

Work Session

Tuesday, March 30, 2021 5:30 PM

NBMHS RC/Zoom, 2920 3.5 Nome-Teller Hwy, Nome, Alaska 99762

A. **Call to Order**

B. **Items for Discussion**

1. Arctic Access Partnership Presentation

2. NACTEC ANEED Grant Presentation

C. **Upcoming Events:**

- Tuesday, April 13, Regular Meeting, 5:30 pm, NBMHS RC/Zoom
- Tuesday, April 27, Work Session, 5:30 pm, NBMHS RC/Zoom

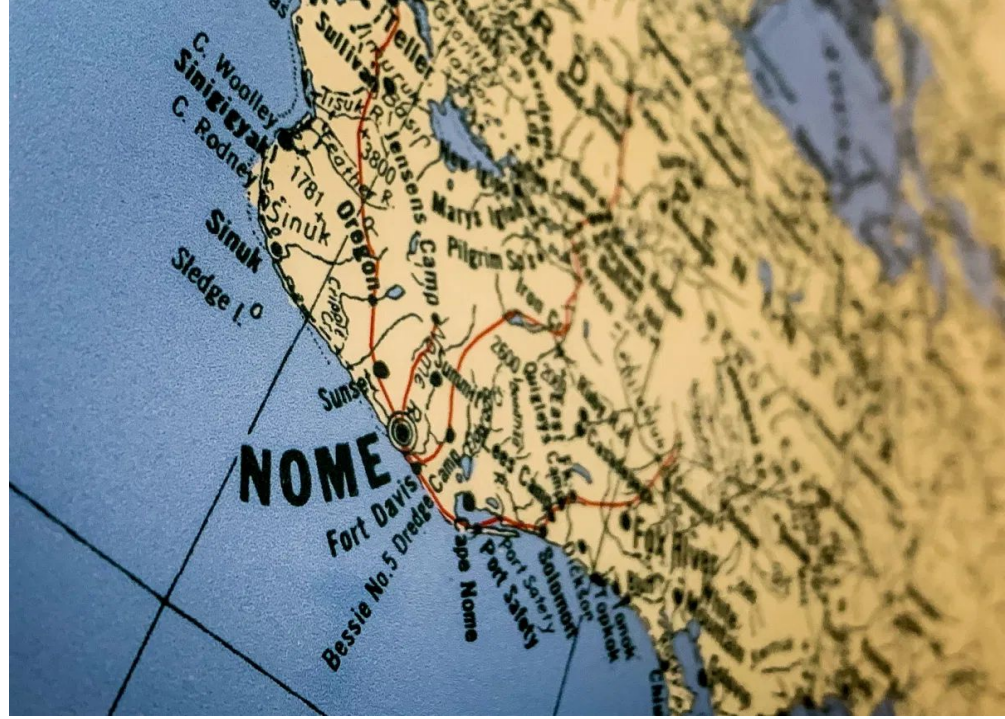
D. **Adjournment**

ARCTIC ACCESS, INC

partnership



NBMHS



Jill Peters

March 30, 2021

ARCTIC ACCESS, INC: WHO ARE WE?



ARCTIC ACCESS, INC.

Independent Living Program located in Nome, Alaska, providing information and assistance to elders and people with disabilities in the North West Arctic and Norton Sound Regions.

