

LEARNING UNDEFEATED

Educate | Elevate | Empower

FY2020 ANNUAL REPORT





LEARNING UNDEFEATED delivers life-changing **STEM** experiences for high needs communities by providing equitable access to education and inspiring students to imagine their own success.



UPDATE FROM OUR **CEO**

For the past 18 years, our work at Learning Undefeated has centered around serving students and teachers in communities that lack access to critical educational resources and opportunities readily available elsewhere. Reaching these communities has allowed us to spark student interest and create awareness of lucrative STEM careers, ultimately building the pipeline for tomorrow's workforce with talented and diverse youth.

On March 11, 2020, our team made the difficult decision to temporarily suspend classes on-board our mobile STEM labs due to the COVID-19 pandemic. Soon after, many schools made similar hard decisions to close. Our team quickly jumped into action, creating at-home science experiments that parents could do with their kids, anticipating that the shutdown would only be a temporary blip in the school year. When it became apparent that the disruption to our education system would be long-lasting, we understood the impact this would have on the communities we serve. While valuable to many, remote learning has a disproportionately negative impact on low-income and rural

students who lack adequate internet access, technology, and support for sustained online learning.

Within a week, our team began a significant transformation, shifting our work to meet the new and demanding needs of students, teachers, and schools. The biggest challenge appeared immediately: providing meaningful experiences for those that need them most in a new world that suddenly lacked accessibility. This challenge continues to be the most important one we face and will continue to drive our mission and work moving forward.

As we start the new school year in a world filled with uncertainty, I am filled with immense gratitude as I think of all the incredible achievements our team has accomplished in the face of adversity, thanks to partners and champions like you. However, significant challenges lie ahead. In these past few months, we have witnessed the economic disparities that COVID-19 has brought to light and the social unrest sparked by longstanding racial injustice. Our team is approaching the upcoming school year with the utmost urgency to prioritize equitable access to education and encourage others to do the same.

Understanding the immense challenges that face an already stressed education system, I begin the year with a great deal of apprehension, but filled with hope for the future. Our students and teachers inspire me as they navigate this new normal with resilience and grit. I am proud to be part of the Learning Undefeated team that has thoughtfully and collaboratively transformed our programming to meet our educators and students' evolving needs wherever they are. And I am hopeful that the obstacles we all face will inspire our youth and help build a stronger community and workforce of tomorrow.

Learning Undefeated's mission has always been, and will continue to be, centered around equity. Thank you for your support moving forward in the continuous effort of providing equitable access to education and inspiring students to imagine their own success.

BRIAN GAINES
CEO, LEARNING UNDEFEATED

EDUCATIONAL ACHIEVEMENTS THIS YEAR

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600+ SCHOOLS
SERVED SINCE 2003

FY 2019-2020
48,704
STUDENTS SERVED

6 mobile laboratories




VISITS TO
UNDER RESOURCED
SCHOOLS



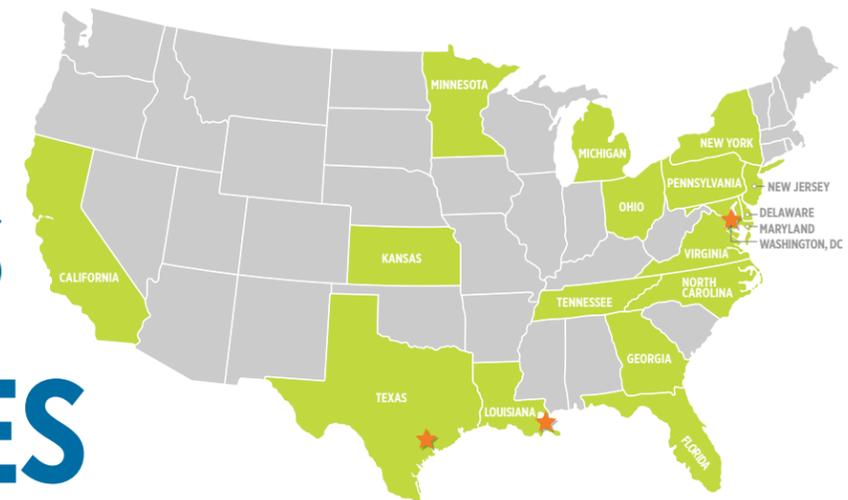
64% of students
reported increased
interest in a job that uses
technology

