Interpreting Climate Change

March 24-27, 2020

Training Syllabus

William Penn Mott Jr. Training Center
Memorandum

Date: February 26, 2020

To: Supervisor

From: Debbie L. Fredricks, Chief
       Training Section
       California State Parks

Subject: Employee Attendance at Formal Training

An employee from your office will soon be attending the formal training program described in the attached. Ensure that the employee is fully prepared to attend the session and that the groundwork is laid for the employee's implementation of the training upon returning to work. You can assist with capturing the full value of the training by taking the following steps:

Prior to Training

1. Make sure that specific employee needs are identified and, if necessary, called immediately to the attention of the Training Coordinator.
2. Review with the employee the reason for the employee’s attendance.
3. Review objectives and agenda with the employee.
4. Discuss objectives and performance expected after the training.

Immediately Following Attendance

1. Discuss what was learned and intended uses of the training.
2. Review the employee's assessment of the training program for its impact at the workplace.
3. Support the employee's use of the training at the work place.

Three Months Following Training

1. Supervisor evaluates the effectiveness of the training on the employee's job performance and login to the ETMS to complete the Training Effectiveness Assessment form.

Thank you for your assistance in seeing that the full benefit of training is realized.

Debbie L. Fredericks
Training Section Chief

Attachment

cc: Participant
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Mission Statement
Training Section

The mission of the Training Section is to improve organizational and individual performance and productivity through consulting, collaboration, training, and development.

TRAINING SECTION STAFF

Debbie L. Fredricks ................................................................. Training Section Chief
Ann D. Slaughter ................................................................. Mott Training Center Manager
Eric Marks ........................................................................ Leadership and Development Manager
Jack Futuran ....................................................................... EMS and LFG Training Coordinator
Jeff Beach ........................................................................... Training Consultant
Tamara Busman ................................................................. Training Consultant
Joel Dinnauer ....................................................................... Training Consultant
Sara M. Skinner ................................................................... Training Consultant
Robert Waller ...................................................................... Training Consultant
Vernon Reyes ....................................................................... Instructional Designer
Jason Smith ........................................................................ Academy Coordinator
Jeremy Alling ..................................................................... Cadet Training Officer
Matt Cardinet ..................................................................... Cadet Training Officer
Jaime Stamps ..................................................................... Cadet Training Officer
Lisa Anthony ........................................................................ Program Coordinator
Margaret Fowler ................................................................. Program Coordinator
Edith Alhambra ................................................................. Assistant Program Coordinator
Samantha Guida ................................................................. Assistant Program Coordinator
Ricky Roldan ......................................................................... Assistant Program Coordinator
Pamela Yaeger ................................................................. Assistant Program Coordinator
THE MISSION
of the California State Parks is to provide for the health, inspiration, and education of the people of California by helping to preserve the state’s extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high quality outdoor recreation.

FORMAL TRAINING GUIDELINES
Welcome to formal training, an essential component in your career development.

Since 1969, our Department has been providing a continuously changing number of diverse training programs at its main training facility, the William Penn Mott Jr. Training Center, and other locations including Marconi Conference Center. The Department strives to enhance your learning and job performance with formal training of the highest quality.

Our Department’s dedication to training is only one aspect of its commitment to you and to the public. This commitment is costly and represents an important investment in you and your career. You and the Department realize a return on that investment by your positive participation in formal training itself and post training follow-through.

The program you will be participating in is described in this training syllabus, which outlines what you can expect from this training and what is expected of you. This syllabus details what you should do before you leave for training; what to do when you arrive; what you will be doing while in training; and, importantly, what you should be able to do when you return to your work site. Specifically:

1. SYLLABUS: The syllabus is now accessible on the Employee Training Management System (ETMS). Your copy of this syllabus is an important part of your training experience and should be brought with you to training. Read it before you arrive and review it following the program along with material you received at training.

2. PRE-TRAINING ASSIGNMENTS: Your completion of pre-training assignments is essential to the success of your training. You are responsible for all reading assignments in preparation for classroom sessions. Time will be provided during working hours to accomplish any assignments which involve either individual or group efforts and resources.

3. TRAVEL: Arrange your travel to and from the training site through your District or Office. (No reimbursement for travel expense – including per diem costs – will be approved for travel not specifically authorized in advance by the District Superintendent).
Individuals may claim reimbursement for incidental expenses incurred as outlined in DAM 0410.6. The Mott Training Center does not have the capability to provide transportation to/from Monterey Airport.

The cost of your travel (airfare, mileage, rental car, etc.) is paid by your District or Office to and from the location of training.

4. HOUSING: Housing will be assigned to you on a shared-room basis and will be available from 3:00 p.m. on the date of arrival to 11:00 a.m. on the date of departure. The Department provides your room and board expenses at Deer Haven Inn only. No per diem allowance will be authorized for living off-grounds. This does not preclude living off-grounds at your own expense. Advise the Training Consultant no later than one week before your scheduled arrival if you plan to live off-grounds. No animals are permitted in housing. In the event of an emergency, staff must know your room assignment; therefore, you may not switch rooms without staff approval. Overnight guests are not allowed. Quiet hour is 10:00 p.m.

5. ENROLLMENT OR HOUSING CANCELLATION POLICY: To cancel participation in a course, the participant must have their District Superintendent or Section/Office Manager send an email to the Training Specialist assigned to the course requesting to remove the participant. If you do not need lodging or must change or cancel your reservation for lodging, you must contact the Mott Training Center or Training Consultant assigned to the course at least 2 weeks prior to your date of arrival. Lodging, registration, and associated fees will be charged to the employee’s District or Section/Office if a training cancellation is received with less than two weeks’ notice.

The Mott Training Center is committed to ensuring that the reservation that has been made for you is accurate and needed.

6. MEALS: Meals provided, semi-cafeteria style, from dinner on the date of arrival through lunch on the date of departure. Meals served at 7:15 a.m. for breakfast, 12:00 noon for lunch, and 6:00 p.m. for dinner. Hot or box lunches may be provided on some days. If you require a special diet, contact the Training Consultant Sara M. Skinner to request the Asilomar Dietary Restriction form no later than two weeks prior to the course start date. The Training Consultant will forward the form to the appropriate Asilomar Conference Grounds staff.

In order to assist participants with limited mobility, Asilomar provides a shuttle to and from the dining hall. Contact either Asilomar staff upon check-in, or Mott Training Center staff upon your arrival, for instructions on arranging a transport.

7. SMOKING: Smoking not permitted in the Mott Training Center or in any lodge or guest room on the Asilomar Conference Grounds.
8. **TRAINING CENTER:** The Mott Training Center is located on Asilomar Conference Grounds, part of Asilomar State Beach. The Conference Grounds are operated for our Department by a concessionaire. All lodging and food services are provided to us by employees of the concessionaire. Constant efforts are made to maintain a sound, harmonious working relationship between the Department and concessionaire. None of us can expect preferential treatment for any reason and, as a departmental employee; you will be expected to join in our continuing effort toward an effective relationship with each Asilomar concession staff member. On occasion, non-departmental groups may be staying in the same lodges. It is imperative that you represent the Department well on and off duty.

9. **REGISTRATION:** When you arrive at Asilomar Conference Grounds, proceed directly to the front desk at the Asilomar Administration Building for your dining room tickets. If you require vegetarian meals, notify the front desk representative and your meal ticket will be marked accordingly.

