
National Lexile Study

2013 – 2014



www.achieve3000.com

2013-2014 National Lexile Study

Number of States	47, plus the District of Columbia
Number of Districts	927
Number of Schools	4,789
Number of Students	756,976
Number of High School Students	167,034 students in 1,474 schools
Number of Middle School Students	331,606 students in 2,599 schools
Number of Elementary School Students	258,336 students in 2,214 schools

Achieve3000® Solutions

KidBiz3000®, TeenBiz3000®, and Empower3000™: the first web-based differentiated literacy solutions that reach every student at his or her Lexile® level. Powered by a proprietary software engine that distributes grade-appropriate assignments to the entire class, but tailors them according to each student's reading level, Achieve3000 Solutions enable teachers to move their students up surely and steadily, level by level.

These research-based solutions extend teachers' reach without increasing workloads or time demands and are proven to accelerate reading comprehension, fluency, writing proficiency, vocabulary development, and high-stakes test scores.

The Assessment Measure

Developed by Achieve3000 in conjunction with MetaMetrics®, LevelSet™ offers a scientific means of matching students to informational text.

LevelSet is administered two times a year—a pre-assessment at the beginning of the school year and a post-assessment at the end of the school

year—providing a summative measurement of student progress. The Lexile Framework is a scientific approach to reading and text measurement that has become the most widely adopted reading measure in use today. Developed by MetaMetrics, Lexile measures are the result of more than 20 years of ongoing research.

A key advantage of the Lexile scale is that the Lexile Framework measures both text and reader using the same scale. This means that the ability to comprehend and the material being comprehended are being evaluated by the same criteria.

Methodology

Lexile Measurement of Reading Growth

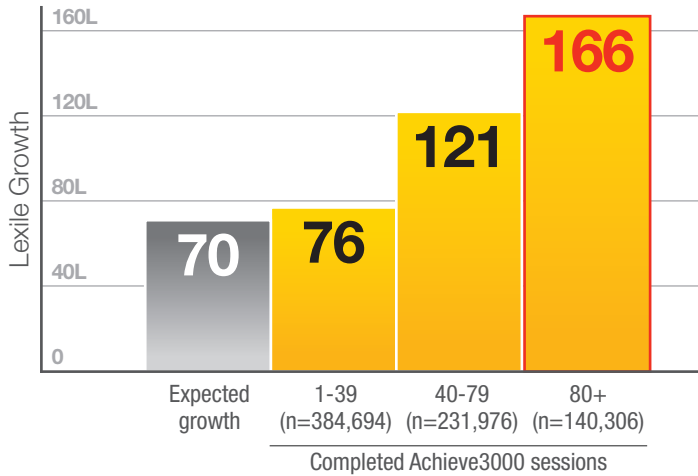
To determine the effects of KidBiz3000, TeenBiz3000, and Empower3000 on the literacy development of students, Achieve3000 designed a study measuring student Lexile growth with a pre- and post-test using the LevelSet assessment.¹ LevelSet, developed in partnership with MetaMetrics, provides a Lexile measure for each student. The actual growth achieved is compared to expected yearly growth, based on MetaMetrics' proprietary calculation.²



¹ Students with valid pre- and post-LevelSet scores as well as at least one completed activity were included in the current analyses.

² Using MetaMetrics' findings on expected yearly growth, Achieve3000 calculated the expected Lexile growth for each student. This calculation was based on the length of time from the student's pre-test to post-test as well as the student's initial reading level. Achieve3000 first used MetaMetrics' expected growth norms to calculate the expected yearly growth for a student at that reading level. Achieve3000 then divided the expected yearly growth by the number of days the student used the program to arrive at an "expected Lexile growth" score for each student.

Lexile Growth Related to Frequency of Program Use



Nearly 2.5X expected reading growth with regular program use³

The number of reading sessions that a student completes on Achieve3000 is a statistically significant predictor of his or her Lexile performance growth, on average.⁴ **Students using the program with suggested frequency (i.e., an average of two or more times per week) exceeded their expected Lexile growth by an average of 96 points.**

Key Findings

- On average, students using the program with suggested frequency (i.e., completing at least two reading sessions per week, on average) achieved more than two times the Lexile growth expected with typical instruction.
- At every grade level, program users achieved higher-than-expected Lexile growth.
- Students who scored 75% or higher on the multiple choice activity made the greatest Lexile growth on average, more than two times the expected growth norms.
- With regular program use, struggling readers (students reading two or more years below grade level) and English language learners made more than two times their expected growth, on average.
- Special education students using the program with suggested frequency made more than two times their expected growth, on average.

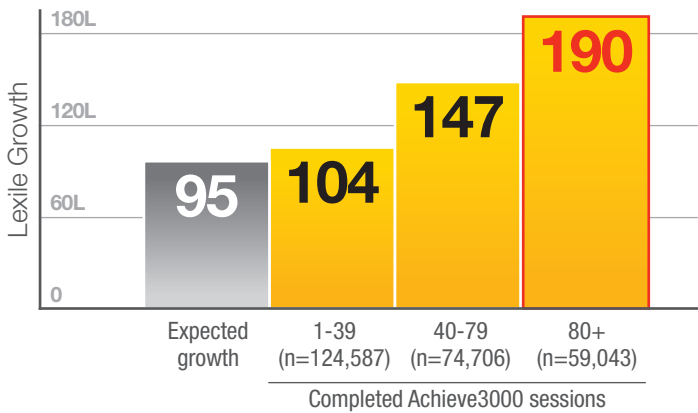
³ Regular use is defined as a minimum of two sessions per week, on average, throughout the school year. Achieve3000 is designed to be used with this frequency.

⁴ $F(2, 756,973) = 15,945.71, p < .0001$

Executive Summary (cont.)

