

Stanford | Accelerator
for Learning

ANNUAL 2021-22 REPORT



Contents

1 Faculty Director’s Letter

2 Our Vision and Mission

3 Our Focus Areas

5 Research + Design

6 Research Projects

7 Digital Learning Virtual Field Trips

11 Early Childhood Learning

12 Learning Differences

14 Learning Partners

14 Workforce Learners

16 Digital Learning Design Workshop

19 Connection + Collaboration

20 Expert Exchange

21 Cross-Campus Partnerships

23 Convenings

25 People + Programs

26 New Leadership

28 Faculty Affiliates

30 EdTech Affiliates

30 Students and Postdoctoral Scholars

32 Leadership



Learning is one of the single most important levers available for improving the human condition



Dear Friends,

The 2021-2022 academic year was a time of pushing through the calamity and uncertainty of the pandemic to create new opportunities for our scholars, students, and partners to use their talents, expertise, and collaborations to improve learning for all.

Through in-person and online activities, we brought educators together to share ideas and knowledge. Our annual design challenge inspired our students to collaborate on new learning solutions and taught them how to develop ideas into scalable innovations. New grants facilitated interdisciplinary research through projects as varied as teaching forest conservation via a virtual field trip to studying academic coaching for students with ADHD. We piloted a new model of teacher professional development, where teachers came to campus to help faculty render their discoveries into usable form for classroom learners. And our industrial affiliates program fostered new networks across the education landscape.

I'm proud of our continuing effort to recruit and cultivate talent across our focus areas in digital learning, early childhood education, learning differences, and workforce learners. In the spring, Professor Philip Fisher joined the Stanford Accelerator for Learning to lead a new center on early childhood. We also launched a new post-doctoral program with the School of Medicine and the Graduate School of Education. The Digital Learning Initiative partnered with local K-12 classrooms to allow students to create their own virtual learning experiences.

The Stanford Accelerator for Learning also continued to develop infrastructure to support the creativity and experimentation of our scholars. Instructional designers and research and support staff assisted our faculty and students in various ways from building apps and designing curriculum to connecting with school districts and policymakers.

In the coming year, we plan to expand our ability to bring actionable insights into communities. There will be different pathways for different learning solutions, and it will be our goal to develop the most optimum course for maximum impact.

We will continue to bring in new partners and researchers, as well, building out each focus area.

We also expect to see more of you. A central component of the Stanford Accelerator for Learning is to create solutions with (not only for) all learners. We are looking forward to in-person gatherings large and small, co-organized with global partners, where we build relationships and learn from each other.

I've said often this year that there is a revolution underway in learning and Stanford is positioned to lead it. Our expertise in data, technology, and the brain and learning sciences — game changers that can break the general lassitude of education toward change — is unparalleled.

The Stanford Accelerator for Learning is strengthening ties across learning efforts at Stanford and facilitating exciting collaborations to super-charge development of solutions for the betterment of humanity. Thank you for being part of this important journey.

Sincerely,

A handwritten signature in black ink, appearing to read 'D. Schwartz'.

Daniel Schwartz

**Halper Family Stanford Accelerator for Learning Faculty Director
I. James Quillen Dean, Stanford Graduate School of Education**

OUR VISION

Accelerating solutions to the most pressing challenges facing learners.

OUR MISSION

Through collaborations across disciplines and with partners, the Stanford Accelerator for Learning leverages the revolution in brain and learning sciences, data, and technology to bring scalable and equitable solutions to all learners.



THREE COMPONENTS FACILITATE OUR WORK



Learner Centered

Recognize and understand the lives, cultures, and experiences of distinct learners



Science & Design

Discover how people learn best, and in what environments, and design tailored learning solutions.



Pathways to Impact

Create systems to move designs and discoveries into society as usable solutions

OUR FOCUS AREAS

Digital Learning

Create vibrant, meaningful, and personalized digital learning opportunities that deepen knowledge and expand access.

Learning Differences

Leverage recent breakthroughs to unlock the potential of children with diverse learning needs.

Early Childhood Learning

Launch a trajectory of well-being and high-quality learning during the early years of life.

Workforce Learning

Open doors to innovations, careers, and passions by providing workers access to new knowledge and skills.

Equity in Education

Create learning opportunities that support and lift students facing adversity and create pathways to lifelong success.



RESEARCH + DESIGN

The Stanford Accelerator for Learning brought together faculty and students from across Stanford to pursue promising projects that improve learning. Scholars designed virtual field trips that explored kelp reefs in Monterey and sites of slavery in South Africa to investigate how different modes of instruction impact learners. They also studied the intersection of disability and race, and looked at the history of policies around disabled students. Grants into the Accelerator helped fund a parent/caregiver assessment on the impacts of the pandemic on young learners, as well as a convening and report on the study of working learners, among other projects.