10. **COURSE LEADERS:** The formal training you will attend is developed and, for the most part, conducted by experienced State Park employees in field and staff positions. Some courses will be conducted by qualified instructors from other agencies and educational institutions. Your course leaders have proven their ability and knowledge in their profession, and provide a level of expertise difficult to match.

11. **TRAINING SECTION STAFF:** Sara M. Skinner is your Training Consultant and has been assigned the responsibility for your training group. That staff member usually serves as a Course Leader as well as a Coordinator. During the program, you may be asked to assist Training Section Staff in the logistics of your training program (organizing field trip transportation, supervising classroom breaks, etc.).

   Training Section Staff will do all within their power to make your training experience pleasant and meaningful.

12. **TRAINING MATERIALS:** May be made available to you at both your unit and the Mott Training Center. Handout materials issued at your unit should be brought to training for possible use. A conference binder or notebook will be issued to you at the training session for note taking and convenience in handling materials. Copies of DAM and DOM will be available to you for self-study. Bring your own pens and pencils.

13. **ATTENDANCE:** Regular attendance is a critical course requirement and your participation is important to the success of this training. An absence of more than 10% of the course hours constitutes grounds for dropping a participant from the course. The Department Training Officer may modify this requirement based upon participant knowledge level and/or the portion of the course missed. All absences, except those of an emergency nature, must be approved in advance by the Training Consultant.
14. TELEPHONE: Limit phone calls during classroom hours to urgent business or emergencies. Anyone wishing to contact you by telephone during working hours should call the Center at (831) 649-2954. Calls after 5:00 p.m. or during weekends should be made to (831) 372-8016, Asilomar Conference Grounds, and the caller should tell the switchboard operator you are with a California State Parks training group. Note: There are no longer pay telephones outside of the Mott Training Center. There are pay telephones located at the Asilomar Administration Building.

15. POST-TRAINING ASSIGNMENTS: In connection with formal training are to be completed under the direction of your supervisor.

16. COFFEE BREAK REFRESHMENTS: Available throughout each session. You will be asked to contribute to the "Hospitality Fund" to defray expenses. Bring your own coffee cup.
PROGRAM ATTENDANCE CHECKLIST / PRE-TRAINING ASSIGNMENTS

To assist you in your preparation for formal training session at the William Penn Mott Jr. Training Center, the following list is provided:

_____ 1. Read the Interpreting to Climate Change program syllabus prior to your arrival at the Training Center.

_____ 2. Arrange your travel through your Unit/District Office.

_____ 3. **Complete Pre-training assignments on page 6 of syllabus (reading assignments begin on page 15).**

_____ 4. Bring the following with you to training:

- [ ] Program syllabus.
- [ ] Uniforms are not required. Appropriate business attire.
- [ ] Reusable coffee mug, refillable water bottle, notepaper, pens, and pencils

If you have any questions or need assistance, contact Training Consultant Sara M. Skinner at (831) 649-2961 or Sara.Skinner@parks.ca.gov.
PRE-TRAINING ASSIGNMENTS

Reading Assignments

*How Attending to Social, Emotional, and Cognitive Dimensions of Learning Builds a Network of Change Agents*

- This document, produced by the National Network for Ocean and Climate Change Interpretation (NNOCCI), provides insight into the social-emotional aspects of being a climate change communicator and climate change education instructor. These observations provide pivotal touchpoints for educators and interpreters in both building community and supporting colleagues in this work.

- As you read the document…
  - Note what particularly resonates with you
  - Describe how you feel as you work your way through the document
  - Write down any personal insights you have as a result of your reading

- Be prepared to discuss your personal reaction in the upcoming training session.

*Expanding Our Repertoire: Why and How to Get Collective Climate Solutions in the Frame*

- This document, produced by the FrameWorks Institute for NNOCCI, shares evidence on the importance of collective solutions to achieve meaningful change for climate mitigation, adaptation, and resilience.

- The concepts in the document will be discussed as part of the upcoming training.

Pre-course Assignment

Review the Regional Reports of California’s Fourth Assessment on Climate Change ([https://drive.google.com/drive/folders/1ZzmrAK21CPa7dRLN3wMWF69m3KHOcllj](https://drive.google.com/drive/folders/1ZzmrAK21CPa7dRLN3wMWF69m3KHOcllj)) for impacts to your region of the State. Meet with your District Environmental Scientist to review those impacts and how your District is mitigating and adapting to them.
POST-TRAINING ASSIGNMENT

Prior to ninety days after the completion of this program, the employee and his/her supervisor should discuss the impact and assess the effectiveness this program has had on the employee.

The post-training evaluation process is intended to provide a bridge between classroom instruction and the on-the-job application of training. The information obtained through this process will assist the employee, supervisor, and Training Section in providing a return on the training investment to the Department.
**INTERPRETING CLIMATE CHANGE (CLIMATE STEWARDS INSTRUCTOR) AGENDA**  
**March 24-27, 2020**

### Tuesday  
**March 24**
- **0800-0815**  Introduction to Training  
  - Tipton/Nelson
- **0815-0900**  State Park Interpreters’ Role in Climate Interpretation  
  - Secretary Crowfoot
- **0900-1000**  Climate Science, Impacts, and Policies  
  - Chamberlin
- **1000-1030**  Interpreters - A Statewide Force for Climate Communication  
  - Yankee
- **1030-1115**  Solutions for a Changing Climate  
  - Tipton/Succow
- **1115-1200**  Regional Impacts Break Out  
  - Tipton
- **1200-1300**  Lunch
- **1300-1330**  Introduction to California Naturalist Climate Stewards Initiative  
  - Ira
- **1330-1400**  Climate Stewards Course Overview  
  - Ira
- **1400-1500**  Social, Psychological, and Cognitive Science of Communication  
  - Nelson
- **1500-1600**  Social-Emotional Labor and Learning in Climate Context  
  - Nelson
- **1600-1700**  Experiences and Perceptions of Climate Change Activity  
  - Nelson

### Wednesday  
**March 25**
- **0800-1200**  NNOCCI Beginner Workshop  
  - Nelson/Tipton/Arnett
- **1200-1300**  Lunch
- **1300-1500**  Conclude NNOCCI Beginner Workshop  
  - Nelson/Tipton/Arnett
- **1500-1700**  Cal-Adapt Overview and Activity  
  - Lyons/IGIS/Nelson

### Thursday  
**March 26**
- **0800-0830**  Introduction to Day  
  - Nelson
- **0830-1030**  Introduction to Trauma-informed Communication  
  - Nelson
- **1030-1130**  Climate Stewardship and Community  
  - Ira
- **1130-1200**  Climate Science Reflection  
  - Nelson
- **1200-1300**  Lunch
- **1300-1400**  Inclusive Language in Climate Communication  
  - Nelson
- **1400-1500**  Citizen Science  
  - Ira
- **1500-1600**  Climate Mitigation, Adaptation, and Resilience  
  - Ira
- **1600-1700**  Trauma-informed Education and Instruction in the Climate Context  
  - Nelson
# INTERPRETING CLIMATE CHANGE (CLIMATE STEWARDS INSTRUCTOR) AGENDA

March 24-27, 2020

**Friday**  
**March 27**  
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<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>0800-0830</td>
<td>Introduction to Day</td>
<td>Nelson</td>
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<tr>
<td>0830-0930</td>
<td>Yale Climate Communications: Climate Maps and Six Americas Activity</td>
<td>Nelson</td>
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<tr>
<td>0930-1000</td>
<td>Blended Learning Approach</td>
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<td>1000-1100</td>
<td>Social-Emotional and Trauma-informed Reflection</td>
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<tr>
<td>1100-1200</td>
<td>Success in Instruction: Bringing It All Together</td>
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PROGRAM OUTLINE/DESCRIPTIONS

State Park Interpreters’ Role in Climate Interpretation
Resources Secretary Wade Crowfoot will share the Resources Agency’s perspective of statewide initiatives, coastal resilience, the State’s response to the Federal administration, and State Parks Interpreters’ vital role in climate communication.

