Alaska Native & Rural Alaskans in Fisheries and Marine Science Careers

Round Table Discussion & Work Group Meetings
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Work Group #1: Staying in Touch

- Web Page
  - Audience (for us)
  - Resource Summaries
  - Scholarships & Internships
- Steering Committee
- Database - Track Students
  - Outcomes (NSF TCUP model) - not just output focus
  - Mentors
  - Student Experiences - what works/doesn’t work
<table>
<thead>
<tr>
<th>Work Group #1: Awareness of Fisheries</th>
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<tbody>
<tr>
<td><strong>Student Awareness of Fisheries</strong></td>
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<tr>
<td>✓ Instructional Videos: Student to Student Sharing</td>
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<td>✓ Rewards/Incentives</td>
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<td><strong>Teacher/Mentor Awareness</strong></td>
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<td>✓ Professional Development</td>
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<td>✓ Raise awareness of distance math/science available to students/ two-way communication</td>
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Work Group #1: Technician Training/Recruitment

✓ Recruitment Difficult
  ✓ Need to recognize “Alien Force”
  ✓ Different needs in various regions of the state
  ✓ Recruit people (teams) to help recruit participants

✓ Group Effort
  ✓ Work from both sides of the coin “ground up approach”
    ✓ Work with local and regional entities for outreach
    ✓ Avoid duplication of effort
Work Group #1: University Message

- Coordinated message
- Step by step training/pathways
  - Pathways – elementary, high school, techs, positions that lead to employment community or statewide
- Life long learning process
Work Group #2: K-12 Outreach

Look at successes of Bristol Bay model

Utilize people with existing contacts in villages, not develop new contacts

Develop a K-12 outreach team consisting of agency reps, Post secondary, local point of contacts (with strong village associations), program “alumni.” (Make sure all reps represent all programs)

Develop a comprehensive resources web site

Provide training for people who have direct contact with students (teachers, agency people, etc)

“Adopt” a school / student (Long term relationship and funding)

*Any program must make the teacher’s job easier

Make sure supervisors provide support and time for these intensive relationships to develop

Take advantage of existing training sessions to spread the word

Take advantage of successful existing programs (Don’t reinvent the wheel)

RAHI, Upward Bound, (add a fisheries component)
Work Group #3: K-12 Outreach

- Get kids interested in SCIENCE (data/ numbers) and on track to higher education/ training
  - “Deliverable student experiences” - Field trips/ hands-on experiences
- Challenge kids to make a difference/ become a part of the decision-making process
  - Weir projects — real life application of data collection
  - Communication to community
    - Elders in residence
    - Integration of traditional knowledge in fisheries science
    - Communicate with tribal councils
    - Use teacher aides as point of contact
- MARKETING fisheries
  - Passion/ Adventure vs. Money (aka. Field biology vs. Engineering)
  - Focus on teachers (develop “science-passion” in teachers)
    - Opportunities for professional development (courses in fisheries/ marine science)
    - Offered during school year for rural involvement
    - Distance delivery improved/ offered
    - More programs like “classroom incubation”
Work Group #2: Summer Camps

- Develop a “tips for successful camps” site
- Follow up with students, and connect to future opportunities
- Include a mix Traditional & western science
- Pool agency help
- Coordinate times
- Make fewer but better programs
Work Group #2: University Programs

- ANSEP model
- Distance delivery for non traditional (older) students
- Use rural campuses
- Distance delivery for high school students
- Create dual credit programs
- Explore what the University’s responsibility should be
- Train teachers to use and support distance ed.
- Better marketing
Work Group #3: University Programs

TURF wars minimized! (MAU/ college/ agency/ stakeholder)
- Leave the turf war out of outreach/ recruiting efforts
- We are ALL working toward a common goal
- Universities/ colleges MUST fill in education-gaps in rural areas
- Advanced Placement kids
- Summer programs for college credit
- Assist in developing “evenness” in student education
  - e.g. Math skills open doors, but writing ability is critical
  - “Quality control” in K-12 courses offered
Work Group #2: Internships

- Look at NOAA’s model, and template on UAS website
- Website as clearing house for programs and interested individuals
- Provide training in how to mentor
- Link funding to performance
- Explore ways to combine expertise and funds
- Develop agreements that allow pooling of scholarship funds
Work Group #3: Internships

Internships/ scholarship clearinghouse through non-partisan entity

- American Fisheries Society (AFS)
- Propose at AK Chapter AFS meeting in Fairbanks in NOV
- Mentorship programs (must be priority—top-down via agencies/ stakeholders)
- Incentives
  - e.g. Computer incentive program through ANSEP
Work Group #2: Training Programs & Employment

- Training Programs: use it as a step into agency careers
  - Include practical skills
  - Include info on University pathways
  - Coordinate and refine existing programs
  - Make sure employer requirements are met

- Employment: coordinate with internships and training programs
Work Group #2: Recommendations to Stay in Touch

- Develop a comprehensive web site
- Develop a data base of program “alumni” for follow-up, employment
- Meet on an ongoing basis
- Include more groups (K-12, Tribes)
- Develop a list serve
- Develop topic subcommittees to meet and report back
Work Group #2: Top 5 Goals for Coming Year

- Develop an “official” system of keeping in touch
- Designate a moderator to keep the group focused and moving forward
- Develop the web site and list serve, include contacts for participants
- Develop special interest subcommittees
- Meet again in 12 months (evaluate progress)
Future Steps: What can Agencies, Universities, & Stakeholders do?

✔ Agencies can: Commit to this and give their staff time to participate - mentor

✔ Universities can: Articulate classes, link CRCD and SFOS, manage a website and listserv

✔ Stakeholders can: Talk to local residents about opportunities
Future Steps:
Steering Committee/Subcommittees

✓ Internships, scholarships and employment group
  ✓ Geron, Beth Spangler, Dave Orabutt, Terry McTigue, Brandy (TCC), Dave Waltemyer

✓ University articulation – BBC, IAC, CRCD, UAS, SFOS

✓ K-12 outreach, technician training – Kyle Belleque, Laurel DeVane, Meg Burgett, Glenn Seamann, Dave Waltemyer

✓ Website design and content – NOAA webmaster, Sea Grant webmaster, Laurel, Glenn
  ✓ Funding options, curriculum to share, internship opps, employment opps, university programs, mentors

✓ (Online discussion groups – feed information into webpage)
Future Steps:
Volunteering Steering Committee

✓ ADF&G
✓ NOAA
✓ USFWS
✓ UA/other colleges and universities
✓ Tribal groups
✓ CDQ groups
✓ Bering sea fishermen’s association
✓ Other industry stakeholders
Future Steps:
Purpose

✓ Memorandum of understanding? Or formation of a coalition?
✓ Represents a commitment to the vision by the member groups so that staff can be directed to work on this
Future Steps:
Thinking Grand

✓ Federal funds to coalition to offer mini-grants to schools
✓ Coming up with a better name
✓ Getting groups like AFN and agencies all pointed in the same direction
✓ Decolonizing education – relevant education