At all school levels (elementary school, middle school, and high school), the number of reading sessions that a student completes on Achieve3000 is a statistically significant predictor of his or her Lexile performance growth, on average.⁵

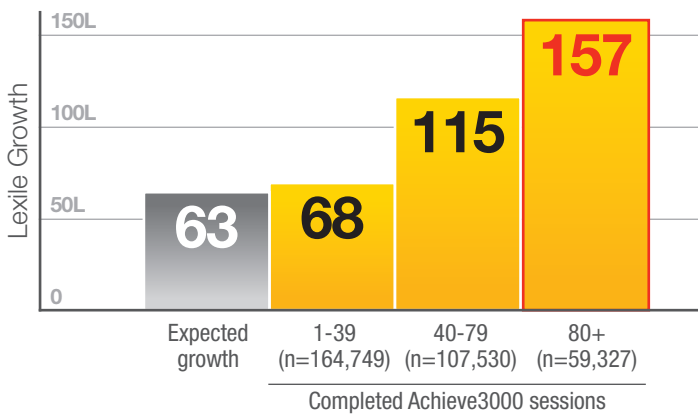
Lexile Growth Related to Frequency of Program Use – Elementary School



2X expected reading growth for elementary school students, with regular program use

Elementary school students using the program with suggested frequency **exceeded their expected Lexile growth by an average of 95 points.**

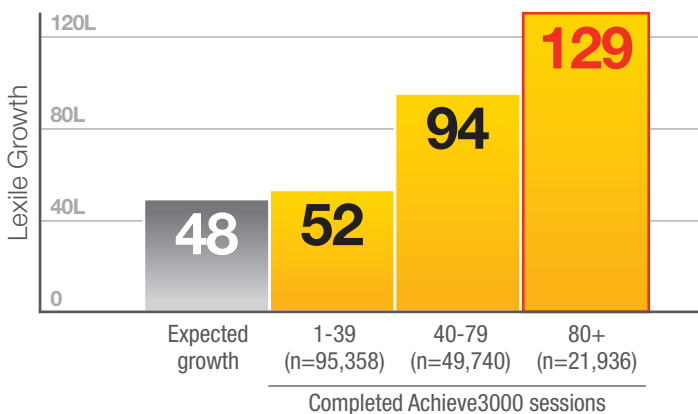
Lexile Growth Related to Frequency of Program Use – Middle School



Nearly 2.5X expected reading growth for middle school students, with regular program use

Middle school students using the program with suggested frequency **exceeded their expected Lexile growth by an average of 94 points.**

Lexile Growth Related to Frequency of Program Use – High School



More than 2.5X expected reading growth for high school students, with regular program use

High school students using the program with suggested frequency **exceeded their expected Lexile growth by an average of 81 points.**

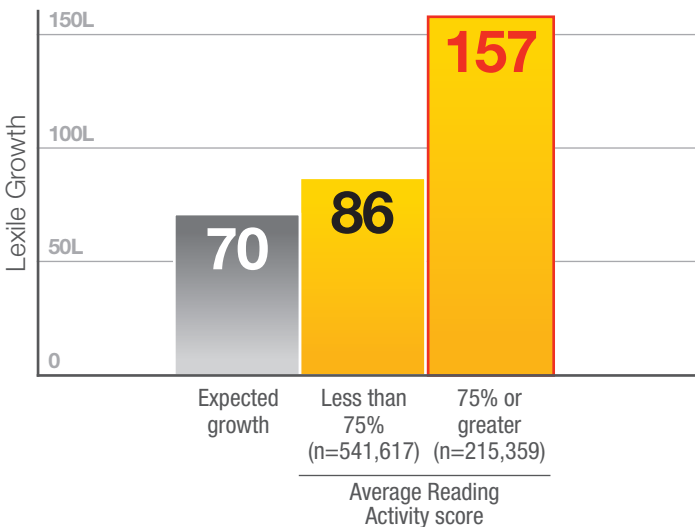
⁵ Elementary school: $F(2, 258,333)=5,366.37, p<.0001$
Middle school: $F(2, 331,603)=7,379.60, p<.0001$
High school: $F(2, 167,031)=2,063.58, p<.0001$

Effect of Quality of Program Use on Lexile Growth

Reading Activity Scores

In addition to analyzing the frequency of use, Achieve3000 also analyzed the quality of program use. The Multiple-Choice Activity is a critical component of the Five-Step Literacy Routine and a simple indicator of the degree to which students are applying themselves to the program. This formative assessment allows teachers to monitor their students' overall understanding of the text read. Students who score 75% or higher on the multiple choice activity are identified as working within their instructional zone. In other words, scores within this range typically indicate that students are reading at a level that fosters their literacy development. Achieve3000 recommends that students be monitored to ensure performance in this range.

Lexile Growth Related to Quality of Program Use



More than 2X expected reading growth for students working within their instructional zone

Students scoring within their instructional zone (75% or greater) **exceeded their expected Lexile growth by an average of 87 points.**⁶

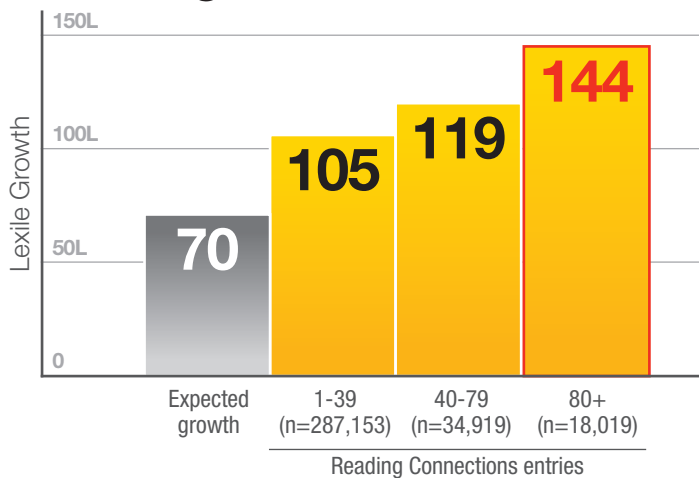
⁶ This difference is statistically significant, $t(215,358)=264.8, p<.0001$.

Reading Connections

Explicit Reading Comprehension Strategy Instruction and Application

Achieve3000 provides explicit instruction on the seven key comprehension strategies for informational texts. Two features of the program, the Lesson Plans and the Reading Connections, help address this need. The Lesson Plans that provide this direct, explicit instruction are available within the Learning Center, and one Lesson Plan is always attached to the daily article. Within each article, students are encouraged to apply the strategies of summarization, generating questions, and setting the purpose by using the Reading Connections embedded in the article.

Lexile Growth Related to Reading Connections



More than 2X expected reading growth for students completing an average of two or more Reading Connections per week

The number of Reading Connections that a student completes on Achieve3000 is a statistically significant predictor of his or her Lexile performance growth, on average.⁷ Students completing 80 or more Reading Connections during the course of the school year **exceeded their expected Lexile growth by 74 points, on average.**

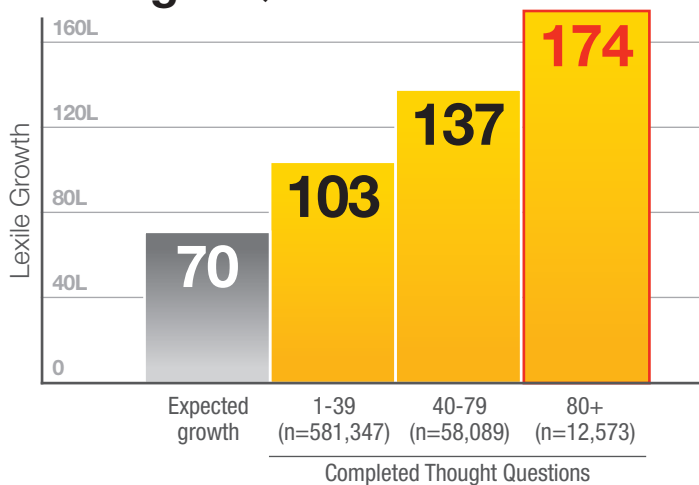
⁷ $F(2, 340,088)=546.96, p<.0001$

Thought Questions

The Reading-Writing Connection

The Thought Question is the fifth step in the Five-Step Literacy Routine and purposefully engages students in a formal writing process that allows them to apply knowledge they have acquired and express their thoughts through writing. Students respond to prompts in three key genres, with an emphasis on persuasive/argument writing, using academic vocabulary to ensure that they are prepared to read, write, and speak effectively in all content-area courses.

