Rethink Learning Labs

2025 Annual Report



Executive Director's Letter

Welcome to our 2025 Annual Report. In 2025, Rethink Learning Labs continued its mission by working in formal and informal learning environments to bring research to practice. In this report, we will highlight each of our projects and programs from the year and provide pictures that let you see a little of the "hard fun" that was had in each event.

2025 was an important year for Rethink Learning Labs because we installed our permanent Board of Directors. Prior to 2025, the Board was comprised of the founder and other supporters from our sister company, Eduscape. Some of those members have continued onto our Board of Directors and we have strategically added other involved leaders to help us with our mission. We thank the Board of Directors for their commitment to our success!

The year was also important because it was the first year in which we began to diversify our funding stream. Rethink Learning Labs was initially funded with research grants from the National Science Foundation. With the help of our grants consultant, Kate Highfill from ProWriting Results, we have begun to partner with Foundations who have the same commitment to ensuring high-quality education for all children that we have. We are very grateful to our new partners and look forward to continued partnership.

No annual report would be complete without recognizing the exceptionally challenging aspects of 2025 faced by all nonprofits in the United States. We watched federal fundings for educational research get slashed. While we are hopeful some of the funding will be restored, in 2025, the National Science Foundation cut its awards to education research by at least $115 million dollars and the number of awards by at least 140. They have also significantly constrained the size of grants, which will have significant impacts on the research that can be done going forward. The U.S. Department of Education's Institute of Education Studies, which has been the largest funder of educational research for years, has ceased all granting

activities as far as anyone can tell. This is a loss of around $245 million for education research. Significant cuts have also been made government-wide for the kinds of funding nonprofits often rely on. With the loss of federal funding, nonprofits, including ours, are flocking to private foundations and other non-federal sources. The pressure on those organizations to support research and or programming by nonprofits has been extreme. The Spencer Foundation, which is a funder of educational research, received as many proposals for a single research program in August as it normally receives across all of its programs in a single year. Another foundation listed on its website that in June, it received 1,816 proposals and funded 18. We have also heard from a foundation that they received over $200 million in requests for a budget that was only $5 million. 2025 was a very hard year for the nonprofit sector. Rethink Learning Labs is extremely fortunate in that we have funding to get through 2026 and we did not lose any of our existing funding in 2025. We continue to work with Dr. Highfill and other experts to further broaden our fundraising efforts in this uncertain landscape.

We hope you will enjoy this annual report as a celebration of the good that happened in 2025. We were able to move our research efforts forward in ways that align with our mission of bringing research to practice.



Background

History

Rethink Learning, Inc is a 501(c)3 created in 2020. Rethink Learning Labs (RLL) is the research division of Rethink Learning created in 2023 with the mission of transforming teaching, learning, and leadership through doing applied research and translating existing research to practice.

At Rethink Learning Labs, we are a small team of dedicated, experienced educational researchers and practitioners committed to transforming educational settings by translating research into practice. Our expertise spans pre-Kindergarten to 12th grade in the areas of Math, STEM/STEAM, Computational Thinking and Cybersecurity, and Teacher Professional Development in Math and STEM. We have expertise in both in-school and informal learning settings.

RLL offers high-quality, in-school and out-of-school experiences for learners of all ages including youth and teachers in areas of high need. RLL's approach is different in that we build our programs and supporting materials on research-based best practices combined with high-quality supporting materials to create a fun, but rigorous, learning experience for youth from all backgrounds and of all ages as well as the adults who support their learning. RLL works closely with our partner organizations to identify areas of need, select the most effective intervention method, and develop research-based solutions that provide effective support during and after programming is delivered.



Mission

Rethink Learning Labs transforms teaching, learning, and leadership through research. We advance innovative learning programs that empower PreK-12 and adult learners and the people who support that learning. We are specifically committed to using research – done by us and by others – to improve teaching, learning, and leadership in STEM in schools and informal learning settings.

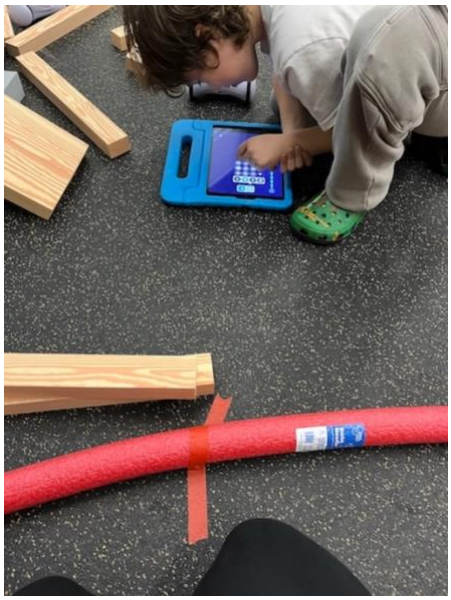
Vision

Learners' thinking should be the focus of all learning activities. To achieve this, instruction must be more learner-focused. This means engaging learners in explorations that allow them to make sense of their world, playfully test conjectures, refine understandings, and generalize concepts. Focusing on student thinking links instruction to the learners' world, adjusts teaching to meet the needs of each learner, and provides the learning leader – whether teacher, parent, or mentor – with insights about what the learners understand about the content. It also tells learners that their ideas are important.

