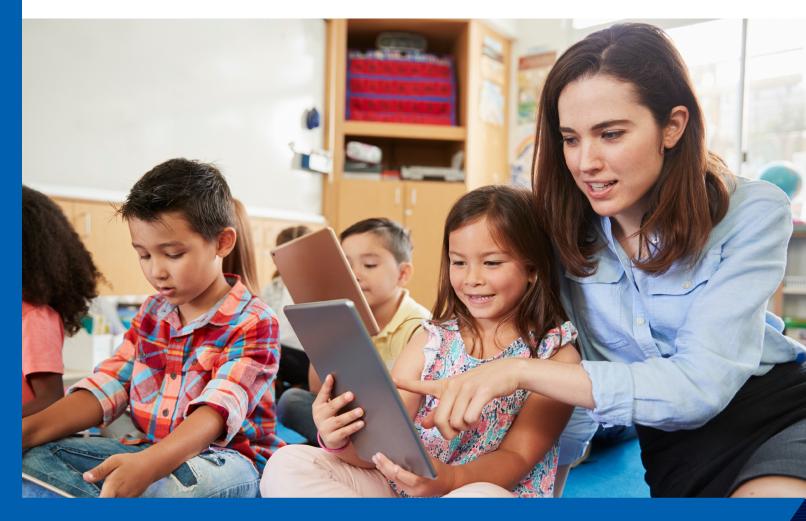
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Solving Today's Literacy Challenges with Audio Technology

In one of the most demanding school environments in memory, educators need more support. Providing them with expanded tools and technologies helps ensure students are reading at proficient levels, which is key to academic success.

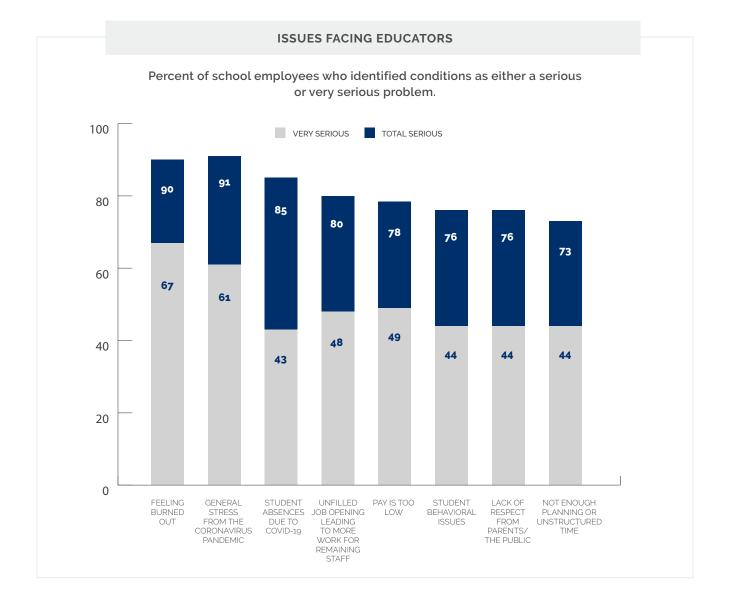
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Introduction

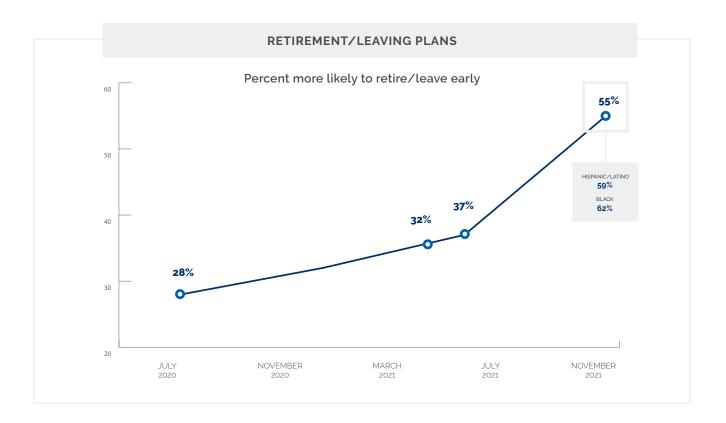
Educators today are facing unprecedented challenges at every turn: Slashed budgets. Student absences. Teacher burnout. A pandemic.

