Top Five Ways Digital Resources Complement Core Curriculum

■ Introduction

From gaining easy access to supplemental resources to providing the right materials to students in the right moment, educators continue to grapple with meeting the needs of today's increasingly diverse students. Learning losses due to COVID-19 have made these hurdles more complex.

According to **McKinsey,** learning loss left students on average five months behind in math and four months behind in reading by the end of the 2020-2021 school year. However, research also shows that students who used digital supplements like a differentiated instructional literacy platform, excelled.

> **Highly engaged students using Achieve3000 Literacy achieved up to four times their expected reading growth during the pandemic.**
>
> **National Lexile Study 2020-2021**

"COVID pushed educators to grab technology and embrace it much more than they had before," said Ray McNulty, President, Successful Practices Network. "Otherwise, it would have taken us another 20 years to get where we are now."

According to Simba Information, the use of digital supplements—digital content used to support core curriculum, including software, games, and apps—is on the rise.

But the most effective digital resources go beyond simply supplementing instruction. Instead, adaptive, personalized digital supplements complement core instruction, allowing districts to bridge learning gaps, differentiate instruction, and accelerate growth.

❚❚ The proliferation of games as well as the overall digital supplement category is a function of the spread of technology, which has allowed teachers to expand their arsenal of resources for any lesson to meet students' individual interest and ability levels. What is beginning to take root is what teachers asked for more than a decade ago: the ability to choose and manipulate different pieces to address different issues for different students at different times. **❚❚**

Simba Information, Publishing for the PreK-12 Market 2020-2021

Why Complement Core Curriculum with Digital Resources?

1. Identify and Close Learning Gaps

When it comes to standards-aligned instruction, one of the biggest challenges teachers face is understanding which standards a student is struggling with, and then finding instructional materials to address students' strengths and weaknesses. This becomes especially difficult in classrooms with diverse learners who are at different levels of standards mastery.

For example, in Achieve3000 Literacy, a digital learning solution that accelerates literacy growth for students in grades 2-12, lessons and differentiated content align to standards while assessments measure mastery of those standards. Teachers can access standards reporting to help them understand which benchmarks a student has mastered, where they need more help, and suggested lesson assignments to address those learning gaps.

In Actively Learn, an ELA, science, and social studies curriculum platform for students in grades 3-12, embedded multiple-choice and short-answer questions also address specific standards as students read, and teachers can see how students are answering these questions in real time. Teachers can even intervene before the student has completed the assignment. For short-answer questions, students who don't answer correctly the first time can receive immediate teacher feedback and revise their answers to earn a Proficient or Advanced score from the teacher.

"When we use digital resources, we can track student performance against standards over time, allowing us to have collaborative conversations with students, teachers, and parents based on specific data points," said Dr. Julie Morrow, Director of Leadership Advocacy, McGraw Hill.

For early learners, the data and these conversations are especially important in getting parents involved in their children's learning from the beginning—and for ensuring students get the most relevant content and the support they need to move forward.

❝ If you're marching through a scope and sequence within whole class instruction, and you're covering standards, there may be gaps that you're missing. Digital supplements allow you to get some of that diagnostic information at the student level and provide resources to help you specifically address those gaps. ❞

Steve Tardrew, VP of Assessment and Research, McGraw Hill

❝ Students who enter a school setting for the first time come in with different levels of ability. Teachers need to be able to define their ability level and provide differentiated instruction, so students can grow… It's like having a second set of eyes to assess how students are doing and provides another layer of instruction without adding a lot of planning time. ❞

Rebecca Carter, Title I Pre-K Instructional Specialist, Virginia Beach City Public Schools, VA

Bridging Learning Gaps for Early Learners

At Virginia Beach City Public Schools, teachers use Smarty Ants, a multisensory, adaptive literacy solution for early learners, to bridge learning gaps without taking away from teacher planning time. Teachers can look at reports in Smarty Ants, see where there's a deficit, and click to find resources to meet the specific needs of each child. For example, if a teacher notices that a student is struggling with a particular word family, they can view that student's progress and reset them back into that level to review the word family.

2. Accelerate Growth

Getting all students back to engaging with grade-level curriculum following the pandemic presents a huge challenge for schools and districts across the country. And while remediation—in which struggling students are pulled out of class to work on skills development—has been the default model for getting students up to grade level, many in the industry have called out its shortcomings.

Research from TNPT shows that giving students work that is better suited for earlier grades "practically guarantees they'll lose more academic ground and get even less access to grade-level work in the future." The **National Center for Learning Disabilities** states that "time spent away from their general classroom results in less engagement in grade-level curriculum."

