How Achieve3000® Literacy Uses Research to Prepare Students for College and Career Success
Table of Contents

Using Lexiles® to Differentiate Instruction ................................................................. 3
Differentiating Instruction for Every Student ............................................................... 4
Providing Opportunities for Independent Reading of Grade-Level Texts .................... 5
Reading and Writing Nonfiction .................................................................................. 5
The Literacy Lesson Routine ...................................................................................... 6
Stretching Students Beyond Independent Work ......................................................... 13

Introduction

Achieve3000 Literacy is an innovative digital solution proven to accelerate literacy growth across all populations of students. It is built on decades of scientific research that investigated how learners develop reading and writing skills. In addition, the program is based on the key findings of multiple federal research reports such as Reaping the Rewards of the Reading for Understanding Initiative (Pearson et al., 2020), Reading Next: A Vision for Action and Research in Middle and High School Literacy (Biancarosa & Snow, 2006), and Writing Next: Effective Strategies to Improve Writing of Adolescents in Middle and High Schools (Graham & Perin, 2007). The materials, activities, and assessments are aligned with the objectives set forth by today’s college and career readiness standards (NGA, 2010).
Using Lexiles to Differentiate Instruction

Achieve3000 Literacy provides differentiated instruction for students in grades 2 through 12 and adult learners. Our approach, illustrated below, has more than 20 years of proven success raising student Lexile® levels and high-stakes test scores. The premise behind Achieve3000's patented approach is simple: one of the most effective ways to strengthen reading, improve overall literacy, and prepare students for the rigors of college and career is to meet them one-on-one at their individual reading levels, while simultaneously targeting grade-level state standards.

The program starts by administering the LevelSet™ assessment, the only universal screener for the comprehension of nonfiction text. Developed in collaboration with MetaMetrics®, the makers of the Lexile Framework, LevelSet offers a scientific means of matching students to nonfiction texts in English and Spanish. The results of this assessment are applied immediately to each student's academic profile, so they can receive grade-appropriate content with readings, activities, and embedded formative assessments that are precisely and scientifically matched to their individual reading levels. Based on these assessments, the readers' Lexile levels are periodically and automatically adjusted so students receive more complex text when they are ready. In addition to working at their Lexile level, where they build reading strategies and develop close-reading skills, students have regular and repeated opportunities to interact with the same content written with the grade-level complexity they will encounter on their high-stakes assessments. To ensure that educators intervene as appropriate, Achieve3000 keeps teachers and administrators informed of their students' ongoing progress. Built-in forecast reports predict students' performance on high-stakes state tests as well as project students' readiness for college and career at the time of those tests, providing teachers with valuable information they can use to ensure all students are on track for success.
Differentiating Instruction for Every Student

A widely accepted and research-validated principle is that students learn better when content is tailored to their individual needs (Tomlinson, 1999, 2004). Time constraints, class size and heavy workloads often prevent teachers from moving away from the “one size fits all” mode. Achieve3000 Literacy makes it easy to differentiate instruction by delivering the same grade-appropriate nonfiction content to students at their individual Lexile levels.

Achieve3000 Literacy is designed to strengthen reading and build literacy across the content areas for all students by providing customizable scaffolds and supports for striving readers, gifted students, and emergent bilingual students. Each state/country and grade level receives a set of lessons that are tailored to meet their needs by addressing their standards and grade-level expectations. Every student in the class takes the LevelSet screening test — in English or in Spanish (or both) — and then reads about the same grade-appropriate, standards-based topic, covering the same key concepts and vocabulary. The Lesson Routine that students move through is differentiated to each student’s identified reading level and instructional needs.

In addition to the Lesson Routine, Achieve3000 Literacy offers a variety of other lesson collections to drive student reading growth, including articles focused on text-based class discussions (“The Scoop”); articles aimed at particular age-level interests (“Kids Channel” and “Teen Channel”); and collections of differentiated fiction for elementary and middle-grade students.

