

What is AVTEC doing...and what do districts need to know

Fall Boardsmanship Academy
September 23 – 24, 2017
Cathy LeCompte, Director ~ AVTEC



AGENDA FOR TODAY

- History of vocational education (aka CTE)
 - How does vocational education look in your district?
- Success in the New Economy
 - What are you doing in your district to prepare students for the new economy in Alaska?
 - What is AVTEC doing to prepare students for success in the new economy & Alaska?
- Questions...comments



History of Vocational Education

- Origins of vocational education
 - Smith-Hughes Act 1917
- Improving vocational education
 - Image problem / NCLB forced vocational education to up their game
- College & Career Readiness
 - Career & Technical Education

<http://www.americanradiohistory.com/segments/the-troubled-history-of-vocational-education/>

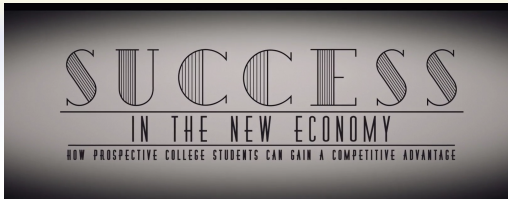


SHARE WITH EACH OTHER...

WHAT DOES VOCATIONAL
EDUCATION LOOK LIKE IN
YOUR DISTRICT?

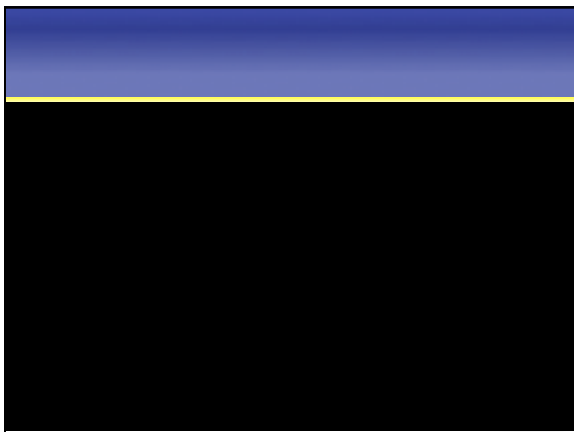


A QUICK VIDEO...



Handouts: interactive quiz for students and transcript for video





Success in the New Economy

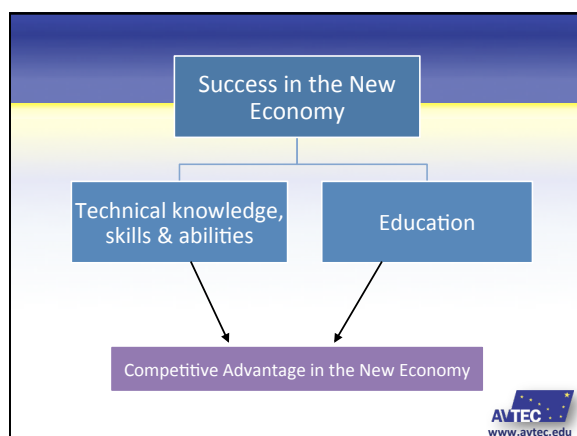
- National data indicates individuals earn more money with a college education
- “College for all” in pursuit of future job security, social mobility, and financial prosperity:
 - 1960 = 13% high school students go to college
 - 2010 = 60% high school students go to college



Success in the New Economy

- 66% high school students enroll in college but only **25% finish BA degree** and those who do find that they are not prepared for the world of work...
- Results is underemployment in “gray collar” jobs – over educated (and in student loan debt) for job/salary







Alaska data indicates...

- More education and training generally means higher earnings, better benefits, and lower unemployment rates
- A highly educated/trained population is an economic asset to a city, region, state, and nation
- Many of the jobs most susceptible to being automated away are low-skilled

AVTEC
www.avtec.edu

Alaska Top Jobs Ratio...

| | | |
|--|--|---|
| 1 | 2 | 7 |
| <ul style="list-style-type: none"> • Physical Therapist • General & Family Practitioners • Physician Assistants | <ul style="list-style-type: none"> • Elementary School Teachers • Airline pilots • Purchasing agents • Registered nurses | <ul style="list-style-type: none"> • Firefighters • Air traffic controllers • Aircraft mechanics • Captains, Mates, and Pilots • Computer user support |

<http://labor.alaska.gov/trends/oct16.pdf>

AVTEC
www.avtec.edu

Other post high school options...

- Apprenticeships:
 - Carpenters, Electricians, Plumbers, Pipefitters and steamfitters
- Long-term on-the-job training:
 - Mobile heavy equipment mechanics, water and wastewater treatment, Power Plant Operators
- Moderate-term-on-the-job training:
 - Welders, police and correctional officers, inspectors/testers/sorters

<http://labor.alaska.gov/trends/oct16.pdf>



What this boils down to...

