



## 4<sup>th</sup> UA Fisheries Seafood Maritime Initiative

October 21, 2015 ~ Meeting Summary

*Welcome – Fred Villa (UA Assoc. Vice President & FSMI Co-Chair)*

### *Opening Remarks*

#### **Dan White (UA Vice President)**

- Everyone has a niche.
- Questions to consider:
  - Who funds FSMI?
  - Who wins – what is accomplished, what difference is made?
  - What role do the community campuses play?
  - When do we declare victory?

#### **Paula Cullenberg (Director, UA Alaska Sea Grant & FSMI Co-Chair)**

- UA FSMI – Where we are at this point
  - We have all coastal campuses at this meeting except for Juneau (but have UAS Provost here). We have an increase in the number of sites in the University offering maritime classes
  - Maritime Works – group established by industry
  - Maritime has more state “awareness” – mentioned in letter to United Fishermen of Alaska by Commissioner of Labor and then in newspaper editorial by chairman of UFA.
  - We have an ongoing UA FSMI Leadership team – still meeting, still functioning.
  - There is an ongoing need – 1 out of 7 jobs in the state are maritime related.
- UA FSMI – long term vision paper outlines how to have UA recognized by those outside of UA as the go-to place for maritime education, training and research.
  - Leadership team (Paula Cullenberg, Fred Villa, Pete Pinney, Mike Castellini, Joan Braddock, Gunnar Knapp, Alan Fugleberg, Priscilla Schulte)
- UA FSMI – core strategies
  - Responsive to industry needs
  - Coordinate across all three MAU’s
  - Communicate to potential and current students

- Connect to secondary, links to upper division training
- Adapt current programs
- Develop new programs when needed
- Research that is applied to FSM concerns and needs
- Build industry partnerships
- Strengthen agency partnerships

*Round Robin of UA sites – what are they doing? (Click [here](#) for presentations.)*

**Bob Metcalf (Northwest Campus - Nome)**

- Fisheries are an important economic engine for the community
- Many working on the water may not consider themselves maritime
- Have developed a Welding CTE working with the Bering Strait School District. Have welder setups in 8 villages, has small engine repair curriculum.
- Works with NACTEC to a limited degree.
- Campus is diversifying supporting research coming through (Korea Polar Research Institute, IARC, Next Generation Environmental, Siquiliaq)

**Debi McLean – (Bristol Bay Campus – Dillingham)**

- Classes have been piloted- we know they are needed.
- We are working towards production of our own small boat parts.
- Added an Outboard Motor maintenance and repair class taught by MAP agent, Gabe Dunham
- Aleutians were added to BB campus - Unalaska and Sand Point
- Uses Carl Perkins funding
- Working toward an OE in entry level fish harvesting

**Mary Pete (Kuskokwim Campus-Bethel)**

- Hired a Fisheries Technology coordinator for the UAS Fish Tech program.
- Need MAP agent – an objective consultant
- Established the Learning Center Board (includes both CDQ group representatives)
- CDQs are eager for partnerships.

**Dan O’Conner (Prince William Sound Community College – Valdez)**

- Valdez is trying to diversify financially – PWSCC is providing education and training to stabilize the economy.
- Maritime is expanding –
  - Silver Bay Seafoods is expanding and building a residential site in town
  - We are adding skills to Millwright program to accommodate
- Maintenance Center – for boat upkeep and support
- Need for Technical Center to diversify the Millwright Program. It needs more space and it’s not a money making program.
- Unable to fill faculty positions

- Would like to determine - what is the real need, what is viable with pooling resources.

#### **Alan Fugleberg (Kodiak College – Kodiak)**

- Developing a Vessel Maintenance & Repair program
- TVEP funding – needed content expert – hired L.A. Holmes, maritime coordinator
- Lease of Industrial Arts program (tech courses) for welding and fabrication
- L.A. working on marine electrical and marine corrosion classes. Electrical issues on boats which are unsafe. Working towards learning to provide quality repairs so that people can be fishing instead of fixing.

\* Kodiak College is ABYC Marine League Certified (as is Kachemak Bay Campus)

#### **Paula Martin (UAS – Sitka) and Reid Brewer UAS Fishery Technology Program**

- Previously courses were only SE-based. Now they are distance delivered statewide.
- Spending a lot of time recruiting students and connecting with industry.
- Certificates provide milestones for completion
- We are experimenting with moving labs to communities for one-on-one delivery.
- We use outreach coordinators in coastal communities
- Developed iPad classes (classes loaded on iPads – no internet needed)
- We have increased credits offered...
  - Dive Program
  - Careers in Fisheries
  - Intro to Mariculture
  - Intro to Marine Science

\* UAS also offers online classes – Boat Electrical and Hydraulics as well as port manager online classes