For students who need more intensive intervention in pull-out or push-in models, Achieve3000 also provides targeted solutions. Achieve3000 Literacy with Boost builds on the features of Achieve3000 Literacy with learning scaffolds and instructional resources designed to deepen differentiation and boost learning intervention and special education programs. Achieve3000 Literacy with Boost also integrates special supports and teaching materials to build language and literacy acquisition for emergent bilingual students of all proficiency levels.
Providing Opportunities for Independent Reading of Grade-Appropriate Texts

To be ready for college and career, students need to know how to independently read and acquire knowledge from complex, nonfiction text at a Lexile level greater than 1300L, a level higher than what is typically required in high school (1090L) (Williamson, 2004). To achieve this important goal, Achieve3000 Literacy offers an instructional model that combines independent student work with teacher-directed instruction to guarantee the greatest acceleration of reading abilities and improvement to overall literacy. Students work through the the lessons at their identified Lexile level, where research shows that they are most likely to develop reading strategies and close-reading skills that are needed for comprehension.

However, we know that on their high-stakes assessments, students are going to encounter multiple sources that challenge them with complexity at the high bands of their grade-level expectations. Therefore, one component of the Lesson Routine Achieve3000 Literacy gives students access to is the Stretch Article, the grade-level (or above) version of the same lesson they just read. Students begin by working at their personal Lexile level to build their background knowledge and get ready for the direct instruction from teachers. This instruction focuses on the Stretch text, challenging students to interact with complex grade-level text complexity that requires a cognitive stretch and that promotes the use of strategies like comprehension monitoring and re-reading. The purpose of the Stretch work is to promote independent reading of complex grade-level (or higher) texts without scaffolds, a key competency required for college and career.

Students need time to read and re-read deliberately and slowly to consider the meanings of individual words, the semantic and syntactic differences in the text, and the development of ideas over the course of the text (Coleman & Pimentel, 2011a).

Since students will have already read the same article at their individual reading levels, they’ll already have an understanding of the background knowledge and key concepts when they get to the Stretch readings. Therefore, they can spend less cognitive energy trying to comprehend the main ideas and more energy focused on the syntactic and vocabulary differences.

Digital highlighting and note-taking are other ways that the program helps students read the Stretch texts. The key concepts can be highlighted, and teachers can direct students to focus their close read on short and worthy pieces of text that they can annotate as they read (Frey & Fisher, 2014).
Reading and Writing Nonfiction

Achieve3000 Literacy provides engaging lessons that include the reading of nonfiction text revolving around contemporary, culturally relevant issues and how these issues tie into a variety of content areas. According to numerous studies, learners benefit tremendously from extensive exposure to and interaction with nonfiction texts.

Reading nonfiction text develops students’ knowledge of vocabulary, literacy, and the world (Anderson & Guthrie, 1999; Cervetti et al., 2012; Cervetti et al., 2016; Pearson et al., 2020). The inclusion of nonfiction text builds knowledge that is needed for comprehension of other texts and ongoing learning (Kintsch, 1998; Wilson & Anderson, 1986).

Using nonfiction as a source for reading, writing, and discussion can improve attitudes toward reading and can assist in overall literacy development (Caswell and Duke, 1998; Guthrie et al., 1996). Furthermore, regardless of learners’ genre preferences, their literacy is likely to improve when they are interested in a text’s topic and when texts address real-world problems and questions (Guthrie et al., 1996).

In addition, college students and adult workers read a significant amount of nonfiction in order to meet their schooling and workplace demands (Smith, 2000; Venezky, 1982). According to the college and career readiness standards, (NGA, 2010), students need to be able to navigate and learn from multiple sources of informational texts. They need to be able to decipher vocabulary and concepts, identify important ideas and an author’s point of view, and analyze the arguments presented and determine whether or not they are valid and have sufficient supporting evidence. To develop these critical literacy skills, students need to read authentic nonfiction by real authors who present their views and arguments. In addition, students need opportunities to discuss the author’s viewpoint and students’ own opinions.

