-2022 school year. Although parents did not access the system, a majority of elementary and middle school parents were aware their child used Achieve3000. When surveyed, approximately 59 percent of elementary school and 57 percent of middle school parents indicated their child used Achieve3000 in any of his or her classes during the

2021-2022 school year, whereas 19 percent of high school parents indicated their child did. Additionally, approximately one-third of elementary school (36%) and middle school parents (37%) indicated they did not know whether their child used Achieve3000, while 62 percent of high school parents indicated they did not know. Parents who indicated their child used Achieve3000 were also surveyed about their understanding of the purpose. From 83 to 87 percent of parents depending on the school level indicated that they understood the purpose of Achieve3000.

### Professional Learning and Support

According to the director of K-12 and gifted programs, teachers are provided with professional learning about Achieve3000 when beginning as a teacher with VBCPS. Additionally, Achieve3000 representatives provide support at the individual school level as needed. The Achieve3000 implementation director will meet with staff at the elementary school and middle school levels. In particular, the director may meet with Professional Learning Communities (PLCs), provide professional learning, and discuss data. In addition, the director offers the ability to work directly with the teachers to coteach and model implementation in the classroom. Through the Achieve3000 help center, professional learning sessions can also be set up.

Regarding receiving professional learning, of the teachers who indicated they used Achieve3000 during the 2021-2022 school year, 96 percent of elementary school teachers, 93 percent of middle school teachers, and 80 percent of high school teachers indicated they received professional learning related to Achieve3000. Of those who indicated they had received professional learning, 91 percent of elementary school, 91 percent of middle school, and 86 percent of high school teachers agreed that the professional learning provided them with the necessary knowledge to use the program with their students.

In addition, 95 percent of elementary school, 93 percent of middle school, and 79 percent of high school teachers indicated they received support directly from Achieve3000 representatives. Of those who indicated they had received support from Achieve3000 representatives, 92 percent of elementary school, 90 percent of middle school, and 90 percent of high school teachers agreed that the support received from Achieve3000 provided them with the necessary knowledge to use the program with their students.

A feature offered in the Achieve3000 teacher portal is a link to the Achieve3000 hub that offers teachers webinars as well as advertisements for student contests. While 64 percent of elementary school teachers indicated they used this feature, less than half of middle school (49%) and high school (43%) teachers indicated they did. Of those who indicated they used the Achieve3000 hub, 80 percent of elementary school teachers, 79 percent of middle school teachers, and 85 percent of high school teachers indicated it was very or somewhat useful.

When administrators were surveyed about Achieve3000 support, 84 percent of elementary school, 76 percent of middle school, and 47 percent of high school administrators indicated they met with Achieve3000 representatives. Of those who indicated they had met with Achieve3000 representatives, 100 percent of administrators at all school levels agreed that meeting with Achieve3000 representatives was useful to understand the program and/or data.

## Characteristics of Students Using Achieve3000

The second evaluation question focused on the demographic characteristics of the students who used Achieve3000, which included students who logged into the Achieve3000 system at least once. Comparisons were made to the demographic characteristics of students at the division level. A difference of 5 percentage points or larger across the groups were noted. Comparisons were also made between the students who used Achieve3000 and those who were included in the outcome analyses.

### Student Demographic Characteristics

A total of 36,541 students logged in to Achieve3000 at least once during the 2021-2022 school year. Demographic characteristics of students who used Achieve3000 are shown in Table 12. In comparison to all students enrolled at any point during the 2021-2022 school year at the elementary school and middle school levels, there were no notable differences in student demographics of those who used Achieve3000. At the high school level, in comparison to all enrolled students, there was a higher percentage of students who used Achieve3000 who were Black (32% vs. 24%) and a lower percentage of students who were White (39% vs. 46%). At the high school level, compared to all enrolled students, there were also higher percentages of students who used Achieve3000 who were economically disadvantaged (51% vs. 38%) and students with disabilities (17% vs. 11%), while there was a lower percentage of students who were identified as gifted (9% vs. 19%).

**Table 12: Demographic Characteristics of Students Who Used Achieve3000**

| Student Characteristic | Used Achieve3000 | | | Division | | |
|---|---|---|---|---|---|---|
| | Elementary 3-5 (N=13,955) | Middle (N=14,411) | High (N=8,175) | Elementary 3-5 (N=14,953) | Middle (N=15,638) | High (N=21,092) |
| Female | 48% | 49% | 44% | 48% | 49% | 49% |
| Male | 52% | 51% | 56% | 52% | 51% | 51% |
| Asian | 6% | 6% | 4% | 6% | 6% | 6% |
| Black | 23% | 25% | 32% | 23% | 24% | 24% |
| Hispanic | 13% | 14% | 14% | 13% | 13% | 12% |
| Multiracial | 11% | 10% | 10% | 11% | 10% | 10% |
| White | 46% | 45% | 39% | 46% | 45% | 46% |
| Economically Disadvantaged | 42% | 45% | 51% | 42% | 43% | 38% |
| English Learner | 4% | 2% | 4% | 4% | 2% | 2% |
| Gifted | 21% | 19% | 9% | 23% | 22% | 19% |
| Military Connected | 24% | 19% | 14% | 24% | 19% | 15% |
| Students with Disabilities | 12% | 12% | 17% | 13% | 12% | 11% |

Note: VBCPS student information included all students enrolled at any point during 2021-2022 obtained from the data warehouse.

To be included in the outcome goal analyses, students must have completed the LevelSet pretest assessment in the fall (i.e., between September and November) and have an end-of-year Lexile adjustment (i.e., between March and June) from the Achieve3000 system. Of the students who used Achieve3000 at any time during the year, 75 percent of elementary school, 78 percent of middle school, and 31 percent of high school students were included in this group for the analyses. Of all students who were enrolled during the 2021-2022 school year, 70 percent of elementary school, 72 percent of middle school, and 12 percent of high school students were included in this group for the analyses. Demographic characteristics of the students who were included in the Achieve3000 outcome analyses were compared to students who used Achieve3000 shown in Table 12. There were no notable differences across the groups of students (see Appendix A).

## Progress Toward Meeting Outcome Goal and Objective

The third evaluation question focused on progress made toward meeting the program's outcome goal and objective focused on improvement in reading skills.

## Goal 1: Students who use Achieve3000 will improve their reading skills.

To examine student improvement in reading skills, students' actual Lexile growth was calculated by subtracting the end-of-year Lexile level from the LevelSet pretest Lexile level. In addition, the amount of students' growth above the expected growth was calculated by subtracting the actual growth from expected growth. Students' improvement in reading was measured by two indicators: 1) whether students' actual growth exceeded their expected growth and 2) whether they were reading on grade level as measured by their end-of-year Lexile level.

Student performance on these measures was examined overall by school level as well as by students' level of usage, activity performance, initial LevelSet pretest performance, and select student groups. Students' level of usage was defined as the number of Respond activities completed throughout the year, while Respond activity performance was defined as the students' average score on the activities. Initial LevelSet pretest performance was defined by whether a student exceeded, met, was approaching, or fell far below grade level benchmarks at the pretest. Select student groups included groups by gender, race/ethnicity, economic status, student disability status, EL status, and gifted status.

***Objective 1:*** *Students who use Achieve3000 will demonstrate improved reading skills as measured by Lexile growth and reading on grade level on the Achieve3000 assessments and teacher survey responses.*

### *Achieve3000 Data*

Students' average actual Lexile growth is shown by level in Table 13. As a reminder, students' actual Lexile growth was calculated by subtracting their end-of-year Lexile level from their LevelSet pretest Lexile level. Overall, elementary school students had larger growth in their Lexile level than students at the secondary levels, which is consistent with previous research showing that Lexile growth is larger at younger grade levels.[18] Examining individual student actual Lexile growth showed that nearly all students at each school level had an increase in their Lexile level from their pretest to their final Lexile adjustment (from 88% to 93%). When comparing students' actual Lexile growth to their expected Lexile growth, from 70 to 73 percent of students depending on the level had actual growth that was larger than expected. When examining the percentage of students reading on grade level as measured by students' end-of-year Lexile level- in Achieve3000, overall, nearly half of elementary school students (49%) and middle school students (47%) who used Achieve3000 were reading on grade level, while 40 percent of high school students were.

**Table 13: Student Improvement in Reading Skills**

| Measure | Elementary (N=10,440) | Middle (N=11,232) | High (N=2,523) |
|---|---|---|---|
| Average actual Lexile growth | 159 L | 114 L | 102 L |
| Percentage of students with increase in their Lexile level (actual growth) | 93% | 88% | 88% |
| Average expected Lexile growth | 85 L | 48 L | 38 L |
| Average actual Lexile growth beyond expected growth | 73 L | 66 L | 64 L |
| Percentage with actual growth **larger than expected** | 71% | 70% | 73% |
| Percentage reading on grade level (based on last Achieve3000 Lexile level) | 49% | 47% | 40% |

Note: There were 13 students excluded from some analyses due to lack of expected growth information using the full Spanish version.

### *Outcomes by Usage and Performance, and Student Groups*

The percentages of students who had larger growth than expected and percentages of students reading on grade level were further examined based on students' level of Achieve3000 usage, activity performance, initial LevelSet pretest performance, and select student groups. Similar to analyses in other reports provided by Achieve3000, student level of usage was categorized by students who completed less than 40 activities, between 40 and 79 activities, and 80 or more activities. Student activity performance level was categorized by students who had an average score on the activities of less than 65 percent, between 65 percent and 74 percent, and at least 75 percent. Student initial LevelSet pretest performance was categorized by students reading far below grade level, approaching grade level, meeting grade level, and exceeding grade level based on their Lexile level. Student group data were analyzed by gender, race/ethnicity, economic status, student disability status, EL status, and gifted status. Differences of 5 percentage points or larger were noted.