78% of
teachers
became more
confident in
using lab tools
and techniques

 **62%**
of students
reported increased interest
in **completing high school**

AFTER JUST ONE EXPERIENCE ON
OUR MXLAB, **61% OF STUDENTS**
EXPRESSED A GREATER INTEREST
IN PURSUING A **STEM CAREER**

MORE THAN
200,000
STUDENTS
SERVED ACROSS
18 STATES
SINCE 2003





MOBILE STEM LABS DROP THIS YEAR

Through our partnerships with AstraZeneca, the Toyota Foundation, the Weinberg Foundation, the State of Maryland, the Rebuild Texas Fund and the Qatar Harvey Fund, Learning Undefeated doubled its fleet of mobile laboratories with three new Drop Anywhere Labs, currently serving Maryland and Texas middle and high school students. These custom-outfitted STEM learning spaces are built from modified shipping containers, providing an immersive learning environment using augmented reality and game-based learning to offer a blend of STEM career and skills education experiences.

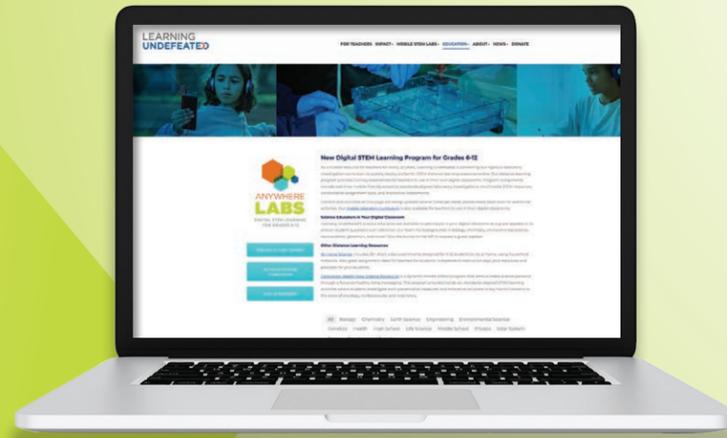
The three new laboratories were officially launched on August 1, 2019 with a ribbon-cutting attended by Maryland's Lieutenant Governor, elected officials, partners, business leaders, and other Learning Undefeated champions, family and friends.



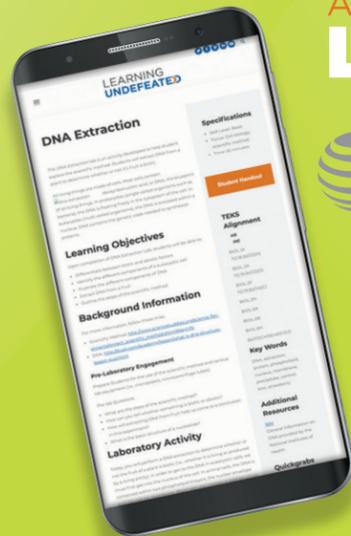
[CLICK FOR MORE INFO](#)



LEFT DROP ANYWHERE LABS ARRIVE IN REFUGIO, TEXAS. ABOVE STUDENTS EXPLORE AUGMENTED REALITY INSIDE THE DROP ANYWHERE LAB.



COVID-19 RESPONSE ANYWHERE LABS: DISTANCE LEARNING PROGRAM



The week school closures were announced in March, Learning Undefeated's education team sprang into action to develop and deploy authentic STEM distance learning resources online.

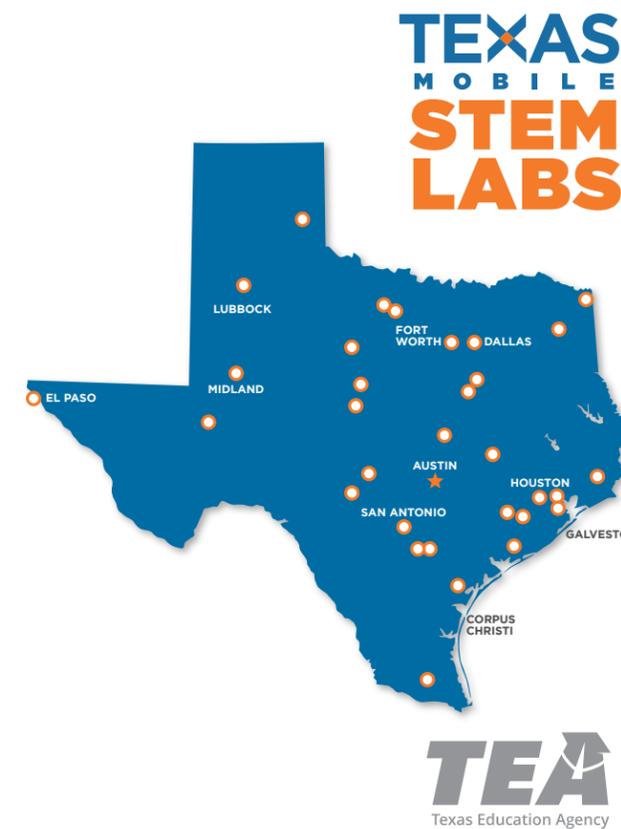
The distance learning program for grades 6-12 leverages our rigorous laboratory investigation curriculum by providing turnkey experiences for teachers to use in their own digital classrooms. Anywhere Labs program components include real-time, mobile-friendly access to standards-aligned laboratory investigations, multimedia STEM resources, collaborative assignment tools, and interactive assessments, virtual professional development for educators, repositories of online learning resources and best practices with wide reach, and support for parents as educators at home. A new partnership with the AT&T Foundation will enable us to boost these efforts.



