

### EDUCATION 4 LEADERSHIP

### 2023 IMPACT

Changing communities one student at a time

Educating for Leadership, Inc. (E4L) impacted students and communities across the globe in 2023. From Alaska to Africa, E4L provided opportunities for students to learn and apply technology as solutions for their communities. Through the initial T3 Alliance, E4L has now expanded to include Make-IT-Secure (cybersecurity) and CBEIgnited (competency-based education approach to change education systems). These three categories continue to support the overall mission of E4L to provide opportunities to under-served populations.



**Destination Moon** 

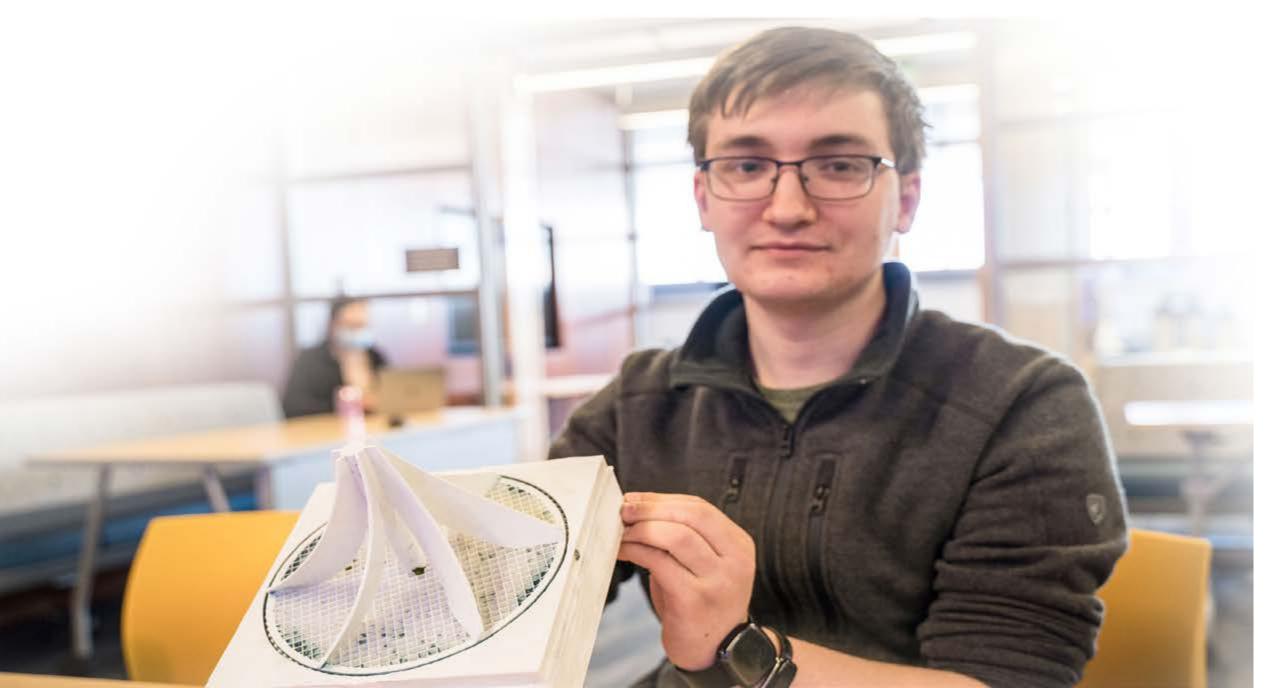
APPROACH

T3 Alliance builds a "training of trainers" program around your unique needs and challenges.



T3 Alliance Training of Trainers





We train instructors how to engage students in STEAM (Science, Technology, Engineering, Art, Mathematics) with hands-on technology (build computers, program drones, construct grow towers, command autonomous vehicles in land, sea, air, alt energy, etc.), and then use the skills learned to give back to their community. It begins with a conversation; who are you and what are your needs? The T3 Alliance builds a "training of trainers" program around your unique needs and challenges.

Together we can make things happen and give EVERY student a unique opportunity to create, engage, ignite!





### E4L 2023 IMPACT NATIONAL REACH

**Local Charities** 

**CBE Scholarships** 

TECHNOLOGY / REACH STUDENTS

### ROV

UNDERWATER ROBOTS IN HYDABURG, ALASKA



The Underwater Robots project aimed to develop a device for studying the marine ecosystem in Hydaburg, Alaska. Middle school students used underwater ROVs to explore the bay with their younger siblings and cousins. High school students examined the undersides of boats in the bay using the ROVs to check for damages and barnacles. They found fascinating marine life under the docks and recorded amazing footage.