It is important to note that higher percentages of students whose Lexile levels met or exceeded grade level benchmarks based on the LevelSet pretest also had an average score on the activities of at least 75 percent compared to students who were far below or approaching grade level (see Appendix B). Relatively similar percentages of students whose Lexile levels met or exceeded grade level benchmarks completed less than 40 activities, between 40 and 79 activities, and 80 or more activities compared to students who were far below or approaching grade level (see Appendix B). Therefore, students' performance on the pretest did not appear to impact how many activities they completed, but it did appear to impact how they performed on those activities.

Comparisons by student usage group showed that at all school levels, the groups of students who completed between 40 and 79 activities had higher percentages of students with growth that was larger than expected compared to students who completed fewer than 40 activities (see Table 14). At the elementary school level, the group of students who completed at least 80 activities had a higher percentage of students with growth that was larger than expected (81%) compared to students who completed from 40 to 79 activities (74%). There was a minimal difference between these two groups at the middle school level (78% vs. 74%). There were fewer than 10 students at the high school level who completed at least 80 activities; therefore, comparisons were not made to this group. When examining the percentage of students who were reading on grade level, at the elementary school and middle school levels, there were higher percentages of students reading on grade level in the groups of students who completed more activities, while there was a minimal difference between the usage groups at the high school level (see Table 14).

At all school levels, nearly all students (from 95% to 99%) who had an average score of at least 75 percent on activities also had growth that was larger than expected, whereas from 50 to 73 percent of students who had an average between 65 and 74 percent had growth that was larger than expected and from 3 to 12 percent of students who had an average below 65 had this level of growth (see Table 14). Comparisons by activity performance showed large differences in the percentages who were reading on grade level between the groups who had at least a 75 percent average score and those who did not (from 60% to 86% vs. from 1% to 42%).

Comparisons by initial pretest performance showed that at the elementary school and middle school levels, higher percentages of students who were exceeding grade level benchmarks at pretest had growth that was larger than expected, followed by students who were meeting grade level benchmarks, and approaching grade level benchmarks, then those who were far below grade level benchmarks (see Table 14). At the high school level, higher percentages of students exceeding or meeting grade level benchmarks showed growth that was larger than expected, followed by those who were approaching grade level benchmarks, and then those who were far below grade level.

**Table 14: Number and Percentage of Students Showing Improvement in Reading Skills by Usage and Performance Category**

| Usage/Performance Group | Elementary | | | Middle | | | High | | |
|---|---|---|---|---|---|---|---|---|---|
| | N=10,440 | Growth Over Expected | EOY Reading On Grade Level | N=11,232 | Growth Over Expected | EOY Reading On Grade Level | N=2,523 | Growth Over Expected | EOY Reading On Grade Level |
| **Activity Frequency** | | | | | | | | | |
| Less than 40 activities | 3,843 | 62% | 41% | 7,908 | 68% | 45% | 2,301 | 72% | 40% |
| 40-79 activities | 4,369 | 74% | 52% | 3,155 | 74% | 52% | 211 | 80% | 44% |
| 80 or more activities | 2,225 | 81% | 59% | 165 | 78% | 64% | ^* | ^ | ^ |
| **Activity Performance: Average score** | | | | | | | | | |
| Average score less than 65% | 2,854 | 34% | 11% | 1,797 | 15% | 3% | 273 | 11% | 1% |
| Average score between 65% and 74% | 3,939 | 73% | 42% | 4,155 | 57% | 23% | 726 | 50% | 13% |
| Average score at least 75% | 3,644 | 99% | 86% | 5,276 | 99% | 82% | 1,518 | 95% | 60% |
| **Pretest Performance**** | | | | | | | | | |
| Far Below GL | 2,756 | 66% | 8% | 2,304 | 53% | < 1% | 949 | 57% | 1% |
| Approaching GL | 4,858 | 69% | 44% | 4,912 | 60% | 28% | 873 | 75% | 36% |
| Meets GL | 2,110 | 78% | 98% | 2,151 | 88% | 98% | 509 | 92% | 99% |
| Exceeds GL | 713 | 89% | > 99% | 1,861 | 96% | 100% | 186 | 89% | 100% |

Note: There were 13 students excluded from some analyses due to lack of expected growth information using the full Spanish version.
*There were less than 10 students at the high school level who completed 80 or more activities.
**These Lexile level categories align with grade-level expectations based on Reading Inventory Lexile performance bands.

### *Outcomes by Student Group*

Comparisons by gender at all school levels showed minimal differences in the percentages who had growth that was larger than expected and those who were reading on grade level at the end-of-year Lexile adjustment date, with the exception of slightly higher percentages of female students reading on grade level compared to male students at the secondary levels.

At the elementary school and middle school levels, higher percentages of Asian and White students had growth that was larger than expected compared to the other groups and lower percentages of Black students had growth that was larger than expected compared to the other groups (see Table 15). At the high school level, a higher percentage of Asian students had growth that was larger than expected compared to the other groups. Regarding reading on grade level, at all school levels, the highest percentage of students reading on grade level was the Asian student group, while the lowest percentage of students reading on grade level was the Black student group.

At all school levels, higher percentages of students who were not economically disadvantaged had growth that was larger than expected and were reading on grade level compared to students who were economically disadvantaged (see Table 15). A similar pattern of results was found for students with disabilities and EL students. In addition, higher percentages of students who were gifted had growth that was larger than expected and were reading on grade level compared to students who were not gifted.

**Table 15: Number and Percentage of Students Showing Improvement in Reading Skills by Student Group**

| Student Group | Elementary | | | Middle | | | High | | |
|---|---|---|---|---|---|---|---|---|---|
| | N | Growth Over Expected | EOY Reading On Grade Level | N | Growth Over Expected | EOY Reading On Grade Level | N | Growth Over Expected | EOY Reading On Grade Level |
| **Gender** | | | | | | | | | |
| Female | 5,127 | 71% | 50% | 5,533 | 71% | 50% | 1,134 | 72% | 42% |
| Male | 5,304 | 72% | 48% | 5,675 | 69% | 45% | 1,379 | 73% | 38% |
| **Race/Ethnicity** | | | | | | | | | |
| Asian | 667 | 75% | 64% | 712 | 79% | 65% | 122 | 86% | 49% |
| Black | 2,113 | 62% | 28% | 2,652 | 62% | 26% | 819 | 71% | 29% |
| Hispanic | 1,288 | 70% | 44% | 1,468 | 67% | 41% | 339 | 73% | 44% |
| Multiracial | 1,187 | 70% | 50% | 1,139 | 68% | 48% | 259 | 73% | 40% |
| White | 5,089 | 75% | 57% | 5,188 | 74% | 57% | 960 | 72% | 47% |
| **Economically Disadvantaged** | | | | | | | | | |
| Yes | 4,342 | 65% | 35% | 4,934 | 62% | 32% | 1,381 | 70% | 34% |
| No | 6,095 | 76% | 59% | 6,294 | 76% | 60% | 1,136 | 75% | 32% |
| **Students with Disabilities** | | | | | | | | | |
| Yes | 915 | 62% | 17% | 1,146 | 46% | 10% | 441 | 51% | 7% |
| No | 9,522 | 71% | 52% | 10,082 | 73% | 52% | 2,076 | 77% | 31% |
| **EL** | | | | | | | | | |
| Yes | 343 | 66% | 20% | 223 | 52% | 3% | 72 | 61% | 5% |
| No | 10,094 | 71% | 50% | 11,005 | 70% | 48% | 2,445 | 73% | 28% |
| **Gifted** | | | | | | | | | |
| Yes | 2,549 | 84% | 83% | 2,405 | 89% | 85% | 214 | 91% | 72% |
| No | 7,888 | 67% | 38% | 8,823 | 65% | 37% | 2,303 | 71% | 23% |

### *Perception Data*

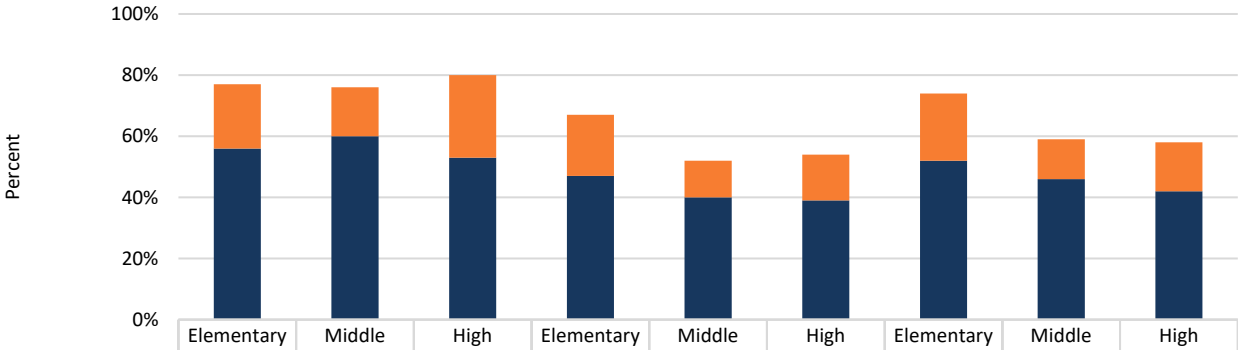
When teachers, students, parents, and administrators were surveyed about Achieve3000 having helped improve students' reading skills, at least 87 percent of teachers, 67 percent of students, 72 percent of parents, and all administrators at all levels agreed (see Table 16). Overall, there were higher agreement percentages at the elementary school level than at the other levels across respondent groups.

**Table 16: Agreement Regarding Achieve3000 Use Helping Improve Students' Reading Skills**

| Group | Elementary | Middle | High |
|---|---|---|---|
| Teacher | 90% | 87% | 87% |
| Student | 82% | 70% | 67% |
| Parent | 86% | 75% | 72% |
| Administrator | 100% | 100% | 100% |

When asked to rate the effectiveness of Achieve3000 on improving students' reading skills, from 75 to 80 percent of teachers indicated that it was very effective or effective. From 67 to 74 percent of elementary school students and parents indicated Achieve3000 was very effective or effective, while from 52 to 60 percent of secondary students and parents indicated it was (see Figure 8).