PARTNERSHIP



Discovery

Work study

Summer paid internships

Job readiness

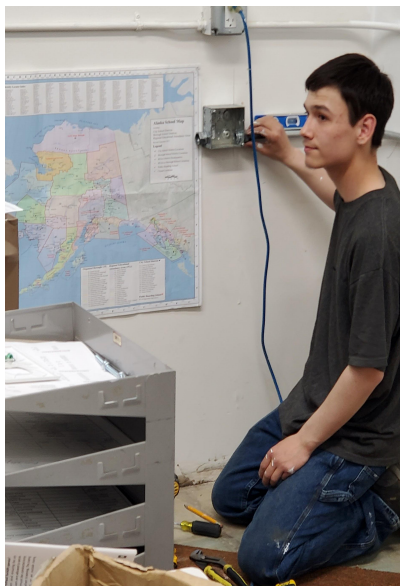
**Local/district
employment**

DISCOVERY



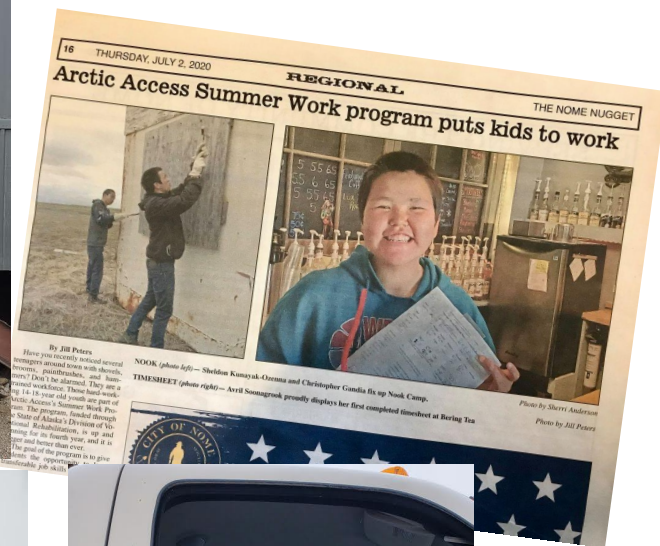
Based at Beltz, this program incorporates job readiness skills application with field trips to local employers (AC, TSR, etc.), life skills instruction, CPR, and events like Culinary Day, sponsored by NACTEC.

WORK STUDY



Through work study programs, students receive paid positions that include mentoring and opportunities for permanent employment or continued vocational training.

SUMMER PAID INTERNSHIPS



SUMMER PAID INTERNSHIPS

Starting our 5th year!

Ages 14-graduation

+/-20 students

+/- 10 local businesses

+/- 10 local businesses

16 THURSDAY, JULY 2, 2020 REGIONAL THE NOME NUGGET

Arctic Access Summer Work program puts kids to work



By Jill Peters

Have you recently noticed several teenagers around town with shovels, brooms, paintbrushes, and hammers? Don't be alarmed. They are a trained workforce. These hard-working 14-18-year old youth are part of Arctic Access's Summer Work Program. The program, funded through the State of Alaska's Division of Vocational Rehabilitation, is up and running for its fourth year, and it is bigger and better than ever.

The goal of the program is to give students the opportunity to learn transferable job skills and expectations.

NOOK (photo left) — Sheldon Kunayak-Ozenma and Christopher Gandia fix up Nook Camp.

TIMESHEET (photo right) — Avril Soonagrook proudly displays her first completed timesheet at Bering Tea

Photo by Sherri Anderson

Photo by Jill Peters

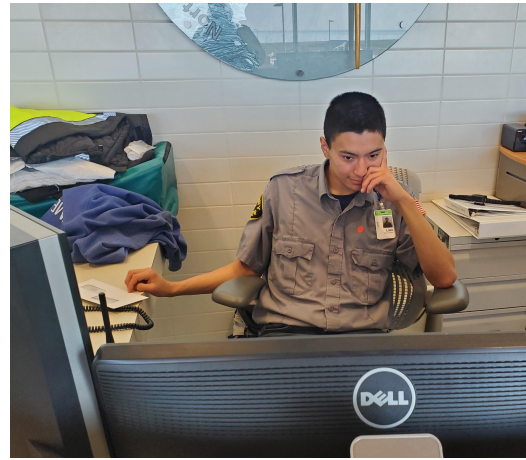


This partnership provide invaluable support for students with multiple barriers

JOB READINESS



LOCAL/DISTRICT EMPLOYMENT



Nome-Beltz/Arctic Alaska alumni find employment working in various sectors of our region including security, the hotel industry, our regional hospital, and Nome Public Schools!





ARCTIC ACCESS, INC.



THANK YOU



Alaska Native Engineering Education Development (ANEED) Project

A Kawerak, Inc./NACTEC Partnership supported by the U.S.
Department of Education's Office of Indian Education - Accessing
Choices in Education (ACE) grant program.



ANEEED Goals

- 1. Develop and implement engineering design challenge/STEM pathway for Northwestern Alaska PreK-8 students.