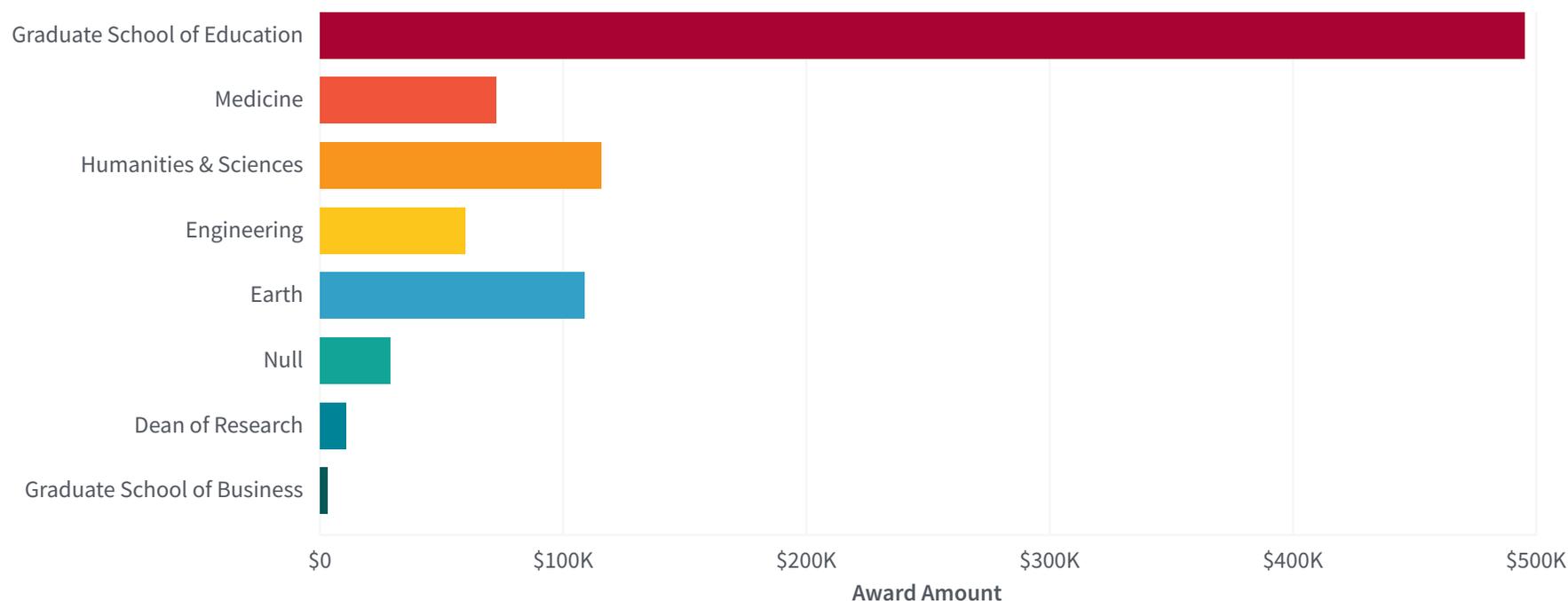
Additionally, the Accelerator funded an annual digital design challenge for college students. In an ongoing collaboration with StartX, the Stanford Accelerator for Learning hosted workshops on learning sciences, entrepreneurship, and educational technology. Teams competed for prototype funding.

Research Projects

The Stanford Accelerator for Learning funded 38 faculty, students, and staff on interdisciplinary teams to pursue concept-proving research. These teams received a total of \$896,909. The Accelerator also received funds to support new and ongoing research across our focus areas. The following pages list both types of projects.

Affiliation of Stanford Accelerator for Learning Seed Grant Recipients

Across Grants: \$ Per School Distribution in FY22



Sum of Award Amount for each Primary School. Color shows details about Primary School. The marks are labeled by sum of Award Amount. The data is filtered on Grant Type and Year Funded. The Grant Type filter keeps 6 of 6 members. The Year Funded filter ranges from 2022 to 2022.

Digital Learning Virtual Field Trips, Seed Grants

Tracking socio-ecological recovery after forest fire: The case of Big Basin

- **Nicole Ardoin**, Associate Professor, Doerr School of Sustainability, Senior Fellow at the Woods Institute for the Environment
- **Anna Lee**, Graduate Student, Emmett Interdisciplinary Program in Environment and Resources
- **Alison Bowers**, Consulting Researcher, Social Ecology Lab
- **Veronica Lin**, Graduate Student
- **Brandon Reynante**

Enhancing First Person Perspective for Learning in Virtual Field Trips

- **Larry Leifer**, Professor, Mechanical Engineering
- **Rebecca Currano**, Postdoctoral Research Fellow, Mechanical Engineering
- **David Sirkin**, Research Associate, Mechanical Engineering

Sustainability and (deep) geologic time...An amazing journey to help us understand our place and time on Earth

- **Elizabeth Miller**, Professor of Geological Sciences
- **Jason Craig**, Graduate student, Geological Sciences
- **Brenda Razo**, Filmmaker/videographer
- **Andy Wengst**, Filmmaker/videographer

Sites of Slavery

- **Grant Parker**, Associate Professor, Department of Classics
- **Shanaaz Gallant**, Curator of Iziko Slave Lodge
- **Dillon Gisch**, Graduate Student, Department of Classics and Stanford Archaeology Center
- **Gerald Groenewald**, Professor of History, University of Johannesburg
- **Jonathan Jansen**, Professor of Education, Stellenbosch University
- **Stefania Manfio**, Graduate Student, Department of Anthropology and Stanford Archaeology Center
- **Paul Weinberg**, Independent Photographer, Curator and Archivist

Conversational Learning with Learner-Created Virtual Environmental Field Trips

- **Roy Pea**, Professor, Graduate School of Education and (by courtesy) Computer Science
- **Aditya Vishwanath**, Graduate Student, Learning Sciences and Technology Design, Graduate School of Education
- **Jeremy Bailenson**, Professor, Department of Communication
- **Nicole Ardoin**, Associate Professor, Sustainability, Senior Fellow at the Woods Institute for the Environment



Reading the Book of Earth's History

- **Erik Sperling**, Assistant Professor of Geological Sciences
- **Lucy Webb**, Graduate Student, Doerr School of Sustainability
- **Ryan Petterson**, Doerr School of Sustainability
- **Maurice Colpron**, Yukon Geological Survey

Project VVRMA (Virtual CCRMA): Adventures in Computer Music Land!