Achieve3000 utilizes trusted news sources and professional writers of cross-curricular content to provide students with multiple lessons each week, giving them the opportunity to read, write, and discuss meaningful issues. Each lesson that follows the Lesson Routine has students moving through a series of steps that include the reading of informational text, completion of embedded formative assessments, discussions, reflection, and response, which require informative and argument writing with evidence from the texts read.
The Lesson Routine

The Lesson Routine is the acceleration engine within Achieve3000 Literacy. It is designed to improve fluency, vocabulary, reading comprehension, and writing proficiency and to build the literacy capacities students need to be college- and career-ready. By working through the routine at their Lexile level, students are able to develop the reading strategies and close-reading techniques needed to pull evidence from text, which is then used to support oral and written arguments—all of which stretches students to the use of higher order, critical-thinking skills. When implemented in the classroom as an instructional tool, these solutions also promote the effective use of discussion and argument, helping to build listening and speaking skills as students argue their differing points of view with supporting evidence drawn from the texts they have read. Each of these five steps is based on best practices that have evolved out of decades of reading research. Together with the proprietary technology and Bayesian scoring of the embedded formative assessment, the steps accelerate students to the comprehension of increasingly complex text and to the acquisition of greater depths of knowledge.

The sections that follow present a summary of each step in the Lesson Routine, along with a research section that illustrates its theoretical framework.

The Lesson Routine at a Glance

Step 1: Get ready to read with a thoughtful question prompt: Students express and discuss their opinions based on prior experience or knowledge.

Step 2: Close reading with the Article: Readings include nonfiction text across the content areas through which students build their academic vocabulary and develop reading strategies and close-reading techniques.

Step 3: Respond to differentiated comprehension questions: The embedded formative assessment drives reporting on standards mastery and also fuels the auto-adjustment of Lexile levels using a proprietary Bayesian scoring application.

Step 4: Learn the value of evidence through reflection: This is another opportunity for working on listening and speaking skills as students return to the initial question prompt and express their opinion, factoring in any new information or evidence they learned through their readings.

Step 5: Write a response using evidence from the text: Students respond to a writing prompt that challenges them to provide text-based evidence to support their response.
Step 1: Get ready to read with a thoughtful question prompt

Students start the Lesson Routine by completing the Ready Step; this step stimulates students to think about the issues that they will explore during the remainder of the lesson. As students think about the question, they are mentally preparing to engage with the content of the lesson. This step becomes an opportunity for discussion, during which all students contribute their understanding and experiences related to the topic. This shared meaning better prepares students for the content of the lesson and contributes to the development of listening and speaking skills.

Connection to Research

Building Literacy Capacities: Of importance to this step is the inclusion of supporting evidence for an opinion—evidence that is delivered in writing or orally. This helps to raise students' awareness of their emerging points of view and at the same time reinforces the importance and value of evidence.

Reading Comprehension: The Ready Step prepares students for the topics being addressed in the lesson, helping students to access their prior knowledge about or make personal connections to the topic. Retrieving the appropriate background knowledge is an essential strategy that helps to support comprehension (Duke & Pearson, 2009; Reynolds & Anderson, 1982).

Learning via Differentiation: The key to successful learning is using content that is grade-appropriate to ensure that students are not only addressing key standards, content, and skills, but are also exposed to age-appropriate, relevant, and interesting information. Taking this grade-appropriate content and differentiating it to meet each student's unique learner profile, along with scaffolds to provide them even better access, ensures that all students develop grade-level knowledge and literacy skills. This first step sets the stage for a learning experience that is designed to help every student maximize their potential by introducing the grade-appropriate topic using vocabulary and text complexity that is most accessible.

Writing Skills: According to the National Writing Commission's 2003 report, "Writing: The Forgotten R," increasing the amount of time students spend writing is key to the improvement of their writing skills. The National Writing Commission also stated that students should be encouraged to write in an informal environment, across the curriculum, and outside of the school routine. The range of topics within Achieve3000 Literacy allows students to write across many content areas, and, because the solutions are cloud-based, they can write anytime and anywhere, not just in the classroom.