#### **Priscilla Schulte (Ketchikan and Juneau)**

- Ketchikan partnerships – Vigor Industrial/Alaska Ship and Drydock, Alaska Marine Highway System, Ketchikan Indian Community, North Tongass Fire Department, Ketchikan Marine Industry Forum, and Ketchikan Gateway Borough School District
- Training equipment includes, Class A Marine Transportation simulator, diesel engines, Hydraulics Repair and Maintenance training unit, marine electrical repair and maintenance training units, refrigerated container training unit, lifeboat and davit training station, fast rescue boats, skiffs & inflatable life rafts, firefighting equipment, welding equipment, damage control unit (coming)
- Have trained 450 mariners in FY15. Students employed at AMHS, Vigor, NOAA, Tyler Industrial, Amak Towing, and Lynden Freight.
- 90% of first two Multi-skilled Maritime Worker cohorts are employed in Maritime field. Has developed MSMW into workforce credential. 3<sup>rd</sup> cohort in progress

\* Have Title 3 grant to upgrade Robertson building into Maritime Technology Center

**Carol Swartz – (Kachemak Bay Campus – Homer)**

- Homer Marine Trades -
  - Vessel Maintenance, 70 hour boat building class in Homer this year
  - TVEP grant – working with industry expanding 4 hour classes (i.e. boat building – 8 hrs)
  - Latest member to AVYC
- Bring instructors to teach courses
  - Deckhand skill courses
  - Marine Safety – Drill Conductor Training
- Fifth year with Marine biology courses
- Semester by the Bay – Bring students up from outside for 12 credit internships (14 students this semester)
- Has a Fish Tech coordinator who also teaches an - Ichthyology course
- Hiring a new maritime coordinator – Position funded with TVEP
- One-hour presentation at high school – Electronics, navigation, etc.

**Courtney Carothers – (UAF-SFOS – Anchorage)**

- SFOS Degree Programs
  - Undergraduate -
    - B.S. – Fisheries
    - B.A. – Fisheries
    - Minor Fisheries
    - Minor in Marine Sciences
  - Graduate –
    - M.S. and Ph.D. – Fisheries
    - M.S. and Ph.D. – Marine Biology
    - M.S. and Ph.D. – Oceanography
- Professional Certification with American Fisheries Society
- UAF Students subsection of AFS – Most Outstanding student chapter award in 2015
- 90% of graduates employed in fisheries profession or graduate study.
- Experiential-learning internships – 2015 – 16 summer internships completed – we have more internships than students
- Nearly all classes delivered live via video-conferencing technology and accessible from remote campuses
- Low student to faculty ratios (25:1 freshmen, 10:1 upper level)
- Classes taught by tenure-track faculty \*51 students in BS program and about 20 in BA program
- Fisheries Graduate programs – Nearly 500 graduates since 2001 – vast majority stay in Alaska

### **Paula Cullenberg – Alaska Sea Grant – Anchorage**

- Alaska Sea Grant is a partnership between NOAA and universities. It is part of UAF and includes research, education and outreach (Marine Advisory Program)
  - Provides Training for Seafood Processors
    - HACCP
    - Starting your Specialty Food Business
    - Microbiology, Seafood Regulation Compliance
    - Pest Management
    - Alaska Seafood Processing Leadership Institute
  - Provides Training for Fishermen
    - Onboard Refrigeration
    - Net mending and hanging
    - Commercial fishing drill conductor training
    - Outboard maintenance and repair
    - Participation in regulatory process
    - FishBiz
    - Alaska Young Fishermen's Summit
  - Education
    - K – 8 Alaska Seas and Watersheds curriculum “Sea Week,”
    - National Ocean Science Bowl, Graduate traineeships
  - Research
- Marine Advisory Program extension agents located in coastal communities statewide.

### *UA Maritime Research Sector*

#### **Overview – Dan White (UA Vice President)**

- Leveraging our Research - Think Big – Think Integrated
  - R/V Sikuliaq – the most advanced arctic research vessel in the world.
  - UA has the largest number of drones in a university.
  - High Frequency Radar
  - Remote Power Module
- The University has an understanding of the Arctic as a social/ecological system
- Building Research Capacity
- Health
  - EPSCOR - \$20M over five years
  - Stimulate sustainable R&D capacity
  - INBRE - \$18M from NIH
  - Statewide biomedical research and student training
  - BUILD grant - \$24M from NIH
  - Engage rural minority students in biomedical and health careers
- Mining
  - U.S. DOL - \$8.1 M
  - Match skilled workforce with high paying jobs

- Long-term prospects
  - FY14 – UA received 674 new-awarded proposals - \$150M – giving UA a total active grants portfolio of \$1.16B
  - FY14 – 82.4% of grant and contract dollars for research – spent on AK projects.
- Leverage loosely related programs
  - UAS and AK Coastal Rainforest Center – partner with USFS and USGS and UAF
  - Southeast Alaska GIS Library
  - Geographic Information Network of AK
- National Scope –
  - UAA Arctic Domain Awareness Center (ADAC)
- Innovate and Commercialize
  - UAVs – “Unmanned Aircraft Systems: An Economic Development Strategy for Alaska.” And “Aerospace Industry Development for AK” (UA Center for Economic Development and ADCCED)
  - Increase in invention reporting (6 in 2011 to 75 in 2014)
  - Increase in Total Invention Disclosures (2 in 2011 – 37 2014)
  - Increase in total patent applications filed (1 in 2011 – 32 in 2014)
  - Increase in number of patents issued (0 in 2011 – 5 in 2014)
  - First startup from UAF – VADAPT (innovative snow removal)