**Figure 8: Perceptions Regarding Effectiveness of Achieve3000 Use Improving Reading Skills**

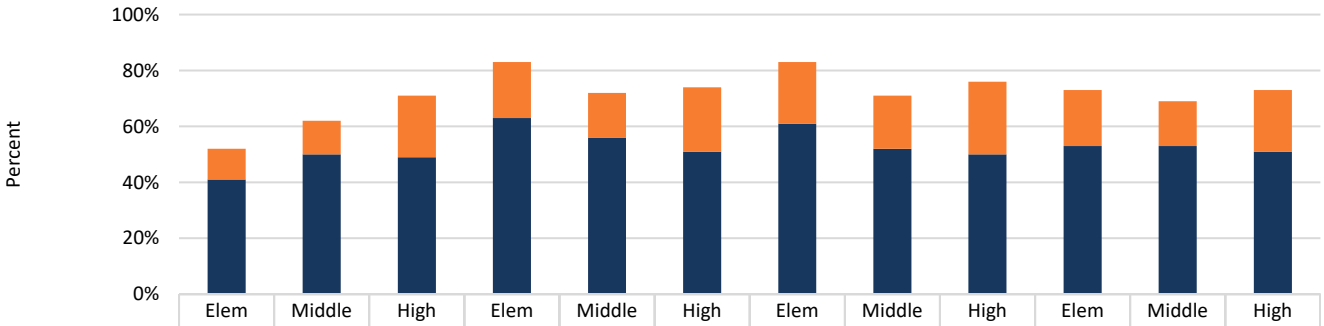



| | Teacher | | | Student | | | Parent | | |
|---|---|---|---|---|---|---|---|---|---|
| | Elementary | Middle | High | Elementary | Middle | High | Elementary | Middle | High |
| Very Effective | 21% | 16% | 27% | 20% | 12% | 15% | 22% | 13% | 16% |
| Effective | 56% | 60% | 53% | 47% | 40% | 39% | 52% | 46% | 42% |

Note: Teachers were asked about students' overall reading ability. Other survey response options included Neither Effective Nor Ineffective, Ineffective, Very Ineffective.

Teachers were also asked about the effectiveness of Achieve3000 on improving several components of students' reading abilities, including fluency, vocabulary, comprehension, and evaluating text. At least 71 percent of teachers at all levels indicated that Achieve3000 was very effective or effective at improving students' vocabulary, comprehension, and evaluating text (see Figure 9). Regarding reading fluency, 71 percent of high school teachers indicated that Achieve3000 was effective, whereas 52 percent of elementary school teachers and 63 percent of middle school teachers indicated it was.

**Figure 9: Teacher Perceptions Regarding Achieve3000 Use Helping Improve Students' Reading Skills**




| | Fluency | | | Vocabulary | | | Comprehension | | | Evaluating Text | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Elem | Middle | High | Elem | Middle | High | Elem | Middle | High | Elem | Middle | High |
| Very Effective | 11% | 12% | 22% | 20% | 16% | 23% | 22% | 19% | 26% | 20% | 16% | 22% |
| Effective | 41% | 50% | 49% | 63% | 56% | 51% | 61% | 52% | 50% | 53% | 53% | 51% |

Note: Other survey response options included Neither Effective Nor Ineffective, Ineffective, Very Ineffective.

## Relationship With Other Assessment Performance

The fourth evaluation question was focused on the relationship between student usage and performance on Achieve3000 assessments with student performance on other division assessments, including the Reading Inventory and spring reading SOLs.

## Relationship Between Assessments

Initial analyses were conducted to examine the relationship between performance on the Achieve3000 assessments (i.e., LevelSet pretest, end-of-year Lexile level) and other division assessments.

As shown in Table 17, at all school levels, the correlations between the Achieve3000 assessment Lexile levels and the Reading Inventory Lexile levels ranged from .74 to .85, which are considered strong correlations.[19] The highest correlation was found in the fall at the elementary school level (.85), while the lowest was found in the spring at the high school level (.74). Correlations between the end-of-year Achieve3000 Lexile levels and the reading SOL scale scores ranged from .68 to .76. The correlations at the middle school and high school levels are considered to be strong correlations, while the correlation at the elementary school level is moderate. These findings suggest a strong positive relationship at all levels between the Achieve3000 assessments and the Reading Inventory and reading SOL, meaning that students who score high on one assessment also score high on the others, while students who score low on one assessment also score low on the others.

**Table 17: Correlations Between Achieve3000 Assessments and Reading Inventory and SOL Performance**

| Correlations | Elementary | Middle | High* |
|---|---|---|---|
| Pretest LevelSet Lexile and fall RI Lexile | .85 | .82 | .78 |
| Last adjustment Lexile and spring RI Lexile | .83 | .80 | .74 |
| Last adjustment Lexile and SOL scale score | .68 | .76 | .75 |

Note: *At the high school level, the RI is mandatory for grade 9 students only; therefore, analyses were limited to grade 9 students.

The determination of whether students are reading on grade level on the Achieve3000 assessments and Reading Inventory as well as passing the reading SOL were also examined. As shown in Table 18 for the fall, 59 percent of middle school students who were reading on grade level in the fall as measured by the fall RI were also shown to be reading on grade level as measured by the LevelSet pretest in the fall. Conversely, 96 percent of middle school students who were not reading on grade level in the fall as measured by the fall RI were also shown to not be reading on grade level as measured by the LevelSet pretest. A similar pattern was seen at the elementary school and high school levels with approximately half of students who were reading on grade level on the fall RI were also reading on grade level on the LevelSet pretest, while 97 percent were not reading on grade level on the RI were also not reading on grade level on the LevelSet pretest.

**Table 18: Percentages of Students Who Met Fall Reading Inventory Benchmark Who Were and Were Not Reading on Grade Level on LevelSet Pretest**

| Achieve3000 LevelSet Pretest Performance | Elementary | | Middle | | High* | |
|---|---|---|---|---|---|---|
| | Met Fall RI Benchmark | Did Not Meet Fall RI Benchmark | Met Fall RI Benchmark | Did Not Meet Fall RI Benchmark | Met Fall RI Benchmark | Did Not Meet Fall RI Benchmark |
| Reading on Grade Level | 50% | 3% | 59% | 4% | 49% | 3% |
| Not Reading on Grade Level | 50% | 97% | 41% | 96% | 51% | 97% |

Note: *High school analyses were limited to grade 9 students.

A similar pattern of results was found for the end-of-year Achieve3000 Lexile level and the spring RI. As shown in Table 19, 65 percent of the elementary school students who were reading on grade level as measured by the spring RI were also shown to be reading on grade level as measured by their Achieve3000 end-of-year Lexile level in the spring. Conversely, 93 percent of the elementary school students who were not reading on grade level as measured by the spring RI were also shown to not be reading on grade level as measured by their end-of-year Lexile level. A similar pattern of results was seen at the middle school and high school levels;

however, the percentage of students reading on grade level on the spring RI who were also reading on grade level through their Achieve3000 end-of-year Lexile level was notably lower at the middle school level.

Overall, student performance on the RI was indicative of the performance in Achieve3000 for students who were determined to not be reading on grade level in the fall and spring on the RI. However, there was not a clear pattern for those who were considered to be reading on grade level on the fall and spring RI. It is important to note that the Lexile performance bands used to determine whether students were reading on grade level were the same across the RI and Achieve3000 assessments. In addition, the assessments were completed during similar timeframes. Therefore, differences in performance between the RI and Achieve3000 assessments may be due to other factors, such as content, assessment formats, or student motivation. For example, Achieve3000 includes all non-fiction content, while the RI includes both non-fiction and fiction content.

**Table 19: Percentages of Students Who Met Spring Reading Inventory Benchmark Who Were and Were Not Reading on Grade Level on Achieve3000**

| Achieve3000 Final Adjustment Performance | Elementary | | Middle | | High* | |
|---|---|---|---|---|---|---|
| | Met Spring RI Benchmark | Did Not Meet Spring RI Benchmark | Met Spring RI Benchmark | Did Not Meet Spring RI Benchmark | Met Spring RI Benchmark | Did Not Meet Spring RI Benchmark |
| Reading on Grade Level | 65% | 7% | 33% | 7% | 56% | 6% |
| Not Reading on Grade Level | 35% | 93% | 33% | 93% | 44% | 94% |

Note: *High school analyses were limited to grade 9 students.

As shown in Table 20, 56 percent of the elementary school students who passed the reading SOL were also shown to be reading on grade level as measured by their end-of-year Achieve3000 Lexile level. Conversely, 97 percent of the elementary school students who did not pass the reading SOL were also shown to not be reading on grade level as measured by their Achieve3000 end-of-year Lexile level. A similar pattern of results was seen at the middle school and high school levels. Overall, similar to the RI, student performance on the reading SOL was indicative of the performance on Achieve3000 for those who did not pass the SOL; however, there was not a clear pattern for those who passed the SOL.

**Table 20: Percentages of Students Who Passed Reading SOL Who Were and Were Not Reading on Grade Level on Achieve3000**

| Achieve3000 Final Adjustment Performance | Elementary | | Middle | | High | |
|---|---|---|---|---|---|---|
| | Passed Reading SOL | Did Not Pass Reading SOL | Passed Reading SOL | Did Not Pass Reading SOL | Passed Reading SOL | Did Not Pass Reading SOL |
| Reading on Grade Level | 56% | 3% | 56% | 1% | 53% | 0% |
| Not Reading on Grade Level | 44% | 97% | 44% | 99% | 47% | 100% |

### Fall to Spring Reading Inventory Performance by Achieve3000 Usage and Performance Groups

Additional analyses were conducted to examine student performance from the fall to the spring on the RI based on students' usage and activity performance in Achieve3000. Overall based on students included in the Achieve3000 outcome analyses, from 44 to 57 percent of students depending on school level were determined to be reading on grade level in the fall and from 55 to 73 percent of students depending on school level were determined to be reading on grade level in the spring based on the RI (see Table 21).