Lexile Growth Related to Thought Questions



Nearly 2.5X expected reading growth for students completing an average of two or more Thought Questions per week

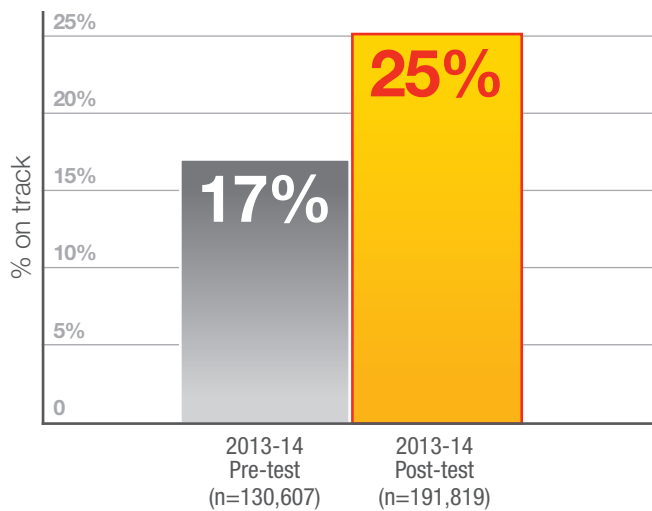
The number of Thought Questions that a student completes on Achieve3000 is a statistically significant predictor of his or her Lexile performance growth, on average.⁸ Students completing 80 or more Thought Questions during the course of the school year **exceeded their expected Lexile growth by 104 points, on average.**

⁸ $F(2, 652,006)=1,962.34, p<.0001$

College and Career Readiness

Achieve3000's College and Career Report supports the current emphasis on College and Workforce Readiness and the Common Core Standards by describing students' readiness for college and career based on their current Lexile reading level. Research demonstrates that giving teachers and administrators access to relevant student data allows them to be more targeted in their instruction and translates to better student performance on high-stakes tests.⁹ After reviewing the College and Career Report, educators can maximize Achieve3000's differentiated instruction by offering students the targeted intervention they need to be successful.

Growth in College and Career Readiness



47% increase
in College and Career Readiness

A higher percentage of students are on track for College and Career Readiness after having participated in Achieve3000 during the 2013-14 school year.¹⁰

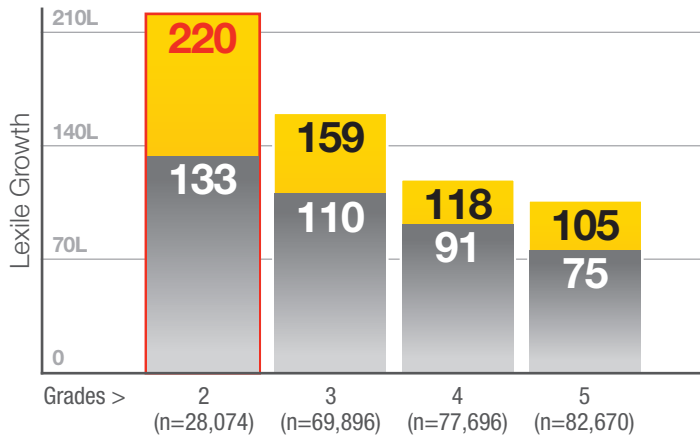
The College and Career Readiness initiative requires increased rigor in reading performance, which translates into higher Lexile-level requirements at every grade level. As states implement this new initiative and work to better prepare students for college and careers, educators are facing new challenges in helping students reach the “on track” reading levels necessary for success.

⁹ Lewis, D., Madison-Harris, R., Muoneke, A., & Times, C. (Fall/Winter, 2010). *Using data to guide instruction and improve student learning*. (SEDL letter, Vol. XXII, No. 2). Austin, TX: SEDL.

¹⁰ $\chi^2(1)=393,730, p<.0001$

Lexile Growth by Grade

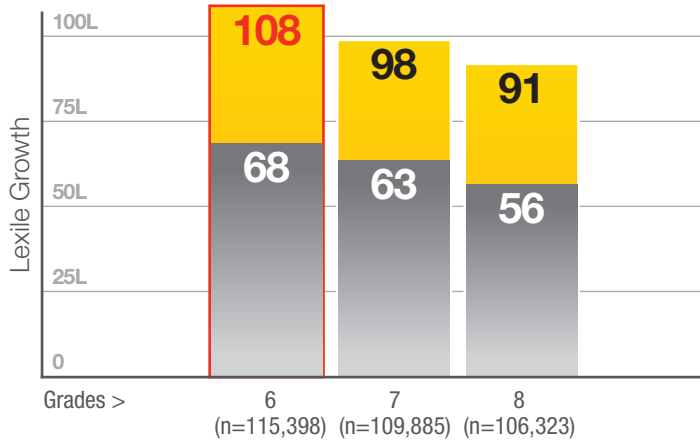
Elementary School Lexile Growth by Grade



On average, Achieve3000 users across all elementary school grade levels made significant growth in Lexile reading performance over and above the growth expected with typical instruction.¹¹

2nd-grade students exceeded their expected Lexile growth by an average of 87 points.