(STEM: Science, Technology, Engineering, & Math)

- 2. Improve Alaska Native students Math and Science proficiency, with deeper conceptual understanding, through engineering-related activities and career exploratory programs in grades 8-12.



ANEEED Objectives

- 1. Create and deliver Early Childhood Education engineering exposure experiences for Nome Public Schools and Bering Strait School District students (Grades PreK-2).
- 2. Create and deliver a series of STEM-infused, engineering-related activities to transition Northwestern Alaska students from elementary through middle school with problem solving skill sets (Grades 3-7).
- 3. Develop and infuse STEM concepts into Career and Technical Education programs in Alaska's priority industries for Northwestern Alaska high school students (Grades 8-11).
- 4. Prepare high school students for post-secondary transitioning into the University of Alaska system (Grade 12).



PreK – Grade 12 STEM Education Pathway

- Offer 20 Engineering Education services at grade-level clusters:
 - PreK-2; 3rd-7th grade; 8th-11th grade; & 12th grade
- Services include:
 - In-school & after school programs
 - Family STEM night programs
 - Summer camp programs
 - Dual credit opportunities
 - Post-secondary preparation/assessments
 - Residential programming and Transition Camps



PreK: WEE Engineer

- Science Museum of Boston *Engineering is Elementary* (EiE) Curriculum
- (4) Design Units
- Three-Step Engineering Design Process focus
- WEE Engineer units include:
 - Designing Fans
 - Designing Wrecking Balls
 - Designing Rafts
 - Designing Noisemakers

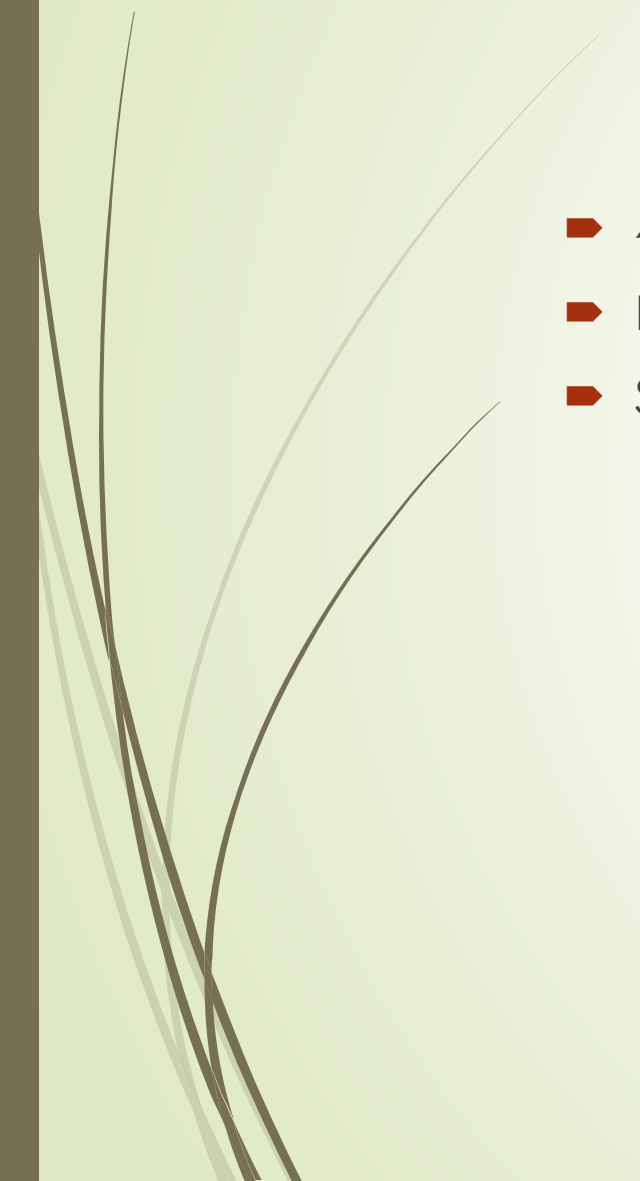


EiE for Kindergarten

- (4) Unique Engineering Design Challenges
- Five-Step Engineering Design Process
- Exposure to Earth Science & Physical Science units
- Units include:
 - Raise the Roof: Designing Shelters
 - Here's the Scoop: Designing Trash Collectors
 - Go Green: Engineering Recycled Racers
 - Bubble Bonanza: Engineering Bubble Wands