Discussion: The initial question prompt is an opportunity for students to share their background knowledge around a topic, so all students enter the lesson with a stronger conceptualization of the topic. Through discussion, students are better primed to comprehend the readings that they will encounter in the lesson.
**Step 2: Close reading of the Article**

The next step directs students to the Read tab where they read an article about a contemporary issue. This step engages students in relevant, real-world topics. All students read about the same grade-appropriate, standards-aligned topic, but the passages are adjusted for each student's individual reading profile—with 12 Lexile versions available in English and 8 available in Spanish—to scaffold students as they develop grade-level knowledge and vocabulary, strengthen reading, and build overall literacy skills.

Built into the texts are tools to foster the development of reading strategies and close-reading techniques. One tool is the digital highlighting tool.

Using a variety of highlighting colors, students can identify key ideas, details, evidence, confusing ideas, and words to explore. The guidelines for using the highlighting tool help students to focus as they read both sources of information.
Connection To Research

**Learning via Differentiation:** Differentiated instruction is at the core of what makes Achieve3000 Literacy so effective. According to Tomlinson (1999; 2004), students learn better when content is differentiated based on their individual needs. Achieve3000 makes it easy for teachers to differentiate reading instruction by tailoring grade-appropriate lessons to students' individual reading levels. All students in the same class read about the same topic, fostering class discussions and building self-esteem. Specific instructional resources help teachers further differentiate for striving readers and English learners, as well as gifted and talented students.

**Developing Literacy Capacities:** To develop the literacy capacities outlined by the National Assessment for Educational Progress (NAEP) and each state's college and career readiness standards, students need to read closely, summarizing to build independence, generating questions to develop researching skills, and setting the purpose to reinforce the value of evidence through identifying text-based information that can be used to formulate written responses. Every lesson provides opportunities for students to practice these strategies as they read, as well as to build strong content knowledge through exposure to cross-curricular informational text. In addition, every lesson comes with point-of-use instructional recommendations that guide the teacher through introducing lessons, supporting students through their independent work, and deepening student comprehension levels by facilitating discussion through the use of text-dependent questions (Murphy et al., 2009).

**Developing Vocabulary Skills:** In his groundbreaking synthesis of over 800 meta-analyses of instructional practices, Hattie (2009) identified vocabulary instruction and knowledge of word meanings as a teaching strategy with highly significant effects on student learning and performance (p. 131). Because every lesson in Achieve3000 Literacy is cross-disciplinary, students are given the opportunity to build a robust bank of academic vocabulary. In accordance with consistent, robust research findings (National Reading Panel, 2000; Wright and Cervetti, 2016), topics are revisited over time and students are given multiple opportunities to interact with the same words, allowing them to understand nuances of meaning.

---

This example shows the word “terrain” as it appears in the Article and student support materials. This same word appears again in the Stretch Article. These are just a few examples of how the Lesson Routine provides multiple encounters with new vocabulary and opportunities for students to use these words in different contexts.
Step 3: Respond to questions in embedded assessment that drive acceleration

After reading the texts, students complete an embedded assessment that serves two critical functions: monitoring of mastery of standards and readiness for high-stakes assessments. Every item is aligned to one or more standards, which drives the report How are my students performing on standards? These items represent the types of questions that students encounter on their high-stakes assessment. Practice with these question types prepares students for the cognitive demand the assessments require and for completing assessments in an online environment.

Additionally, using a Bayesian scoring application, the system monitors scores on these activities and automatically increases student Lexile levels when it determines they are ready for more complex text. Based on how students respond, the system assesses their performance and moves them to more challenging text. The questions also serve to measure comprehension and vocabulary mastery as well as assess higher-order thinking skills.

Connection to Research

Learning via Differentiation: The regular and ongoing formative assessment provided in the Multiple-Choice Activities holds each student accountable to the same grade-level state and college and career readiness standards but with questions that are differentiated based on each student’s reading level. Teachers can monitor each student’s progress and easily identify individual strengths and weaknesses. Prescriptive reports identify remediation materials specific for each individual student’s needs.

