## Alaska State Board of Education proposed Career and Technical Education (CTE) Program Recognition

## Effective Student Engagement

Minto School/Scott Brucker Hydroponics Growing — Students assembled a hydroponics growing unit and grew vegetables for consumption in developed meals. This project successfully accessed transitional funding provided by Alaska Department of Labor and Workforce Development to help students with an Individualized Education Plan (IEP) to be independent young adults. Student learning objectives included: assembly of hydroponic system; read instructions and trouble shoot technical problems; seed selection, planting and care; harvest fully grown vegetables and develop meals. Based on project success, the school will be purchasing more units to harvest additional foods for school use.

**Delta Greely School District Boat Building** – Students at Delta Greely High School successfully designed and built a 21-foot aluminum jet boat from scratch. The school received grants from Airgas for welding equipment, student safety gear and consumables used in boat fabrication. Multiple years and classes of students designed the boat using Computer Aided Design (CAD) software, created a 3D model for "water channel" testing, analyzed draft and drag, and cut out and assembled the boat. Students will obtain a gaming permit to raffle off the boat.

## Work-Based Learning

## Alaska Resource Education (ARE) Powerful Opportunities for Women in Resources (POWR)

Camp – Alaska Resource Education conducted a week-long field trip as a capstone activity for students enrolled in a 9-week Anchorage School District course exploring career opportunities in Alaska's natural resources industries. Students visited over ten Alaska employers and training programs located near Alaska's rail belt from Anchorage to Fairbanks. Students experienced firsthand engagement with real job tasks in resource extraction and energy related Alaska industrial partners. Students were subject to industry safety, training, and employment standards in action during their site visits.

Annette Island School District Scuba Program – Partnering with the local tribe (Metlakatla Indian Community) through a MOA with the Department of Fish & Wildlife, the program allows students to gain the necessary license to harvest sea cucumbers and geoduck clams, which are shipped overseas. Through this MOA, students are required to earn Rescue Diver certification before a dive harvest permit is provided. Based upon up to four years of supervised dive experiences and training during school, students become confident divers with skills that increase safety and significantly reduce diving accidents as a commercial diver. Diving skills will be applied to mariculture programs in the future.

Bristol Bay Regional Career and Technical Education Program's Fisheries Program – Providing programming to students from four school districts, BBRCTE has developed a strong partnership with Bristol Bay Native Corporation, and together are focusing on student's traditional native culture and skills as the foundation of viable career pathway built upon the skills students already possess such as local waterway knowledge, how to pilot a skiff and fillet a fish, reading the weather, etc. Courses offered include: Commercial Set Net Camp; Commercial Fishing Work-Study; Fisheries Technician Training; and Bristol Bay Board of Fish Policy. Students can continue post school training through AVTEC's Maritime track and other statewide fisheries training.