Engineering is Elementary: Grades 1-3

- 4-6 units per year/per grade level
 - Life Science, Earth Science, & Physical Science units
 - Sampling of units include:
 - The Best of Bugs: Designing Hand Pollinators (Gr. 1)
 - Music to My Ears: An Acoustical Engineering Challenge (Gr. 1)
 - To Get to the Other Side: Designing Bridges (Gr. 2)
 - A Sticky Situation: Designing Walls (Gr. 2)
 - Marvelous Machines: Making Work Easier (Gr. 3)
 - Light Up the Night: An Electrical Engineering Challenge (Gr. 3).
- 



Engineering is Elementary: Grades 4-5

- (4-6) units per year/per grade level
- Life Science, Earth Science, & Physical Science units
- Sampling of units include:
 - Now You're Cooking: Designing Solar Ovens (Gr. 4)
 - A Slippery Slope: Engineering an Avalanche Protection System (Gr. 4)
 - Shake Things Up: Engineering Earthquake-Resistant Buildings (Gr. 4)
 - A Slick Solution: Cleaning an Oil Spill (Gr. 5)
 - An Alarming Idea: Designing Alarm Circuits (Gr. 5)
 - Water, Water Everywhere: Designing Water Filters (Gr. 5)



Engineering is Elementary: Grades 6-8

- ▶ May include a limited sample of EiE units at middle school level
- ▶ Potential EiE units:
 - ▶ Here Comes the Sun: Engineering Insulated Homes
 - ▶ Plants to Plastics: Engineering Bioplastics
 - ▶ Growing Up: Engineering Vertical Farms
 - ▶ Outbreak Alert: Engineering a Pandemic Response

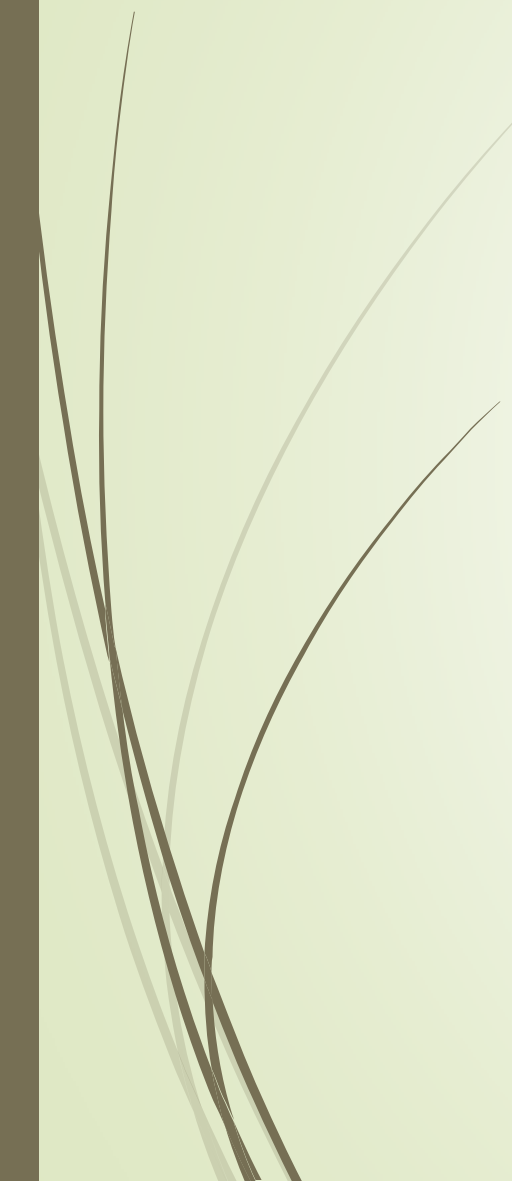


STEM Infusion in CTE: Grades 7-12

- NACTEC & ANSEP partner programming
- Science & Math infusion in CTE content
 - Aviation: <https://www.nacteonline.org/aviation-program/>
 - Small Engine Repair: <https://www.nacteonline.org/small-engine-repair-program/>
 - Flux Core Arc Welding
 - Healthcare