### *Statewide Initiatives and Funding Opportunities*

#### **Report from DOL and Workforce Development – Marcia Olson**

- Workforce Innovation and Opportunity Act (WIOA) – 3 regional meetings will be held (Juneau, Fairbanks, and Anchorage) for input on writing and implementing new workforce development plan.
- Training grants – STEP grants, Youth grants, Apprenticeships
- Eligible training provider list
- UA Funding
  - TVEP
  - Carl Perkins
  - Title III
  - Other: Marine Industrial Apprentice Program, Construction Career Days – (Contractor OJT), National Fund – Formalize Investment and workforce development to partner with public.

### *Comments from Maritime Works – Doug Ward and Kris Norosz*

- Alaska Community Foundation has grant funds for workforce development
- KTVA Channel 11 mentioned maritime a number of times during [Workforce Wednesday](#) segment
- Maritime Works is thinking of joining with APICC

## *Activities for Collaboration*

### **Credit and Non-Credit Pros and Cons**

#### Credit

Financial Aid  
VA  
Scholarships  
Employability Skills  
Salary increase  
Requirement for Job  
Path for traditional students  
Broader/wider base of skills  
AAS – Marine Transportation Industry Credit

#### Non-Credit/CEU

Leads to External Credential  
KOC – ABYC  
KOC – Sea Grant – AFDO  
Sea Grant – Drill conductor – Coast Guard  
Homer – Coast Guard  
Sitka – PADI  
Sitka – Clear Harbors  
Water/Waste Water  
Marine Electrical  
Navigation  
Electric  
Seafood Processing  
Leadership  
Deck Skills  
Boat Building  
Net mending

### **Dual Credit Pros and Cons**

#### Credit

Increase commitment  
Good intro/teaser to try out an area  
Should there be a standardized cost?

#### Non-Credit

Cheaper (unless campus pays)  
Less stressful  
No credential required  
Shorter

## *Certifications*

### **Non-Degree/Certified Programs**

- Going to have to collectively track data since not tracked with the University.
- If we're going to be student-centric how do we display or advertise instead of students having to go to separate websites.
- Clearinghouse for classes offered statewide?
- Model – Alaska Health Education Program has a site they built themselves.
- Possibly pull everyone's info into one inventory.
- External communication is the challenge. No one site that would list everything available.
- Would non-university training opportunities – yes – so it should be an industry activity to take on.

## *Externships, Internships and Apprenticeships*

### **Apprenticeships**

- Complex
- What is an apprenticeship – not only union. Federally registered apprenticeship with DOL specific curriculum, automatic increase of wages for increase in hours. Employed by a sponsored employer. Performance metrics – competent in specific areas.

### **Internships**

- Can be paid for work, get endorsement or certificate, not paid (Maritime-UAS).
- Sitka – onsite mentor, requirement for educational program.
- UAA – internship – non-paid, along with registration in course, get academic credit.
- Apprenticeship to qualify for WOIA – small amount of education provided, rest of the time on the job with employer. Employer responsible for teaching skills at competency level.
- Bristol Bay – academic credit for internships.
- Internships at University must be approved through Faculty Senate, Chancellors office, etc.
- Internship 101 course – University (different for each campus).
- Apprenticeship – employer demand for an employee.
- Internship can be student lead.
- Fish and Game – system to offer employees education.
- BLM – apprenticeship model – flexible – competencies built into it.
- On the job fits for some industries, but not for others. (Possibly Processing Companies would work with this model).
- University of Alaska has a bachelors of Technology and an associates of Technology. UAA – doing away with the apprenticeship program, UAF still has theirs.



### *Credit for Prior Learning*

- Corporate programs did study on how to get credit for prior learning. More difficult at UAA than UAF. Transfer of credit is inconsistent. How difficult is this? Are their regulations and roadblocks to make this happen?
- Catalog controls whether this can happen. Every catalog will likely address this. (SE does not have any credit allowed – other than CLEP).
- UAF allowed it with RD.
- Are there opportunities we should look at?
- More campuses are using e-portfolios for documenting skills. Competency based education is coming – if we don't do it, someone else will.
- Is the portfolio required for this worth the credit – sometimes takes more effort than taking the courses.
- Good option for distance students. At this point it is very inconsistent.
- Need for it is different industry by industry (Hatcheries vs. Fish and Game).

### *Overall needs*

- Portal for info – career info.
- Learning pathways for occupations.
- Consider having municipal and borough economic development plans.
- Include workforce training as an economic contributor.