## Evidence-Based Exemplar



## Who We Are & What We Do

Amira Learning achieves measurable reading growth by delivering Science of Reading and curriculum coherence through the powerful synergy of AI and neuroscience.

Using advanced speech recognition and natural language processing technology, Amira listens to students read aloud, identifies reading challenges, and delivers micro-interventions based on reading and neuroscience research. Amira serves as a personal AI reading reading coach that gives teachers direct insights into student progress while providing students with immediate feedback and support. Amira is designed to identify reading difficulties early, track progress over time, and deliver evidence-based interventions that build foundational literacy skills. Amira's technology has been validated through many research studies, including multiple studies conducted by independent groups, demonstrating significant reading growths for students who use Amira regularly.

## How We Think About Evidence-Based in Our Design Process

Research-Based Foundation: We always start with the research. Amira is built on a deep scientific foundation, drawing from established pedagogical frameworks including the Simple View of Reading (Gough & Tunmer, 1986), Scarborough's Reading Rope (Scarborough, 2001), and the Active View of Reading (Duke & Cartwright, 2021). In designing a recent comprehension dialogue feature, our entire team—including everyone from the CEO to all of our AI engineers—began by reading and discussing "The Science of Reading Comprehension Instruction" (Duke et al., 2021) to ensure our initial design was firmly grounded in the pedagogy that the research suggested was effective for growing reading comprehension skills.

**Expert Collaboration:** Our design process begins with consulting literacy experts who provide critical guidance. Rather than theoretical discussions, we present concrete approaches for candid feedback. For example, we consulted directly with Dr. Nell Duke on our initial designs and received feedback that led us to make significant changes. This collaborative approach ensures we faithfully implement research-backed practices that drive meaningful student growth.

**Iterative User Testing and Co-Design:** We believe in rapid prototyping with our actual users. By putting early versions of features in front of students and teachers quickly, we gather critical feedback that shapes our development. This classroom-centered testing approach ensures our solutions work in real educational settings, not just in theory. Student engagement and teacher implementation feedback drive continuous refinement of the user experience.

**Rigorous Outcome Measurement:** We hold ourselves accountable to the mission through the comprehensive measurement of student growth. Our approach includes:

- Internal research investigating the relationship between usage and assessment outcomes (dozens of studies annually)
- External validation through independent third-party research
- Partnerships with Local Education Agencies (LEAs) and State Education Agencies (SEAs) to study the impact of Amira usage based on external and/or summative assessment data

When students don't demonstrate expected growth, we systematically investigate possible root causes and implement product improvements accordingly to ensure that Amira will consistently deliver significant literacy gains for all learners.



## Why Evidence-Based is Important in Our Product

It's simple: Our mission is to help students grow using the combined power of AI and reading science, and we take this mission very seriously. Student growth is our north star. Without a very dedicated and intentional focus on learner growth, AI will easily become the next flashy technology that looks cool but fails to deliver on its promise to move the needle. By centering our design process on the goal of producing measurable literacy gains, we ensure that the use of AI is aligned to this mission.

Honing in on growth creates accountability throughout our development process. From initial research through expert collaboration, user testing, and outcome measurement, we continuously ensure that our innovations will actually help children become better readers. Rather than implementing technology for its own sake, we harness AI specifically to address research-identified learning needs and pedagogical challenges in literacy development.

Focusing on student growth ensures that Amira Learning remains true to its core purpose: helping children become better readers through thoughtful AI application that's guided by science and continuously improved through real-world application and evidence.

"Amira has incredible potential to transform literacy instruction! Its ability to quickly and reliably provide actionable data through short AI-driven diagnostics is a game-changer. The real reward is the valuable instructional time recouped, allowing educators to focus on what matters most: improving student outcomes."

Maura Fegel, Director of Assessment and Accountability, Camden County School