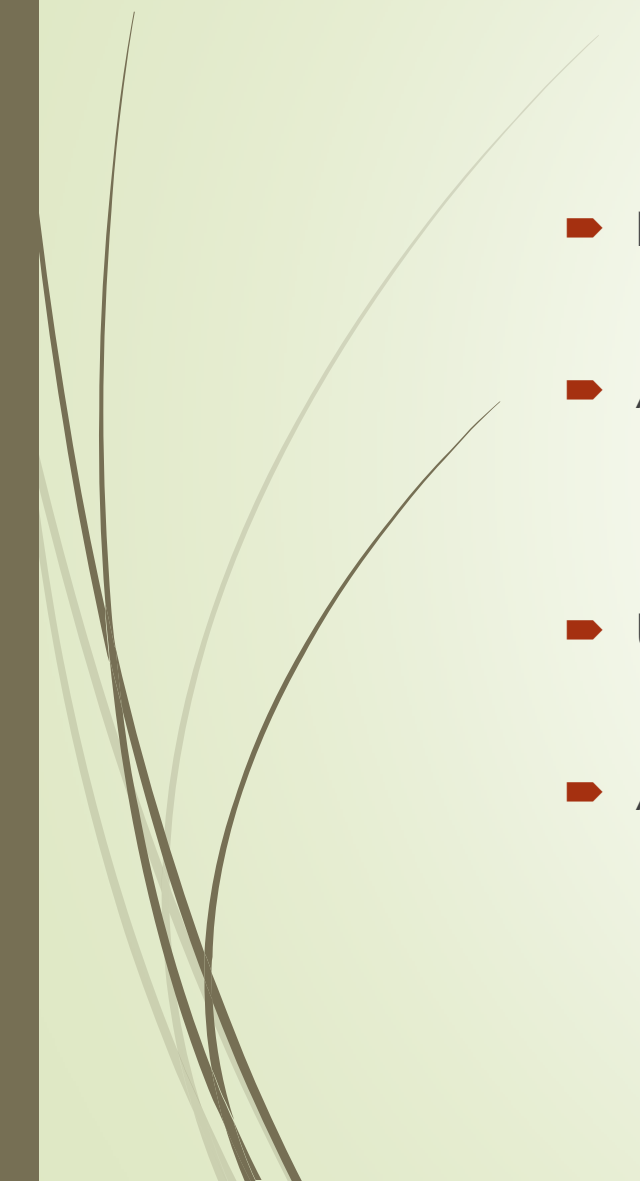
Delivery Plan



- ▶ NACTEC will hire (4) Itinerant Teachers
- ▶ Teachers will be assigned (4) primary leads
 - ▶ E.g. Nome/Golovin/Wales/White Mountain
 - ▶ Village service: 6 weeks/school year/site
- ▶ Nome service includes
 - ▶ Kawerak Head Start
 - ▶ Nome Pre-School
 - ▶ Nome Elementary School
 - ▶ K-5 Special offering (school day) & after school programming
 - ▶ Equivalent of 1.0 FTE position anticipated for NPS/NES
 - ▶ NES 6th grade classroom – Room 119 -- location to host EiE program



Transition Camp Programs



- NACTEC/ANSEP 5th Grade STEM Ready Camp (Nome)
 - FY22 (1), FY23 (2), FY24 (3)
- ANSEP/NACTEC 6th-8th Middle School Academy (Anchorage-UAA)
 - NPS & BSSD Students; NACTEC staff chaperones
 - (1) ten-day program/year in FY22-FY24 (54 students/year)
- UAF-NWC/NACTEC Salmon Lake Field Biology Camp
 - August 2022-24, Five-day dual credit camp program
- ANSEP High School Programs



Performance Outcome Measures



- PEAKS data:
- Increase cumulative student Math proficiency by 5% in project years 2, 3, & 4.
- Increase cumulative student Science proficiency by 5% in project years 2, 3, & 4.
- Reduce the % of developmental Math courses for incoming Alaska Native college Freshmen by 5% in years 3 & 4.