**Table 21: Percentage of Students Reading on Grade Level on RI in the Fall and Spring**

| Data | Elementary | Middle | High* |
|---|---|---|---|
| Fall percentage reading on grade level | 52% | 57% | 44% |
| Spring percentage reading on grade level | 73% | 66% | 55% |

Note: *Reading Inventory analyses at the high school level were limited to grade 9 students.

As shown in Table 22, overall comparisons by usage group and activity performance group showed that higher percentages of students who completed more activities and had higher averages on the activities were reading on grade level on the spring RI compared to students who completed less activities and had lower averages on the activities. At the high school level, higher percentages of ninth grade students who completed less activities were reading on grade level on the spring RI than students who completed more activities. However, the patterns of results by usage group and activity performance group at all levels were most likely due to higher percentages of students reading on grade level in the fall (see Table 22).

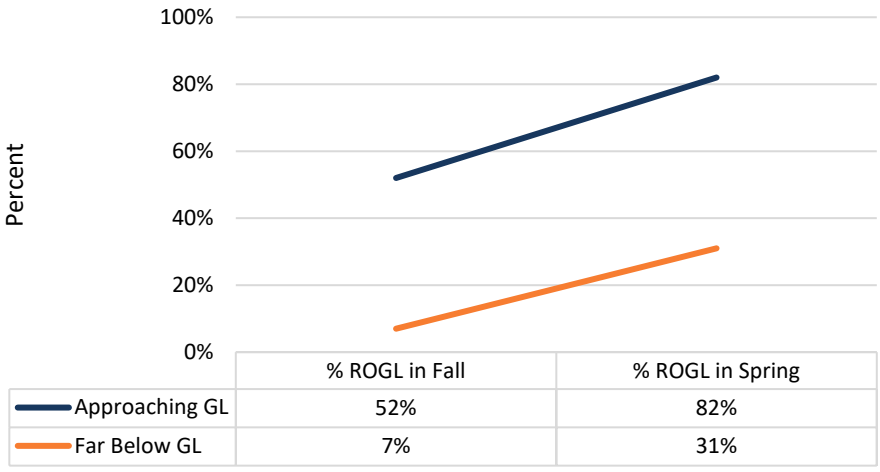
**Table 22: Percentage of Students Reading on Grade Level on the Reading Inventory by Usage and Performance Category**

| Usage/Performance Group | Elementary | | Middle | | High | |
|---|---|---|---|---|---|---|
| | Fall Reading on Grade Level | Spring Reading on Grade Level | Fall Reading on Grade Level | Spring Reading on Grade Level | Fall Reading on Grade Level* | Spring Reading on Grade Level* |
| **Activity Frequency** | | | | | | |
| Less than 40 activities | 49% | 71% | 57% | 66% | 47% | 57% |
| 40-79 activities | 53% | 75% | 57% | 67% | 35% | 49% |
| 80 or more activities | 53% | 76% | 66% | 75% | ^** | ^ |
| **Activity Performance: Average score** | | | | | | |
| Average score less than 65% | 21% | 44% | 15% | 21% | 10% | 14% |
| Average score between 65% and 74% | 51% | 77% | 45% | 57% | 34% | 45% |
| Average score at least 75% | 77% | 92% | 82% | 89% | 67% | 80% |

Note: *Reading Inventory at the high school level includes grade 9 students only.
**Less than 10 high school students completed at least 80 activities.

To examine the potential impact of Achieve3000 use for below-grade level readers, additional analyses compared the percentage of students who were reading on grade level on the RI in the fall and in the spring for students who were far below grade level and those who were approaching grade level on the fall LevelSet pretest. Students who were reading on grade level in the fall were not included in these figures due to already meeting the reading on grade level benchmark. At the elementary school level, the percentages of students who were reading on grade level on the RI increased 30 percentage points from fall to spring for those approaching grade level benchmarks (from 52% to 82%) and 24 percentage points for those far below grade level benchmarks (from 7% to 31%) (see Figure 10).

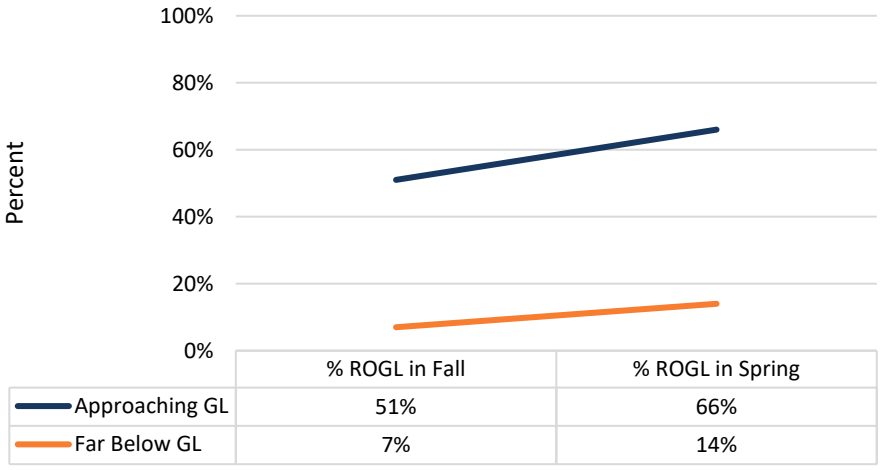
**Figure 10: Percentage of Elementary School Students Reading on Grade Level in Fall and Spring on RI by LevelSet Pretest Performance**




| | % ROGL in Fall | % ROGL in Spring |
|---|---|---|
| Approaching GL | 52% | 82% |
| Far Below GL | 7% | 31% |

As shown in Figure 11, at the middle school level, the percentages of students who were reading on grade level on the RI increased 15 percentage points from fall to spring for those approaching grade level benchmarks (from 51% to 66%) and 7 percentage points for those far below grade level benchmarks (from 7% to 14%).

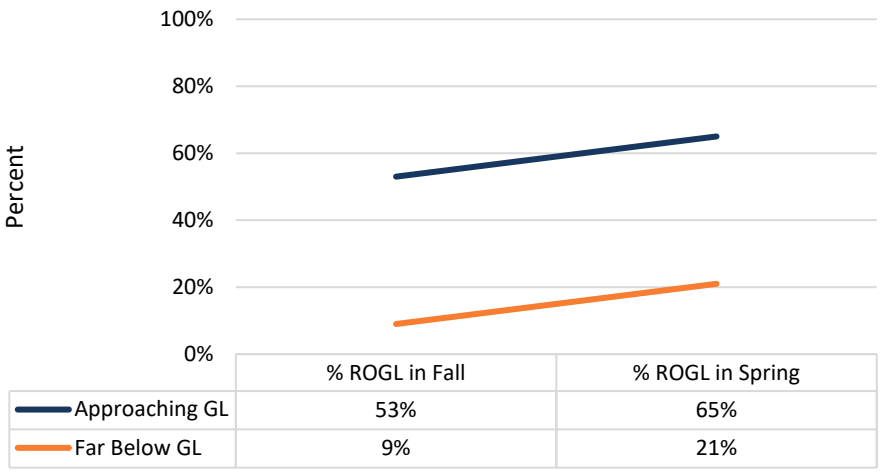
**Figure 11: Percentage of Middle School Students Reading on Grade Level in Fall and Spring on RI by LevelSet Pretest Performance**




| | % ROGL in Fall | % ROGL in Spring |
|---|---|---|
| Approaching GL | 51% | 66% |
| Far Below GL | 7% | 14% |

At the high school level, the percentages of students who were reading on grade level on the RI increased 12 percentage points from fall to spring for both groups: those approaching grade level benchmarks (from 53% to 65%) and those far below grade level benchmarks (from 9% to 21%) (see Figure 12). Taken together, these results at each school level show a notably larger increase of below-grade level students who were reading on grade level by the end of the year at the elementary school level compared to the secondary levels.

**Figure 12: Percentage of High School Students Reading on Grade Level in Fall and Spring on RI by LevelSet Pretest Performance**

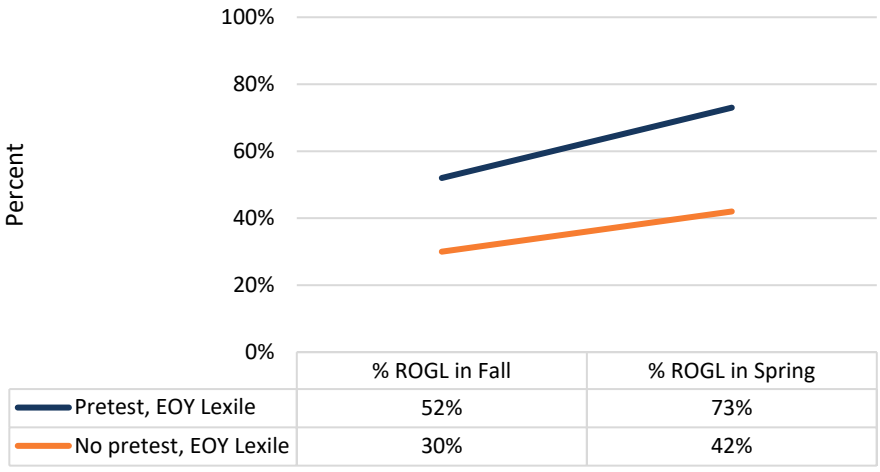



| | % ROGL in Fall | % ROGL in Spring |
|---|---|---|
| Approaching GL | 53% | 65% |
| Far Below GL | 9% | 21% |

Performance on the RI in the fall and the spring was also examined comparing students who had an Achieve3000 LevelSet pretest and end-of-year Lexile level to the students who used Achieve3000 (i.e., logged in at least once) but did not have a LevelSet pretest and end-of-year Lexile level to assess the extent to which consistent Achieve3000 use impacted the reading gains that were made during the year on a separate assessment. As a reminder, for students to have an end-of-year Lexile level, they must have completed at least four Respond activities within a month timeframe. In addition, they must have completed the LevelSet pretest in the fall (i.e., September through November) and the end-of-year Lexile in the spring (i.e., March to June). Therefore, these students must have engaged with the system for at least one month during this timeframe, whereas the students without the LevelSet pretest and end-of-year Achieve3000 Lexile level did not engage with the system for at least a one-month period at any point during the school year.