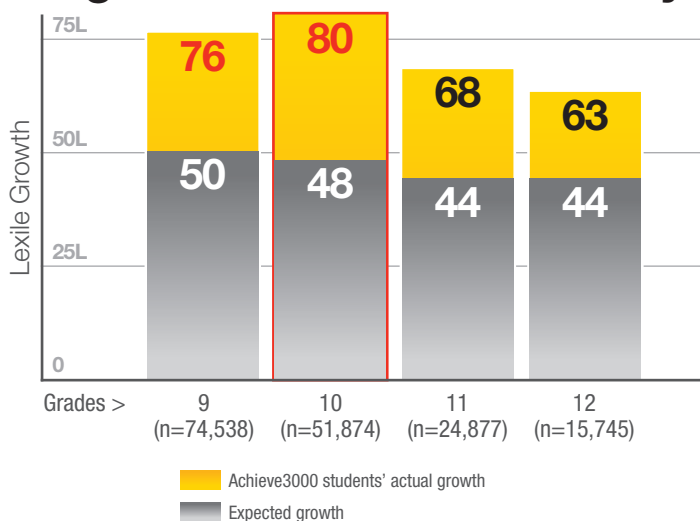
Middle School Lexile Growth by Grade



On average, Achieve3000 users across all middle school grade levels made significant growth in Lexile reading performance over and above the growth expected with typical instruction.¹²

6th-grade students exceeded their expected Lexile growth by an average of 40 points.

High School Lexile Growth by Grade



On average, Achieve3000 users across all high school grade levels made significant growth in Lexile reading performance over and above the growth expected with typical instruction.¹³

10th-grade students exceeded their expected Lexile growth by an average of 32 points.

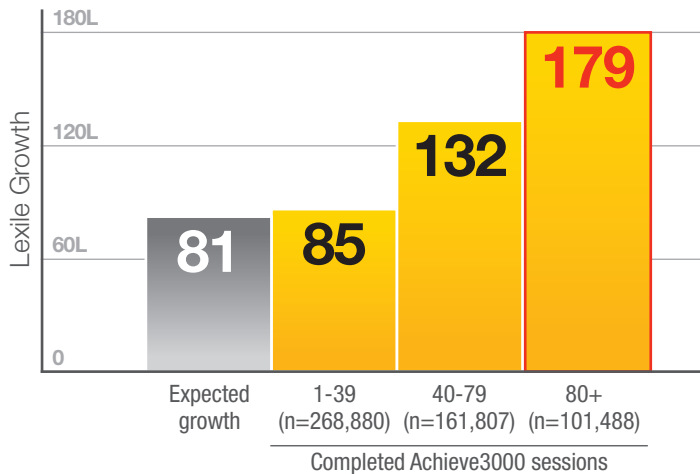
¹¹ $p < .0001$ in all cases

¹² $p < .0001$ in all cases

¹³ $p < .0001$ in all cases

Results for Struggling Readers

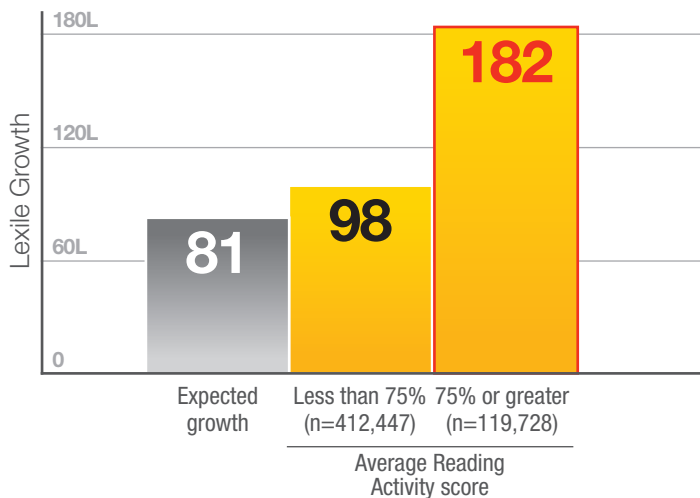
Lexile Growth Related to Frequency of Program Use for Below Grade Level Readers



More than 2X expected reading growth for students reading two or more years below grade level, with regular program use

For below grade level readers, overall and at each school level, the number of reading sessions that a student completes on Achieve3000 is a statistically significant predictor of his or her Lexile performance growth, on average.¹⁴ Overall, below grade level readers using the program with suggested frequency **exceeded their expected Lexile growth by an average of 98 points.**

Lexile Growth Related to Quality of Program Use for Below Grade Level Readers



More than 2X expected reading growth for struggling readers working within their instructional zone

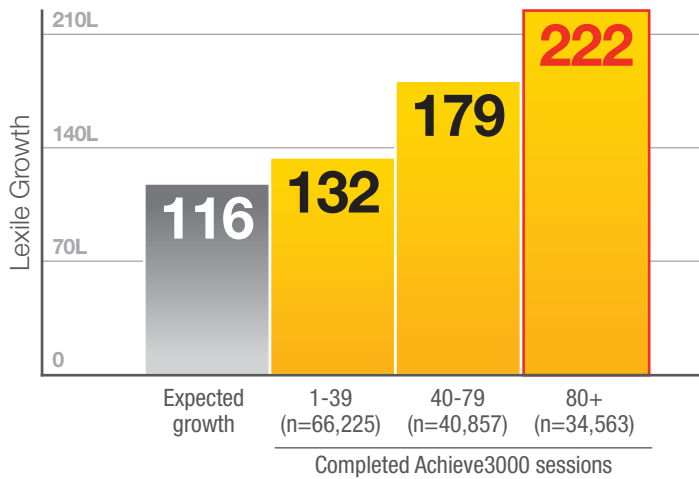
Below grade level readers scoring within their instructional zone (75% or greater) **exceeded their expected Lexile growth by an average of 101 points.**¹⁵

¹⁴ Overall: $F(2, 532,172) = 10,437.67, p < .0001$
 Elementary school: $F(2, 141,642) = 2,905.66, p < .0001$
 Middle school: $F(2, 247,449) = 4,921.86, p < .0001$
 High school: $F(2, 143,075) = 1,534.33, p < .0001$

¹⁵ This difference is statistically significant, $t(119,727) = 194.96, p < .0001$

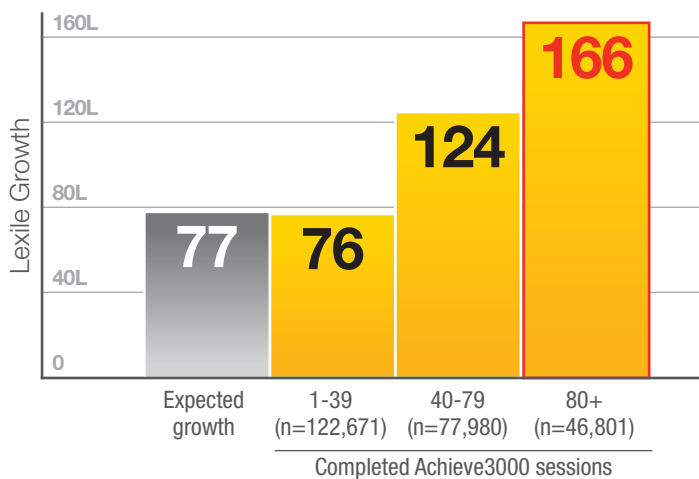
Results for Struggling Readers (cont.)