Rather than focusing resources on remediation, **state and federal funding** has been directed toward efforts to accelerate student learning. Accelerated learning means providing just-right, just-on-time learning scaffolds to help students steadily improve performance. Accelerated growth is any growth above a student's expected growth.

For example, a differentiated instructional solution like Achieve3000 Literacy includes embedded assessments and automatic content matching to increase complexity when students are ready, and move their Lexile measures up level by level. According to the National Lexile Study, "providing tools to accelerate growth will be essential in helping to address learning loss."

> **Highly engaged learners using Achieve3000 Literacy achieved 3.6 to 4.4 times their expected reading growth across all learning environments.**
>
> **National Lexile Study 2020-2021**

Students Highly Engaged in Actively Learn Achieve Higher Lexile Scores

In a national study of 17,285 students, researchers found that when students with a "high" grade (average score of 75%+) are strongly engaged with Actively Learn, they achieve greater reading gains— as gauged by their Lexile measure in Achieve3000 Literacy. According to the study, it's significant that Actively Learn's embedded multiple-choice and short-answer questions in ELA, science, and social studies require students to engage with the instructional content and respond with evidence-based answers to receive the highest scores.

National Lexile Study, Actively Learn + Achieve3000

When teachers have the ability to constantly monitor and evaluate what's working and what's not working for a specific student, teaching becomes more intentional, focused, and strategic, paving the way for progress and growth.

" The biggest success I've seen with Achieve3000 Literacy is the amount of growth across the board, from our most struggling to our most advanced readers. We've seen some kids reaching 150% to 250% growth, which is really incredible. "

Adrianna Ramirez, 6th Grade Teacher, Liverpool School District, NY

3. Provide Personalized, Adaptive Learning Opportunities

According to the **2020-2021 National Lexile Study,** "students will benefit greatly if schools and districts can continue to provide them with personalized and adaptive learning opportunities" to counter learning losses due to the pandemic. Using a personalized, adaptive learning model, content and experiences are adapted to fit a student's strengths and areas of improvement, while allowing them to learn in their own way, at their own pace, and in the environment that best suits them.

However, most teachers don't have the time or resources available to provide these opportunities to every student. Digital supplements can lighten the load for teachers, providing personalized, adaptive pathways for students to follow and maximizing independent practice time.

For example, students working with Achieve3000 Literacy begin with a benchmark assessment called LevelSet at the start of the year. Based on that assessment, they're presented with differentiated text matched to their Lexile level. They complete activities and assessments along the way and are autom atically presented with more complex texts based on their performance, allowing them to grow month by month.

" **Digital supplements vary in the ways and extents to which they personalize instruction for each student. The most effective solutions allow students to access information and instruction as each student needs, when that student needs it, progressing at the pace the individual student needs. They also incorporate embedded assessments, automatically adapting content based on student performance. "**

Andrew Ordover, VP of Product Development for Literacy Solutions, McGraw Hill

Helping Students Take Charge of Their Learning Through Personalized Experiences

Six years ago, Rowan-Salisbury Schools in Salisbury, NC, set out to engage students in their own learning. With a focus on literacy, they chose Achieve3000 as their partner. Through personalization offered by Achieve3000 Literacy, children were able to access thousands of articles on their personal reading level, enabling the district to capture student interest and engage them in the process of reading.

Providing access to appropriately leveled reading materials immediately evened the playing field for all students, while anytime access to articles empowered them with the tools to explore and discover the joys and rewards of reading. Students also engaged in the Career Center, where they used the potential career pathways of their choice to help them establish personal reading goals. Because the Career Center outlines the Lexile measures needed for specific areas of interest, students were able to able to connect reading growth with future opportunities in a powerful, tangible way.

"All aspects of implementation promoted and supported our children in reaching their personalized goals," said Dr. Julie Morrow, Director of Leadership Advocacy, McGraw Hill and former Assistant Superintendent of Curriculum at Rowan-Salisbury School. "This level of commitment and individualization promoted a culture of literacy and supported our children in achieving their highest levels of success."

As a result, Rowan-Salisbury Schools exceeded the expected student Lexile growth over the past six years and created a culture of literacy for their community.

Read the article

4. Provide Equitable Access to Adaptive Content

As classrooms become more diverse, it's important to provide equitable access to learning through culturally relevant materials. At Howard County Public School System in Maryland, teachers use Actively Learn to provide differentiated learning opportunities for students in English language arts, science and social studies classes while tracking student interaction and engagement.