- **Ge Wang**, Associate Professor of Music and, by courtesy, of Computer Science
- **Kunwoo Kim**, Graduate Student, Music/CCRMA, Stanford VR Design Lab @ CCRMA

Virtual dives and data collection in the kelp forests of Monterey Bay

- **Robin Elahi**, Lecturer, Biology, Hopkins Marine Station
- **Chris Garsha**, Senior Science and Engineering Technician, Stanford

Exchange Student Experiences for Everyone

- **Glenn Fajardo**, Lecturer, d.school
- **Carissa Carter**, Academic Director, d.school

ACED: Accelerating Creative Empathic Design Through Virtual Building Field Trips

- **Renate Fruchter**, Director of PBL Lab, Sr Research Engineer, Civil and Environmental Engineering

A VR “Museum-of-you” to Foster Positive Teacher-Student Relationships

- **Steve Juarez**, PhD student, Stanford Graduate School of Education
- **Teresa LaFromboise**, Professor, Graduate School of Education
- **Geoffrey Cohen**, Professor, Psychology and Graduate School of Education

Experiential Differences in Virtual vs. Physical Outdoor Sounds Installations

- **Julia Mills**, Master's Student in Music

Working Trees

- **John Foye**, MBA Student, Stanford Graduate School of Business and Master's Student in Environment and Resources
- **Aakash Ahamed**, PhD Student, Geophysics

Hidden Herbarium — A Trip to Stanford's Plant Collection

- **Eugene Tang**, Master's Student in Mechanical Engineering
- **Vicky Zhao Chan**, Master's Student in Learning Design and Technology, Graduate School of Education

UP CLOSE

Increasing Access to Marine Sciences

Home to various organisms like abalone, rockfish, and sea otters, kelp forests are made up of brown algae found in dense stemlike structures. A beautiful space for marine creatures to live in, they provide commercial and recreational value, and a prolific lab for research and learning about ecosystem complexities.

Since the 1970s, the Ecology and Conservation of Kelp Forest Communities course at Stanford's Hopkins Marine Station has provided students with such an opportunity. The marine scuba diving course consists of three main components: train the next generation of underwater scientists, teach the students species identification and natural history, and engage in the ecology of this ecosystem through hands-on long-term monitoring.

New this year? A project for students to use underwater video equipment provided by the Stanford Accelerator for Learning to capture transects as well as snippets of field sites and organisms. The footage will be used to make short movies of each explorer's life as an underwater ecologist and kelp forest scuba diver.



The video project's goal, says Robin Elahi, a lecturer at Hopkins and instructor of the course, is to increase access to marine science and give students anywhere the ability to learn about natural history and participate in the long-term monitoring of kelp forests in Monterey Bay.

The content these students create will also provide data for other researchers, as well as inspire prospective students to get out of their comfort zone and into the water.

Adapted from, "Underwater Stanford Scientists investigate the kelp forests," Stanford Report.

UP CLOSE

Walking in Their Shoes

Two virtual field trip projects allow participants to get a glimpse into how others live

The importance of hands-on learning is well understood. Generally, students retain more when they're interacting with the material, there's improved attention to the tasks at hand, students are encouraged to collaborate and work together, and the lessons are more fun.

But experiential learning is not always practical, affordable, or feasible. Two new projects of the Stanford Accelerator for Learning take this on. Keith Bowen, a researcher with the Digital Learning initiative, and Bryan Brown, professor of science education and an accelerator faculty affiliate, summarize their projects.

Keith: We have a team of faculty, students and teaching assistants from three universities (Stanford, Emory, and the Modern University of Business and Science in Beirut, Lebanon) creating a series of virtual refugee sites. The team is broken into subgroups and they're working together to create checklists and interview protocols to assess conditions at refugee sites in Lebanon. They capture their work in 360 videos that are used in global health classes at the universities.

In our early research, we're finding that students tend to feel that the virtual reality gave them a real sense of what it might be like in the refugee camps. Other students said the virtual experience increased their sense of persistence to help with the problem. I recall one student saying, "I could imagine myself walking in their shoes and viewing the size and layout of the tents ... You walk in the shoes of another and therefore you are more likely to empathize."



Bryan: Our project involved 10 high school biology teachers from across the country. Our project involved 10 high school biology teachers from across the country piloting two virtual field trip lessons. Our team interviewed a subset of teachers and students to learn about their experience.

The first experience was a virtual field trip to Tanzania to explore environmental efforts there. Second, students took a virtual field trip to Puerto Rico and created their own VR trips. Several key ideas emerged.

Many students described how the digital engagement helped them connect with science. Several students said the VR improved their ability to focus on the science being taught. But there were tech limitations. Several students reflected on how bandwidth negatively impacted their experience. This project is an extension of an ongoing line of scholarship examining the potential role of culturally relevant science technology.

Early Childhood Learning, External Grants

RAPID Survey Project

RAPID is an early childhood and family well-being survey that collects essential information from households and families with young children to provide actionable data to key stakeholders to inform immediate and long-term program and policy decisions. The RAPID survey utilizes an innovative approach that allows us to revise and add to the survey in real-time as circumstances for families evolve.

The FIND Professional Development Program

The Early Childhood team received funding to adapt the FIND Program (Filming Interactions to Nurture Development) to a professional development context. FIND is a highly effective video coaching program that facilitates responsive, supportive caregiving to significantly improve developmental outcomes for children from birth to five years old.