Climate Science, Impacts, and Policies
Natural Resources Division Chief Jay Chamberlin provides a general overview of climate science, statewide impacts in and outside parks, and policy frameworks.

Interpreters - A Statewide Force for Climate Communication
Interpretation and Education Division Chief Stacey Yankee elaborates on the California State Park Interpreters’ role, to interpret a changing climate and the state reports such as the Safeguarding California Plan (2018) which mandate the critical role of educating the public about climate change.

Solutions for a Changing Climate
Overview of statewide initiatives and legislation as well as climate mitigation and adaptation projects in State Parks such as salt marsh and redwood forest restoration and prescribed fire.

Regional Impacts Break Out
Participants work with interpreters in their region to delineate how climate change will impact your local area based on looking at the Fourth Climate Assessment and talking to their District Environmental Scientist.

Introduction to California Naturalist Climate Stewards Initiative
Introduction to the Mission, Vision, and Purpose of the Climate Stewards Initiative, the new course offering of the California Naturalist Program, and how this Climate Stewards Training is the first step to training others to becoming certified UC Climate Stewards.

Climate Stewards Course Overview
Overview of the Climate Stewards Course including the key components and guiding principles, basics of each course unit, the online and in-person aspects of the course, the role of the course capstone project, and the Climate Stewards Community.
Social, Psychological, and Cognitive Science of Communication
Brief overview of the social, psychological, and cognitive science of how people receive and interpret information and how that affects communication techniques and style. When dealing with sometimes-controversial issues like climate change, this is particularly important information to understand to equip communicators with the best tools to successfully communicate the information, educate about the issue, and motivate people toward behavior change.

Social-Emotional Labor and Learning in Climate Context
Before the course, participants read the brief *How Attending to Social, Emotional, and Cognitive Dimensions of Learning Builds a Network of Change Agents*. In this session, the presenter will provide additional insight into social-emotional labor and learning and facilitate a discussion around these emerging and important concepts in climate change education.

Experiences and Perceptions of Climate Change Activity
In this activity, participants will pair up and work through a series of questions relating to a personal experience or perception of climate change that affected how they perceive the issue/themselves/their work. Once the participants have worked through these questions, the entire group will come back together to share insights from common experiences and how these insights relate back to social-emotional labor/learning.

NNOCCI Beginner Workshop
In this 6-hour workshop, participants will learn the practice of strategically framing climate change communication researched and disseminated through the NNOCCI network. Elements include: appropriate tone, learning shared values, crafting well-constructed explanatory changes, learning the four evidence-based metaphors for successfully explaining climate science, the need for collective solutions messaging, the importance of hopeful messaging instead of crisis messaging, and most importantly workshopping a well-framed climate communication to integrate into their everyday work. Three co-facilitators will support this work as students alternately learn new material and then put it into practice.

Cal-Adapt Overview and Activity
Participants will be shown an overview of the Cal-Adapt website (cal-adapt.org) and the presenter will work through an activity to demonstrate how the website can be used to find the latest climate science on various issue in their region. This science, and the tools on the website, can be used to visual climate impacts now and in the future lending to better preparation and presentation of regional interpretive climate change programming.
Introduction to Trauma-informed Communication
In this presentation, participants will be introduced to the concepts of trauma-informed education and communication and how they relate to environmental—especially climate change—education.

Climate Stewards and Community
What does it mean to be a climate steward? How do climate stewards help move their community toward climate resilience? Here participants will learn about the programs, tools, and mindsets that help communities step up mitigation, adaptation, and resilience efforts.

Climate Science Reflection
Questions about the science of climate change often bubble to the surface after participants hear certain new ideas and work through different activities. This time is an opportunity to reflect on the science that was shared on Day 1, and address any questions that have arisen since.

Inclusive Language in Climate Communication
The language we use in our communication is critical to the success of the communication, too often the language used in popular media and colloquial speech is alienating instead of inclusive. So what does inclusive language mean? Here we will break down the common terms that can be polarizing and suggest options that are unifying.

Citizen Science
Citizen science is an increasingly important tool in monitoring climate change impacts. Many projects across the state are monitoring changes in phenology, animal movements, precipitation patterns, sea-level, and much more. Citizen science and climate resilience tie together in interesting and important ways.

Climate Change Mitigation, Adaptation, and Resilience
California is committed to mitigating greenhouse gas emissions, adapting to changing climate patterns, and supporting communities to increase their resilience to climate impacts. Informal science educators have a critical role to play in educating the public on what needs to be done and how to accomplish it.
Trauma-informed Education and Instruction in the Climate Context
With the increase of extreme events such as fire and floods across the state of California, it is becoming critical to consider the traumatic experiences our audiences bring with them to our presentations. When communicating about climate change science and impacts, one can convey accurate information in a trauma-informed way to improve audience reception of information and consideration of behavior change.

Yale Climate Communications: Climate Maps and Six Americas Activity
The Yale Program on Climate Change Communication has been researching the beliefs and attitudes of Americans around global warming since 2009. They have analyzed the data and created profiles of the six ways Americans typically perceive climate change. They have also created data visualizations to assist climate educators in understanding their audiences for best application of interpretation and communication techniques. The Yale Climate Maps will be shared and suggested uses provided as well as working through a group activity on the thinking patterns of the Six Americas of Global Warming.

Blended Learning Approach
Courses that use a combination of online and in-person instruction need a somewhat different approach to help the students and instructors be successful. The flipped classroom used in the Climate Stewards Course (and many others in recent years) needs this blended learning approach.

Social-Emotional and Trauma-informed Reflection
Social-emotional labor/learning and trauma-informed communication are emerging considerations in the climate change communication field. Increasingly, the nature of climate change calls for educators to consider the whole person in their interpretation of climate science and climate change impacts. This is a big shift in thinking for most communicators. This time provides space for group reflection and discussion of the ideas presented in the previous sessions and moving forward.

Success in Instruction: Bringing It All Together
Success as an educator, presenter, interpreter, and communicator depends on many factors. Climate Stewards is a course that works to bring a variety of important concepts to the climate change education and communication space that have until now been only found in separate trainings and presentations. With the information and techniques taught in this training, participants are now equipped to train a new wave of Climate Stewards working for community resilience to climate impacts.
INTERPRETING CLIMATE CHANGE

Changes Intended for Learners/Learning Outcomes

1. Acquire knowledge of statewide climate initiatives and State Park Interpreters’ role from an agency perspective.

2. Summarize climate science, impacts, and State Parks policies.

3. Identify the department’s climate communication mandate.

4. Identify Statewide and department solutions to mitigate and adapt to a changing climate.

5. Begin to build regional communities of practice centered on climate impacts.

6. Identify social and emotional reactions to difficult work and how being cognizant of and sensitive to others reactions fosters a stronger community and increases resilience.