As shown in Figure 13, at the elementary school level, there was a larger increase for the students who engaged with Achieve3000 (increase of 21 percentage points from fall to spring) compared to the students who did not engage with Achieve3000 (increase of 12 percentage points from fall to spring). The increase in the percentage of students reading on grade level from fall to spring as measured by the RI was 9 percentage points larger for those who engaged with Achieve3000 than those who did not engage with Achieve3000.

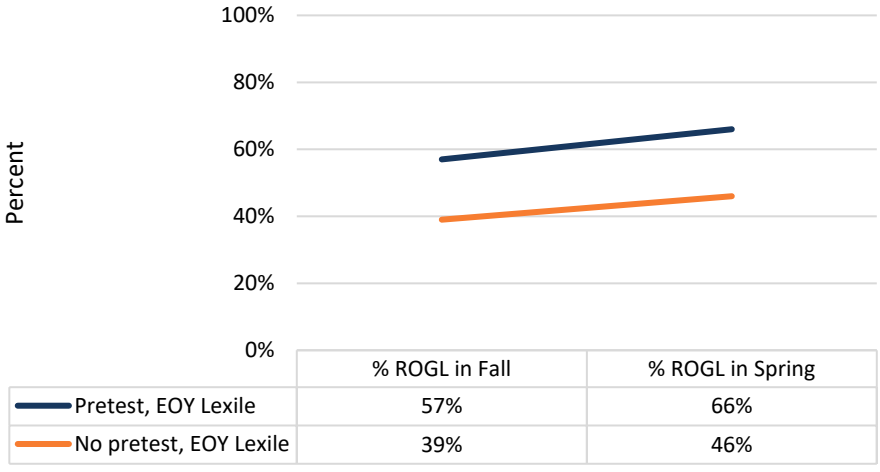
**Figure 13: Percentage of Elementary School Students Reading on Grade Level in Fall and Spring on RI by Achieve3000 Usage Group**




| | % ROGL in Fall | % ROGL in Spring |
|---|---|---|
| Pretest, EOY Lexile | 52% | 73% |
| No pretest, EOY Lexile | 30% | 42% |

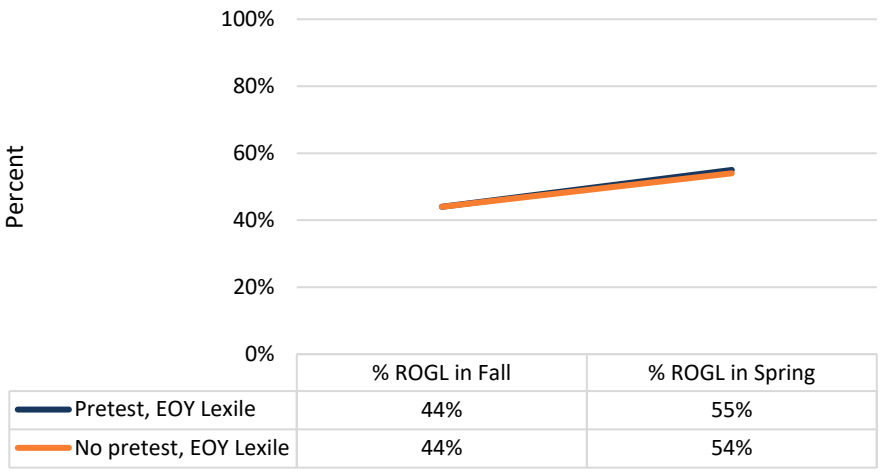
As shown in figures 14 and 15, at the middle school and high school levels, the increase in the percentage of students reading on grade level from fall to spring was relatively similar for students who engaged with Achieve3000 and the students who did not engage with Achieve3000, although the pattern of results was in the direction of favoring students who engaged with the system (MS: increase of 9 percentage points from fall to spring vs. 7 percentage points; HS: increase of 11 percentage points vs. 10 percentage points).

**Figure 14: Percentage of Middle School Students Reading on Grade Level in Fall and Spring on RI by Achieve3000 Usage Group**




| | % ROGL in Fall | % ROGL in Spring |
|---|---|---|
| Pretest, EOY Lexile | 57% | 66% |
| No pretest, EOY Lexile | 39% | 46% |

**Figure 15: Percentage of High School Students Reading on Grade Level in Fall and Spring on RI by Achieve3000 Usage Group**




| | % ROGL in Fall | % ROGL in Spring |
|---|---|---|
| Pretest, EOY Lexile | 44% | 55% |
| No pretest, EOY Lexile | 44% | 54% |

The data suggest that especially at the elementary school level, there is a greater increase in the percentage of students reading on grade level from the fall to the spring RI for students engaging with Achieve3000 than for those not engaging with Achieve3000. Although both groups made reading gains at the middle school and high school levels, the gains did not vary noticeably for those who did and did not engage with Achieve3000. This school level difference could be related to higher percentages of elementary school students regularly using Achieve3000 than at the secondary levels. However, it is also possible that this pattern could be related to other Tier I reading resources available to secondary students not engaging with Achieve3000 that are supporting their reading skill growth.

### Student Performance Data Summary

In summary, students' end-of-year reading performance was examined through two measures in Achieve3000, including larger growth than expected and reading on grade level, as well as through other division assessments such as the Reading Inventory. Comparisons of performance on the Achieve3000 measures were made based on student initial reading performance and for select student groups. Comparisons of performance on the Achieve3000 measures and division assessments were made based on student usage and performance in Achieve3000 throughout the school year.

Comparisons based on student initial performance on the Achieve3000 LevelSet pretest showed that higher percentages of students who were meeting or exceeding grade level benchmarks performed better on all Achieve3000 reading measures than students who were approaching or far below grade level. Overall, at all levels, compared to other race/ethnicity groups, higher percentages of students in the Asian student group performed better on Achieve3000 reading measures, while lower percentages of students in the Black student group performed better on Achieve3000 reading measures. In addition, lower percentages of students who were economically disadvantaged, students with disabilities, and EL students performed better on Achieve3000 reading measures compared to students who were not, while the opposite was found for students who were identified as gifted.

At all school levels, comparisons based on student performance on the Achieve3000 activities showed that notably higher percentages of students who had better performance on the activities also performed better on Achieve3000 reading measures and the RI. In addition, overall comparisons by Achieve3000 usage (i.e., the number of activities completed) showed that higher percentages of students who completed more

activities performed better on most measures, although the patterns were less consistent for the usage groups than comparisons based on the activity performance groups. However, the patterns of results by usage group and activity performance group on the RI were most likely due to higher percentages of students reading on grade level in the fall.

Additional data showed that there was a larger increase of below-grade level students reading on grade level at the end of the year at the elementary school level compared to the secondary levels. In addition, at the elementary school level, the increase of students reading on grade level from fall to spring on the RI was 9 percentage points larger for the students who engaged with Achieve3000 than the students who did engage with Achieve3000. There were minimal differences at the middle school and high school levels, although the pattern of results did favor those students who engaged in Achieve3000 compared to those who did not. The data suggest that at the elementary school level, there is a greater increase in the percentage of students reading on grade level from the fall to the spring for students engaging with Achieve3000 than for those not engaging with Achieve3000. Although both groups made reading gains at the middle school and high school levels, the gains did not vary noticeably for those who did and did not engage with Achieve3000. This school level difference could be related to higher percentages of elementary school students regularly using Achieve3000 than at the secondary levels. However, it is also possible that this pattern could be related to other Tier I reading resources available to secondary students not engaging with Achieve3000 that are supporting their reading skill growth.

## Stakeholder Perceptions

### Overall Perceptions

Staff were asked about Achieve3000 meeting the needs of their students. At least 81 percent of teachers at each school level and all administrators at all school levels agreed that Achieve3000 meets the needs of their students (see Table 23).

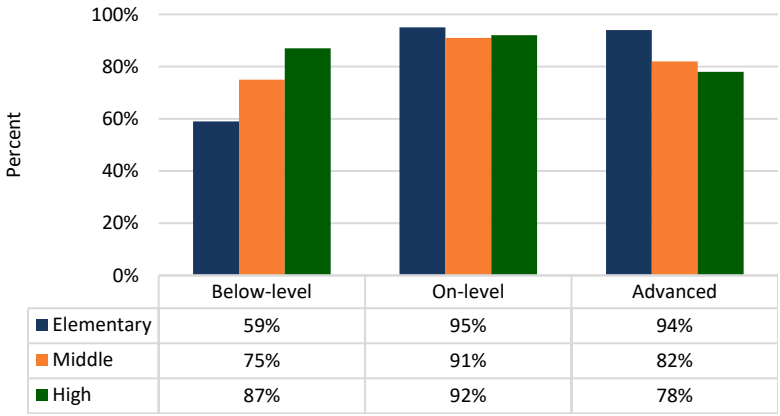
**Table 23: Agreement Percentages Regarding Achieve3000 Meeting Student Needs**

| The Achieve3000 reading resource meets the needs of my students. | Elementary | Middle | High |
|---|---|---|---|
| Teacher | 85% | 81% | 87% |
| Administrator | 100% | 100% | 100% |

Note: Administrator Don't Know responses excluded. Percentage of administrators who indicated they did not know ranged from 6 to 17 percent depending on school level.

Staff were also surveyed about Achieve3000 meeting the needs of students based on their reading level, including below-level, on-level, and advanced readers. At the secondary levels, from 75 to 87 percent of teachers agreed that Achieve3000 meets the needs of below-level readers, while 59 percent of elementary school teachers agreed (see Figure 16). From 91 to 95 percent of teachers at all school levels agreed that Achieve3000 meets the needs of students who are on-grade level readers and from 78 to 94 percent of teachers at all school levels agreed that Achieve3000 meets the needs of students who are advanced readers. A similar pattern was found for administrators with a higher percentage of high school administrators agreeing that the needs of below-level students were met than elementary school and middle school administrators (100% vs. 80%-84%), while all administrators agreed that on-level readers had their needs met, and a lower percentage of high school administrators agreed that advanced readers had their needs met (71% vs. 96%-98%).