The Thriving Providers Project

This project works closely with the Health Federation of Philadelphia, providing technical assistance and evaluation for a series of pilot projects run by HFOP which provide economic stabilization to early childhood care providers.

Supporting Equity-Focused, Interdisciplinary, and Responsive Research in Early Childhood Care and Education: The Equity in Early Education (E3) Postdoctoral Fellowship Program

The two-year Equity in Early Education (E3) postdoctoral fellowship program trains scholars to conduct research that will contribute to more equitable and sustainable early childhood care and education systems.



Learning Differences, Seed Grants

Trans-Semiosis and Fairness in the Design of Testing Accommodations/Accessibility Resources for Students with Special Needs

- **Guillermo Solano-Flores**, Professor, Graduate School of Education
- **Ramon Martinez**, Associate Professor, Graduate School of Education

Bayesian Modeling of Individual Differences in Self-Directed Learning Based on Observed Attention Allocation Patterns

- **Nick Haber**, Assistant Professor, Graduate School of Education
- **Thomas Robinson**, Professor, Pediatrics, School of Medicine
- **Bryon Reeves**, Professor, Department of Communication
- **Nilam Ram**, Professor, Departments of Communication and Psychology

Searching for Solutions: DisCrit & Disproportionality

- **Subini Annamma**, Associate Professor, Graduate School of Education
- **Ralph Banks**, Professor, Stanford Law

Bridge to Learning - Academic Life Coaching for Students with ADHD

- **Victor Carrion**, Professor, School of Medicine
- **Chris Lemons**, Associate Professor, Graduate School of Education

Tuning into Learner Differences in Sensory vs. Integrative Experiences of the World: Crossing Boundaries of Speech and Music

- **Bruce McCandliss**, Professor, Graduate School of Education

Illuminating the Textures of Disability-Race Intersections: An Interdisciplinary Study of Larry P's Classification Trajectories

- **Alfredo Artiles**, Professor, Graduate School of Education
- **Mike Hines**, Assistant Professor, Graduate School of Education

Learning Differences, External Grant

Doctoral Training Program in Leadership for System-wide Inclusive Education (LSIE)

LSIE prepares next generation special education researchers to take on the most pressing issues facing education: (1) advancing equity for all; (2) improving learning outcomes for each and every learner; and (3) using cutting edge research techniques and practices to advance knowledge for practitioners, policy makers, and teacher educators.

UP CLOSE

Helping Schools Spot Struggling Readers

Identifying struggling young readers can be a time-consuming and costly task for schools, requiring a teacher or reading specialist to sit with students one-on-one to gauge their proficiency as the child reads aloud.

A new online tool developed at a Stanford lab lifts that burden without compromising any of the reliability of one-to-one assessments while advancing research into why some kids have trouble with reading in the first place.

The Rapid Online Assessment of Reading (ROAR), developed at the Brain Development & Education Lab at Stanford, introduces a way for school districts to assess their entire student population for struggling readers in the time it currently takes to run a standard assessment on a single student.

It is among the projects of the Learning Differences initiative at the Stanford Accelerator for Learning, which also helped facilitate the use of ROAR with schools and other partners.

In addition to giving teachers useful insight into the challenges a particular student faces, the collective data generated by the assessment is helping to further the lab's research into factors linked to learning differences in young readers.

“With the ROAR, schools and clinics can assess and monitor kids’ progress at a scale that just wasn’t possible before,” said Jason Yeatman, an assistant professor at Stanford Graduate School of Education (GSE) and the School of Medicine, who directs the Brain Development & Education Lab. “And because the tool is tied to research that’s ongoing, it gives us data that can answer a lot of questions about the mechanisms of reading development — data that can help us understand why some kids struggle and others don’t.”



Learning Partners, External Grant

Building a Professional Learning Community for National Education Equity Lab Teachers

The Stanford Accelerator for Learning provided professional development and support to teachers from Title I high schools participating in a pilot program in which high school students could enroll in a university credit-bearing introductory computer science course.

Workforce Learners, External Grant

Framing an Applied Science to Support Adult Working Learners

The Stanford Accelerator for Learning sponsored a convening spearheaded by Education Professor Mitchell Stevens to discuss how to build an applied science to study the needs of “working learners,” a term that refers to adults pursuing paid employment and learning opportunities at the same time. The project culminated in the release of a concise report to the National Science Foundation which included nine recommendations.



UP CLOSE



Accelerating Solutions for Working Learners

In recent years, growing numbers of government agencies, nonprofits, for-profit companies, philanthropies and education institutions have developed programs to support working learners, spurred by the recognition that many adults without college degrees struggle with the impact of new technologies on work and the accompanying shifts in employment qualifications.

But there is not yet a reliable way to evaluate the effectiveness of such programs or even of determining whether they address the most critical challenges working learners face. A report from the Stanford Accelerator for Learning aims to change that.

Compiled after a year of studying and convening, the report makes nine recommendations including identifying new educational opportunities that may benefit workers throughout their working lives, promoting collaboration between researchers and businesses to better understand how new credentials are affecting hiring decisions, and developing data collection systems that will enable researchers to track transitions between learning and employment experiences as people progress from young adulthood to retirement. The report also recommends that such research be conducted by bringing together different stakeholders regionally.

“In a nutshell, we’re calling on government to play a leadership role in investing in an applied science of adult and lifelong learning, with a particular emphasis on understanding the educational needs of working adults who do not have four-year college degrees,” said Mitchell Stevens, a sociologist and professor at Stanford Graduate School of Education (GSE) who is a leader of the project. “Most education research looks solely at the first quarter of life. The relationships between school, work and biography across the lifespan are a black box.”