Building Literacy Capacities: The Multiple-Choice Activities require that students exercise high-level cognitive thinking, which supports the goal of challenging students to comprehend as well as critique what they are reading. The multiple-choice item types also align closely to high-stakes state tests. Item-by-item alignment allows for precise reporting of mastery on specific state and college and career readiness standards. The Multiple-Choice Activities also support the goals of the NAEP cognitive framework. Drawing from years of literacy research that characterizes reading as a dynamic cognitive process, the authors of the Reading Framework for the 2019 NAEP identified key cognitive targets (distinguished by text type), familiar to most teachers, as central to constructing meaning:

✓ Locate and Recall: When students locate and recall information from an article, they identify clearly stated main ideas or theses or locate supporting details.

✓ Integrate and Interpret: The processes of integration and interpretation engage students in comparing and contrasting ideas, drawing conclusions, finding evidence to support an argument, and distinguishing facts from opinions.

✓ Critique and Evaluate: The final set of reading behaviors, critiquing and evaluating text, asks students to take an objective view of the text. This category asks students to evaluate the strength and quality of evidence used to support an argument, examine a text to see what is most significant, or judge the effectiveness of a specific textual feature.
**Step 4: Learn the value of evidence through Reflection**

After completing the embedded assessment, students revisit the question that was introduced in Step One. This gives students an opportunity to consider what they already know about the topics to be read and what opinions they have before they learn new information from the texts in the Read tab. The question in Step Four asks students to reevaluate their opinions based on new information gleaned from the readings. Reflection on questions both before and after reading helps students to realize that ideas and opinions are flexible and can be shaped by reading and learning new information and evidence. It also raises awareness of their emerging points of view.

The strategy of having students agree or disagree with opinion statements before and after reading is known as the Anticipation Guide Strategy. It was first published by reading researchers Robert Tierney and John Readence and was popularized by Kylene Beers in *When Kids Can't Read: What Teachers Can Do*.

**Connection to Research**

**Building Literacy Capacities:** The Reflection questions encourage students to develop opinions and judgments and to value evidence by supporting their views on important issues. In the first interaction with a question, the goal is to explore students’ beliefs and activate their prior knowledge about the themes in the text. Then, as students work through the routine, they are asked to reconsider their beliefs based on new information from the text.

The questions do not have clear right or wrong answers and are worthy of debate, which helps to facilitate more meaningful classroom discussions and debates. In presenting their opinions, students are supported as they discuss and argue as well as encouraged to provide evidence to support their opinions, critical skills encouraged by college and career standards.

**Learning via Differentiation:** Leaders in differentiation identify the use of “respectful tasks” as central to engaging students at all levels. By ensuring that readers across the range of abilities are addressing the same key activities for each lesson, we recognize that each student has an important contribution to make. This is an important element in supporting the self-esteem needs of students. The before and after questions are another of those respectful tasks. They allow all students to share their opinions and see their responses in the larger context of students across the country.
Step 5: Write a response using evidence from the text

As a culminating step, students are asked to synthesize all of the information they have learned in order to respond to a writing prompt. Achieve3000 includes informative, argumentative, and narrative prompts that require higher-order, critical-thinking skills and the use of supporting evidence from the texts read.

Connection to Research

Building Literacy Capacities: The written response helps students to comprehend and critique and to develop their higher-order thinking skills as they engage in learning beyond what is provided in the reading. It challenges students to extend their initial impressions, apply what they have read, and form generalizations to identify the most significant elements in a passage or to take a different perspective. The rigor of the question pushes students to think critically, to use reasoning skills, and to value evidence by backing up their ideas and opinions with text-based evidence. It calls on students to Integrate/Interpret and then Critique/Evaluate information from text.

The Reading/Writing Connection: As was reported by the National Writing Commission (2003), it is not that students have not mastered the mechanics of writing; rather, they have not learned to create cohesive, coherent, engaging prose. Step 5 gives students practice in this essential skill with rigorous prompts related to the Article. The ability to draft, edit, and revise responses that integrate information from a source is a critical academic skill and one that is essential for success on the high-stakes assessments.