**Figure 16: Teacher Agreement Percentages Regarding Achieve3000 Meeting Student Needs by Student Group**




Students and staff were also asked survey items related to being able to easily navigate Achieve3000. Nearly all students at all school levels agreed that they understood how to use Achieve3000 (ES: 99%, MS: 98%, HS: 95%). From 81 to 92 percent of teachers depending on the school level agreed that they could easily navigate Achieve3000 and nearly all (from 94% to 96%) agreed that their students could easily navigate Achieve3000 (see Table 24). Nearly all administrators who have accessed Achieve3000 indicated that they are able to easily navigate it to find information needed (from 96% to 100%).

**Table 24: Teacher Agreement Percentages Regarding Ability to Navigate Achieve3000**

| Survey Item | Elementary | Middle | High |
|---|---|---|---|
| I can easily navigate Achieve3000. | 92% | 89% | 81% |
| Students can easily navigate Achieve3000. | 96% | 94% | 94% |

When surveyed about the level of student engagement with Achieve3000, from 64 to 68 percent of teachers at all school levels indicated that their students were somewhat engaged when they used Achieve3000, while no teachers indicated their students were very engaged (see Table 25). While 80 percent of elementary school students agreed that the articles in Achieve3000 are interesting, 65 percent of middle school and 67 percent of high school students agreed. Similarly, 70 percent of elementary school students agreed that they enjoyed reading the articles in Achieve3000, while 49 percent of middle school and 56 percent of high school students agreed. Overall, from 80 to 92 percent of parents indicated that their child was either very or somewhat engaged when he or she used Achieve3000.

**Table 25: Perceptions Regarding Student Engagement in Achieve3000**

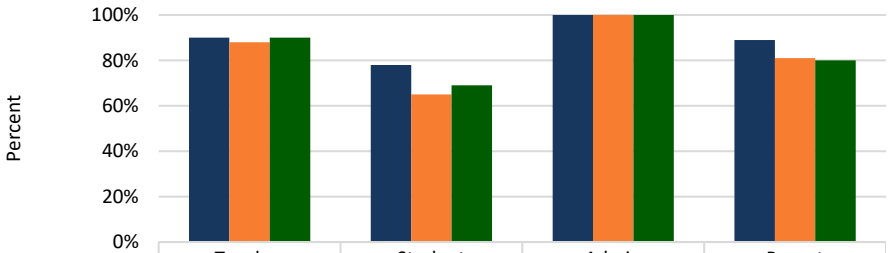
| Survey Item | Elementary | Middle | High |
|---|---|---|---|
| Teacher – My students are somewhat engaged when they use Achieve3000.* | 66% | 64% | 68% |
| Student – The articles in Achieve3000 are interesting. | 80% | 65% | 67% |
| Student – I enjoy reading the articles in Achieve3000. | 70% | 49% | 56% |
| Parent – My child is either very or somewhat engaged when he or she uses Achieve3000.** | 92% | 83% | 80% |

Note: *There were no teachers who indicated their students were very engaged. The other response option was not engaged.
**The other response option was not engaged.

All administrators, at least 88 percent of teachers, and at least 80 percent of parents indicated they were satisfied with Achieve3000 (see Figure 17). For students, 78 percent of elementary school students indicated

they were satisfied with Achieve3000, while from 65 to 69 percent of middle school and high school students were satisfied.

**Figure 17: Satisfaction Percentages**




| | Teacher | Student | Admin | Parent |
|---|---|---|---|---|
| Elementary | 90% | 78% | 100% | 89% |
| Middle | 88% | 65% | 100% | 81% |
| High | 90% | 69% | 100% | 80% |

### Program Benefits and Areas for Improvement

Open-ended survey items provided the opportunity for teachers, administrators, and parents to comment about the program's benefits and areas for improvement. Several themes emerged from responses about the benefits. Teachers, administrators, and parents commented about students being able to access material that is differentiated and at their own reading level. Teachers noted the benefit of allowing students the opportunity to practice independent reading to improve reading skills. Teachers also indicated the benefit of having data regarding students' reading skills and administrators indicated the benefit of being able to measure students' progress in reading. Many parents generally commented on the program helping to improve students' reading skills. Several parents also noted that Achieve3000 is easy for their children to use and access, including that their children can access it anywhere and at any time and that the topics are interesting.

Regarding areas for improvements, teachers, administrators, and parents commented that there should be additional article topics, while teachers and parents also noted that the articles should be more interesting for students. Additionally, administrators indicated that there should be improvements made for below-grade level readers. Several teachers commented on the lack of student engagement or interest in the articles. Many parents indicated that the use of technology should be lessened, and students should use physical books. Several parents also indicated that they would like to be able to access Achieve3000 and that they would like to have additional information about the program.

Students were also provided with an opportunity to provide general comments about the Achieve3000 program. Many students commented that the articles in Achieve3000 were "boring" or that they would like to read more interesting articles. Many students noted that they disliked the program, thought it should be discontinued, or viewed it as not helpful, while others commented that they liked the articles, found it fun, or helpful. In addition, some students noted that they found Achieve3000 stressful or challenging, while several students noted that their reading skills improved using Achieve3000 and that they were able to learn new things through the articles.

## Cost

The total cost of Achieve3000 to the division for the 2021-2022 school year was $1,423,538. According to the scope of work, the cost included Achieve3000 literacy licenses for all school sites and professional

development days. Cost was calculated for each school level. As shown in Table 26, the cost at the elementary school level was highest at $967,613, while the cost at the high school level was lowest at $115,763.

**Table 26: Achieve3000 Cost by Level**

| School Level | 2021-2022 Cost |
|---|---|
| Elementary | $967,612.50 |
| Middle | $340,162.50 |
| High | $115,762.50 |
| **Total Cost** | $1,423,537.50 |

Additional analyses were conducted to examine the total cost per student based on the number of students who used the program (i.e., logged in to Achieve3000 at least once) and those who engaged with the program (i.e., completed the pretest in the fall and had an end-of-year Lexile level). As shown in Table 27, at the elementary school level, the cost per student ranged from $69 to $93 per student, while the program ranged from $24 to $30 at the middle school level and $14 to $46 at the high school level.

**Table 27: Achieve3000 Cost Per Student**

| | Used Achieve3000 | | Completed Pretest and End-of-Year Lexile | | |
|---|---|---|---|---|---|
| School Level | Number of Students | Cost per Student | Number of Students | Cost per Student | Total Cost |
| Elementary | 13,955 | $69.34 | 10,440 | $92.68 | $967,612.50 |
| Middle | 14,411 | $23.60 | 11,232 | $30.29 | $340,162.50 |
| High | 8,175 | $14.16 | 2,523 | $45.88 | $115,762.50 |
| **Total Cost** | 36,541 | $38.96 | 24,195 | $58.84 | $1,423,537.50 |

# Summary

Achieve3000 is an online literacy program that provides differentiated non-fiction content to students based on their Lexile level. VBCPS began using the Achieve3000 literacy program during the 2015-2016 school year as a reading resource for students in grades 3 through 12. During the 2021-2022 school year, teachers were expected to use Achieve3000 with all students in Tier I instruction in grades 3 through 8, while teachers could use it as a resource as needed for students in grades 9 through 12. At elementary school specifically, Achieve3000 provides a structured opportunity for students to work individually while small group instruction may be occurring. At the middle school level, students were expected to use the program in their English and Social Studies courses.

To ensure students are provided content that is differentiated based on their Lexile level, students are first assessed on a universal screener, the LevelSet assessment. Based on students' performance on the LevelSet, students are given a Lexile level as well as determination of whether they are on track for meeting the college and career readiness benchmark for their grade level, which informs whether they are reading on grade level. Based on students' pretest Lexile level, students are provided lessons with the level of difficulty (e.g., text complexity) that matches their reading level. The core feature of Achieve3000 is a five-step lesson routine that students engage in: Ready, Read, Respond, Reflect, and Write. During the Respond portion of the lesson, students respond to a set of eight multiple-choice comprehension questions. If students complete at least four lessons within a month timeframe, students' Lexile levels are continuously monitored and adjusted as appropriate based on performance on the Respond activity portion of the lessons.

On the survey, 74 percent of elementary school classroom teachers in grades 3 through 5 who responded to the survey indicated they used Achieve3000 during the 2021-2022 school year. In addition, 90 percent of middle school English and 86 percent of middle school social studies teachers indicated they used Achieve3000. Overall, 17 percent of high school teachers indicated they used Achieve3000. Similarly, most elementary school (92%) and middle school students (89%) indicated they used Achieve3000 during the 2021-2022 school year, whereas 36 percent of high school students indicated they used Achieve3000. Actual login data obtained from Achieve3000 showed that most elementary school (93%) and middle school students (92%) who were enrolled at any point during the 2021-2022 school year logged in to Achieve3000 at least once, whereas 39 percent of high school students logged in at least once. In addition, of the students who logged in to Achieve3000 at least once, most students (from 92 to 99 percent depending on level) completed the LevelSet pretest assessment.

Overall, approximately half of elementary school students who logged in to Achieve3000 at least once completed the recommended 40 Respond activities throughout the school year, while 24 percent of middle school students and 3 percent of high school students completed this many. In addition, 30 percent of elementary school, 42 percent of middle school, and 46 percent of high school students had an average score of at least 75 percent on the Respond activities, which is the standard set by Achieve3000.

The Achieve3000 program offers other components that provide teachers with resources for supporting students, including the ability to adjust features provided to students, such as support or enrichment opportunities. Teachers also have access to various resources to help them prepare and teach the lesson to students, including lesson materials. Overall, at least 71 percent of teachers at all levels indicated they used the lesson teacher recommendations and lesson teacher materials in general.