23,378 students IN ALL 50 US STATES

ESTIMATED STUDENT REACH OF ANYWHERE LABS
DISTANCE LEARNING MATERIALS, FROM MARCH - AUGUST 2020

TEXAS PROGRAMMING EXPANDS STATEWIDE



Starting this fall, Learning Undefeated is rolling out a new partnership with the Texas Education Agency. The Texas Mobile STEM Laboratory program will serve K-8 students and teachers throughout the state, visiting each of the twenty Educational Service Center regions for the 2020/21 school year.

The lab offers cross-curricular STEM experiences, introducing STEM to students by allowing them to engage with the engineering design process. Onboard the lab, students solve engineering design challenges and work cooperatively to design a product or process using model STEM activities that integrate content knowledge aligned to the Texas Essential Knowledge and Skills (TEKS) standards.



BELOW LEFT STUDENT BUILDS A WIGGLEBOT IN A NEW ENGINEERING CHALLENGE FOR GRADES 4-6. BELOW RIGHT MXLAB INTERIOR.



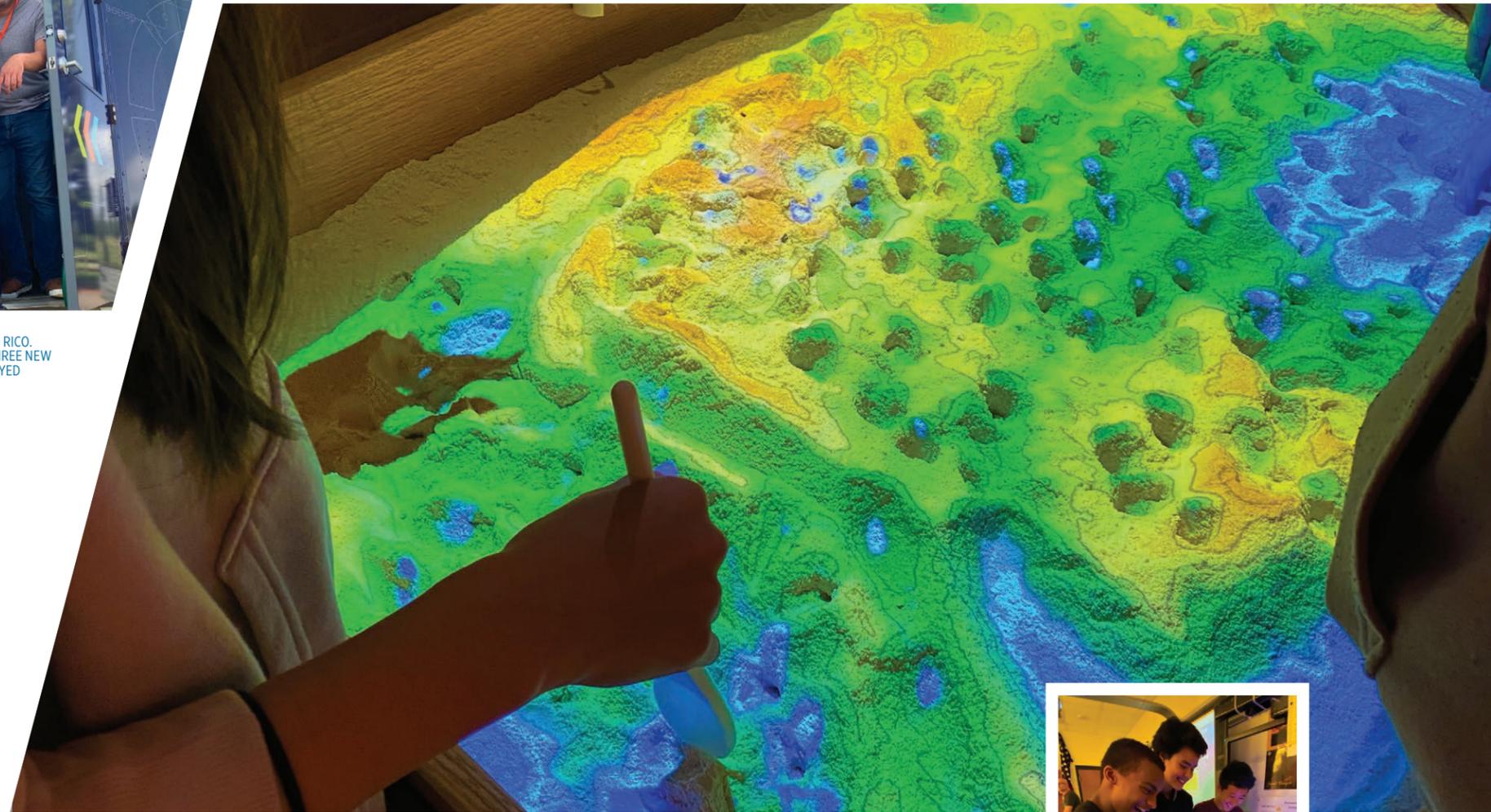
DISASTER RECOVERY PROGRAM ARRIVES IN PUERTO RICO