GROWTOWER

RPI GROWTH MONITOR



**Underwater Robots** in Hydaburg, Alaska

Students building underwater Remote Operated Vehicles

HCSD Students by their Grow Tower for agriculture using Raspberry Pi mothmixed with technology for monitoring progress, while using hands on tools with pvc pipe, students were excited to put things into place to grow their own crops for the school and community.

**Student Stipends** Site Support Juneau STEAMfest Cordova IceWorm Energy Fest T3 Shake Fest Event Fairbanks T3 Hydaburg STEAM Fest T3 Shishmaref STEAM Fest Anchorage Drone Club Testing Event Wrangell Advanced Drone Training EVENT **Anchorage Energy Audit Event** Seward STEAMfest with Cordova ASAP Conference + T3 Summer Program STEAMfest T3 Summer Program T3 Alliance & Alaska Airmen Aviation Outreach Program UAF Makerspace Summer STEAM Engine Labor Day Train the Trainers North Pole High School STEAM Fest T3 Alaska Fall programs

erboard to monitor growth, humidity, light. Learning the science of agriculture



# GLOBAL REACH

STUDENTS / TECHNOLOGY / REACH



COMPETENCY BASED CURRICULUM (CBC) TRAINING FOR LECTURERS LAIPAIKIA UNIVERSITY - KENYA

Lecturers were trained on Competency-Based Education and how to incorporate it in the lecture halls. The ICT team was also taken through assembling the Raspberry Pi donated to the University by the T3 Alliance Alaska.



Laipaikia University - Kenya Maasai Mara - Kenya GoFundMe - Kenya Bobi Institute - Uganda Move Global - Uganda

CBC Training for Laikipia University lecturers kicked off on 22nd August, 2023 at Mandela Hall and Computer Laboratory consecutively. The session was officially launched by Prof. Kibett Rotich and encouraged members to be ready to learn a lot concerning the Competency Based Education (CBE). He also urged everyone that change and adoption of the new learning model is inevitable.

### E4L 2023 IMPACT

## STUDENT IMPACT

HYDABURG CITY SCHOOL DISTRICT, ALASKA



T3 Alaska Students at the Shismaref STEAM fest designed and built their own fishing poles and took a field trip onto the frozen sea ice to test them out. While on the ice a few students had a chance to test the DJI Inspire drone used by the community search and rescue group.



### ENGAGING COMMUNITY

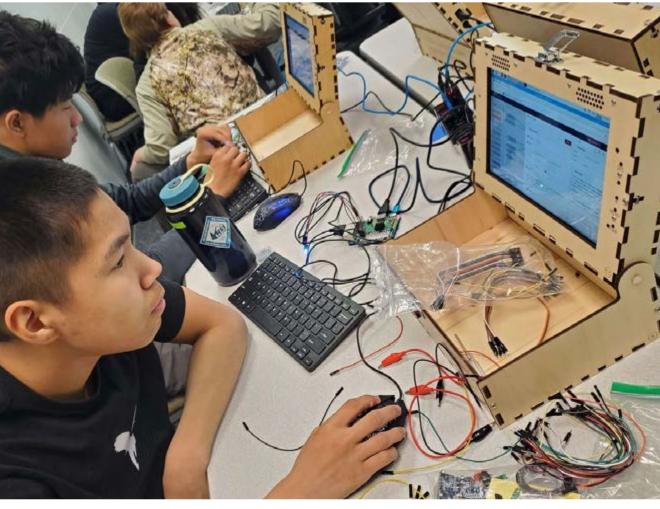
In response to teacher shortage in rural Alaska (and across the country) post-COVID, T3 Alliance brought in teacher experts for 10-day rounds to provide hands-on instruction. Instructors worked with current staff and administration to demonstrate best practices for working with students to motivate and engage them into community-wide lessons.



It's time to earn Raspberry PI badges

MS Math 60%
MS Reading 55%
HS Math 178%
HS Reading 50%
HS LA 62%
Average 81% Improvement

MAPS standardized test scores show growth rate an average of 81% in both the middle and high school levels this year