Additional features offered to students include the ability to track their progress, a career center, and writing center. When surveyed, at least 85 percent of students at all levels agreed that they can check their progress in Achieve3000 through their points and achievements. When teachers were surveyed about their students' usage of the career center and writing center, from 53 to 65 percent of teachers depending on school level

indicated their students used the career center, while from 44 to 56 percent of teachers depending on school level indicated their students used the writing center.

Achieve3000 also allows teachers and administrators to access student submission and assessment data in the system. Most elementary school (95%), middle school (93%), and high school teachers (89%) indicated that they had accessed student reports in the data center. Of those who indicated they used the data center, nearly all indicated that the reports were either very or somewhat useful (from 95% to 98%). Ninety-four percent of elementary school administrators, 83 percent of middle school administrators, and 87 percent of high school administrators indicated they accessed data in Achieve3000.

Achieve3000 offers a Home Edition in which parents can access reports for their children. A usage report obtained from the Achieve3000 system showed that 185 parents across all schools had an Achieve3000 username; however, no parents had a recorded login to the system during the 2021-2022 school year. When surveyed, approximately 59 percent of elementary school and 57 percent of middle school parents indicated their child used Achieve3000 in any of his or her classes during the 2021-2022 school year, whereas 19 percent of high school parents indicated they did. Additionally, approximately one-third of elementary school (36%) and middle school parents (37%) indicated they did not know whether their child used Achieve3000, while 62 percent of high school parents indicated they did not know.

A total of 36,541 students logged in to Achieve3000 at least once during 2021-2022. In comparison to all students enrolled at any point during the 2021-2022 school year at the elementary school and middle school levels, there were no notable differences in student demographics of those who used Achieve3000. At the high school level, in comparison to all students, there was a higher percentage of students who used Achieve3000 who were Black (32% vs. 23%) and a lower percentage of students who were White (39% vs. 46%). At the high school level, there were also higher percentages of students who used Achieve3000 who were economically disadvantaged (51% vs. 38%) and students with disabilities (17% vs. 11%), while there was a lower percentage of students who were identified as gifted (9% vs. 19%).

The goal of Achieve3000 is for students who use Achieve3000 to improve their reading skills. When teachers, students, parents, and administrators were surveyed about Achieve3000 having helped improve students' reading skills, at least 87 percent of teachers, 67 percent of students, 72 percent of parents, and all administrators at all school levels agreed. Overall, there were higher agreement percentages at the elementary school level than at the other school levels across respondent groups.

Students' actual Lexile growth data showed that from 70 to 73 percent of students depending on school level had actual growth in their Lexile level that was larger than expected, although 49 percent of elementary school, 47 percent of middle school, and 40 percent of high school students had a final Lexile level in Achieve3000 that showed that they were reading at or above their grade level. Overall, at all school levels, students who completed more activities and had a higher average score on their Respond activities were more likely to have growth that was larger than expected and be reading on grade level. There were notably large differences in percentages of students who showed improvement in reading skills for those students who had an average of 75 percent or above compared to other groups. Similar results were found regarding performance on the RI, although the pattern was less consistent for comparisons by activity frequency group. However, the patterns of results by usage group and activity performance group on the RI were most likely due to higher percentages of students reading on grade level in the fall.

Additional data showed that there was a larger increase of below-grade level students reading on grade level at the end of the year as measured by the RI at the elementary school level compared to the secondary levels. In addition, at the elementary school level, the increase of students reading on grade level from fall to spring on the RI was 9 percentage points larger for the students who engaged with Achieve3000 than the students

who did engage with Achieve3000. There were minimal differences at the middle school and high school levels, although the pattern of results did favor those middle and high school students who engaged with Achieve3000 compared to those who did not. The data suggest that at the elementary school level there is a greater increase in the percentage of students reading on grade level from the fall to the spring for students engaging with Achieve3000 than for those not engaging with Achieve3000, while this pattern was less pronounced at the middle and high school levels.

At least 81 percent of teachers at each school level and all administrators at all school levels agreed that Achieve3000 meets the needs of their students. Staff were also surveyed about Achieve3000 meeting the needs of students based on their reading level. At the secondary levels, from 75 to 87 percent of teachers agreed that Achieve3000 meets the needs of below-level readers, while 59 percent of elementary school teachers agreed. From 91 to 95 percent of teachers at all school levels agreed that Achieve3000 meets the needs of students who are on-grade level readers and from 78 to 94 percent of teachers at all school levels agreed that Achieve3000 meets the needs of students who are advanced readers.

When surveyed about the level of student engagement with Achieve3000, from 64 to 68 percent of teachers at all school levels indicated that their students were somewhat engaged when they used Achieve3000, while no teachers indicated their students were very engaged. While 80 percent of elementary school students agreed that the articles in Achieve3000 are interesting, 65 percent of middle school and 67 percent of high school students agreed. Similarly, 70 percent of elementary school students agreed that they enjoyed reading the articles in Achieve3000, while 49 percent of middle school and 56 percent of high school students agreed. All administrators, at least 88 percent of teachers, and at least 80 percent of parents indicated they were satisfied with Achieve3000. For students, 78 percent of elementary school students indicated they were satisfied with Achieve3000, while from 65 to 69 percent of middle school and high school students were satisfied. In total, Achieve3000 cost $1,423,538 to the division for the 2021-2022 school year, with approximately 68 percent of the cost at the elementary school level.

# Recommendations and Rationale

## Recommendation #1: Continue Achieve3000 with modifications noted in recommendations 2 through 5. *(Responsible Group: Department of Teaching and Learning)*

**Rationale:** The first recommendation is to continue Achieve3000 with modifications noted in the recommendations below. Based on School Board Policy 6-26, following an evaluation, a recommendation must be made to continue the program without modifications, continue the program with modifications, expand the program, or discontinue the program. Overall, students who used Achieve3000 had increases in their reading skills. Of students who used Achieve3000 during the 2021-2022 school year, from 70 to 73 percent of students depending on the school level showed Lexile growth that was larger than expected in Achieve3000. Additional data showed that, at the elementary school level, the increase of students reading on grade level from fall to spring on the RI was 9 percentage points larger for the students who engaged with Achieve3000 than the students who did not engage with Achieve3000. In addition, high percentages of staff and parents were satisfied with the program. All administrators, at least 88 percent of teachers, and at least 80 percent of parents indicated they were satisfied with Achieve3000.

## Recommendation #2: Reexamine the purpose of Achieve3000 at the high school level given the limited usage. *(Responsible Group: Department of Teaching and Learning)*

**Rationale:** The second recommendation is to reexamine the purpose of Achieve3000 at the high school level given the limited usage. According to the Department of Teaching and Learning, at the high school level, Achieve3000 can be used by teachers as a resource if access is requested, and there is not an expectation of teachers using the system with high school students. When surveyed about the use of Achieve3000, 17 percent of high school classroom teachers and 36 percent of high school students who responded to the survey indicated they used Achieve3000 during 2021-2022. Of high school English teachers, 39 percent indicated they used Achieve3000. Based on usage data obtained from Achieve3000, of all high school students enrolled during the 2021-2022 school year, 39 percent logged in to Achieve3000 at least once during the year. However, of all high school students enrolled during the 2021-2022 school year, 12 percent of high school students engaged with the program (i.e., had a fall LevelSet pretest Lexile level and end-of-year Lexile level). In addition, low percentages of high school students who logged in to Achieve3000 used the system with the Achieve3000 recommended amount of frequency overall (i.e., 3% completed at least 40 activities in total). In an analysis of reading on grade level outcomes based on the Reading Inventory for grade 9 students, results showed minimal difference between students who engaged with Achieve3000 (increase of 11 percent of students reading on grade level from fall to spring) compared to students who were not engaged with Achieve3000 (increase of 10 percent of students reading on grade level from fall to spring). The cost of the program at high school was approximately $116,000 in 2021-2022.

## Recommendation #3: Encourage teachers to ensure student usage recommendations are being met and to monitor student Achieve3000 activity performance to ensure performance recommendations are being met. *(Responsible Group: Department of Teaching and Learning)*

**Rationale:** The third recommendation is to encourage teachers to ensure student usage recommendations are being met and to monitor student Achieve3000 activity performance to ensure student performance recommendations are being met. Overall, 52 percent of elementary school students and 24 percent of middle school students who logged in to Achieve3000 completed at least 40 activities during the 2021-2022 school year, which is Achieve3000's recommended level of high usage. Regarding activity performance, 30 percent of

elementary school students and 42 percent of middle school students had an average activity score that was passing (i.e., defined by Achieve3000 as receiving a score of 75 percent or above). Additionally, on average, elementary school students passed 56 percent of their attempted activities and middle school students passed 62 percent of their attempted activities. At all school levels, students who completed 40 or more activities as well as students who had an activity average of 75 percent or above were more likely to show growth that was larger than expected and be reading on grade level at the end of the year as measured by Achieve3000. In addition, at the elementary school level, the increase of students reading on grade level from fall to spring on the RI was 9 percentage points larger for the students who engaged with Achieve3000 than for the students who did not engage with Achieve3000. However, there was a minimal difference at the middle school level between students who did and did not engage with Achieve3000 (2 percentage points larger for students engaged in Achieve3000).

## Recommendation #4: Investigate whether there are Achieve3000 product features that could better meet the needs of below-grade level readers. *(Responsible Group: Department of Teaching and Learning)*

**Rationale:** The fourth recommendation is to investigate whether there are Achieve3000 product features that could better meet the needs and enhance the benefit for below-grade level readers. Examinations of students' growth data for students who were determined to be approaching grade level or far below grade level on the LevelSet pretest assessment in the fall showed that from < 1 to 8 percent of far below grade level students and from 28 to 42 percent of approaching grade level students depending on school level were reading on grade level by their end-of-year Lexile level in Achieve3000. Additionally, lower percentages of students reading below grade level in the fall demonstrated larger than expected growth by the spring compared to readers who were meeting or exceeding grade-level expectations. On the survey, although 82 to 95 percent of elementary and middle school teachers agreed Achieve3000 met the needs of their on-grade level or above-grade level readers, 59 percent of elementary teachers and 75 percent of middle school teachers agreed the program met the needs of their below-grade level readers.