7. Summarize best practices of trauma-informed education and communication.

8. Distinguish what makes a successful climate communication tool.

9. Recall one or two examples of psychological, sociological, or cognitive processes impacting how people receive communications.

10. Describe collective solutions and why they have more impact for climate change than individual solutions.

11. Apply Strategic Framing® (values, metaphors, causal chains, and collective solutions) to climate change communications.

12. Utilize Cal-Adapt to access current California climate data and generate future projections of climate for use in local communications.

13. Acquire knowledge and skills to successfully offer a Climate Stewards Course.
How Attending to Social, Emotional & Cognitive Dimensions of Learning Builds a Network of Change Agents:

Background, Theory, & Guiding Principles for Facilitating NNOCCI Trainings

This document offers insight for navigating the social, emotional, and cognitive challenges a Study Circle or workshop participant may experience, based on our experiences teaching and evaluating Study Circles and Beginner Workshops since 2010. The curriculum and network design are intentionally set up to support facilitators and NNOCCI network members on their change agent journeys. In this document we’ve highlighted examples of how these different pieces support the journey using the symbols on the right. Understanding these dynamics will equip you as co-facilitators to recognize what can be done to build a safe learning environment to help achieve our broader goals.

The main authors of this document were Anna Marie Trester of FrameWorks Institute, Kate Flinner of New Knowledge Organization, and Hannah Pickard of New England Aquarium. FrameWorks, New Knowledge and New England Aquarium were the primary architects of the NNOCCI Study Circle curriculum and each played a role in mentoring new Study Circle co-facilitators during 2010-2017. Trusted NNOCCI facilitators and staff (Janan Evans Wilent, Jerran Orwig, Jess Reese, Annette Brickley, and John Anderson) provided additional insight for this document. Together, we have monitored trends and experimented with how to address these common challenges. This document is the product of our collective knowledge.

Why Social & Emotional Learning Are Key to Our Approach

We at NNOCCI are focused squarely on the outcomes: improving scientific understanding, increasing a sense of hope, and increasing the likelihood that people will take civic action.

As a network, NNOCCI understands that in order to have productive national climate change dialogue we need to increase the effectiveness of our conversations to empower and engage our citizen neighbors. We at NNOCCI are focused squarely on the outcomes: improving scientific understanding, increasing a sense of hope, and increasing the likelihood that people will take civic action.

To accomplish these goals, we need to change the way we understand and talk about climate change and potential solutions. As much as this is a strategy for the general public, it is also a strategy we have for our community of informal educators and scientists. In order for our interactions to achieve these outcomes, we have to anticipate that our current communications strategies will/may not be the ones that will get us to our goals. Acknowledging that the outcome of a message may be different from our intended purpose for it, we recognize that understanding the way in which people process climate and ocean information and their feelings about these issues is key to building more effective communications. While one can appreciate that learning new strategies will feel different, emotionally experiencing the learning process can be challenging – and often quite unexpectedly so.
To prepare communicators to break the social norm of silence around climate change and to feel comfortable approaching strangers with unfamiliar ways of communicating, it is imperative to address all aspects of their learning - supporting not only their intellectual development, but also their social and emotional needs as they grow and develop new skills. For this reason, the NNOCCI curriculum intentionally focuses on building a community of peers who support each other as they practice and build confidence in their capabilities as climate communicators and change-makers.

Why the NNOCCI Training Works

NNOCCI’s most important outcome of training is to increase a science communicator’s sense of self-efficacy. Self-efficacy, or a belief in one’s own capability to achieve objectives, plays a role in almost everything we do, from small daily tasks to long-term personal and professional aspirations. A communicator’s sense of self-efficacy directly effects their ability and willingness to talk about climate change. Social support is key ingredient in bolstering self-efficacy. To that end, the NNOCCI training approach combines peer-to-peer teaching, group learning, and membership in a supportive Community of Practice. A Community of Practice is a group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly (Wenger, Trayner, & de Laat, 2011). Additional social support comes from the accountability of working closely with institutional partners who participate in the training.

Related to their self-efficacy, NNOCCI alumni also experience an increase in hope for implementing solutions to climate change threats. Hope is important because research has shown that those who are more hopeful about climate change are more likely to stay engaged with the issue (Ojala, 2012). NNOCCI members become significantly more likely to talk about climate change with their audiences and peers because of their increased feelings of self-efficacy and hope, and the social support benefits provided by the training and network membership. In turn, their audiences are significantly more likely to understand the science of climate change, to feel increased hope for climate change solutions, and demonstrate increased intentions of taking community-focused actions for climate change solutions.

What is Success for a Co-Facilitator?

Success is keeping everyone moving in the direction of giving Strategic Framing® a try, knowing that common cognitive, emotional and social issues may affect a participants’ engagement with the learning process and their cohort colleagues.
The Challenges & How to Navigate Them

The following sections describe examples and observable indicators of a participant who may be struggling during the Study Circle process. We often refer to these indicators as “signs of resistance,” as they often appear in instances when participants disengage and may cause others to disengage. These examples of “resistance” may also describe communicators who may be reflecting on training, education, and other experiences different from the NNOCCI approach. Our network is stronger because of the diversity of perspectives and experiences. As facilitator, you are a gatekeeper ensuring that the new voices in our community share an understanding of what NNOCCI is and how powerful Strategic Framing is for our roles as climate communicators.

The work is challenging but exhilarating: expressions of resistance are normal and are not evidence of failure or an indication that there is something wrong with the curriculum. When we flip our mindset away from thinking of this behavior as resistance to instead seeing the behavior as cohort members’ efforts to overcome learning challenges, facilitators can find opportunities to guide new learning and growth. Your role as facilitator is to respect the concerns by understanding what might be going on and respond appropriately to keep the group and/or the individual on track. We hope that you find comfort in knowing that these challenge patterns happen across Study Circles and NNOCCI workshops, and positive outcomes have continued to emerge regularly. We believe that having insight into how the training is designed to anticipate and moderate common challenges will help you as a facilitator navigate these issues in a supportive way.

Because each Study Circle member works through ideas and concepts in their own time, learners may experience breakthroughs, insights, or challenges at different moments in the training. Some might be all in after the first meeting, while for others their enthusiasm and commitment might not emerge until the last meeting, or even after the training is over. Knowing that a participant’s acceptance of the NNOCCI approach may happen at any time, your task is to attend to the social and emotional needs of participants as they arise.

The common challenges that impact a participant’s or group engagement are tied to:

- Nature of Being a Climate Communicator or Environmental Scientist
- Emotional Responses to Barriers
  - Anxiety about Deniers and Confrontation
  - Negative Emotions when Encountering Institutional Barriers
  - Frustration with Political Norms & Systems
- Learning about Communications & Cognitive Science
  - Struggling with the Nuances of Strategic Framing
  - Discomfort being in the Learner’s Seat
  - Feeling Overwhelmed by Needing to Move from Learner to Trainer
- Learning about Climate Science
- Roles within the Cohort

When encountering expressions of cognitive, social, and emotional challenges a valuable facilitation tactic is to acknowledge what you are seeing in the moment and reflect back to the group how and why you responded as you did. This approach helps participants process what is going on and understand the facilitator’s role. This facilitation practice also models facilitation skills for participants, who will soon be trainers faced with similar challenges.
Study Circle members will bring emotional experiences to the training. These experiences may affect how they engage with the training, each other, and co-facilitators. Environmental communicators’ work is complex and guided by multiple perspectives. While no two educators’ work is exactly the same, many have similar emotional experiences that come to a head when talking about issues like climate change. In this section, we will continue to refer to educators, because they have been the focus of research in the past. However, please keep scientists in mind as you think about this aspect of the challenge. Although research has not focused on climate scientists, the nature of their work overlaps a great deal with that of educators, so we can assume that they experience many of the same challenges and stressors as educators.