Below Grade Level Readers – Elementary School



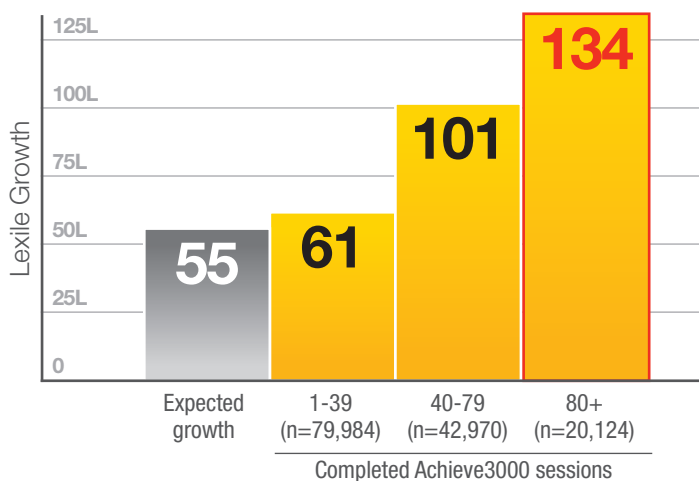
Elementary school struggling readers using KidBiz3000 with suggested frequency **exceeded their expected Lexile growth by 106 points, on average.**

Below Grade Level Readers – Middle School



Middle school struggling readers using TeenBiz3000 with suggested frequency **exceeded their expected Lexile growth by 89 points, on average.**

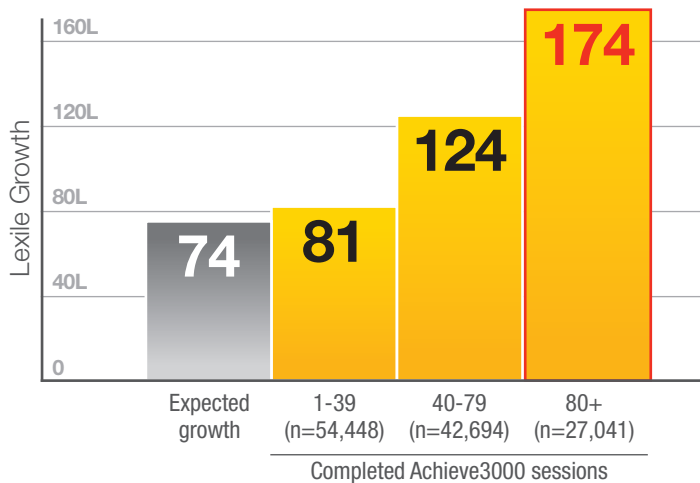
Below Grade Level Readers – High School



High school struggling readers using Empower3000 with suggested frequency **exceeded their expected Lexile growth by 79 points, on average.**

Results for English Language Learners (ELLs)

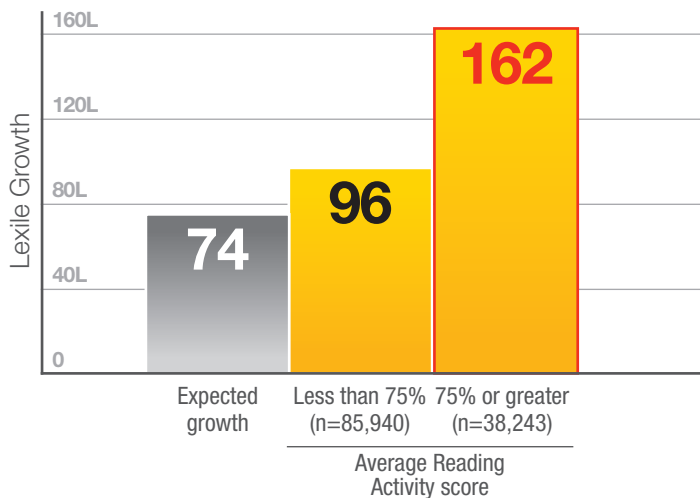
Lexile Growth Related to Frequency of Program Use for ELLs



Nearly 2.5X expected reading growth for English language learners, with regular program use

For English language learners, overall and at each school level, the number of reading sessions that a student completes on Achieve3000 is a statistically significant predictor of his or her Lexile performance growth, on average.¹⁶ Overall, English language learners using the program with suggested frequency **exceeded their expected Lexile growth by an average of 100 points.**

Lexile Growth Related to Quality of Program Use for ELLs



More than 2X expected reading growth for ELLs working within their instructional zone

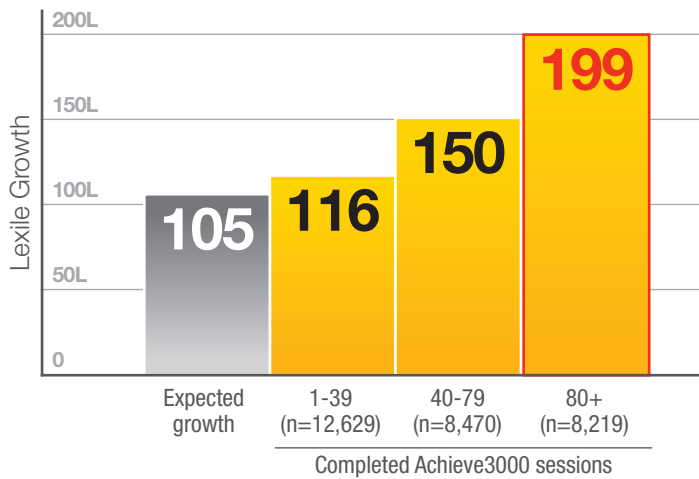
English language learners scoring within their instructional zone (75% or greater) **exceeded their expected Lexile growth by an average of 88 points.**¹⁷

¹⁶ Overall: $F(2, 124,180)=2918.81, p<.0001$
Elementary school: $F(2, 29,315)=596.84, p<.0001$
Middle school: $F(2, 61,194)=1540.90, p<.0001$
High school: $F(2, 33,665)=505.75, p<.0001$

¹⁷ This difference is statistically significant, $t(38,242)=117.56, p<.0001$

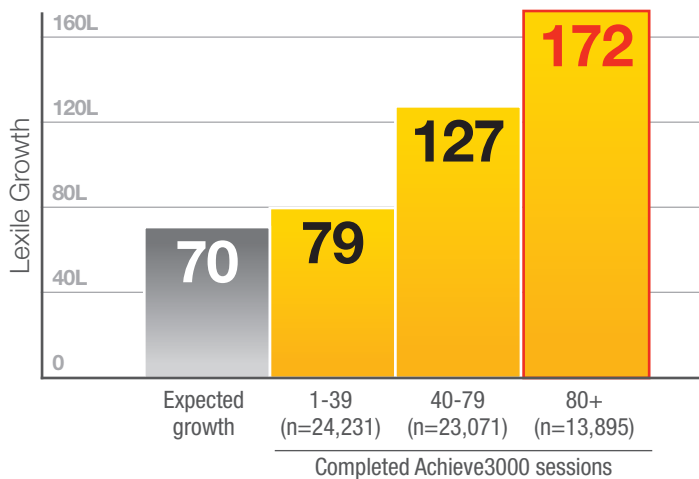
Results for English Language Learners (ELLs) (cont.)