- High school kids should expect to continue their education/training if they want good wages and better job security.
- It's an overstatement to say that all or nearly all of the jobs our economy is producing will *require* something beyond a high school education, but it is fair to say that MOST of the GOOD jobs will.
 - Dan Robinson, Senior Research Analyst DOLWD

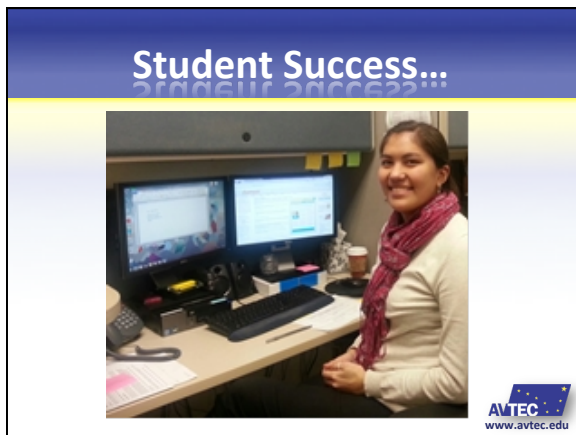


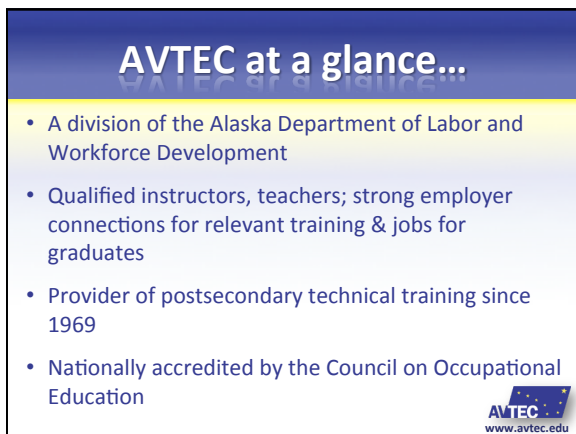
SHARE WITH EACH OTHER...

WHAT ARE YOU DOING IN YOUR DISTRICT TO PREPARE STUDENTS FOR THE NEW ECONOMY IN ALASKA?







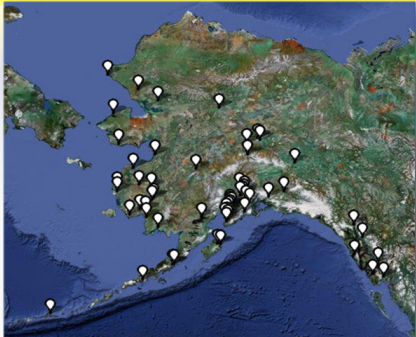



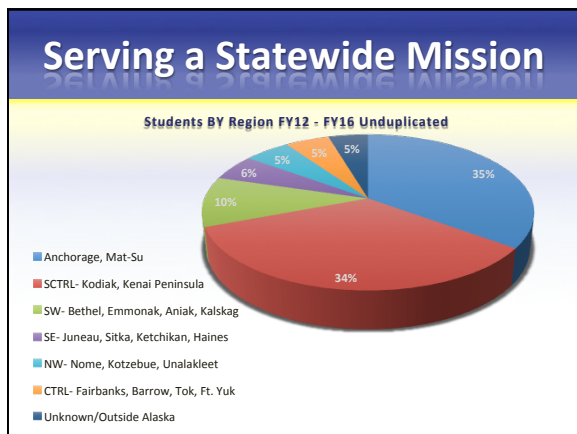
Mission statement...

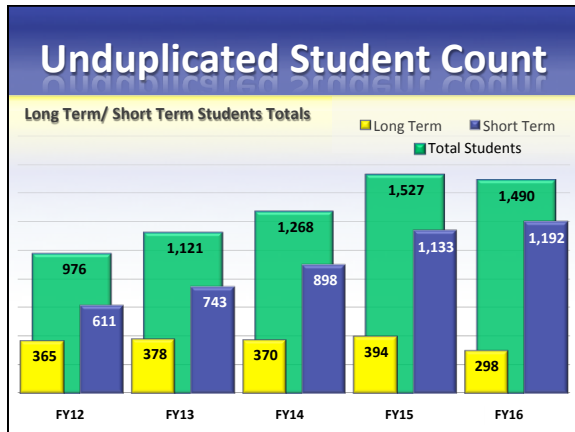
AVTEC prepares students with career & technical skills required for success in the Alaska workplace.




Serving a Statewide Mission











Student Achievement...