Digital Learning Design Workshop

The Stanford Accelerator for Learning ran its now-annual student digital design challenge to help students create effective learning tools and scale them. The challenge included the following elements:

Workshops

Students participated in a series of workshops to grow their knowledge and network. Workshops focused on learner-centered design processes, learning science and design, technical implementation, team building, and entrepreneurship.

Mentorship

Awardees gained access to mentors who provided support throughout later-stage research, design, and development phases of their projects. Mentors include faculty experts, industry experts, and peers with recent experience in developing digital learning experiences.

Funding

Students had the opportunity to apply for two rounds of funding. In the first round, grants of \$1,500 were awarded to the top teams for early stage prototype development and user testing. In the second round, larger grants of up to \$9,000 were awarded for advanced prototype development and user testing.

Connections

Students are introduced to a community of entrepreneurs, faculty experts, and industry gatekeepers interested in producing more effective learning solutions.



Digital Learning Design Workshop, Projects

Along

Along is a social platform that allows users to annotate, share and collaborate publicly or as a team. It aims to become a global social network to find and share non-polarized information.

ClassPing

ClassPing is the social connection app for Gen Z in the in-person classroom. Students chat without disrupting the flow of class. Emoji responses allow students to react in real-time to the teacher. Immediate feedback and collaboration increases student engagement.

Curious Conversations

Curious Conversations is a conversational agent to enrich children's science learning by engaging them through two-way discussion.

DREAM

DREAM is an EdTech startup whose mission is to democratize access to the best universities around the world through two programs: Peer 2 Peer and Smart Counselor Web App.

EcoSystemOne

EcoSystem One aims to prepare kids for new realities of learning, working, and playing inside immersive environments. We make learning and teaching in VR as easy as Google classrooms.

Hubble Learning

Hubble is a mobile app designed for family social and emotional wellness. Within a fun, gamified environment, Hubble delivers an adaptive learning experience personalized for each child. Learnest

Learnest

Learnest is a career and re-skilling navigator for displaced workers.

Mobilio

Mobilio is building a “smart” white cane that can help blind and visually impaired people navigate safely and effectively.

PipeDreamers

PipeDreamers uses advances in data analytics and consumer technology to intelligently match youth with mentors, rehabilitative programming, educational and professional opportunities, community resources, and social services.

Sage

Sage objectively measures leaders' skills and helps them develop the precise behaviors that matter most to their team.

Short Answer

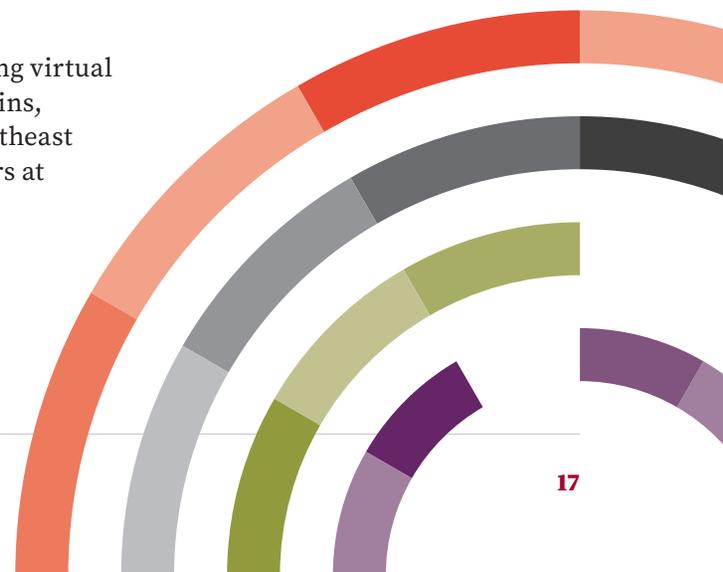
Short Answer is a web app that saves teachers time in lesson prep and feedback while engaging students in class material.

Stanford Pathways

Stanford Pathways is a flexible online learning program for working adults on Stanford's campus that haven't completed their bachelor's degree.

WeStride

WeStride is a 12-week long virtual coding program that trains, mentors, and places Southeast Asians as remote workers at tech companies.





CONNECTION + COLLABORATION

A key component of the Stanford Accelerator for Learning is cultivating a network of scholars, educators, and others to share experiences and expertise. Our success depends on bringing together a variety of voices and perspectives. This year, we piloted a number of new programs with teachers, researchers, and decision makers, and established new collaborations with learning partners across the university. We helped researchers get to know each other through social events and research conversations. And we extended our outreach beyond Palm Drive, presenting at national conferences including ASU-GSV, SXSW EDU, and the American Education Research Association (AERA) annual meeting.

Expert Exchange

To encourage the best outcomes for all learners, we must build solutions together. The Stanford Accelerator for Learning created new programs this year to facilitate the exchange of expertise and bridge and bridge the gap between research and practice.

Bay Area Superintendent Quarterly Convenings

The Stanford Accelerator for Learning piloted a day-long convening to bring together public school district superintendents from San Mateo and Santa Clara Counties to share best practices and learn new approaches. The get together includes a Stanford expert to discuss a particular aspect of their research and its relevance to the work of the districts. The pilot is continuing through the 2022-2023 year.