ELLs – Elementary School



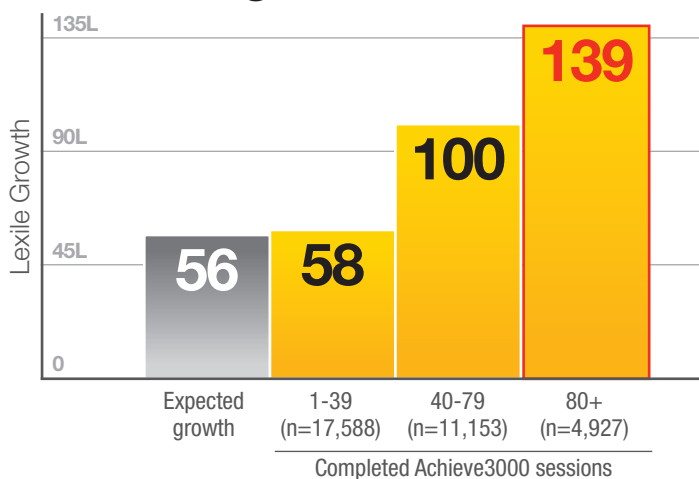
Elementary school ELLs using KidBiz3000 with suggested frequency **exceeded their expected Lexile growth by 94 points, on average.**

ELLs – Middle School



Middle school ELLs using TeenBiz3000 with suggested frequency **exceeded their expected Lexile growth by 102 points, on average.**

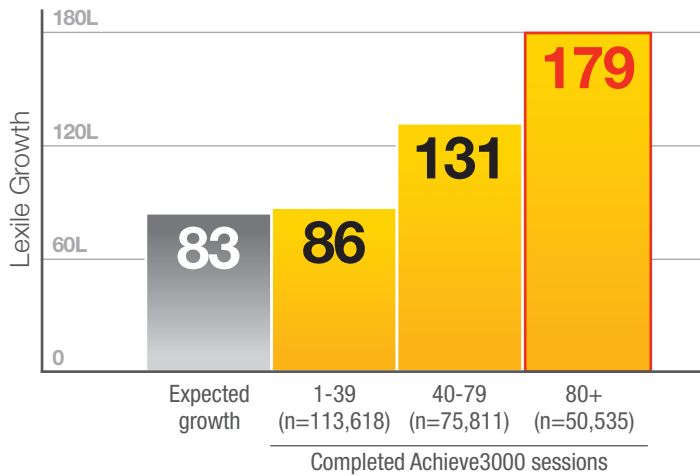
ELLs – High School



High school ELLs using Empower3000 with suggested frequency **exceeded their expected Lexile growth by 83 points, on average.**

Results for Special Education Students (SPED)

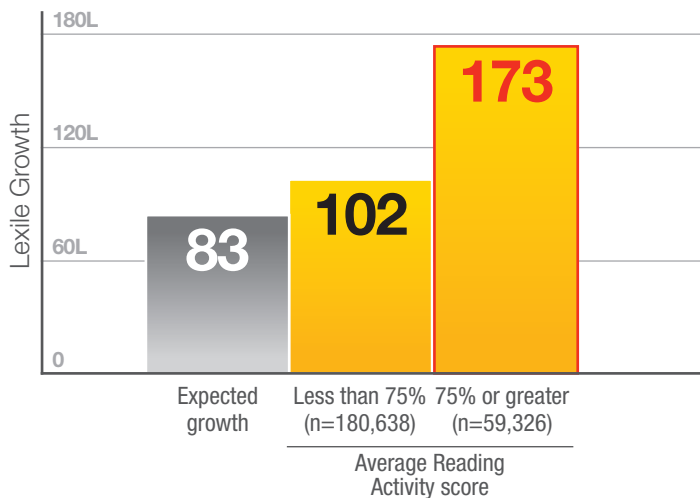
Lexile Growth Related to Frequency of Program Use for SPED Students



More than 2X expected reading growth for SPED students, with regular program use

For SPED students, overall and at each school level, the number of reading sessions that a student completes on Achieve3000 is a statistically significant predictor of his or her Lexile performance growth, on average.¹⁸ Overall, SPED students using the program with suggested frequency **exceeded their expected Lexile growth by an average of 96 points.**

Lexile Growth Related to Quality of Program Use for SPED Students



More than 2X expected reading growth for SPED students working within their instructional zone

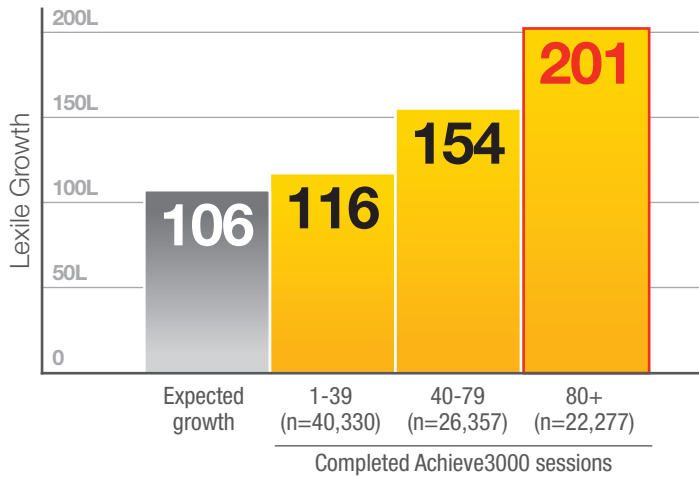
SPED students scoring within their instructional zone (75% or greater) **exceeded their expected Lexile growth by an average of 90 points.**¹⁹

¹⁸ Overall: $F(2, 239,961)=5241.24, p<.0001$
 Elementary school: $F(2, 88,961)=1771.84, p<.0001$
 Middle school: $F(2, 102,233)=2426.97, p<.0001$
 High school: $F(2, 48,761)=706.73, p<.0001$