Program Overviews

Our program offerings are linked to our research in key ways.

Computational Thinking Counts



This NSF-supported program, which ended September 2025, focused on supporting elementary students in having experiences with computational thinking. In 2025, we worked to analyze data collected from our teacher professional development efforts and we also extended the work in two key ways. This work was done in collaboration with our partners at the Kaput Center for Research and Innovation in STEM Education.

First, we worked with the Boys & Girls Club of New Bedford to bring computational thinking to an informal learning setting. There, Ezra Gouvea, Kun Wang, and Chandra Orrill worked with 61 youth - including 26 girls! We also had a local Ph.D. student, Kolewole Kushimo volunteer with us as part of the effort. The youth learned to use Photons robots and the team brought in new challenges for them each week. The culminating experience was the talent show where several of the youth programmed their Photons to dance to The Twist while family members cheered them on.

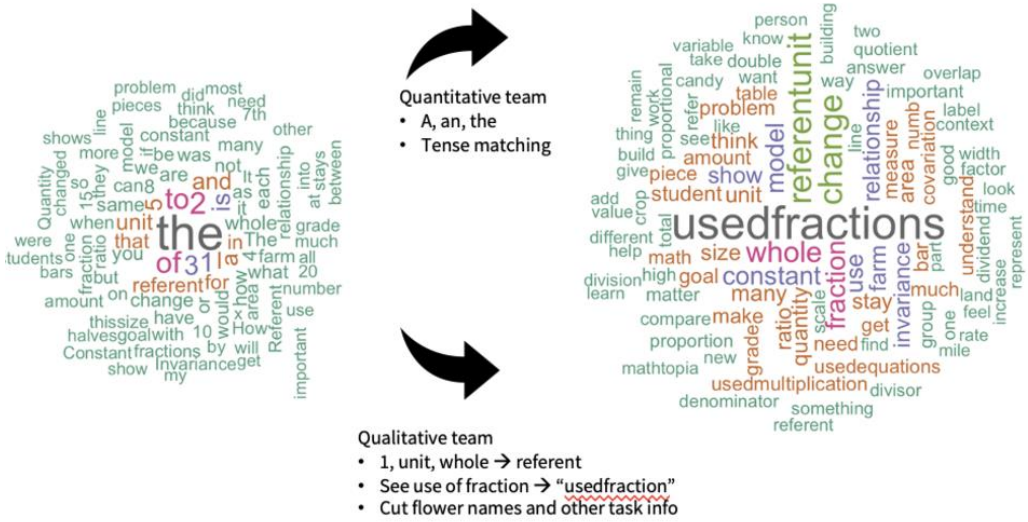
Computational Thinking Counts pt 2



Our other extension of the CT Counts program was into preschool! Blakely Tsurusaki, Director of STEM Initiatives, partnered with the Seattle Public Library to create an integrated experience for an inclusive preschool in Seattle. She introduced 45 children (3-4 years old) to science through stories, hands-on explorations, crafts, and other experiences. Throughout it all, she focused on computational thinking standards to ensure the young learners engaged in problem solving, debugging, and decomposition as part of their integrated experience. This extension of the work was supported, in part, by The GLOBE Program in addition to NSF support.

Rational Numbers Playground (RNP)

This NSF-funded research project is a partnership led by Rethink Learning Labs, with collaborators at PSU-Abington and the University of Georgia. Our work has been to develop professional development for math teachers focused on proportional reasoning and fraction multiplication and division. So far, we have offered PD to 60 teachers in 4 states. Our work in 2025 included working closely with our partners to explore ways that AI can be used to help with data analysis. We also worked on understanding how teachers make sense of this mathematics, which will help us create better professional development.



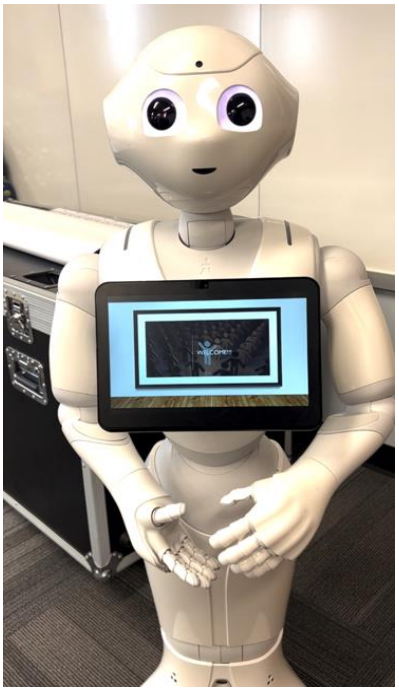
Cybersecurity and AI



We have another NSF-funded project focused on helping middle schools students understand cybersecurity and AI. In 2025, we worked with 35 fifth and sixth graders at Our Sisters' School in New Bedford to pilot our instructional approach. We have them play a card game that introduces them to key ideas of cybersecurity. Then, we have them learn about AI using Photon robots. In our debriefing, we work to help them tie together the cybersecurity understanding they are developing and the AI knowledge they are developing.