"With Actively Learn, ESL teachers are excited about what they can offer their students and can see that students actually accessed what they offered," said Nancy Czarnecki, Curriculum Coordinator for Secondary Language Arts at the district. "Special education teachers appreciate that they can track the success of students with data, which helps us meet the goals that IEPs outlined for students."

In addition, when students can see themselves in learning materials, they're more engaged and inspired. According to research, higher engagement leads to larger learning gains across racial and ethnic groups.

> **Students of all racial and ethnic groups experienced strong acceleration when highly engaged with Achieve3000 Literacy.**
>
> **National Lexile Study 2020-2021**

Through digital supplements like Achieve3000 Literacy and Actively Learn, students can access engaging, timely content that's differentiated to their reading level, culturally relevant, and aligned to standards across age groups and subject areas, including current event news articles generated a day or two after an event happens.

"Providing the most relevant, up-to-date personalized content to students is only possible through technology like Achieve3000," said Steve Tardrew, VP of Assessment and Research, McGraw Hill. "The idea of pulling and compiling all kinds of print materials in the same way, on that kind of scale, and that quickly would be very overwhelming for teachers."

Think about an elementary, middle, or high school social studies or science class. With digital supplements, teachers can integrate engaging articles that align to standards into their group instruction and have a class discussion, or give students the choice to select their own articles at their differentiated reading level.

For example, Actively Learn's ELA curriculum units include diverse voices in the following collections: Asian and Pacific Islander History and Literature, Black History and Literature, Indigenous History and Literature, LGBTQ History and Literature, Latino/a History and Literature, and Women's History and Literature. Actively Learn also includes content on diverse holidays and celebrations for a more inclusive learning environment.

Meeting the Needs of English Learners Through Differentiated Content

With more than 1400 students speaking 39 different languages, educators at Gilbert Spruance Elementary School in Philadelphia, PA, faced a unique opportunity to meet the literacy needs of their diverse student population.

"Whether a student is fluent in English or is coming to us learning English as a second language, we support the individual and help them discover and celebrate their strengths," said Danielle Murray, school-based teacher lead for literacy at Gilbert Spruance Elementary. One of the ways they do this is through the Achieve3000 Literacy platform, which allows them to track students' reading growth and automatically provide content that matches students' reading ability as they progress.

In their first year using the platform, seventh-grade students exceeded the standard for PA academic growth, with English learners in grades six and seven also exceeding the standard for academic growth.

Achieve3000 Literacy data showed that when students used the program with regular frequency, 56% of them exceeded their expected reading growth.

"Through a mix of actionable data, differentiated instruction, and recognizing successes, we have been able to accelerate literacy, drive positive outcomes, and help students discover a love for reading," said Danielle Murray, school-based teacher lead for literacy.

Read the article

5. Simplify Instruction with Flexible, Easy-to-Use Tools

With today's teacher shortages, teachers are being asked to cover multiple classes, which leads to loss of planning time. The right digital supplements allow teachers to pull quality materials and resources that support what they're teaching, align to standards, and address student needs—all without requiring hours and hours of extra planning.

"While digital supplements may take some time to set up and ensure that all students have access, good ones are fairly simple to access and use once set up," said Andrew Ordover, VP of Product Development for Literacy Solutions, McGraw Hill. "There's no need to grab books off shelves, figure out who needs what, or open boxes and distribute resources."

The best tools make it simple for teachers to implement in a range of environments—from 1:1 classrooms to those with only a projector connected to a single laptop. They also allow students to work independently or collaboratively, in a computer lab, from a cart or on a tablet. In addition, effective digital supplements can facilitate a range of instructional models including whole group, small groups, pair/share, and one-on-one, while allowing teachers to adapt instructional procedures, pacing, and priorities to meet the needs of students.

Meeting the Needs of Diverse Students Through Differentiated Instruction

English learners at Ysleta Independent School District were not progressing into general education classes as quickly as they needed to ensure success after high school. The district was looking for a way to teach English learners subject area content knowledge while filling gaps in English language vocabulary and comprehension. Educators also needed the ability to adjust lesson plans, assignments, and topics as needed, according to the classroom environment and students' unique capabilities and skills.

Using Achieve3000 Literacy, the district has implemented a systemic approach to differentiated instruction and has seen a 12% decrease in the number of English learners whose Lexile measures fall below grade-level college and career readiness expectations.