In the middle of the most demanding school environment in recent memory, nearly every community is experiencing critical staffing shortages, affecting teachers' and students' performances and mental health. Nearly three-quarters of educators have taken on more responsibilities due to staff shortages, according to the National Educators Associations' most recent survey¹. Meanwhile, 90% reported feeling serious burnout.



This has led to 55% of members reporting that they aim to leave education earlier than originally planned — up from 37% at the start of the 2021 school year, with even higher rates among BIPOC educators who are already underrepresented in the education system².





Beyond staff shortages, many schools are also facing new budget trouble. Public K-12 school funding already declined dramatically in many states after the Great Recession, with nearly 60% of states providing less total school funding per student pre-pandemic than in 2008, before most students were even born³. Today, state budgets have been recalculated due to lower tax revenue and increased spending on unemployment and other services amid COVID; because states contribute about half of all public-school funding nationwide, cuts have come for school funding.

Staffing shortages and budget cuts have far-reaching consequences across communities. The academic performance of students in low-income districts fell even further behind over the past two years. Studies have shown that students learned much less during remote lessons during the pandemic, with direct impacts on literacy and reading levels⁴. Research from the University of Virginia found that approximately 35% of K-2 students in the state scored below their expected levels in fall 2021 — an "alarming" 20-year low, according to the researchers⁵.

These intersecting crises in today's schools have exposed and amplified inequalities across society, from poverty to race to disability to geographical isolation. Lower-income students, students of color, and students with learning disabilities are more at risk of reading and writing deficiencies, are less likely to graduate high school, and have less earning potential as adults. In addition, in schools, less proficient readers are prone to emotional distress and frustration, leading to disruptive behavior in classrooms.

Research shows that teachers who work in more supportive school environments are able to more effectively raise student performance on assessments

Schools are often already ill-equipped to deal with struggling students. But research shows that teachers who work in more supportive school environments are able to more effectively raise student performance on assessments, as compared to those who do not⁶. Today's educators need far greater access to resources and support in order to ensure successful academic outcomes. Expanding teacher capacity is critical to prevent the worst potential impacts of these massive disruptions across society.

Supporting Struggling Readers is Key to Improving Conditions for All

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Literacy is the foundation of overall educational success. Reading skills are the gateway to success in every classroom subject - the need to read is not limited to their English Language Arts classes; literacy skills are essential in math, history, and all other content areas. Beyond the classroom, literacy is an essential daily life skill needed for reading everything from road signs to store labels to nametags. Not being able to read has a profound effect on our self-esteem, social-emotional skills, and imagination.

Yet in 2019, the most recent national reading assessment, 65% of American fourthgrade students read at a level considered below proficient⁷.

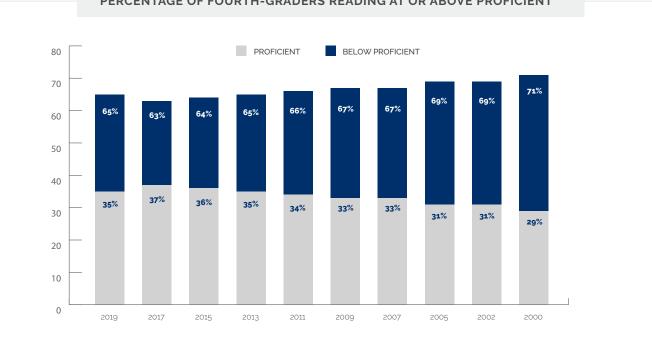
to their English Language Arts classes; literacy skills are essential in math, history, and all other content areas

The need to read

is not limited

Literacy skills, including listening, speaking, reading, and writing, can be some of the most difficult to support because students can fall on such a wide spectrum.

Students enter school at varying levels of preparedness for reading, and usually spend the first few years of school "learning to read." If reading skills aren't developed by around grade 4 when education begins to focus on more complex and higher-order thinking skills, studies have shown that students rarely catch up with their peers to become fluent readers.



