Stanford Accelerator for Learning

# UNLOCKING HUMAN POTENTIAL TIROUGIA ISINING

The Stanford Accelerator for Learning connects scholars and students across disciplines with external partners to create scalable, equitable solutions to the most pressing challenges facing learners today. Advances in artificial intelligence, technology, data science, and the brain and learning sciences are happening at incredible rates and transforming our ability to address these challenges and improve education. By leveraging these advances—and collaborating with partners in the public, private, and education sectors—we are working to improve outcomes for all learners, at all stages of life.

# A NEW VISION FOR LEARNING

### **About the Stanford Accelerator for Learning**

Learning is central to personal growth and associated with nearly every positive life outcome, including health, income, and happiness. The Stanford Accelerator for Learning is based on the belief that expanding access to high-quality learning experiences is one of the best ways to help people reach their full potential.

Housed at the Stanford Graduate School of Education, the accelerator brings together interdisciplinary teams of researchers, students, educators, entrepreneurs, advocates, policymakers, and community leaders to create new solutions to persistent and emerging challenges in education.

The Stanford Accelerator for Learning makes learning opportunities more accessible and beneficial for every learner. We believe that all learners have great potential and should have the opportunity to thrive.



# AN INNOVATION HUB FOR LEARNING

The Stanford Accelerator for Learning has identified six areas in urgent need of new ideas, evidence, and solutions. Breakthroughs in these areas have the potential to impact a wide variety of learners, transforming individual lives, communities, and societies at large. The following provides an introduction to these areas as well as select examples of the accelerator in motion.

### **Digital Learning**

All learners should have access to rich digital experiences that empower them to discover, grow, and connect. The accelerator is expanding our understanding of the different ways people learn virtually, enabling better designs that promote deep learning in a digital context and developing pathways to scale. The accelerator is leading cutting-edge research and solutions in artificial intelligence (AI) and education to transform teaching and learning in an ethical, equitable, and safe manner.

### **EMPOWERING TEACHERS**

MPowering Teachers is an AI-driven tool that helps educators better engage with students by providing feedback on their classroom interactions. Developed as a complement to conventional observation of classroom teaching, it offers personalized feedback that promotes effective teaching practices. MPowering Teachers also provides a novel way to gain feedback that is not possible through in-person observation by helping bring biases to light and precisely measuring the time and quality of interactions with students. Research shows that the tool increased teachers' use of beneficial teaching practices as well as student engagement and satisfaction.

### CLASSROOM-READY RESOURCES ABOUT AI FOR TEACHING (CRAFT)

The CRAFT AI literacy platform co-designs and publishes free and adaptable instructional resources to help high school teachers facilitate instruction in all subject areas to teach students how to explore, understand, question, and critique AI. Through CRAFT, the accelerator is preparing young people for an AI-powered economy—one in which AI literacy will be an essential skill.

# Learning Differences and the Future of Special Education

All people need access to learning opportunities that expand their ability to engage fully in life, but educators are often unprepared to teach the wide range of students in their classrooms. The accelerator supports breakthrough research, policy innovation, and inclusive leadership development that improve opportunities for children with diverse learning needs.

### **RAPID ONLINE ASSESSMENT OF READING (ROAR)**

ROAR, developed at the Brain Development & Education Lab at Stanford, enables school districts to assess their entire student populations for struggling readers in the time it currently takes to run a standard assessment on a single student. This new online tool transforms educators' ability to identify struggling young readers—previously a costly task requiring one-on-one time with a teacher or reading specialist. Moreover, it helps with detecting potential challenges and providing appropriate earlier interventions in a child's journey. In addition to lifting that burden, the tool is advancing research into the causes of reading difficulties in children.

### SANTA CLARA RESEARCH PRACTICE LEARNING PARTNERSHIP

Stanford and the Santa Clara Unified School District have partnered to co-design a K–12 campus focused on inclusive education. Located on a single campus, this 600-student elementary school, 1,000-student middle school, and 1,600-student high school will be a place where researchers work with teachers to develop instructional methods that harness neuroscience and leverage how the brain processes and retains new information. The site will also be a rich environment for preparing teacher candidates and current teachers and administrators to implement inclusive instructional practices.

### **Early Childhood Learning and Development**

Early childhood is the period of greatest brain, biological, and psychological development; 1 million new neural connections are formed every second in the earliest years. What happens at an early age affects lifelong health, learning, and behavior. The newly formed Stanford Center on Early Childhood, an initiative of the accelerator, takes a developmental and interdisciplinary perspective on early childhood.