ABOVE MDBIOLAB VISITS PUERTO RICO. RIGHT STUDENTS TEST ONE OF THREE NEW CONTOUR AR SANDBOXES, DEPLOYED FLEET-WIDE THIS SCHOOL YEAR.

Learning Undefeated has expanded its geographic footprint by bringing its MdBioLab Education Disaster Recovery Program to Puerto Rico. In partnership with the Puerto Rico Science, Technology & Research Trust, MdBioLab traveled to Puerto Rico in March and will be serving communities impacted by the earthquakes that struck the southwest part of the island earlier this year.

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GENERATION HEALTH: THE SCIENCE OF US

In partnership with AstraZeneca and Discovery Education, Learning Undefeated launched Generation Health: How Science Powers Us, a dynamic middle school program that aims to make science personal

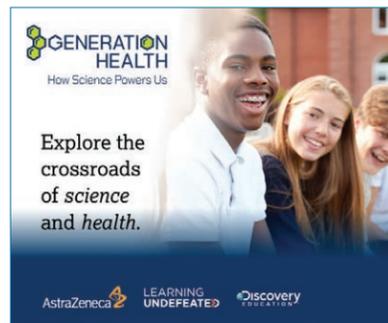
through a focus on healthy living messaging. This coming school year's programming will focus on respiratory issues, with students exploring how air quality and noncommunicable diseases, such as asthma, affect those around us.

"It was more fun than learning from a book because it was visual. When I push the sand higher you get more layers and colors. When you have hands-on learning it's way more fun than learning from a paper!"

— AIYANA, 8TH GRADE SCIENCE STUDENT, HOUSTON, TX



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SOCIAL MEDIA CAMPAIGN

NEW CURRICULUM TOPICS

CYBERSECURITY

In collaboration Northrop Grumman Corporation, Learning Undefeated created a new cyber forensics activity for high school students, titled Who Are Your Friends? A Cybersecurity Mystery. Demonstrating how criminals use social engineering—manipulating people into revealing personal information online—to compromise and hack into personal accounts, students learn how to recognize and prevent cyber phishing attacks, the importance of secure passwords, the basics of encryption, and how cypher codes can be used to send messages or store information.



AR SANDBOX

With our new custom-built augmented reality (AR) Contour sandboxes, students are able to learn about topography, erosion, watersheds, and other environment issues through hands-on exploration. The AR Sandboxes premiered in fall 2019 and have quickly become one of our most requested lab activities by students and teachers.

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DON'T TAKE OUR WORD FOR IT

Teachers and students agree that Learning Undeclared programs add real value to their academic lives.

“Our kids have been through so much. Having Learning Undeclared in our district was essential to giving our students meaningful and engaging science lessons in a safe environment. We are excited to have them back this year!”

— TINA HERRINGTON, SUPERINTENDENT, WHARTON ISD, TEXAS

“It gave a real life adventure and shows that you can create something and explore no matter what you are. Overall, I might want to be an engineer.”