We also created and piloted a short instrument to help teachers see what their students know about cybersecurity and AI.

Cybersecurity and AI



We have been working with Teachers& in Philadelphia and the School of the Future to explore ways of supporting more students to find their way into cybersecurity careers. This includes mapping the very complex terrain of opportunities for cybersecurity for students as well as developing instructional opportunities that support students in developing more meaningful understandings of how classroom mathematics is tied to cybersecurity.

Math Professional Development

Through our partnership with Eduscape, we were able to work with 13 elementary teachers and paraprofessionals in Florida for two days of math professional development. We focused on introducing teachers to the value of communication in the classroom and then demonstrated what that could be like for the students who they teach. The teachers had fun learning about math teaching and learning.



Program Evaluations



In addition to our research work, we also conduct program evaluations for educational programs. In 2025, we had two active evaluation projects:

- evaluation of a statewide K-12 computer science initiative
- evaluation of a college-level cybersecurity program that seeks to make prospective cybersecurity professionals more aware of government agency positions and that seeks to prepare more students to conduct cybersecurity research

Research Dissemination

Papers and Presentations from FY 2025

Brown, R. E., Orrill, C. H., Wang, K. (2025). Teachers making sense of fraction multiplication with an area model. Poster to appear in Proceedings of the forty-seventh annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education.

Gouvea, E., Asif, A. D., Thapa, R., Kushimo, K., Orrill, C. H., Kayumova, S., & Balasubramanian, R. (2025, April). Rearticulating computational thinking to resist deficit discourse. [Poster presentation]. AERA Annual Meeting 2025. Denver, CO.

Gouvea, E., Asif, A., Thapa, R., Kushimo, K., Orrill, C., Balasubramanian, R., & Kayumova, S. (2025). Working to foreground relationality in computational thinking. In S. C. Kong, T. C. Hsu, & J. Zhao (Eds.), Proceedings of the 9th International Conference on Computational Thinking and STEM Education (CTE-STE) (pp. 75–80). The Education University of Hong Kong. https://www.eduhk.hk/ctestem2025/doc/CTE-STEMproceedings20250616a.pdf

Gouvea, E., Kayumova, S., Balasubramanian, R., & Orrill, C. (2026). Noticing the Relationality of Computational Thinking. To appear in Proceedings of the 13th International Conference of Mathematics Education and Society, (pp. 401–404).

Nagar, G. G., Orrill, C. H., Borwn, R. E., & Wang, K. (2025). Middle grades teachers' sense making of invariance in the context of referent unit. Short paper to appear in Proceedings of the forty-seventh annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education.

Orrill, C. H., Gouvea, E., Kayumova, S., & Balasubramanian, R. (2025, April). Inclusive computational thinking in one early elementary classroom. [Roundtable presentation]. AERA Annual Meeting 2025. Denver, CO.

Orrill, C. H., Wang, K., & Brown, R. E. (2025, April). Double-number lines, area models, and 15 years of the Common Core Standards for School Mathematics. [Paper presentation]. AERA Annual Meeting 2025. Denver, CO

Wang, K., Mardone-Segovia, C., Wang, S., Brown, R. E. Orrill, C. H., Cohen, A. S. (2025). Enhancing interview protocol evaluation: integrating topic modeling with qualitative insights. Poster to appear in Proceedings of the forty-seventh annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education.

Financial Overview

$887,734

Total Income

$745,970

Total Expenses

$62,120

Total Assets

$3,903

Total Liabilities

Financial Statements

2025 Accountant Review and 990 coming soon!

The People & Partners of Rethink Learning

Rethink Learning Labs Staff

Dr. Chandra Orrill - Executive Director of Research & Development
Dr. Blakely Tsurusaki - Director of STEM Initiatives
Dr. Ezra Gouvea - Postdoctoral Researcher
Dr. Kun Wang - Postdoctoral Researcher
Dr. Bonni Jones - Research Scientist
Kym Welty - Grant Support Specialist



Funding Partners

Edward Jones Charitable Gift Fund
The GLOBE Program
The National Science Foundation
The Nellie Mae Foundation
QuestionPro

Rethink Learning Board of Directors

Matthew Murphy, Ed.D. (chairperson)
Interim Superintendent
Wanaque School District



Tobey Eugenio
Learning Experience Designer
Our Sisters' School



Lanie Gordon (Board Treasurer)
V.P. of Operations
Eduscape



Takiwi Milton-Babalola, Ed.D.
Chief Academic Officer
Danville Public Schools



Alex Urrea
Founder of Rethink Learning
Founder & CEO, Eduscape



Chandra Orrill, Ph.D. (Board Secretary)
Executive Director
Rethink Learning

