RURAL
technology fund

2022 ANNUAL REPORT

Changing
Trajectories

LETTER FROM OUR EXECUTIVE DIRECTOR

I can't tell you exactly why I first started tinkering with computers. I know that the glow of the screen and the intricate patterns on the circuit boards may have fueled my curiosity… but, it was what those things represented that kept me coming back. When I touched the keys, I could create anything I wanted, talk to people on the other side of the world, or learn about any topic that had drawn my attention that day. For the first time in my life, the world seemed bigger than the circumstances I was born into.

It's that feeling of curiosity and awe – the closest thing I know to real magic – that led me to start the RTF in 2008. I wanted other kids to experience that feeling. When they did, I wanted them to be able to chase it as far as their imagination allowed without the hurdles I experienced. Now, as we prepare to celebrate our fifteenth anniversary, I'm humbled by just how far we've been able to spread that magic.

As I reflect back on 2022, I can say without hesitation that this was the most significant year in our existence. The growth in our staffing and board the year prior allowed us to expand our existing mission reach, grow into new areas, and make many of our internal processes more efficient. As a result, we were able to put technology education resources into the hands of 13,987 students in 36 states, provide assistive technology devices for 186 students, and provide scholarships valued at over $25,000.

I've always said that technology is no more about a computer than astronomy is about a telescope. The unique projects we fund continue to prove that, as students use technology to better themselves, their families, and their communities. A few of my favorites from this year:

- A classroom in Shageluk, AK where students are starting to learn the basics of soldering and electronics as they build sensors and collect data designed to help NASA better understand the aurora borealis.
- A teacher in Paicines, CA started the students in her one-room school down a journey towards competing in Lego robotics tournaments.
- A librarian in Gainesville, GA created a "Tech Petting Zoo" event for her community designed to let kids experience coding, engineering, and computational thinking.
- A nonverbal student in Mellen, WI used a new tablet as her primary communication device, allowing her to better express her ideas and questions.

In this annual report, we've laid out some highlights from our work in 2022. I hope you'll enjoy reading these stories and seeing photographs of students who've taken part in programs we've funded and supported.

As always, I want to thank the teachers, students, volunteers, and partners who support our mission. Whether it's happening in school classrooms, after-school programs, public libraries, maker spaces, or children's museums,… we're going to continue trying to inspire the curiosity that can help young people transcend their circumstances and reach for the stars.

CHRIS SANDERS
Founder and Executive Director

TABLE OF CONTENTS

The mission of the RTF is to help rural students recognize opportunities in technology careers, facilitate pathways to work in the computer industry, and provide equitable access to technology for students with disabilities.

BUILDING FROM SCRATCH

Amanda McCraw, the only employee of Panoche School District, wears the hats of classroom teacher, principal, and superintendent. Her one-room school in Paicines, CA currently enrolls 8 students (one 1st grader, two 2nd graders, one 4th grader, one 7th grader, and three 8th graders). Amanda's life revolves around the school: she lives on campus just steps away from her classroom, her husband volunteers for yard duty and as a lunch helper, and she teaches one of her own children! Accepting the position was easy for Amanda; she grew up one hour away in the nearest town and has always loved the small, rural school setting. With her heterogeneous class, Amanda says the kids close in age vary so much in ability that she imagines they would be lost in a traditional setting.

Prior to introducing robotics, Amanda had a large bucket of LEGOs in her classroom. Students always wanted to build with them, so she thought to herself, "How can I turn this into an educational opportunity for them?" When searching for LEGO education options, she stumbled across the LEGO STEAM curriculum. She said, "I looked around and thought that we have so little tech integration, and this is their future. They're going to work in jobs that don't even exist yet. It was eye-opening." She then began searching for grant opportunities to make her vision a reality and found the RTF.

"Starting from scratch was easier than I thought! I was worried we would have a hurdle," she reflected. The RTF supplied Amanda's classroom with LEGO Spikes and LEGO BricQs. As soon as the items arrived, Amanda unpacked them, stuck stickers on them, and let her kids explore. Within days, students were making cars that were coded to drive across the room. In awe of their creativity, she said, "it's been amazing to see how they took it and ran. Now they're asking if they can do other things and add things on. They're thirsty for it!"