Research has shown that many environmental educators may live with a high degree of stress as a result of speaking, observing, and thinking about human-caused environmental degradation on a regular basis (Albrecht, 2007; Fraser & Brandt, 2013; Fraser et al., 2013). The nature of environmental educators’ high-contact work with the public requires them to mask or suppress the feelings of distress in order to productively engage with their audiences. When working directly with audiences, or observing public dialogue about environmental issues, educators often perceive that others do not share their commitment to pro-environmental values and actions. This repeated perception can be upsetting. If educators feel they are in the minority opinion on environmental issues, they can also experience feelings of isolation owing to this sense of distance from others’ priorities. In addition, many have anxiety about confrontations with audiences who disagree with an environmental message. There is a desire to turn any possible confrontation into a conversation, which NNOCCI principles address, but there is an inherent fear and anxiety of this facet going into training.

Having opportunities for educators to address their emotions can reduce the intensity of these feelings and prevent a cyclical and damaging emotional grind. Researchers have found that environmental educators’ continual experience of stress, distress, worry, and isolation can begin to look like symptoms of trauma and post-traumatic stress disorder (Fraser et al., 2013). Therefore, our curriculum includes activities and an approach that acknowledge emotional dimensions of our experiences in productive ways—the Lift It Up/Roll It up activity is an example. There will also be times that you will need to prioritize an emotional conversation if it pops up organically. For example, emotional conversations often happen on the day of science presentations as people are learning about distressing research on climate impacts and the scale of the problem. These conversations also sometimes emerge on the Questions & Ah-ha boards.

With the Study Circle members’ opportunity to work closely with peers who share their environmental values, the group needs the chance to express their experience of emotional distress with each other. You want to avoid them thinking, “I’m finally among people who feel the same way! But I now can’t seem to talk about it...” The group may disengage if they feel expressed feelings are dismissed. In the Lift It Up/Roll It up activity, for example, we are honoring and acknowledging our fears. We ask participants to write down their hopes and fears on a piece of paper, share it with the room, then offer the papers to be wrapped up together and saved for later. Here, we provide a brief opportunity in the beginning of the training to express deep fears and concerns, as well as the chance to set those aside if desired. It provides a starting off point where participants understand they can talk about deeply held emotions as
needed. It is also a moment where we are being explicit about centering our learning around our hopes and not our fears. As a Co-facilitator, it is important to be intentional with your words so as to not allow the group to be distracted by diving too deeply into the group’s fears, but yet not communicate that we are asking them to bury their feelings to move forward. Some of the most important moments for learning and social cohesion during the training are when the group comes together to support a distressed colleague, and so setting this intention/tone at the outset is crucial for future success.

**Emotional Responses to Barriers**

Emotional responses to barriers also shape how participants respond to the training. Any type of barrier – whether real or perceived – has the same effect on an individual and should be acknowledged respectfully. Below we discuss common barriers and how to handle them.

**Anxiety about Deniers & Confrontation**

One of the first hurdles for many climate communicators is the fear of facing an aggressive climate denier. Deniers are an easy way to access the fear, anxiety and emotional weight of communicating about climate change. In media, dialogue about climate change is often portrayed as a heated argument between a denier of and proponent for the science behind climate change. In many cases, mass media gives a platform to a vocal climate change denier, sometimes lacking a balanced and reasonable counterpoint to accurately explain climate science. For some participants, family members and friends repeatedly deny climate change. As a result, NNOCCI participants may anticipate opposition, anger, dismissal and people trying to undermine their credibility during conversations about climate change. For some, anxiety about confronting a denier creates a larger-than-life monster particularly in a public setting.

Some communicators may express concern about not knowing how to stop an interaction that becomes negative. At this point, remind participants that our goals are not about winning an argument, but engaging in a conversation where people can participate calmly and openly. It’s okay if you don’t convince someone to agree with you. *Success in a conversation is being able to maintain a level-headed tone and exchange ideas.* If the conversation is getting heated, it is okay to say, “thank you for your ideas” and walk away. By remembering NNOCCI strategies and keeping calm, you are changing the interaction from debate to conversation, and perhaps opening a door as someone they can talk to or ask questions with. Every audience member who denies climate science may not be converted, but by holding productive conversations communicators make progress in unforeseen ways.

It’s important to not let anxiety over a possible interaction with a denier be an obstacle to testing out these new tools. The NNOCCI training tries to help members understand that deniers are just people, and we all have things in common that can be good bridges into a conversation. Facilitators guide members to have empathy and maintain curiosity about what’s behind people’s views – this approach will help keep the tone civil and allow the conversation to stay values-focused. Facilitators can also emphasize that members can forgive themselves for not being perfect. There will always be a new day and a new conversation to try again.

Practice is key to moving beyond this fear, specifically practicing with people who are not in the...
Ensuring that the Study Circle is a safe place to practice and fail, and coaching someone to let go of being perfect, is the first step to build the confidence they need to try it outside of the cohort.

**Negative Emotions when Encountering Institutional Barriers**

Some emotional experiences stem from the effects of different types of institutional barriers, which can leave individuals feeling isolated, powerless, frustrated, and discouraged. These emotions can affect how members experience the training and what they do after the training. Co-facilitators can leverage their skills and resources from the NNOCCI community to empower members who are challenged by institutional factors.

Some NNOCCI members struggle to gain support from their supervisors. A lack of support typically takes the form of not being given the resources required to realize a member’s goals. Research has shown that people in high stress jobs are more likely to experience exhaustion or magnified stress when they lack support from their supervisor (Constable & Russell, 2010; Dormann & Zapf, 1999). Most commonly in the NNOCCI context, members are not given enough time or budget to effectively participate in the NNOCCI training or implement new skills after the training is complete. It is important for co-facilitators to know if participants face this challenge during the training, so that these individuals are not harshly judged for their level of participation and are supported. As a co-facilitator, you can help them prioritize assignments, readings, and other activities to make sure they are doing the core work of the training. If necessary, you or a leader in the NNOCCI community can contact the supervisor to make sure everyone is on the same page about the training requirements that each institution agrees to.

As NNOCCI members begin to implement climate change messaging, they occasionally encounter barriers related to their institution’s culture. Cultural barriers occur when participants try to incorporate climate change messaging into programs and other institutional endeavors, and aren’t able to get the buy-in or traction they envisioned. This problem can happen when departments who play different roles in institutional messaging operate in silos. For instance, a NNOCCI member might be able to rally the education staff, but cannot convince the keeper staff to use the same messaging during chats. Related to institutional cultural challenge is navigating organizational hierarchy. The hierarchy often includes stakeholders, like board members, who are not experienced with the NNOCCI method and have strong opinions about how communications should be done.

Finally, some NNOCCI members may experience challenges with their institutional partners. Partners might leave the institution during NNOCCI training or after it is complete. Or they may lack interest in or
commitment to the training. A partner’s physical or mental absence can cause the remaining partner to lose momentum, feel a sense of isolation, and miss out on social and emotional support. Here, co-facilitators may need to provide extra support and spend extra time with the remaining partner. It’s also helpful to remember that the alumni themselves are also resources to each other.