PERCENTAGE OF FOURTH-GRADERS READING AT OR ABOVE PROFICIENT

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Common struggles for students when learning to read include reading comprehension, or the ability to mentally process written words and understand what they mean in order to integrate these new concepts with past knowledge. Some of these challenges begin with problems with "decoding," or the ability to sound out written words and recognize familiar word parts. Other students have difficulties mechanically processing words, if the ability to visualize and conceptualize language and information is not natural. Still more students have issues with vocabulary, or knowledge of words, as well as overall structure (morphology), use (grammar), meanings (semantics), and links to other words (word/semantic relationships).

These problems do not arise in a vacuum: factors that can also affect students' literacy levels and vocabularies include learning disabilities, limited English language skills, lack of access to reading material, and lack of resources or support in schools and at home. Poverty and low reading proficiency can also be a perpetuating cycle. Childhood poverty tends to be intergenerational, as 73% of children whose parents do not have high school diplomas are in low-income families⁸. Research shows that a lack of early childhood support directly impacts students' success rates later on. The number of words a child hears before entering school, for example, and whether or not a child is exposed to reading at home, significantly affect a child's reading preparedness. Since 60% of low-income families in America can't afford books, many children start early at a disadvantage⁹.

When children struggle with reading, due to different individual factors leading to unique specific challenges, they need varied support systems. None of these challenges are insurmountable — the better each student's literacy challenges are recognized and addressed, the easier their path to success will become.

The struggles of individual students can lead to lower overall school system performance on assessments, resulting in student, parent, and teacher stress, and ironically, even deeper budget cuts. Many schools that do not perform well on national assessments are already under-resourced, in low-income and/or rural communities. These schools need efficient, research-proven support to supplement struggling students' learning.

Solving Today's Literacy Challenges with Audio Technology

The data suggest that schools and districts wishing to improve reading performance need solutions that enable educators to deliver evidence-based reading support to their students who struggle to read. As children age and learning shifts from "learning to read" to "reading to learn," support can mean the difference between learning from reading or suffering sustained academic failure. To empower students to not only be able to read but also to want to read, a holistic approach — offering intensive care for the most at-risk students and specialized attention for those with moderate literacy needs — is key.

At Learning Ally, we embody this approach by using a "Whole Child Literacy" method to provide educators with effective, science-backed solutions that support struggling readers in any classroom. Whole Child Literacy builds on "whole child" pedagogy and encompasses a variety of factors that impact a child's ability to learn to read proficiently, including:

- Brain-based reading instruction;
- A child's cognitive factors; and
- The environments, in school and out, in which a child develops.

The <u>Learning Ally Audiobook Solution</u>, composed of high-quality, human-read audiobooks and a suite of teacher resources to monitor and support student progress, is designed to turn struggling readers into engaged learners.

With a library of more than 80,000 culturally relevant, curriculum-aligned audiobooks, our Audiobook Solution has all the books students need to read as well as the ones they will want to read for fun. The Audiobook Solution levels the playing field by allowing struggling readers to access grade-level content aligned to their cognitive level rather than their reading ability so they can develop essential vocabulary and background knowledge, and accelerate their learning.



All of Learning Ally's audiobooks are human-read, most by trained voice artists, so students can hear the prosody of the writing as intended by the author and experience a true model of fluency. They feature culturally appropriate artists whenever possible while content area experts record textbooks. Human-read audiobooks make all the difference, supporting students with auditory processing issues who might otherwise have difficulty deciphering synthetic, computer-generated words.