Teacher Fellows

What would it be like for researchers to get feedback directly from educators on learning solutions in progress? This was the impetus for the Teacher Fellows program. The Stanford Accelerator for Learning brought together expert teachers with Stanford researchers, as well as policymaker, and curriculum developers in conversation about ideas and work that is just getting started. In this pilot program, K-12 teachers and Stanford faculty and students gathered in-person for structured conversations around Learning, Design and Technology projects focused on improving learning.

Morning Mix

The Morning Mix focused on peer-to-peer feedback. We know from research that feedback improves performance, enhances relationships and stimulates new ideas. But researchers rarely get to reflect on each other's work, especially outside of their own field. The Morning Mix provided an informal space for researchers to discuss current projects and develop community.

Cross-Campus Partnerships

Those who study and design learning solutions at Stanford come from a variety of disciplines and schools. You'll find a sample of what we can do together below.

AI and Teaching Writing Project

The Stanford Accelerator for Learning collaborated with the Stanford Institute for Human-Centered Artificial Intelligence (HAI) on an initiative to explore AI language processing systems and how they might be used in the classroom to help students with writing. An initial design workshop brought together middle and high school teachers from Stanford Online High School with learning specialists to begin defining the challenges of teaching writing, understanding the potential of AI, and considering the possible uses of AI, both positive and negative. The team also produced three papers exploring AI in writing class, understanding AI in education, and how AI might help teach writing.

Para Pro Academy

The Stanford Accelerator for Learning, Stanford Graduate School of Education, and the Stanford Down Syndrome Research Center launched the Para Pro Academy, a free professional development program for paraeducators focused on skills to support students with disabilities, including Down syndrome.

Paraeducators provide vital support for teachers by working one-on-one with students with the most intensive needs. But many receive limited training — if any — for their role. Eleven paraeducators from Bay Area school districts participated in the inaugural Para Pro Academy, which took place on the Stanford campus. Through lectures, group discussions, and problem-solving scenarios, paraeducators

“Paraeducators are the most underutilized resource in schools. My team’s research has demonstrated that paraeducators can be incredibly effective in providing academic and behavioral supports when they receive high-quality professional development and ongoing coaching, and we wanted to explore whether we could provide that as a service to schools in the Bay Area.”

Chris Lemons

Associate Professor Stanford Graduate School of Education.



learned about the legal parameters that outline their professional role, characteristics of students with Down syndrome, strategies to support academic and behavioral outcomes, and approaches to collaborate effectively with other school staff members.

Med-Ed Postdoctoral Research Program

The Stanford School of Medicine (SOM) and the Graduate School of Education (GSE) have formed a collaboration to fund an advanced research postdoctoral fellowship to contribute to the Stanford Accelerator for Learning’s goal of encouraging interdisciplinary research on learning and education. The grant will support a PhD postdoctoral scholar for 2 years. The scholar will be mentored jointly by a co-principal investigator from both the SOM and GSE. This year, two postdoctoral scholars were selected to (1) develop, implement, and evaluate tablet-based intervention software in the form of child-friendly games for children with mathematical learning disabilities and (2) to develop mental health intervention tools for school age children in a digital format and work with teachers in school environments.



Convenings

Our scholars, students, and staff found many ways to convene, and collaborate whether online or in-person. Here is a sampling of our engagement in the 2021-22 academic year.

Fall

StartX Demo Day

The Stanford Accelerator for Learning + StartX Campus Demo Day featured presentations and demos by StartX companies, panels & interactive Q&As with successful founders.

Faculty Affiliates Social

Researchers from across the university gathered in-person to get acquainted and learn about new projects and research opportunities.

Winter

Starting with Sesame: Investigating Teaching and Learning in Early Childhood

Lightning talk with Associate Professor Rebecca Silverman.

Personalized Trajectories of Learning and Exploration: “Shaping” Life with Screenomics and Other Observational Paradigms

Lightning talk with Professor Nilam Ram

Working Learners Report Convening

An event drawing dozens of scholars and practitioners to discuss recommendations from a new report, co-authored by Stanford scholars, on building an applied science to support “working learners.”

Spring

Learning Differences and the Future of Special Education

Lightning talk with Professor Elizabeth Kozleski.

An Evening with Geoffrey Canada

The annual Cubberley Lecture at the Graduate School of Education, picture on opposite page, focused on early childhood learning and equity in learning with guest speaker Geoffrey Canada, founder of the Harlem Children’s Zone, in conversation with Ted Lempert of Children Now, Kitty Lopez of First Five, and Dr. Lisa Chamberlain, a faculty affiliate of the Stanford Accelerator for Learning.

ASU+GSV

Stanford Graduate School of Education Dean Daniel Schwartz joined other leaders in education to discuss the future of teaching and teacher education. Video here.





PEOPLE + PROGRAMS

The Stanford Accelerator for Learning aims to expand the community of problem-solvers in education by creating new opportunities for faculty across disciplines to bring their creativity and expertise to the challenges of learning. In 2021/2022, the Accelerator supported new faculty, brought in two inaugural EdTech Affiliates, expanded our Faculty Affiliates program, cultivated emerging scholars through postdoctoral and research programs, and hired a new executive director.

New Leadership

In the 2021/2022 academic year, the Stanford Accelerator for Learning brought to Stanford two leaders with experience and expertise to help us grow in new directions.

Philip Fisher

Professor of Excellence in Learning, Stanford Graduate School of Education, and Faculty Director of the new Stanford Center for Early Childhood.



Fisher's research focuses on developing and evaluating early childhood interventions in socially and economically marginalized communities, and on translating scientific knowledge about healthy development under conditions of adversity for use in social policy and programs. He has a particular interest in the effects of early stressful experiences on children's neurobiological and psychological development, and in prevention and treatment programs for improving how children function in areas such as attachment to caregivers and relationships with peers. His work also explores the brain's plasticity in the context of therapeutic interventions.