While institutional barriers can seem overwhelming and outside of NNOCCI’s control, there is a lot that co-facilitators can do. If a communicator is feeling negative emotions due to challenges at their institution, NNOCCI co-facilitators and other members should show how the NNOCCI community supports the individual. Asking questions and listening helps the person feel acknowledged, as is empathizing that their problems are legitimate, common, and a hard context to work within. Connecting those individuals to other network members who have experienced similar problems can be instrumental in feeling a sense of camaraderie and developing solutions to institutional barriers. Building the knowledge of resources available on ClimateInterpreter.org can also be useful so that NNOCCI members know that they don’t have to re-create the wheel if they aren’t able to make their own resources. At the end of the training, members who are struggling with institutional support may need to adjust their expectations for what they can accomplish. Rather than revising all programs and exhibits with NNOCCI-style communications, these individuals’ action plans might instead focus on slowly building awareness and enthusiasm for the new knowledge they bring back. Working on an action plan with a supervisor is another way to build a realistic and appropriate timeline for their next steps.

Even for members who have the benefit of institutional support, a variety of institutional barriers are still common. Throughout the training it’s important to convey that we don’t expect massive change overnight. Even for the most committed organizations it takes years to see large-scale change. The road to change might be in fits and starts, or even a few steps backwards for every step forward. Encourage action plans to be realistic, starting small to get early wins, and anticipate a long timeline. Guilt about not getting enough done is common but unproductive. It’s important to be honest about what works and what doesn’t, be flexible and open to change. We sometimes refer to NNOCCI members as “ninjas” because our work is opportunistic, it moves slowly, and often in the background. While we always want to showcase the major achievements of our NNOCCI members, it’s also important to shine a spotlight on the modest, but meaningful victories.

Frustration with Political Norms & Systems
Some NNOCCI members encounter barriers in their institution or region’s political norms or laws. For instance, some state governments have banned the mention of climate change in state-funded facilities, while some institutions have also placed restrictions on talking about climate change. Similarly, some NNOCCI members perceive that their area’s political culture discourages discussion of climate change. When faced with these challenges, communicators often feel powerlessness. The broader NNOCCI community is key to providing the support these participants
Work with the Membership Committee to connect participants to network members and help you share network success stories to keep participants hopeful that these contexts don’t have to dictate their success.

Learning About Communications & Cognitive Science

For people who are not familiar with communications as a field or a science, the learning curve to becoming critical consumers of language can be difficult. In the context of this learning, it is important to be sensitive to the different needs of the educators and the Science Fellows since their prior experiences with communicating, their relationship to climate science, and their audiences are varied. All members bring a depth of professional experience in fields where effective communication is valued. Co-facilitators should keep in mind how frustrating it is to learn, particularly as a seasoned professional, that something as seemingly straightforward as effectively communicating with our audiences now needs to be re-learned, re-evaluated, and further developed.

Struggling with the Nuances of Strategic Framing

New framers often experience confusion and frustration at the technicalities of Strategic Framing, especially when it feels counter-intuitive. Being overwhelmed by this may lead people to want to reject it as a method. Here co-facilitators can remember to reiterate that many approaches that have been seen as environmental communication “best practices” actually backfire and produce the opposite result that we want. Reinforce the value that these tools are tested for their ability to build issue engagement and support in conversations about climate change and ocean change solutions.

Begin each lesson by reiterating the importance of taking our time on each frame element, and reminding people where we are in the Study Circle journey as a group.

Remember to talk to participants about your own experience and cognitive challenges as a beginning framer. Sharing and reflecting on your final project video in the first meeting is a way that the curriculum supports your modeling of this journey and opens the door to have the social and emotional support that a participant might need from you, and you might need from a participant to keep on learning. As a co-facilitator, you can share how you learned to check for biases in your own communication – like acknowledging how people don’t necessarily respond to scientific arguments the way you do, or that their reason to care about climate change is different than your own. This work is cognitively demanding: it takes time, patience, and practice to learn to recognize and analyze patterns of thought and apply strategic tools within your own communications. As participants begin to feel the rhythm of the course, the pieces start to fall into place as they did for you. And reminding participants that learning Strategic Framing is like learning a new language can be a helpful metaphor for the work ahead.

Participants may enter the course looking to build their knowledge of climate science and solutions because
they feel like that’s what’s missing from their communications toolbox. They may express desire to get to those curriculum elements quickly, or will try to incorporate them into their practice of the early elements. Sometimes they do this because they haven’t fully grasped how different framing is from how they previously communicated. Sometimes it is because starting a conversation without knowing where it is going to end feels uncomfortable. As a co-facilitator you don’t want to critique them on something you haven’t taught, but you also don’t want people to have to unlearn it. You want to be careful not to discourage participants or diminish their excitement as they learn new elements. Begin each lesson by reiterating the importance of taking our time on each frame element, and reminding people where we are in the Study Circle journey as a group. Starting and closing with the Journey Slide is an important grounding image to keep everyone on track. Focus feedback on the rubric, and be explicit that you are not giving feedback on the unlearned elements so you can maximize learning of the nuances of each element. Making this facilitator practice routine is key to its success.

**Discomfort Being in the Learner’s Seat**

For some participants, being in the learner role itself can be challenging. The Study Circle cohorts are filled with people who are successful in their careers and highly trusted by their organizations. In the face of new information, especially information that does not easily gel with what they know or have experienced, Study Circle members (like all people) may be inclined to reject it rather than try it. We’ve seen this sentiment expressed in a few different ways: as doubts about the effectiveness of the approach, feeling an urgency to share the full scale of the climate crisis, or seeing NNOCCI as “the new fad” in a long line of educational approaches. Sometimes, participants are overwhelmed by thinking that all visitor communication needs to be reframed. They will refer to addressing Maslow’s hierarchy of needs, a theory taught by the National Association of Interpretation, in which interpreters understand the importance of taking care of a visitor’s basic needs, like knowing where the bathrooms are, in order to set them up to receive the environmental messages of their visit. The key to helping them process this discomfort is a reminder that we’re focusing on tweaking communication aimed at building hope, ocean and climate knowledge, and civic engagement, not all visitor communication.

Participants might feel criticized, overwhelmed or even defensive. Others can’t let go of perfection and become nervous about making mistakes as they try this new way of communicating. To ease the learning process for these participants, co-facilitators should acknowledge and highlight the expertise among educators and scientists in the room, and ask Study Circle members to draw on their professional experience as much as possible. At the same time, co-facilitators can and should reiterate that the training in a new communication approach will feel funny for many, but that a new approach can be assimilated into other professional approaches after Study Circle members learn it and feel confident about using it.

We often hear fears that, by using Strategic Framing, we are trying to manipulate people. This concern often comes up in the Bridge and Pivot Lesson, and in the early days of the Study Circle. People’s prior experience analyzing how language choice influences outcomes is often from the political realm, and so the discomfort makes sense. However, language exists to shape understanding, and we are constantly making communication choices to effectively convey our message. Thus, knowing that we are always instinctively framing communication in our lives, it makes sense to learn how to frame strategically and make the most
out of our climate change communication opportunities.