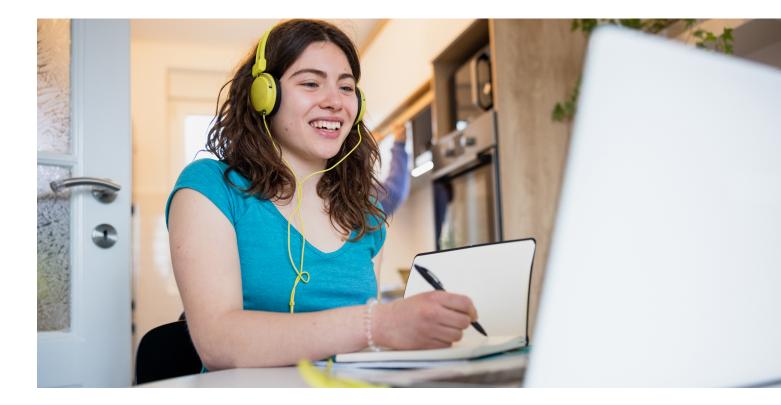
With a library of titles that includes popular fiction and series, classic literature, textbooks, and more, students of any age are sure to find something that interests them. They can even download books directly to their device to read offline, providing anytime, anywhere access — so students who might lack WiFi connectivity at home can still continue their learning.

The Learning Ally Audiobook Solution's library of audiobook titles includes all books aligned with Bookworms, Wit and Wisdom, and other popular curriculums

The Audiobook Solution also includes tools to track how many pages a student has read as well as the amount of time spent reading, so teachers can track student progress and hold them accountable for time on task.

The benefits of differentiation are well-documented, but many educators are stretched too thin to create new lesson plans for every student. The Learning Ally Audiobook Solution allows students to set their own reading pace and control the size, spacing, and brightness of the font, customizing the experience to their learning needs and supporting teachers' in-classroom capacities. Built-in progress monitoring and the ability for educators to communicate directly with their students make providing differentiated instruction a breeze.

In many classrooms, there is only enough time to do close reading activities with short books or excerpts of long books. The Learning Ally Audiobook Solution's library of audiobook titles includes all books aligned with Bookworms, Wit and Wisdom, and other popular curriculums; they can be used in classrooms, and then, struggling readers can finish books independently, saving valuable class time for discourse and critical thinking exercises.



While audiobooks can't replace practicing reading with decodable text, the Learning Ally Audiobook Solution's read-along highlighted text feature helps model fluent reading. It also allows struggling readers to consume the same books as their peers, so they can confidently participate in class discussions. To ensure students understand what they read, the Audiobook Solution includes student-centric features like embedded dictionaries and annotation capabilities. This allows students to easily look up new words and practice summarizing what they have read without leaving the audiobook app. Teachers can even review their work from a simple dashboard and follow-up if they see any cause for concern.

Proven Research

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A great deal of academic research into the efficacy of audiobook support for literacy skills exists. Audiobooks have long been considered an alternative for access to literacy especially important for readers with physical and cognitive difficulties, but they can support every reader in their reading journeys.

For example, one study found that read-aloud or audiobooks can introduce new vocabulary and concepts, provide a fluent model for students to emulate, and allows students access to literature that they are unable to read independently¹⁰.

Furthermore, numerous studies point to the benefit of audiobooks as a remedy for student disengagement with reading ¹¹ ¹² ¹³ ¹⁴.

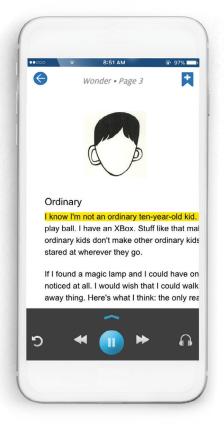
In addition, listening to books can benefit readers in different age groups in various ways. For younger children, researchers found that a "word gap" exists between children from low-income homes and high-income homes,

and hearing new vocabulary in books out loud exposes children to a higher quantity of spoken sophisticated vocabulary^{15 16}.

As for older students, researchers found that the relationship between listening and reading comprehension strengthens after second grade, around when students begin to master their decoding skills¹⁷. Studies on middle and high school readers found that the influence of listening comprehension on variance in reading comprehension continues to grow over time¹⁸. More research found that audiobooks can be used with adolescent readers to improve their reading fluency, expand their vocabulary, develop their comprehension, and increase their motivation to interact with books¹⁹.

Commissioned efficacy studies of the Learning Ally Audiobook Solution's impact on struggling readers when implemented with fidelity, include:

- · Increased vocabulary, fluency, and comprehension;
- · Greater self-confidence, motivation, and classroom engagement; and
- Higher assessment and high-stakes test scores.