¹⁹ This difference is statistically significant, $t(59,325)=134.77, p<.0001$

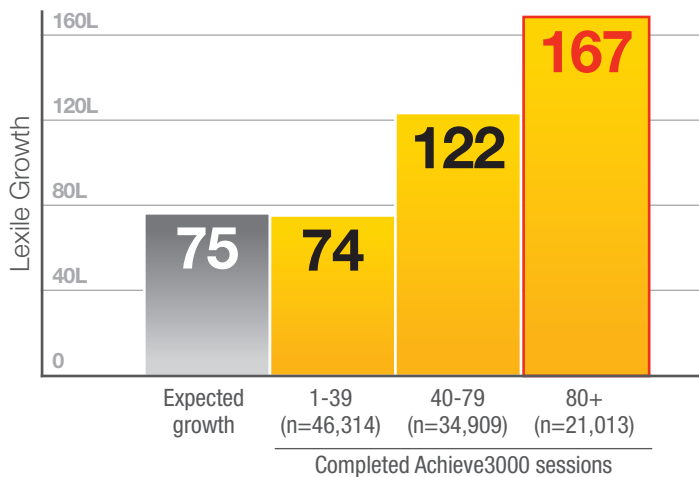
Results for Special Education Students (SPED) (cont.)

SPED Students – Elementary School



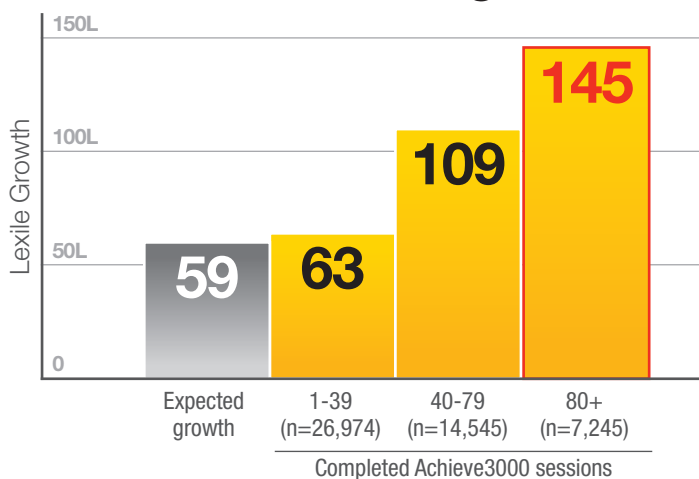
Elementary school SPED students using KidBiz3000 with suggested frequency **exceeded their expected Lexile growth by 95 points, on average.**

SPED Students – Middle School



Middle school SPED students using TeenBiz3000 with suggested frequency **exceeded their expected Lexile growth by 92 points, on average.**

SPED Students – High School



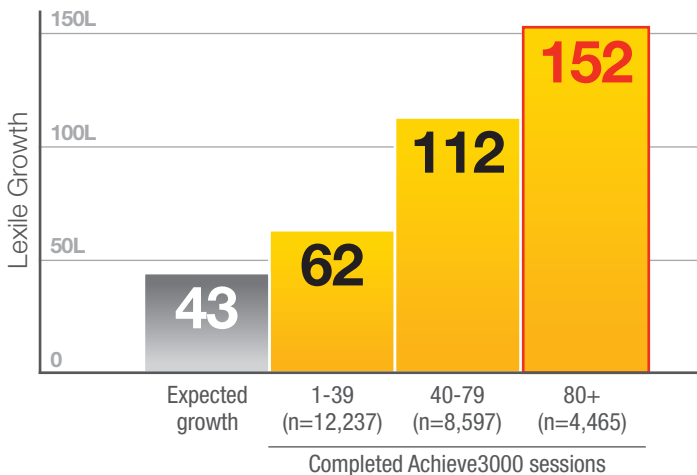
High school SPED students using Empower3000 with suggested frequency **exceeded their expected Lexile growth by 86 points, on average.**

Results for Enrichment Students

Research on Advanced and Gifted students shows that the most important strategy to use in their learning experiences is differentiated instruction.²⁰ Differentiated instruction should be provided to accelerate learning for high-ability students and maximize their achievement. These students, as much as all other groups of students, need access to reading materials, activities, and instruction that does not place ceilings on their learning.

Achieve3000's programs provide the challenge, rigor, and relevancy these students need to continue their literacy growth. Current data from students across the country using Achieve3000 supports the effectiveness of the program in meeting their needs. **These students more than tripled their expected Lexile growth.**

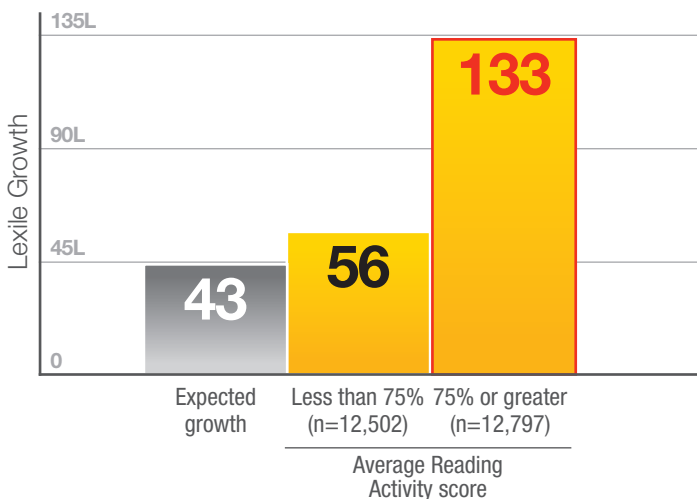
Lexile Growth Related to Frequency of Program Use for Enrichment Students



More than 3.5X expected reading growth for Enrichment students, with regular program use

For Enrichment students, overall and at each school level, the number of reading sessions that a student completes on Achieve3000 is a statistically significant predictor of his or her Lexile performance growth, on average.²¹ Overall, Enrichment students using the program with suggested frequency **exceeded their expected Lexile growth by an average of 109 points.**

Lexile Growth Related to Quality of Program Use for Enrichment Students



More than 3X expected reading growth for Enrichment students working within their instructional zone

Enrichment students scoring within their instructional zone (75% or greater) **exceeded their expected Lexile growth by an average of 90 points.**²²

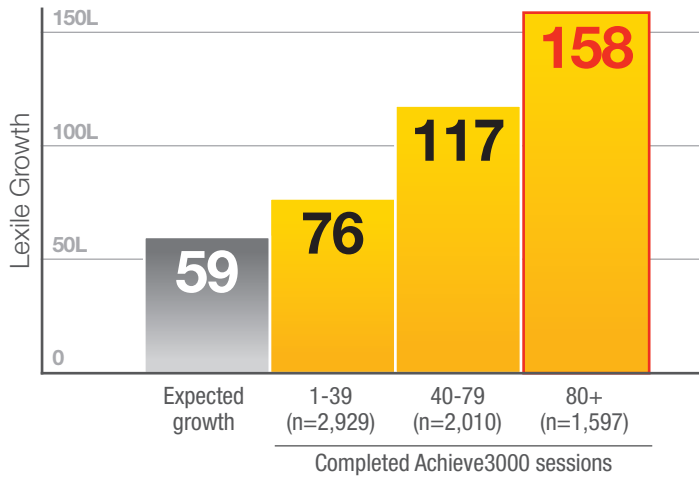
²⁰ Tomlinson, C. (1998). *How can gifted students' needs be met in mixed-ability classrooms?* Washington DC: National Association for Gifted Children