As director of Stanford's [new center on early childhood](#) learning and development, Fisher will bring education together with neuroscience, pediatrics, law and policy, developmental psychology, business and other fields to address the complex issues that intersect in early childhood.

Prior to arriving at Stanford, Fisher was Philip H. Knight Chair and professor of psychology at the University of Oregon (UO). "There really is no one like him in the field, between his accomplishments in basic science and his evaluation and design of interventions," said Ryan Padrez, a pediatrician and clinical associate professor of pediatrics at Stanford Medicine. "His ability to straddle both spheres is remarkable."

Isabelle Hau

Executive Director, Stanford Accelerator for Learning



Prior to joining the Stanford Accelerator for Learning, Hau was a founding partner at Imaginable Futures, the philanthropic investment firm of eBay founder Pierre Omidyar and his wife Pam where she led the U.S. education initiative. In this role, she scaled impact-driven education nonprofit and for-profit organizations, including multiple impact unicorns. She has worked with a broad and deep network of educators, edu-preneurs, innovators, funders, researchers, community and system leaders – and partnered with Sesame Street, Harvard Center on the Developing Child, LEGO, Head Start, Khan Academy, Ascend at the Aspen Institute, edtech and philanthropic funders, the federal and local governments, and other esteemed organizations to scale innovations in education that have reached millions of learners. She is a contributor to Forbes and EdSurge, and writes a weekly newsletter, [Small Talks](#).

UP CLOSE



Four Questions for Isabelle Hau

What is your background?

I was born in rural Southern France, and immigrated to the U.S. Education has always been a major driver of my life, and I have devoted my professional career to understanding, innovating, and building a bright future of learning for each and every child to have similar (or better) learning opportunities than I had.

Why did you join the Stanford Accelerator for Learning?

I joined the Stanford Accelerator for Learning because it is a platform for outsized impact in our future of learning.

Sadly, we are in the midst of the largest learning crisis of our lifetime. We need to accelerate solutions that make a difference in learning and connect with what we know works for whom and in what context. We also need to accelerate collaborations, as none of us can do it alone. Last, we need to accelerate the dissemination of scientific knowledge into practices. This is precisely what the accelerator is working on to pave the way for breakthrough impact.

I was also attracted to Stanford as a unique research university, with incredible faculty, staff, student and alumni talent, paired with a long history of daring innovation – having discovered the first neural network in artificial intelligence and the first sleep apnea monitor for newborns, and incubated many startups including Google.

What do you think is most exciting about the vision of the Stanford Accelerator for Learning?

What excites me most about the Stanford Accelerator for Learning's vision is its ambition to impact millions of learners directly through a portfolio of evidence-based solutions while transforming the way we think about research-to-practice and practice-to-research.

Can you please share a fun fact?

May I share two fun facts? First, I co-starred with Grover of Sesame Street on an episode about early childhood innovation. Second, I am an instructor-level Kung fu practitioner – always learning!

Faculty Affiliates

The affiliated faculty of the Stanford Accelerator for Learning are a diverse group of scholars who have a central interest in improving learning experiences for all. They share a belief that evidence-based solutions can have real impact in people's lives. And they are committed to working together to help make transformational change.

The affiliate program provides a supportive environment for scholars to exchange ideas, build relationships, and partner on research.

Dan Abrams School of Medicine	Bryan Brown Graduate School of Education	Gary Darmstadt School of Medicine	Elizabeth Kozleski Graduate School of Education
Subini Annamma Graduate School of Education	Emma Brunskill School of Engineering	Benjamin Domingue Graduate School of Education	James Landay School of Engineering
Nicole Ardoin Doerr School of Sustainability	Janet Carlson Graduate School of Education	Heidi Feldman School of Medicine	Victor Lee Graduate School of Education
Alfredo Artiles Graduate School of Education	Victor Carrión School of Medicine	Philip Fisher Graduate School of Education	Larry Leifer School of Engineering
Susan Athey Graduate School of Business	Chris Chafe School of Humanities and Social Sciences	Sean Follmer School of Engineering	Chris Lemons Graduate School of Education
Ralph Banks Stanford Law School	Lisa Chamberlain School of Medicine	Karin Forssell Graduate School of Education	Ira Lit Graduate School of Education
Jonathan Berger School of Humanities and Sciences	Geoffrey Cohen Graduate School of Business, of Education, and School of Humanities and Sciences	Shelley Goldman Graduate School of Education	Ramón Martínez Graduate School of Education
Michael Bernstein School of Engineering		Nick Haber Graduate School of Education	Bruce McCandliss Graduate School of Education
		Michael Hines Graduate School of Education	Vinod Menon School of Medicine

Elizabeth Miller
Doerr School of Sustainability

Arden Morris
School of Medicine

Anthony (Tony) Norcia
School of Humanities and
Sciences

Ryan Padrez
School of Medicine

Pablo Parades Castro
School of Medicine

Grant Parker
School of Humanities and
Sciences

Roy Pea
Graduate School of Education

Nilam Ram
School of Humanities and
Sciences

Byron Reeves
School of Humanities and
Sciences

Thomas Robinson
School of Medicine

Farzana Saleem
Graduate School of Education

Daniel Schwartz
Graduate School of Education

Kawin Setsompop
School of Medicine

Rebecca Silverman
Graduate School of Education

Guillermo Solano-Flores
Graduate School of Education

Erik Sperling
Doerr School of Sustainability

Sakti Srivastava
School of Medicine

Mitchell Stevens
Graduate School of Education

Hari Subramonyam
Graduate School of Education

Anthony Wagner
School of Humanities and
Sciences

Dennis Wall
School of Medicine

Ge Wang
School of Humanities and
Sciences

Jason Yeatman
Graduate School of Education
and School of Medicine



EdTech Affiliates

The Stanford Accelerator for Learning is building a new network of relationships and affiliations across all education sectors to help innovations achieve scale and impact. We are building programs and infrastructure to engage practitioners, entrepreneurs, philanthropists, and policy makers in the research and design of new solutions and to provide greater opportunities for the translation of discovery to application.