**Feeling Overwhelmed by Needing to Move from Learner to Trainer**

Because the Study Circle course is intended to make participants trainers, some participants feel panicked when they first learn about the field of communications and cognitive science. It feels overwhelming to go from learner to expert, while realizing that much of the content goes against our instincts. We often see this sentiment expressed in fears about being able to answer technical questions about FrameWorks Institute’s research. This is understandable but it’s important to not let these concerns derail practice time. The qualitative and quantitative cognitive research is equally rigorous and reviewed as traditional scientific research, and even if participants are unfamiliar with this type of work, trusting in the methodology and the science is key to trusting the outcome. Recommended readings offered as homework throughout the course are available to help deepen members’ understanding of the context and the research behind the program. Reminding folks that the final meeting will focus on tools for training others also helps participants to set aside this fear for the moment.

To move through all of these challenges, people need to try Strategic Framing and see how the conversation results in different outcomes. Don’t spend too much time in the “theory bubble” without application. Talking about the theory without applying it can build anxiety, which can result in resistance and opposition to the strategy. We need new framers to pay attention to what happens as a result of speaking in this new way. Do they find that it leads to more follow-up questions, longer interactions, and more involved conversations? Does it invite more curiosity, engagement, and reflection?

Fortunately, the curriculum invests time in practice and as co-facilitator it is important to hold space for it. Use the Question & A-ha board to keep the meetings moving from theory to practice while honoring the participants’ needs. And don’t answer questions that you know the curriculum will get to later - time to practice the current topic is more important! The early homework assignments – particularly engaging in conversations with friends, family and colleagues – use the built-in trust of social groups to create a safe space to practice. The Study Circle cohort itself is also designed to be a safe space, to help people feel comfortable making mistakes and voicing their concerns. The repetitive structure of giving feedback using the Framing Fluency Rubric helps to build comfort in receiving and giving feedback to their peers in a constructive way and helps them build their skills as a trainer.

**Learning About Climate Science**

Similarly to the previous challenge with communications and cognitive science, Study Circle participants will come with varying levels of comfort with climate science content. They might perceive that they are the
only one who does not understand. As with other aspects of the curriculum, getting people connected and talking to each other can reduce this inaccurate perception and increase participation. The inclusion of Science Fellows in the cohort is designed to build a safe and trusted relationship between educators and scientists that is mutually beneficial. As co-facilitators, you can support that relationship building so that Science Fellows are seen as trustworthy science experts and educators are seen as experts in learning, and encourage them to see each other as resources.

To ensure a shared foundation of knowledge, it’s important to check for climate science understanding throughout the course. The online Climate Science Lesson is meant to ground people in basic understanding and provide opportunity for reflection on learning and comfort with the science. During the day of science presentations, make sure questions are being voiced and all equally comprehend the crucial aspects of climate science. A good technique for checking for shared knowledge is asking a member of the cohort to try to explain to others what they just learned (on a volunteer basis). This exercise often prompts more questions by the group than if the scientist asked for questions. This provides a place for the Science Fellows to help their colleagues by offering suggestions and modeling explanations, which in and of itself is its own framing practice. If there are questions that no one can explain, follow up with the presenters to provide accurate information. The science presentation day is also an opportunity for the presenting scientists to reflect on their own communication skills, which they are often eager to do with the Study Circle participants.

While the science presentation day can be thrilling and illuminating, it can also have a darker side for many Study Circle members. Hearing about the severity of climate problems may be overwhelming or depressing. Scientists may go into a level of detail that individuals may not be ready for, or a level of crisis that is hard to manage emotionally. While excitement for the science day is generally high leading up to the event, the weight of new knowledge (depending on the content and how it’s delivered) can be paralyzing. In the past, some members have reflected that they want to unlearn what they have just heard. The emotional challenges are important to work through as a group, and may lead you to rearrange the agenda. As always, we want to provide the opportunity during Study Circles to express emotional reactions to mitigate feelings of isolation. The social bonds, trust, and shared experiences can help lift people out of paralysis and keep them moving forward. Remember that it is not necessary, or recommended, for facilitators to be the only voice of comfort; allow others to respond before you. The science field trip day is an excellent place to observe and feel the sense of community and shared purpose the group has created for itself when members attend to each other’s emotional needs.
Roles Within the Cohort

The cohort arrives with a variety of skills, expertise and interests. An environmental communicator’s identity is strongly tied to their work, and so it is imperative to honor their relevant identities and experiences and not to ask them to put them away. For example, educators who have a lot of science knowledge or scientists who do a lot of outreach may want to acknowledge those skills to establish their place within the Study Circle. Giving people time to speak from their positions of authority is important. For example, don’t only ask the Science Fellows the science questions. Similarly, you don’t always have to be the answer-giver as a co-facilitator. Homework assignments ask participants to answer each other’s questions and the in-person time should allow for this approach as well. Answering each other’s questions is a way to engage in the cognitive effort to “think about one’s thinking” and it can help to build bonds within the cohort.

Solidifying the peer-to-peer relationship dynamic that makes our model effective takes honesty, transparency, and vulnerability on the part of the facilitators. It’s helpful to share that leading a bunch of educators and scientists can be intimidating, and a public acknowledgement of that fact and a plea for empathy can go a long way to breakdown walls between teacher and student. As a facilitator, you can explain, and repeat occasionally, that you learning too. You are all on this journey together and you have been in their shoes. Fluency takes time and practice, but it can be done.

It’s important to keep the social experience of Science Fellows in mind during the Study Circle process. Their experiences, expertise, and working context are different than those of informal educators. Because the room is mostly educators, it can be easy for a co-facilitator to call everyone educators, which can feel exclusionary. If Science Fellows’ roles aren’t clearly defined at the beginning of the training, and their homework assignments are not tailored with an acknowledgement of their working contexts, it can be emotionally draining and cognitively demanding for Fellows to find their purpose within the group.

Training yourself to call everyone *communicators* is a good first step. Having one-on-one conversations with the Science Fellows before the Study Circle starts can help you develop an understanding of their work environment, opportunities for framing practice, and what they hope to get out of the course so that you will start on the same page. Pairing a Science Fellow with a prior Science Fellow mentor is also a great peer-to-peer way to sustain engagement. Once the Study Circle starts it’s important to clearly define Science Fellows’ roles for the whole group to avoid confusion or Science Fellows feeling dismissed or unvalued if the group doesn’t use them as a resource.

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Conclusion: Community Matters

Just as framing teaches us to promote community-level solutions to the issue of climate change, one of the keys to NNOCCI’s success is building our sense of community. It is important to “widen the lens” for participants about the work they are doing in the Study Circle by contextualizing it within the NNOCCI story and reminding them that the end of the Study Circle process is the beginning of participation in a wider community of framers. The final meeting is a crucial bridge to the next step on their journey, and it’s important to be clear about resources, support and expectations for participation within the greater community. When challenges arise – and they will – NNOCCI members provide a “support group” of concerned and motivated peers who share values, skills, and learning. This community can work together to get over barriers both real and perceived. Remember, we do this work because research shows that when environmental educators feel like people in their social networks share their pro-environmental values, they feel less fear or panic about the environment, and being part of this group increases educators’ hope (Swim & Fraser, 2013).

It all begins at the beginning. As a co-facilitator, you set the tone for a learning context where it is safe to make mistakes, learn and begin to apply new skills together, and to try out a leadership role. You also hold a space for doing the emotional work described throughout this guide so educators do not have to continue to suppress or hide their fears. And you model how to facilitate reflection that honors the cognitive, social, and emotional challenges of our shared work. In doing so, you are modeling what it means to be a member of this network.

