Broad Notes/Further Discussion Questions

- Rethinking how we define "Science"- How do we currently define it and how should we
 define it moving forward? How do we define success? Is there a metric, measurement,
 or stories about helping to define success?
 - o Bringing specialists and generalists together
 - Opening up a seat at the table to all of them, looking for different skills when building a diverse collaboration network.
 - Promoting diffuse leadership within a collaboration so it isn't all dependent on one single person
 - o Broadening the definition of what science is
 - o Stop referring to them as "soft" skills and switch to language like "collaboration" skills
 - The "best" researcher may not be the best leader for a collaborative group, playing on and recruiting all kinds of skills and strengths to build the most effective group from all angles.
 - Capitalizing on true collaboration and playing to people's strengths, not everyone needs to have the same skills
 - Encouraging and creating platforms to develop these skills that usually aren't included in professional development – looking outside traditional scientific definitions for professional development skills.
 - If we need a new protocol in research, we go and read and learn about it apply this principle to the other skillsets in the other parts of our lives and development.
 - What can we learn from different fields as a way to learn how to develop these skills?
 - When we build teams, asking questions like: What kind of qualities are we looking for?
 What are leadership skills? Are they uniformly defined throughout the world and international community?
 - RE leadership: Maybe it is about creating spaces which feel safe for people to share. This means taking into consideration language, cultural differences, broad spectrums of experience, etc. (see below)
- What are some of the challenges in creating, sustaining, and maintaining these collaborative networks? And what are some solutions to those challenges?
 - Building the relationship and trust Partnering in building that trust and respect
 - Takes time
 - Short grant cycle to build up and in particular maintain the networks
 - Early career researcher (ECR) involvement specifically: Trying to avoid the "kids table" effect – how do we keep the people involved when activities are only 1 year seats, how do we engage them afterwards? How can ECRs learn how to leverage access to something more long lasting?
 - Language as a barrier
 - Hard to develop skills in leadership if a comfort level isn't there

- Language barriers within disciplines
 - Trying to use language from other disciplines to think about new topics (see above for different skill sets). For example: Dr. Sue Moore in her keystone addressed referred to the bowhead whale as a "cultural keystone" – a keystone species is an ecological theory and idea that is now being used to describe and communicate the importance of the animal to culture and tradition rather than to the ecosystem as in the classic use of the word.
- Communicating in a diverse collaborative group when there are different cultures and traditions.
- Remembering the power of listening and really being heard.
- O How do you institutionalize what the project has learned and discovered?
 - Thinking about what the product is and how it can be useful to the community it is targeting.
 - Recognizing the value of the product early will help carry it beyond the life of the project.
 - Working under or creating a more permanent organization rather than projects that are shorter, a network of networks.
- o In person vs. Online Meetings and Networking
 - In Person
 - Potential barriers to travel (con)
 - See body language and develop report with people (see below with engagement) (pro)
 - Online
 - Limited service and access to stable connection (con)
 - o Can send visuals beforehand to help in low internet areas
 - Could reach and serve a wider audience than traveling to an in person destination (pro)
 - Diminished concentration and distraction of other home life activities and responsibilities (con)
 - Increased meeting participation because it is "easier"- more demands on time (con)
- Systematic Disconnects
 - Who is at the table? Who has the skills? Who has the desire to do the work?
 - Systematically the researchers are the ones that should lead the
 collaborations, but don't always have the skills to do that. So celebrating
 those differences (above) to set up these successful teams.
 - How do we discover leaders?
 - Ensuring the people we need to lead have the chance to lead because they might be the best researcher or the biggest rising star in the field, but thy have the desire, the will, and the collaboration skills to invest.
- Additional Suggestions for Activities Moving Forward

- A webinar/panel discussion on how to take advantage of opportunities that could get sent to ECRs before they take on roles like a board member in APECS – APECS could help facilitate something like this.
- o Develop middle groups to help coordinate communication.
- Engaging in less formal settings and meeting people you might not otherwise meet. For example, meal time on ships. Thinking about the importance of meeting spaces.
 - Key aspect in collaboration: Connecting with people as full human people, getting to know them, not just what they do and as a representative of a discipline, organization, or perspective.
 - Creating relationships as people and how that might more naturally form collaborative networks.

Are their ways we can recreate this type of atmosphere and space?

- Interest in identifying different types of Arctic research collaborations that are out there, how different styles of management/organizational structures result in different scientific outcomes, what the future needs of the Arctic research community are with respect to scientific collaboration management.
- Continuing discussions about interdisciplinary (drawing on different fields and skills, see above), international, and indigenous engagement.
 - Invitation vs. Inserting oneself into a community
- Reviewers look for plans to recruit a diverse group, thinking about what that diversity looks like (career level, international, diverse skill set, race, gender, etc.).
- o Developing Frameworks for new projects and collaborations
 - Define the rules of engagement. Do it early and revisit regularly.
 - Share visions, build trust, transform potential into capacity and think about what can and are people bringing to the table.