²¹ Overall: $F(2, 25,296)=827.02, p<.0001$
 Elementary school: $F(2, 6,533)=250.70, p<.0001$
 Middle school: $F(2, 13,439)=441.76, p<.0001$
 High school: $F(2, 5,318)=114.23, p<.0001$

²² This difference is statistically significant, $t(12,796)=86.17, p<.0001$

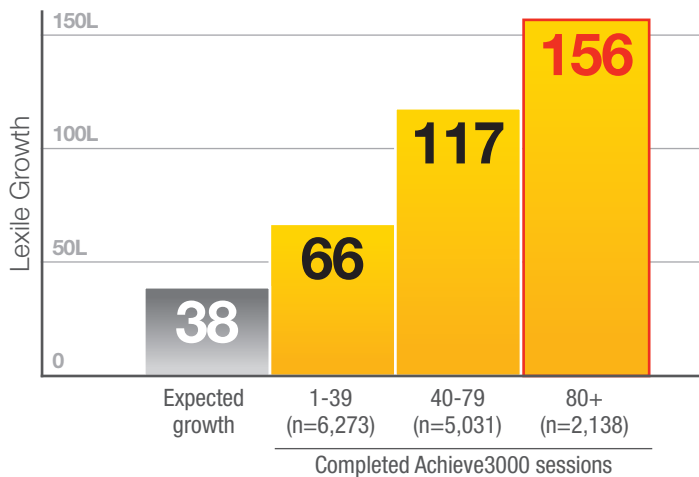
Results for Enrichment Students (cont.)

Enrichment Students – Elementary School



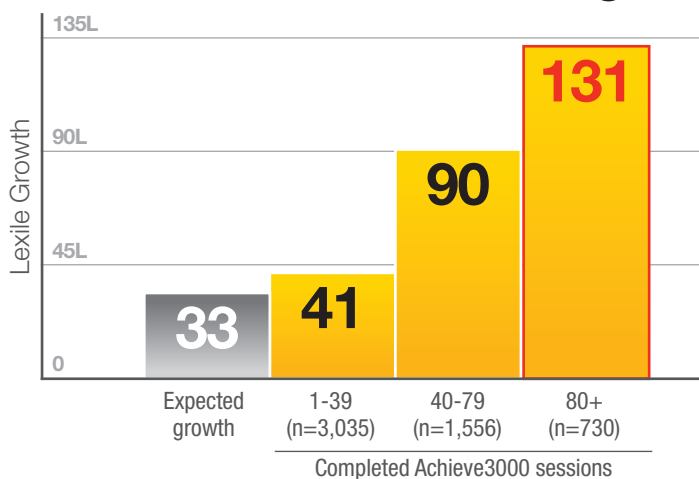
Elementary school enrichment students using KidBiz3000 with suggested frequency **exceeded their expected Lexile growth by 99 points, on average.**

Enrichment Students – Middle School



Middle school enrichment students using TeenBiz3000 with suggested frequency **exceeded their expected Lexile growth by 118 points, on average.**

Enrichment Students – High School

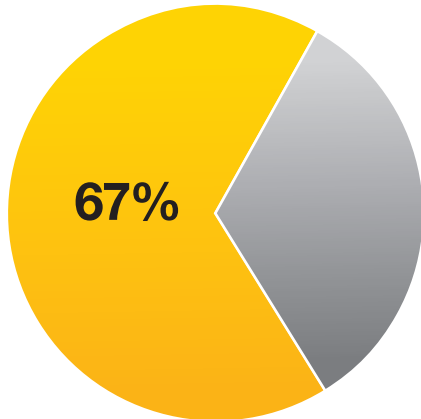


High school enrichment students using Empower3000 with suggested frequency **exceeded their expected Lexile growth by 98 points, on average.**

After-School Usage

Research on adolescent literacy suggests that the amount of reading students do during out-of-school hours is an accurate predictor of their in-school academic achievement.²³ If after-school programs can motivate young people to read more and explore their interests through reading, this research suggests that their academic performance will improve.

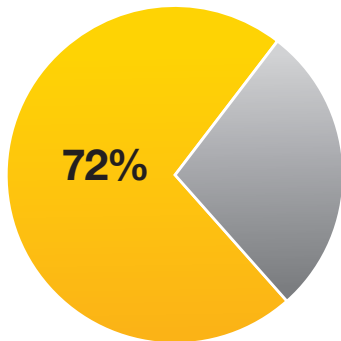
National After-School Usage



67% of Achieve3000 students logged in after school hours.

Students logged in 8,072,256 times after school during the school year.

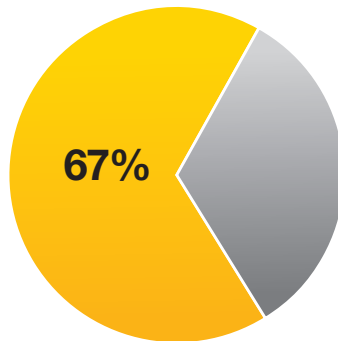
Elementary School After-School Usage



72% of KidBiz3000 students logged in after school hours.

Elementary school students logged in 3,365,174 times after school during the school year.

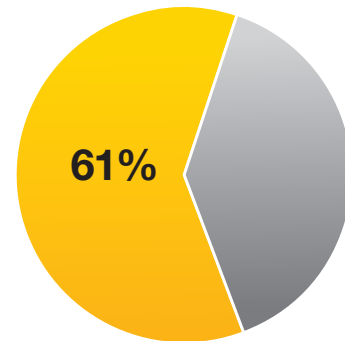
Middle School After-School Usage



67% of TeenBiz3000 students logged in after school hours.

Middle school students logged in 3,431,483 times after school during the school year.

High School After-School Usage



61% of Empower3000 students logged in after school hours.

High school students logged in 1,275,599 times after school during the school year.

²³ MetLife Foundation Afterschool Alert. (2011, November). *Literacy in afterschool: An essential building block for learning and development* (Issue Brief No. 53). Washington, DC: Author.



www.achieve3000.com

To learn more about Achieve3000 and
its proven solutions, call **800-396-1660**
or e-mail info@achieve3000.com