- In FY16, 91% of AVTEC students enrolled in long term training programs graduated or completed training upgrades
- Among these AVTEC graduates, 90% were employed in training-related jobs

Student Success...




Training Experience...



- Applied technical skills
- Competency-based assessments
- Industry driven credentials
- Specific preparation for employment



TRAINING PROGRAMS

- Long term training programs take students from zero to entry level; 6 weeks to 10 months.
- Job Upgrade Training for new & incumbent workers; less than 6 weeks increase upward mobility.
- Continuing Education for new & incumbent workers; less than 6 weeks to maintain employed status.



Long Term Training Programs

- Applied Technologies:
 - Combination Welding (Structural & Pipe Welding)
 - Diesel Heavy Equipment Technology
- Energy Building Trades:
 - Industrial Electricity
 - Construction*
 - Refrigeration*
 - Plumbing & Heating*
 - Power Plant Operator



* Facilities Maintenance Combination



Long Term Training Programs

- Alaska Culinary Academy
 - Culinary Arts
- Alaska Maritime Training Center:
 - Master not more than 200 Tons
 - Qualified Member of the Engine Department
- Information Technology:
 - Business & Office Technology
 - Information Technology (Networking)

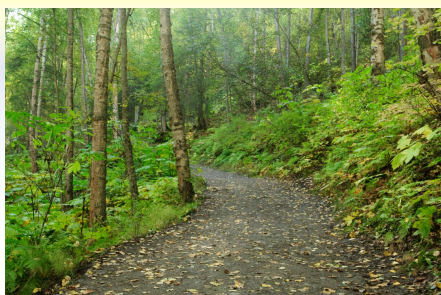


Short Term Training Programs

- Bulk Fuels Operator
- Advanced Power Plant Operator
- School Bus Driver
- Microsoft Office Products
- Maritime Basic Training
- Maritime Advanced



Pathways model...



High School Maritime Pathway

HIGH SCHOOL: Introduction to Nautical Skills ~ Young Fisherman's Program

ADULT: Pre-apprenticeship for qualified Maritime Apprentice program




Post Secondary Maritime Pathway

Youth Outreach & Pre-apprentice

Introduction to Nautical Skills & ~ Young Fisherman's program available via eLearning statewide or on site at USCG approved local high school

Introduction to Nautical Skills for adults = pre apprenticeship for Callista Apprenticeship

Entry Level Courses / Hawse Pipe / Apprenticeship

Able Seafarer Deck & Engine; Able Bodied Seaman; Qualified Member of the Engine Department

Deck, Engine Kitchen paths in apprenticeship


Add: Sea Time in qualified rating, training, on board assessments for advancement.

Advanced Training

Advanced Maritime Officer Training

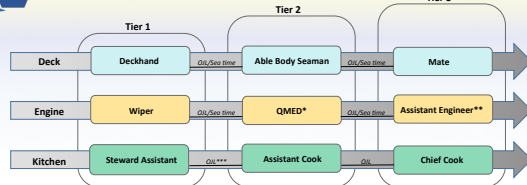
Marine Engineering

Associate of Applied Science Marine Transportation (via articulation with UAS Ketchikan)



Alaska's Maritime Apprenticeship Program


Voyage Paths



* QMED: Qualified Member of Engine Department

** Engine: Tier 3, Apprentice may choose either Designated Duty Engineer (Limited), or Third Engineer (Unlimited)

*** OJL: On-the-Job Learning




Student Success...




www.avtec.edu

SHARE WITH EACH OTHER...

**IN WHAT AVTEC PATHWAYS DO
YOUR DISTRICT CTE PROGRAMS
ALIGN?**


www.avtec.edu

Training Partnerships are key to student success...

- University of Alaska ~ articulation agreements and program schedule alignment
- Regional Training Centers ~ transition support for students
- High Schools ~ EXCEL Alaska, tours & experience at AVTEC
- Employers / Registered Apprenticeships ~ Related Instruction




www.avtec.edu

Industry Partnerships are key to Student Success...

- Alaska Workforce Investment Board
 - Provide oversight to AVTEC
- Industry Advisory Committee
 - Advise: strategic conversations
 - Assist: fund development
 - Advocate: key areas for policy change; AVTEC's voice in Juneau and beyond



Industry Partnerships Key to Student Success...

- Program/Occupation Advisory Committees
 - Advise: On curriculum, student performance in workplace
 - Assist: Equipment donations, financial contributions, scholarships for students
 - Advocate: Support AVTEC mission through communication; ambassadors



Questions?

Visit us on the web at:

www.avtec.edu

Come and visit - book a tour



Contact me at:

Cathy LeCompte

cathy.lecompte@avtec.edu

224-6150