With such a range in ages, Amanda runs a centers-based schedule where students can interact with the equipment for two 50-minute sessions each week. She reflected, "It's been fantastic because I see them working –I partner my big kids and little kids. I'm seeing teamwork. I have several English language learners and their communication skills are benefitting from it because they're talking it out with their friends and creatively solving problems! There are so many benefits I didn't even think about." Amanda's journey has been one of true exploration and excitement!

"My idea was they were going to work on coding, which is big as they grow up. Maybe some engineering. I had no idea it was going to hit so many other aspects – social-emotional learning from working with buddies and on a team. It's just been so much more than even I had hoped for."

 - Amanda McCraw

ASSISTIVE TECHNOLOGY AT THE RTF

To truly address the digital divide between rural and non-rural communities, we need to ensure that technology is accessible to all students, including those who need modified devices or specialized software. With the expansion of our mission into Assistive Technology (AT), we are introducing more students to technology and what it can represent, fulfilling a more holistic approach to student engagement in rural communities.

Assistive Technology is everywhere – you are using AT whenever you enlarge your text on your phone, use closed captioning while binging Netflix, or use speech-to-text to message a loved one. As technology evolves and becomes increasingly prevalent in our everyday lives, more AT becomes available, but more AT is needed to keep up.

We typically categorize AT as no-tech, mid-tech, or high-tech. Some AT doesn't involve technology – adapted grips, picture communication boards, and sticky notes can all be AT. These are referred to as no-tech AT; they're fairly simple to use and don't require a power source. Mid-tech AT may require power, but using these items does not require extensive training. This category includes items like switches, buttons, talking calculators, or sensory input items. High-tech options require specialized training for operation and include touchscreen devices, speech-recognition software, AAC devices, and eye-gaze software.

With our focus on furthering computer science and related fields in the classroom, offering high-tech AT solutions was a logical next-step for our organization. Ensuring that high-tech assistive solutions are available for all students to interact with and benefit from is critical if we want to address the discrepancy in digital access.

In 2022, we funded several Assistive Technology projects, including:

- Tablets in Pine Hill, AL, and Hardinsburg, KY, to support nonverbal and limited verbal students with communication in the classroom.
- GoTalks in Somerville, AL, to support a speech therapist in working on communication and supporting curricula.
- An interactive whiteboard in Tonopah, NV, for a self-contained classroom serving students with vision loss, expanded communication needs, and learning disabilities so they can meaningfully connect to classroom content.

We envision supporting many more of these types of projects in the future. With the inclusion of Assistive Technology as a core part of our mission, we can better ensure digital accessibility to rural students across the United States, thereby furthering individual opportunities for learning and exploration.

OUR IMPACT

In 2022, the RTF put tech education resources into the hands of

13,987 students

and assistive technology resources into the hands of

186 students,

bringing our total number of students to

168,599

2022 donations went to

89

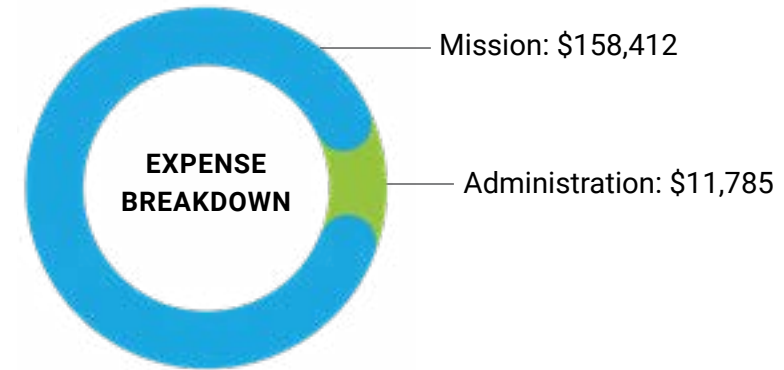different schools and libraries.

MAPPING OUR REACH

The locations below represent where we provided technology education resources and assistive technology to rural classrooms and libraries this year.