### FILMING INTERACTIONS TO NURTURE DEVELOPMENT (FIND)

The interactions that young children have with their adult caregivers are key to early childhood development. Caregivers often intuit how to engage with young children, but these interactions can be challenging. FIND coaches have been recording caregiver-child interactions in homes, childcare centers, and pediatric care settings and playing video clips back to individual caregivers to reinforce supportive interactions. AI is now being used to help detect and analyze these interactions effectively. Recently, FIND launched a pilot of self-paced online courses that can reach a larger number of childcare providers.

### RAPID

Launched nationally in April 2020, the RAPID Survey Project initially gathered information about the well-being of young children and their caregivers during the COVID-19 pandemic. It represents a major shift in early childhood research, which has too often been difficult to understand and access. Moving beyond the pandemic, RAPID now captures and widely shares timely snapshots of families' experiences and has become a valuable source of information for practitioners, government agencies, and other stakeholders hoping to identify and address critical challenges for early learners, families, and educators.



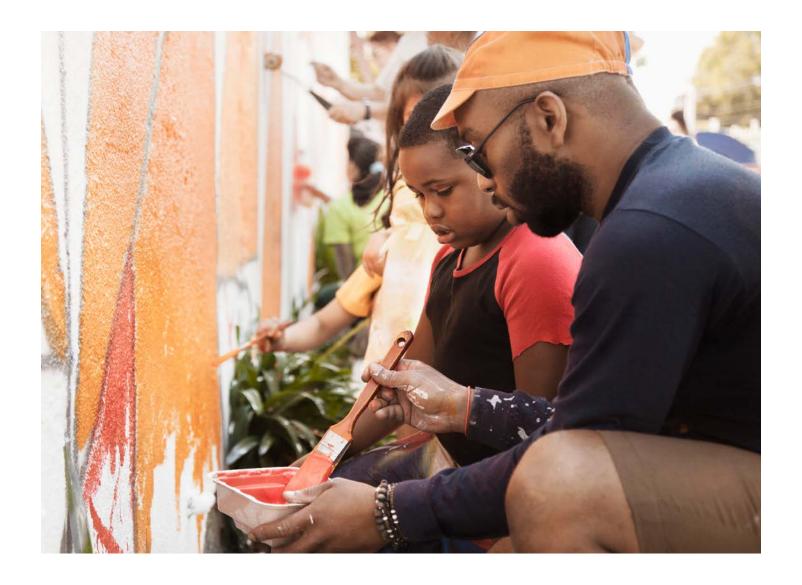
## Systems Change for Advancing Learning and Equity (SCALE)

The SCALE initiative aims to transform the landscape of educational opportunity by leveraging knowledge and insights for better education decision making. In addition to identifying and supporting new solutions, the Stanford Accelerator for Learning engages policymakers, district and school leaders, teachers, nonprofits, and industry to scale promising, evidence-based interventions across diverse issues in K-12 education.

### THE NATIONAL STUDENT SUPPORT ACCELERATOR

The National Student Support Accelerator (NSSA) is devoted to translating promising research about how tutoring can benefit students into action on the ground. NSSA provides comprehensive resources for those interested in implementing high-impact tutoring, introduces a framework for structuring tutoring programs to suit their communities, and builds on the body of evidence with new research and solutions.





# **EVOLVING THEMATIC AREAS**

### **Equity in Learning**

The recent pandemic further exposed deep gaps between those with access to educational opportunities and those without. While equity is embedded in every one of the accelerator's initiatives and guides our approach to learning, the Equity in Learning initiative will design solutions to address the factors that perpetuate educational disparities and analyze the roles of race, culture, poverty, community, and identity in learning and teaching.

### **Adult and Workforce Learning**

Learning does not end with the completion of a formal education. As technology races ahead, adults who can access new knowledge and skills will be far more likely to thrive. The accelerator is leveraging advances in technology, science, and design in partnership with companies and nonprofits to prepare working learners for dynamic opportunities throughout their lives.

# IT TAKES ALL OF US, INCLUDING YOU.

We don't just measure success by what happens at Stanford—our vision is to accelerate solutions to the most pressing challenges facing learners far beyond campus. When learners of all kinds flourish, it lays the foundation for a brighter future.

Solutions felt by all require help from all—we can't do this alone. When we come together across disciplines, expertise, and life experience, we make progress. Please join us.

The Stanford Accelerator for Learning is an initiative of the Stanford Graduate School of Education. For more information, please visit <u>acceleratelearning.stanford.edu</u>

### The Stanford Accelerator for Learning

520 Galvez Mall Stanford, CA 94305

Darcy Deming, Senior Associate Director for Development, Stanford Graduate School of Education darcy.deming@stanford.edu (650) 531-6034

**Stanford** Accelerator for Learning



# Stanford