Equipped with knowledge about when and how points of concern, confusion, and fear are likely to surface, co-facilitators can approach these moments with empathy, creating space and acknowledgement of the challenges that this process presents in order to help people focus on the goals and move forward productively. Remind your participants that a major victory can be as small as a visitor simply saying, “oh, I hadn’t thought about it that way!” or “can you tell me more about what you mean by that?” This mindset helps keep things in perspective, and to not overlook the small and subtle victories that will begin happening all around them. The power of the NNOCCI model is in building self-efficacy so that a network of change agents can unite and empower concerned citizens to change the world.

Equipped with knowledge about when and how points of concern, confusion, and fear are likely to surface, co-facilitators can approach these moments with empathy, creating space and acknowledgement of the challenges that this process presents in order to help people focus on the goals and move forward productively.
References & Further Reading


In FrameWorks’ approach to communications on social problems, Strategic Frame Analysis®, social scientists identify several different frame elements, which are aspects of communications where seemingly small differences in emphasis can lead to large differences in how the communication is understood, interpreted, and acted upon. **Solutions** is the frame element that discusses possible actions to take to address a social problem. Solutions might be promising initiatives, effective programs, or recommended decisions. Effective framing of solutions supports public engagement in the issue by establishing that problems have solutions, and it directs the public to consider collective, public responses to social problems.

Because the strategic framing approach is designed to engage the public in a more informed civic discussion, FrameWorks’ strong recommendation is to focus communications on collective solutions, not individual behaviors. This isn’t to suggest that individual behaviors aren’t ultimately part of how to effectively address the issues facing our environment—they are, of course. But they are not the only piece of the puzzle. Individual behaviors are always shaped by context, and experts agree that policy-level changes are needed to address this issue. Given that the problem requires a both/and approach to individual/collective actions, this is where careful consideration of the communications strategy comes in. A social or scientific analysis of a problem isn’t the same as a communications analysis!

In arriving at a communications analysis, careful consideration of existing patterns of public thinking is an important early step. Across social issues, FrameWorks researchers have found that systemic and structural changes are difficult for the American public to grasp. In contrast, the same studies have shown time and time again that individual-level explanations of causes and solutions are the “default setting” for Americans. We explain education outcomes in terms of the actions of students, teachers, and parents—and find it difficult to imagine what constitutes “the system” beyond this. We explain health outcomes in terms of the diet and exercise choices of individuals—and are unlikely to spontaneously think of the social and economic factors that shape health. Individual explanations are also top of mind for the public when they think and talk about the environment.

If this is the default setting, it has implications for how to talk about solutions. FrameWorks’ recommendation is that science educators focus communications on examples of collective and civic solutions and spend as little time as possible talking about personal consumption choices. Here’s why. Americans already get a fairly steady diet of news-you-can-use messages about how to personally pursue a more climate-friendly lifestyle, and they have plenty of practice in thinking about solving problems at the individual level. Notably missing from the public discourse are examples of what can be done collectively, systemically, at a scale large enough to meet the challenge before us. As a result, people get little practice in thinking about these types of solutions. It’s important to fill in this “cognitive hole.” With a purposeful, disciplined approach to diffusing more and better examples of lesser-known policy options at the community, regional, and national level, science educators can play an important role in expanding Americans’ repertoire of solutions that they have heard of and can consider productively.

So: FrameWorks recommends that climate communicators carefully steward their precious few opportunities to engage the public and use this limited resource to spread the word about collective solutions.

From here, the next question is whether there are more and less effective ways to talk about collective solutions. And the answer is yes—framing matters! Read on to learn about four considerations for talking about solutions in the most powerful way.
What to do when they ask, “What can I do?”

It’s important to proactively include solutions frames in communications, as opposed to only talking about potential changes when asked directly. But, when people do ask, how can climate communicators take advantage of the opportunity to help diffuse a new, more expansive understanding of what needs to be done to address climate and ocean change? When a curious person asks, “What can I do?” how might you answer in such a way that appeals to the person as a citizen, not merely a private individual?

Here’s one simple possibility. You might begin, “I think it’s important for all of us to look for ways we can make a difference beyond your own households.” Then, if the situation allows, continue with concrete suggestions that involve actions the person can take to influence decisions within or through institutions. Here are examples you could provide:

- “...Learn more about the proposals in your community that are working toward sustainability. And as those possibilities get discussed or debated, get involved and speak up about how important this is.”

- “...Keep an eye out for opportunities to make connections to the issue of energy use, so that the kind of productive conversation we’re having here starts to happen more often and more publicly. It might be connecting a parent-list-serv conversation about carpooling to the broader implications for us all. Or it might mean bringing up energy efficiency as an important concern when your office is figuring out its new office supply procurement policy.”

- “...Think about the organizations you’re in—your place of work or worship. How can those groups take action toward reducing the waste of/use of fossil fuels?”

The connecting thread here is the recommendations all involve individual actions that take place in some sort of sociopolitical context beyond the household—institutional, local, or otherwise. They illustrate the kinds of things that ordinary people can imagine themselves doing, but they are always and only actions that leverage their power as civic actors and as members of groups and organizations, acting in community.

Watch out: Some ways of framing solutions can cause problems

A final framing recommendation is to take extra care to avoid partisan cues when talking about promising approaches or upcoming proposals. Perhaps more so than other frame elements, solutions are the most likely to be interpreted as partisan, or at least political, in nature. Partisan cues easily activate myside bias. This cognitive shortcut, also known as confirmation bias, leads humans to readily incorporate information that confirms beliefs held by their social group and reject ideas that they interpret as coming from another “tribe.” Put another way: once people interpret a communication as part of politics as usual, they tend to switch out of learning mode and into debate, defend, double-down mode. To keep dialogue and learning open, it is therefore important to take extra care to avoid word choices, themes, and examples that might be understood as coming from a particular political vantage point.

While this recommendation might be easy to grasp conceptually, it can be tricky to implement—and even trickier in the current political moment. On issues that have been the subject of partisan divides, and in moments of increased political polarization, sensitivity to partisan cues can be heightened. To help framers
attend more closely to word choices that could evoke myside bias, here’s a short list of alternate terms to use.

**Instead of this:**
- politician, policymaker
- policies, legislation
- California adopted standards requiring…
- Government
- Speak up, let leaders know your opinion

**Consider this:**
- elected official, community leader
- directions, ideas, proposals, commitments
- Californians agreed to/committed to…
- Our state, our community, the city/county of…
- Get involved, keep learning, join a group

This isn’t a comprehensive list—and even the longest list of wording alternatives wouldn’t capture all partisan cues, as the idea of politics as usual can be communicated in different ways. A story about how a specific zoo or aquarium is playing its part in a local effort to reduce heat-trapping emissions will almost certainly contain fewer partisan cues than a story about what the Paris accords will mean for the nation. The idea is to maintain an explanatory stance, as opposed to a persuasive one, when talking about solutions.

**Conclusion**

Getting out of behavior-change framing involves some behavior change! Changing communications habits takes practice—but that’s as it should be, as the stories we tell are dress rehearsals for the policies our society will endorse. By developing the discipline to include collective solutions in your climate communications and to avoid words and choices that could polarize or alienate potential allies, talking solutions can be part of the solution to the threats facing our ecosystems.
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