— 8TH GRADE EXPLORER LAB PARTICIPANT

“Our students do not get the opportunities that larger schools offer. This helps them to broaden their horizons.”

— KEITH WILLIAMS, SCIENCE TEACHER, WOODSBORO JUNIOR/SENIOR HIGH SCHOOL, TEXAS

“Your mobile lab changed my life! I was a student at Watkins Mill High School when the mobile lab came to my school, and my experience on the lab is what caused me to choose a major in a STEM field. Your program really is changing lives!”

— UNDERGRADUATE BIOENGINEERING STUDENT, UNIVERSITY OF MARYLAND

“I wanted to take a moment to thank you for providing the biology kits to students at DuVal, Flowers, Oxon Hill, and Roosevelt. What a game changer!! This addition will enhance our distance learning and provide the students with experiences that they cannot get from a computer. Thank you for your thoughtfulness and willingness to partner with us.”

— FELICIA J. MARTIN LATIEF, ED.D., STEM INSTRUCTIONAL SUPERVISOR, PRINCE GEORGE'S COUNTY PUBLIC SCHOOLS, MARYLAND

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SUPPORT OUR WORK

VOLUNTEER

- > Come out and volunteer on one of our mobile laboratories to support our instructors and engage with students and teachers
- > Sign up to be a guest on our new Let's Talk STEM virtual talk show series to share your story and inspire students to consider a career in STEM!
- > Support our content development efforts by lending subject matter expertise to our curriculum development team as we continue creating new and engaging activities across a variety of STEM disciplines
- > Become a Learning Undeclared Champion to help promote and share our resources across your network and social channels

DONATE

- > Show your ongoing support by [donating online](#) and considering a recurring donation each month.
- > Shop with [Amazon Smile!](#) Choose Learning Undeclared as your selected charity when shopping on smile.amazon.com and Amazon will donate a portion of your purchases to support our mission.

Reach out to partnerships@learningundefeated.org to find out how you can get involved and support our mission.

FUND A PROGRAM

- > Support our mobile STEM laboratory program by sponsoring a one-week mobile lab visit, an entire school year of programming, or somewhere in between!
- > Support our distance learning efforts by sponsoring one or several episodes of the Let's Talk STEM series, our At-Home Science Kits, or our Equipment & Activity Teacher Loaner Lab program
- > Sponsor a specific lab activity for curriculum development
- > Sponsor our [ATLAS](#) College & Career Readiness symposium or support our [YSEP](#) summer camp programming ▶



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2019-2020 PARTNERS

Learning Undeclared is able to provide innovative programs and resources to educators, students, and communities **at no cost** thanks to generous donors and supporters.

SIGNATURE PARTNERS



COMMUNITY PARTNERS

- AmeriCorps
- Bender JCC of Greater Washington
- Boys & Girls Clubs of Metropolitan Baltimore
- Civic Works
- Housing Opportunities Commission of Montgomery County
- Maryland Tech Council
- NASA
- NIH-National Cancer Institute
- STEM en Tu Pueblo

CORPORATE PARTNERS

- American Gene Technologies
- AT&T
- CFR Engineering
- CNSI
- DAP
- Deloitte
- Emergent BioSolutions
- Fulton Bank
- Grace
- Lockheed Martin
- M&T Bank
- Northrop Grumman
- Novavax
- QIAGEN
- Scheer Partners

- VWR
- Whiting-Turner
- WSSC Water

EDUCATION PARTNERS

- Building Engineering and Science Talent
- Discovery Education
- Houston Community College
- Johns Hopkins University, Montgomery County
- Maryland State Department of Education
- Mobile Laboratory Coalition
- Montgomery College
- Morgan State University
- SMU, Simmons School of Education & Human Development
- Spark 101
- West Dallas STEM School
- University of Maryland
- University of Maryland Bio Park

FOUNDATION PARTNERS

- The Harry and Jeanette Weinberg Foundation
- The Mead Family Foundation
- The Morris & Gwendolyn Cafritz Foundation
- The Qatar Harvey Fund
- The Rebuild Texas Fund



“ Learning Undeclared is constantly developing and delivering creative STEM education programs for students. They are quick to market with new ideas, piloting and adapting them in the same ways that R&D researchers would do with a new vaccine. This team is truly transforming how students learn and how they see themselves having STEM careers. I am incredibly proud to serve as board chair for Learning Undeclared.”

— BRIAN ROSEN, LEARNING UNDEFEATED BOARD CHAIR & SENIOR VICE PRESIDENT, COMMERCIAL STRATEGY AT NOVAVAX





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