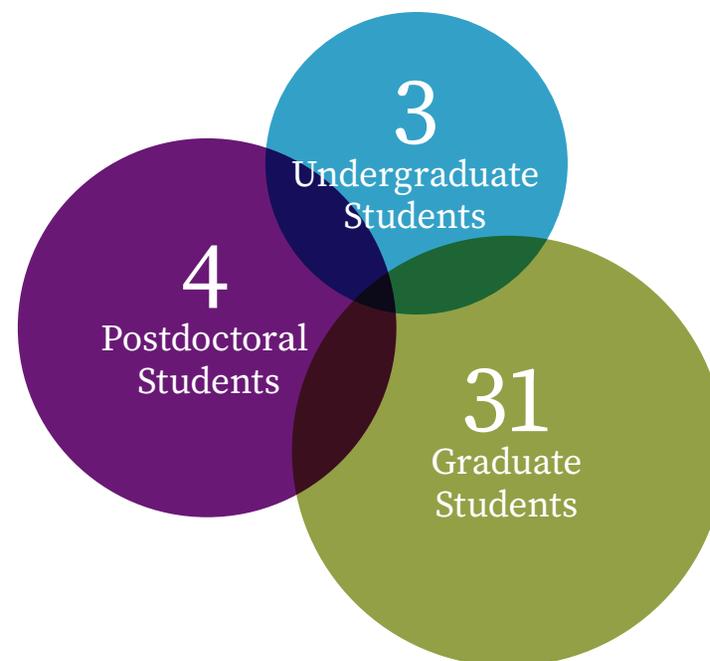
The EdTech Affiliate Program provides opportunities for companies to work with Stanford researchers to explore emerging technologies and bring market perspective to the design of solutions.

In 2021/2022, we welcomed two new EdTech Affiliates:

- [Productivity Innovation Center](#)
- [McGraw Hill Education](#)

Students and Postdoctoral Scholars

The Stanford Accelerator for Learning supported undergraduate, graduate, and postdoctoral scholars from across the university with student funding, resources, and research mentorship.



UP CLOSE

A Profile of PhD student Kemi Oyewole

Kemi Oyewole left teaching in Boston public schools after seeing how her colleagues were often unable to meet students' academic and social-emotional needs, despite extraordinary efforts. "There can be such discrepancies in children's educational experiences, even within the same city or neighborhood," says Oyewole, now a doctoral student at Stanford Graduate School of Education. "It's not fair to students, their families or our communities."

Many young students face significant challenges even before entering the classroom, she says, including inadequate health care, housing, and access to healthy food, which impacts their ability to learn. Scarce school funding makes it hard to attract service providers, like nurses and social workers, to support students. Oyewole's undergraduate experience at Spelman College, a historically Black institution committed to social justice, made it impossible for her to ignore these issues.

As a scholar, Oyewole uses a sociological approach to study the ways professionals are organized and prepared to address inequalities in education. Her research looks at the role of instructional coaches in K-12 schools, who team up with teachers to innovate and problem solve in the classroom. These educators bring an experienced, fresh perspective – but too often, she says, they're pulled in many directions to fill gaps in staffing.



"I've seen how challenging the work of educational improvement can be," says Oyewole, who is also pursuing the GSE's [Certificate in Partnership Research](#), a program promoted by the Stanford Accelerator for Learning, through her work with an instructional coaching network in a local school district, where she collaborates with educators to explore the boundaries of school reform and professional development. Oyewole plans to teach at the university level after receiving her doctorate, helping to equip the next generation of teachers and researchers with the skills to make K-12 education more equitable.

Leadership

Daniel Schwartz
Faculty Director

Isabelle Hau
Executive Director

Kristen Blair
Director of Research, Digital Learning Initiative

Geoffrey Cox
Director, Stanford Learning Partners

Olivia Crawford
Chief Operations Officer

Philip Fisher
Director, Stanford Center on Early Childhood

Elizabeth Kozleski
Co-Director, Initiative on Learning Differences

Ira Lit
Co-Director, Initiative on Learning Differences

Nereyda Salinas
Co-Director, Stanford Learning Partners

Angela Hall Watkins
Associate Dean for External Relations,
Stanford Graduate School of Education



Stanford's Vision

Fueled by optimism and a sense of responsibility, we seek to accelerate our purposeful impact in the world.

The scale and urgency of challenges facing us today require that Stanford reach farther and move faster to accelerate purposeful impact in the world. We need a new way of working that enables us to tackle long-standing issues facing our society and our planet and allows us to be nimble when faced with unexpected threats. The vision amplifies contributions through a new model for research universities: accelerating the creation and application of knowledge to tackle the world's great problems, anchoring research and education in ethics and civic responsibility, and promoting access and inclusion.

We'd love to hear from you. Contact us at acceleratelearning@stanford.edu

Learn more and sign up for our biweekly newsletter acceleratelearning.stanford.edu



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