Golovin	AK	Thermal	CA	Symsonia	KY	Waretown	NJ	Saint George	SC
Shageluk	AK	Nederland	CO	Estherwood	LA	Pahrump	NV	Walterboro	SC
Cuba	AL	Laurel	DE	Buckland	MA	Sandy Valley	NV	Whitewood	SD
Eutaw	AL	Odessa	FL	Gray	ME	Argyle	NY	Dew	TX
Horton	AL	Ponte Vedra	FL	Birch Run	MI	Cuba	NY	Elm Mott	TX
Livingston	AL	Eatonton	GA	Blissfield	MI	Lake Placid	NY	Griffith	TX
Pine Hill	AL	Gainesville	GA	Calumet	MI	Fairland	OK	Hardin	TX
Samson	AL	Irwinton	GA	Webberville	MI	Fargo	OK	Kennard	TX
Sulligent	AL	Manchester	GA	Kimball	MN	Mooreland	OK	Penitas	TX
Summerdale	AL	Maysville	GA	Crocker	MO	Stilwell	OK	Sealy	TX
Bee Branch	AR	Gilbert	IA	Seneca	MO	Stonewall	OK	Ivins	UT
Cedarville	AR	Bluford	IL	Brooklyn	MS	Wilson	OK	Roosevelt	UT
Coolidge	AZ	Vienna	IL	Duncan	MS	Oakland	OR	Cana	VA
Sanders	AZ	Hope	IN	Dundee	MS	Quarryville	PA	Sussex	VA
Paicines	CA	Benton	KY	Goldsboro	NC	Florence	SC	Royal City	WA
Phelan	CA	Fancy Farm	KY	Lexington	NC	Hickory Grove	SC	Mellen	WI
Smith River	CA	Hardinsburg	KY	Ogallala	NE	Mullins	SC		

RTF FINANCIALS AT A GLANCE

TOTAL INCOME AND CONTRIBUTIONS:
$174,253

TOTAL EXPENSES:
$170,197

EXPENSE BREAKDOWN

Mission: $158,412

Administration: $11,785

GuideStar
Gold Transparency 2022
Candid.

SUPPORTING PARTNERS

Revolution Tier ($20,000+)	AND APPLIED NETWORK DEFENSE	Blackthorne
Innovation Tier ($10,000+)	Security Onion SOLUTIONS	Square
Opportunity Tier ($5,000+)	BLACK HILLS Information Security	DRAGOS / TrustedSec

COMMUNITY PARTNERS

RURAL SCHOOLS COLLABORATIVE · girls who code · CODE · SANS
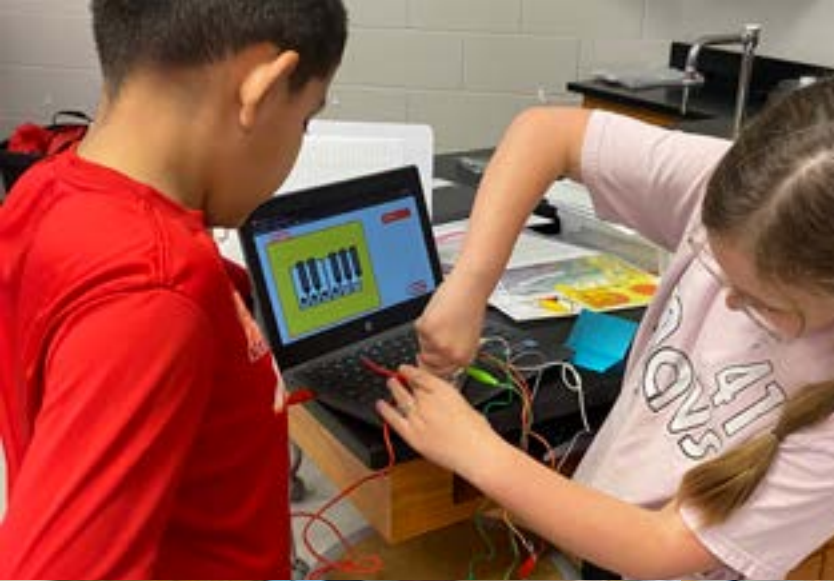
How to Help

Your donation will go directly to supporting rural and economically disadvantaged students by providing computer science and engineering equipment, curriculum, scholarships, and assistive technology in classrooms and libraries across the country.

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Recurring Donations With Patreon

One Time Donation By Check

One Time Donation Online

Support Our Cause at **www.ruraltechfund.org/donate**