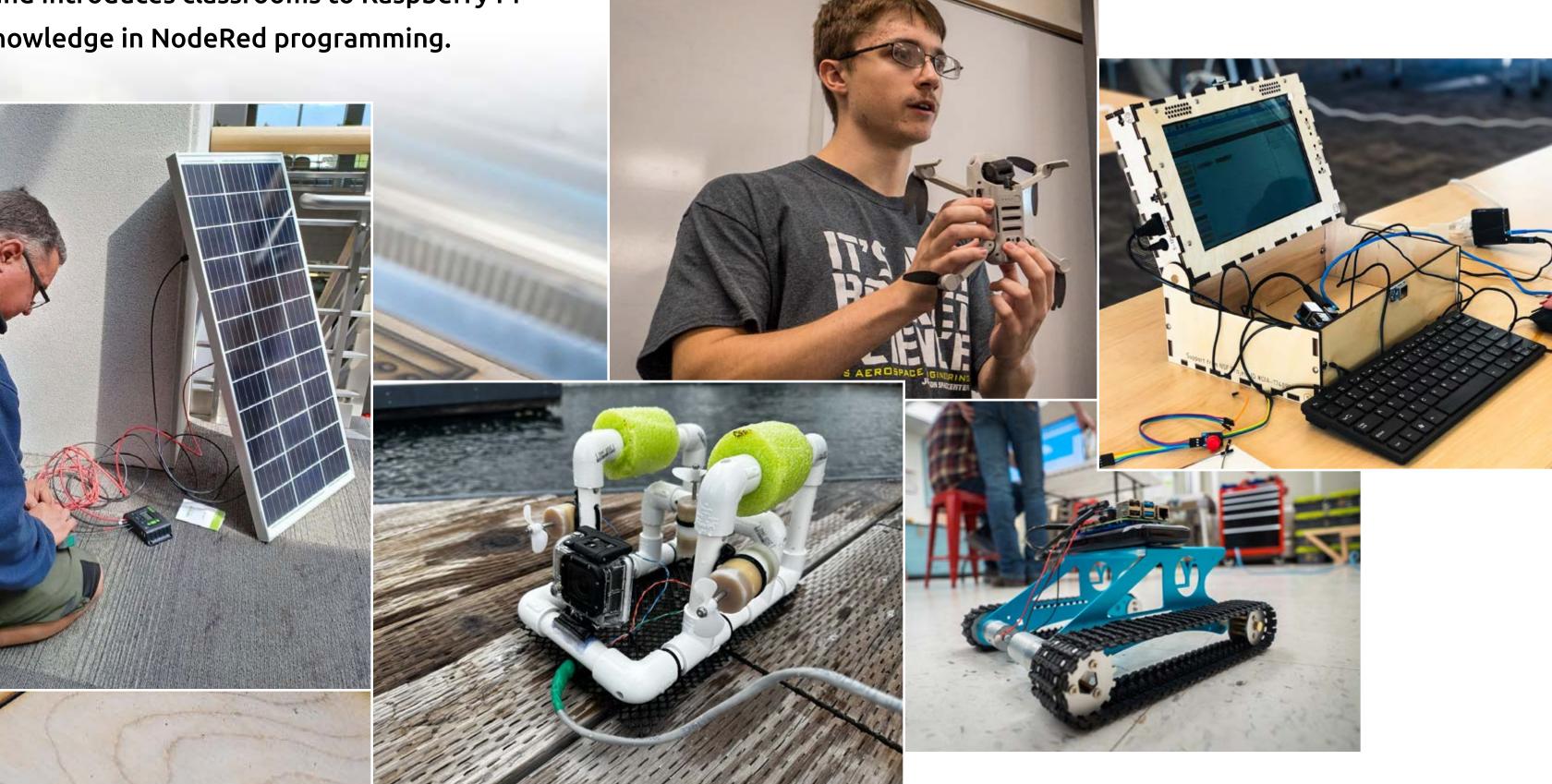
Students learned about sensors, using drones, storytelling, and 3D printing, as well as trying whale, salmon bellies, and akutaq, with Native Student Services at UAA.



# DIVERSITY IN TECHNOLOGY

T3 Alliance trains teachers in new learning concepts, such as growth mindset, and introduces classrooms to Raspberry Pi technology and knowledge in NodeRed programming.

RASPBERRY PI / DRONES / REMOTE OPERATED
VEHICLES / MAKER SPACE / 3D PRINTING /
LASER CUTTING / VIDEO / CYBER SECURITY /
STORY TELLING / COMPETENCY BASED EDUCATION





COLLABORATION & ENDORSEMENTS

STEM EDUCATION

COMPETENCY BASED EDUCATION

CYBER SECURITY

### Major Partners:

National Science Foundation (two awards)

Council for Opportunity in Education

National Association for Community College Entrepreneurship

**Connected Nation** 

**University of Alaska** 

University of Mississippi

University of Miami Dade

University of Boise State

**University of Puerto Rico** 

University of Hawaii



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Engaging organizations with STEM hands-on instruction and community based projects



Systemic approach to competency based learning



Training of trainers to understand cyber security and make systems secure