## Recommendation #5: Provide parents with additional information about Achieve3000 and investigate providing parents access to the Achieve3000 Home Edition. *(Responsible Group: Department of Teaching and Learning)*

**Rationale:** The fifth recommendation is to provide parents with additional information about Achieve3000 and investigate providing parents access to the Achieve3000 Home Edition. Achieve3000 offers a Home Edition in which parents can access reports for their children's Achieve3000 work and progress as well as additional resources to supplement school instruction. In the Achieve3000 system, teachers can access information to provide parents about accessing the Home Edition. When surveyed, approximately one-third of elementary school (36%) and middle school parents (37%) indicated they did not know whether their child used Achieve3000, while 59 percent of high school parents indicated they did not know. A usage report obtained from the Achieve3000 system showed that although 185 parents across all schools had an Achieve3000 username, no parents had a recorded login to the system during the 2021-2022 school year. Themes that emerged from parent survey comments regarding improvements of Achieve3000 included providing parents access to Achieve3000 and providing parents with more information related to the program.

# Appendices

## Appendix A:

**Demographic Characteristics of Students Included in Achieve3000 Outcome Analyses**

| Student Characteristic | Outcome Analysis | | |
|---|---|---|---|
| | Elementary (N=10,440) | Middle (N=11,232) | High (N=2,523) |
| Female | 49% | 49% | 45% |
| Male | 51% | 51% | 55% |
| American Indian | < 1% | < 1% | < 1% |
| Asian | 6% | 6% | 5% |
| Black/African American | 20% | 24% | 32% |
| Hispanic | 12% | 13% | 14% |
| Multiracial | 11% | 10% | 10% |
| Native Hawaiian/Pacific Islander | 1% | < 1% | < 1% |
| White | 49% | 46% | 38% |
| Economically Disadvantaged | 42% | 44% | 55% |
| Identified Limited English Proficient | 3% | 2% | 3% |
| Identified Gifted | 24% | 21% | 8% |
| Identified Military Connected | 24% | 19% | 14% |
| Identified Special Education | 9% | 10% | 17% |

## Appendix B:

**Percentage of Students in Activity Performance Groups by Initial Performance on LevelSet Pretest**

| Activity Performance: Average score Group | Far Below Grade Level | Approaching Grade Level | Meets Grade Level | Exceeds Grade Level |
|---|---|---|---|---|
| **Elementary** | | | | |
| Average score less than 65% | 58% | 21% | 10% | 4% |
| Average score between 65% and 74% | 30% | 47% | 33% | 18% |
| Average score at least 75% | 12% | 32% | 58% | 79% |
| **Middle** | | | | |
| Average score less than 65% | 44% | 15% | 2% | 0% |
| Average score between 65% and 74% | 42% | 51% | 24% | 9% |
| Average score at least 75% | 13% | 35% | 74% | 91% |
| **High** | | | | |
| Average score less than 65% | 24% | 4% | 1% | 0% |
| Average score between 65% and 74% | 38% | 33% | 15% | 3% |
| Average score at least 75% | 38% | 63% | 84% | 97% |

**Percentage of Students in Activity Frequency Groups by Initial Performance on LevelSet Pretest**

| Activity Frequency Group | Far Below Grade Level | Approaching Grade Level | Meets Grade Level | Exceeds Grade Level |
|---|---|---|---|---|
| **Elementary** | | | | |
| Less than 40 activities | 41% | 36% | 36% | 28% |
| 40-79 activities | 40% | 43% | 41% | 43% |
| 80 or more activities | 19% | 21% | 23% | 29% |
| **Middle** | | | | |
| Less than 40 activities | 75% | 71% | 69% | 66% |
| 40-79 activities | 24% | 28% | 30% | 32% |
| 80 or more activities | 1% | 1% | 2% | 2% |
| **High** | | | | |
| Less than 40 activities | 92% | 91% | 90% | 94% |
| 40-79 activities | 7% | 9% | 10% | 6% |
| 80 or more activities | < 1% | 0% | < 1% | 0% |

# Endnotes

[1] A Lexile level is a measure of a student's reading ability level. The higher the Lexile measure, the higher the student's reading level. Source: https://www.scholastic.com/parents/books-and-reading/reading-resources/book-selection-tips/lexile-levels-made-easy.html
[2] Achieve3000. Research to Practice White Paper: How Achieve3000 literacy uses research to prepare students for college and career success.
[3] https://www.prweb.com/releases/2016/06/prweb13457913.htm
[4] Tier 1 instruction is provided to all students during classroom instruction, whereas Tier 2 or Tier 3 instruction involves targeted group or individualized interventions provided to specific students who are identified as struggling in a certain area.
[5] Personal communication. N. DeVries. March 4, 2022.
[6] Three students were excluded due to not being in grades 3 through 12.
[7] In the mid-year reports from Achieve3000, all students who had a manual adjustment to their Lexile level were excluded.
[8] McGraw Hill Achieve3000 Literacy Lexiles and LevelSet: Frequently Asked Questions document.
[9] Personal communication. M. Gillikin, Achieve3000 Professional Services Manager. September 27, 2022.
[10] Research to Practice article Achieve
[11] Lexile FAQ Doc
[12] Standard Usage Report available in Achieve3000 portal. "How are my students progressing towards Achieve3000's 40-activity usage goal?"
[13] Division Assessments and Reading Inventory 2021-2022. August 26, 2021. Secondary Principals' Packet Memo.
[14] Personal communication. N. DeVries. March 4, 2022.
[15] Personal communication. N. DeVries. October 4, 2022.
[16] Achieve3000 Help Center. https://helpcenter.achieve3000.com/hc/en-us/articles/360063218193-Home-Edition-Setup-Welcome-Letter
[17] https://helpcenter.achieve3000.com/hc/en-us/articles/1500002783081-Additional-Home-Edition-Resources-
[18] Williamson, G. L. (2006). What is Expected Growth? A white paper from MetaMetrics, Inc.
[19] Strength of correlation coefficients was defined as follows: .1 to .3 as weak; between .3 and .7 as moderate; .7 to 1.0 as strong. According to SAGE Research Methods Datasets. (2015). Learn about Pearson's Correlation Coefficient in SPSS with Data from the Consolidated Stat Performance Report (2012-2013). Retrieved from https://methods.sagepub.com/dataset/pearson-in-edfacts-cspr-2013.

Aaron C. Spence, Ed.D., Superintendent
Virginia Beach City Public Schools
2512 George Mason Drive, Virginia Beach, VA 23456-0038

Produced by the Office of Planning, Innovation, and Accountability
For further information, please call (757) 263-1199

Notice of Non-Discrimination Policy

Virginia Beach City Public Schools does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation/gender identity, pregnancy, childbirth or related medical condition, disability, marital status, age, genetic information or military status in its programs and activities, employment, or enrollment and provides equal access to the Boy Scouts and other designated youth groups. School Board policies and regulations (including but not limited to, Policies 2-33, 4-4, 5-7, 5-19, 5-20, 5-44, 6-7, 6-33, 7-48, 7-49, 7-57 and Regulations 2-33.1, 4-4.1, 4-4.2,4-4.3, 5-7.1, 5-44.1, 7-11.1 and 7-57.1) provide equal access to courses, programs, enrollment, counseling services, physical education and athletic, vocational education, instructional materials, extracurricular activities, and employment.

Title IX Notice: Complaints or concerns regarding discrimination on the basis of sex or sexual harassment should be addressed to the Title IX Coordinator, at the VBCPS Office of Student Leadership, 641 Carriage Hill Road, Suite 200, Virginia Beach, 23452, (757) 263-2020, Mary.Gonzalez@vbschools.com (student complaints) or the VBCPS Department of School Leadership, 2512 George Mason Drive, Municipal Center, Building 6, Virginia Beach, Virginia, 23456, (757) 263-1088, Robert.Wnukowski@vbschools.com (employee complaints). Additional information regarding Virginia Beach City Public Schools' policies regarding discrimination on the basis of sex and sexual harassment, as well as the procedures for filing a formal complaint and related grievance processes, can be found in School Board Policy 5-44 and School Board Regulations 5-44.1 (students), School Board Policy 4-4 and School Board Regulation 4-4.3 (employees) and on the School Division's website at Diversity, Equity and Inclusion/Title IX. Concerns about the application of Section 504 of the Rehabilitation Act should be addressed to the Section 504 Coordinator/Executive Director of Student Support Services at (757) 263-1980, 2512 George Mason Drive, Virginia Beach, Virginia, 23456 or the Section 504 Coordinator at the student's school. For students who are eligible or suspected of being eligible for special education or related services under IDEA, please contact the Office of Programs for Exceptional Children at (757) 263-2400, Plaza Annex/Family and Community Engagement Center, 641 Carriage Hill Road, Suite 200, Virginia Beach, VA 23452.

The School Division is committed to providing educational environments that are free of discrimination, harassment, and bullying. Students, staff, parents/legal guardians who have concerns about discrimination, harassment, or bullying should contact the school administration at their school. Promptly reporting concerns will allow the school to take appropriate actions to investigate and resolve issues. School Board Policy 5-7 addresses non-discrimination and anti-harassment, Policy 5-44 addresses sexual harassment and discrimination based on sex or gender. Policy 5-36 and its supporting regulations address other forms of harassment.

Alternative formats of this publication which may include taped, Braille, or large print materials are available upon request for individuals with disabilities. Call or write Nikki Garmer, Virginia Beach City Public Schools, 2512 George Mason Drive, P.O. Box 6038, Virginia Beach, VA 23456-0038. Telephone (757) 263-1199 (voice); fax (757) 263-1131; (757) 263-1240 (TDD) or email her at anna.garmer@vbschools.com.

vbschools.com
your virtual link to Hampton Roads' largest school system

VIRGINIA BEACH
CITY PUBLIC SCHOOLS
CHARTING THE COURSE



November 2022