"That is what I really appreciate about Achieve3000 Literacy: there isn't any script," said Louisa Aguirre-Baeza, Director of Academic Language Programs, Ysleta Independent School District, TX. "We have that flexibility to target what we need to target, tie it to thematic units within our curriculum, and/or pick and choose certain articles that are either high-interest or related to the content that we're teaching. To me, that's what makes it the best, because it's accessible to students at any given time with flexibility for both the teacher and the student."

Read the article

Best Practices for Complementing Core Curriculum with Digital Resources

The most effective digital solutions go beyond just supplementing instruction. Instead, they complement and elevate your core curriculum. Here are best practices from educators on how to use personalized digital solutions to complement instruction.

■ **Incorporate digital supplements in both whole- and small-group instruction.**

"We'll do a group lesson that might include finding the main idea, or introducing vocabulary, and use our Promethean board to see it in a large format. When the lesson is over, students do their own lesson on their iPad at their reading level that is differentiated. There are a million articles and a million ways to drive home the focus skill, at every child's ability level."

Deb Drysdale-Elias, Principal, Carver Elementary School, AZ

❞ **Technology is most effective when it's integrated into instructional practices. It's not just students hunkered over a computer at their desks with no collaboration or conversation.** ❞

Dr. Julie Morrow, Director of Leadership Advocacy, McGraw Hill

■ **Integrate technology into a gradual release model.**

"Have students work in small groups and release them to do independent practice based on small-group instruction. Blend in face-to-face time with the teacher and allow them to work independently at their own pace, time, and place."

Dr. Julie Morrow, Director of Leadership Advocacy, McGraw Hill

■ **Use data to provide personalized, standards-aligned instruction.**

Teachers can use digital tools to pull reports on how students are performing to literacy standards and identify struggling students. During class, the teacher can have one-on-one conversations with these students while the others use digital resources at their tables or with a partner to work on standards they need to improve. After working on their own learning pathways or choice boards, students then meet with the teacher to show and report their progress.

Dr. Julie Morrow, Director of Leadership Advocacy, McGraw Hill

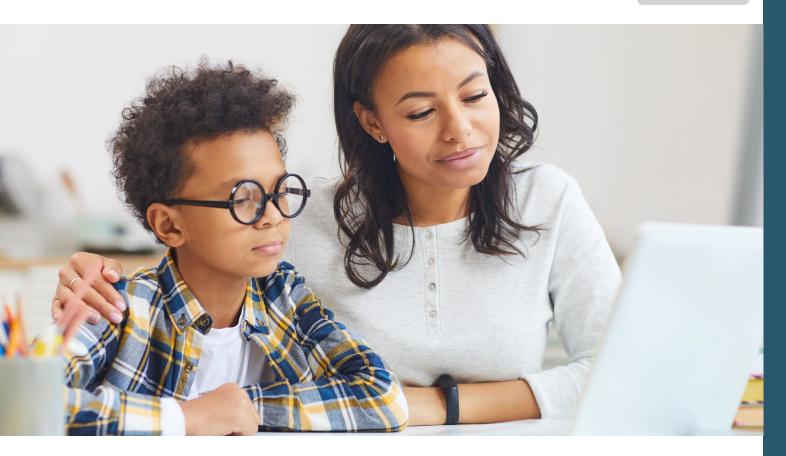■ **Teach early learners technology basics and digital citizenship.**

"The youngest students need to be taught how to use devices safely, not to share personal information or talk to strangers, and only go to apps they're instructed to use. They should also know how to plug devices in safely, how to tap, scroll, and swipe, and how to ask for help."

Rebecca Carter, Title I Pre-K Instructional Specialist, Virginia Beach City Public Schools, VA

■ **Use technology purposefully.**

"Screen time is a big issue in our district. Our policy is that screen time shouldn't exceed the duration of three times the age of the student. So, students who are four years old should have no more than 12 minutes of screen time per day. This means we need to use technology purposefully. A personalized program like Smarty Ants helps us do this. It takes the work out of finding appropriate materials for students to use."

Rebecca Carter, Title I Pre-K Instructional Specialist, Virginia Beach City Public Schools, VA

Complement Your Curriculum for Higher Learning Gains

More than just digital supplements, personalized solutions like Achieve3000 Literacy, Actively Learn and Smarty Ants are mission-critical to the effectiveness of core instruction. These solutions do more than act as helpful extras. They're a true complement to instruction.

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

About Achieve3000

Achieve3000, a McGraw Hill company, 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.