Differentiation: The Thought Question provides students with an opportunity to demonstrate, apply, and extend what they have learned in a formal writing assignment. The complexity of the writing assignment is varied in the prompt as well as in the rubrics and writing support that match and extend student skill levels.

In this sample question, the student is asked to provide support for his/her response using text evidence from the article.
Stretch Students Beyond Independent Work

Independent work is at the center of the Lesson Routine, and through this work we see incredible Lexile gains—double or even triple what you expect to see in a school year. However, teacher-directed instruction and guidance through the lesson increases the rigor of work that students do and better prepares them for their high-stakes assessments and college and career readiness goals. To support this instruction, Achieve3000 provides supports for teachers:

**Teacher Recommendations:** The materials in the “point-of-use” Teacher Recommendations are designed to aid teachers as they guide students through the Literacy Lesson Routine. They help teachers introduce the topic, build background knowledge, and reinforce the academic and cross-disciplinary vocabulary associated with the content of the lesson. Additionally, the materials help teachers hold students accountable for providing evidence in their Before and After Reading questions. During reading, students receive scaffolding in annotating and highlighting, if needed. After reading, Teacher Recommendations provide guidance in helping students draft/edit/revise their written responses while including evidence from the text.

**Stretch Article:** Teachers then extend the lesson and increase the rigor by using the Stretch Article—the grade-level version of the lesson—to model for students how to fluently read or apply reading strategies to grade-level text. Combining independent student work and teacher-directed instruction around the Stretch Article creates the perfect blended learning environment to accelerate student Lexile gains. Through this regular and repeated exposure to grade-level text, students gain confidence in working with the text complexity they will see on high-stakes state assessments.

**Connection to Research**

**Higher-Order Thinking Skills:** The latest state standards require that students construct effective arguments on a wide range of subject matter. Text-dependent discussion questions in the Teacher Recommendations and Teacher’s Guide help students use academic language in speaking and help teachers support debate and argument in the classroom. These tools cultivate discerning readers who question what they read. In addition, teachers may use a graphic organizer in conjunction with the Before Reading question to help students support their opinions.

**Direct Instruction:** Most lessons come with strategy lesson plans as well as Teacher Recommendations for how to use the Stretch Article to challenge students with grade-level text. Teachers receive everything they need to deliver explicit instruction and support the use of critical reading strategies in order to help students read complex text independently. The Teacher’s Guide includes metacognitive strategies for teachers to use as they help students comprehend the complex texts and language associated with multiple sources of information. Both instructional tools also provide several supports so that teachers can facilitate discussion and debate. By discussing the facts and ideas in texts, students gain world knowledge, an essential component of reading comprehension (Kintsch, 1998; Murphy et al., 2009; Pearson et al., 2020).
**Vocabulary Instruction:** Both the Teacher Recommendations and the Teacher’s Guide identify academic vocabulary that teachers should introduce and reinforce with their students. Specific vocabulary activities are recommended in the Teacher’s Guide, and myriad vocabulary activities are available in the Learning Center. In addition, the Learning Center provides access to direct instruction lesson plans around morphemic (meaningful word parts) and contextual analyses. The Teacher Recommendations also flag words from the Academic Word List (Coxhead, 2003). These are academic terms that are common across disciplines, so they will help students develop the language they need for all their content-area classes and for college and career readiness. Exposure to academic vocabulary will benefit learners at all levels. Many of the academic terms are also SAT/ACT words.
How Achieve3000 Literacy Uses Research to Prepare Students for Success

References


Hattie, John, Identified vocabulary instruction and knowledge of word meanings as a teaching strategy with highly significant effects on student learning and performance, pp. 131.


To learn more about Achieve3000 Literacy, please contact 1-800-838-8771 or visit achieve3000.com

About Achieve3000

Achieve3000 delivers a comprehensive suite of digital solutions that significantly accelerate and deepen learning in literacy, math, science, social studies, and ELA. Using personalized and differentiated solutions, Achieve3000 enables educators to help all students achieve accelerated growth. For more than five million students in grades PreK-12, Achieve3000 improves high-stakes test performance and drives college and career readiness.