Audiobooks have long been considered an alternative for access to literacy

Double the Rate of Reading Growth

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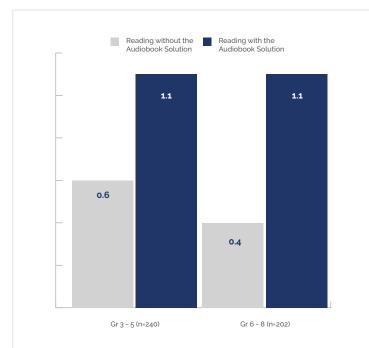
In 2017, a large Denver school system turned to Learning Ally to support their students who were at risk of falling behind because they struggled to read grade-level text. Looking for ways to tackle inclusivity and accessibility in their schools, administrators chose the Learning Ally Audiobook Solution to offer students supplemental help reading. Students used the Learning Ally Audiobooks App to download books and read, thereby developing essential comprehension and background knowledge necessary to make progress in their education. Educators used the Learning Ally Educator Portal to help students select books and monitor their progress during school and throughout the summer.

Students in grades 3-8 were evaluated over a series of three benchmark assessments during the 2018-2019 school year. Learning Ally compared students' performance on the STAR Assessment and the extent to which they demonstrated fidelity of implementation — or reading with frequency (at least 20 minutes a day for 33 days) — showing correlations to reading level performance. Approximately 800 students attending 34 schools were included in the sample.

The results were very significant: Prior to using the Learning Ally Audiobook Solution, educators in the Denver school system could expect to improve reading levels among typical students who struggle to learn due to neurological differences in reading at a rate of about 0.4-grade levels of improvement.

Students who engaged with the Audiobook Solution ... typically achieved about double the rate of reading growth

When examining students who engaged with the Audiobook Solution at rates indicative of reading with frequency, they typically achieved about double the rate of reading growth (0.9).



Learning Ally Evaluation Study, n=1,500 students Gr 3-8, based on SY 2018-2019, STAR Assessment In addition to students making about double the rate of reading growth, the probability of students achieving a full grade level of reading growth was almost twice as likely to occur when students were engaged in reading with the Audiobook Solution at rates approaching reading with frequency.

In particular, the Learning Ally Audiobook Solution supported specific literacy skills at ageappropriate levels. For younger students, the Audiobook Solution builds fluency, vocabulary, and comprehension. For older students, the Audiobook Solution allows them to keep pace with class and work to their capability.

Educators, students, and families throughout the study experienced the benefits of student reading achievement, including academic success, heightened motivation, reduced frustration, and a culture that fosters a joy and celebration of reading.



Conclusion

Working in education has always been a labor of love — and one of the most difficult and undervalued professions in America. Our current education system is facing intersecting crises on nearly every dimension, with potential impacts for generations to come. Educators need far more support inside and outside of the classroom in order to protect academic achievement for students, especially those already vulnerable. When students fail to learn to read or keep up reading, it perpetuates inequality far beyond the classroom. The Learning Ally Audiobook Solution is not just an audiobook — it's a researchbacked resource for today's classrooms.

The Audiobook Solution can help both teachers and students overcome these crises. Audiobooks can be another tool in the toolbox to expand teacher capacity, enable classroom cohesion, provide scaffolding for learning, and empower student success. The Learning Ally Audiobook Solution includes a host of student-centric programs to ensure engagement and successful ongoing implementation, as well as a suite of reporting and progress monitoring tools for teachers to help manage assignments, track student reading, and provide updates to parents and administrators. The Learning Ally Audiobook Solution is not just an audiobook — it's a research-backed resource for today's classrooms.



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Learning Ally is a leading nonprofit education solutions organization dedicated to equipping educators with proven solutions that help new and struggling learners reach their potential. Our range of literacy-focused offerings for students pre-k to 12th grade and catalog of professional learning allow us to support more than 200,000 educators across the us.

For more information, call 800-221-1098 or visit LearningAlly.org.