

**Focus:** Communicating Science Ideas

**Grade Level:** 7-12

**Session Length:** 45-60 minutes

### Driving Questions

- How can we protect the Crystal Cove SMCA?
- How can we start planning a social media piece to communicate about the Crystal Cove SMCA with a specific audience?

### NGSS Links

- Communicating, Evaluating, & Sharing Information

*In the eighth session of the MPA Exploration, student research teams begin planning a social media piece to help raise awareness of challenges related to the Crystal Cove SMCA.*

Research teams are introduced to the basics of science communication, where science ideas are shared with other audiences. They revisit some of the challenges that threaten the Crystal Cove SMCA and pick a specific challenge to help solve, decide on an audience, and begin planning a social media post, blog post, or video that will help raise awareness and address that challenge.

### Learning Outcomes & Assessments

<i>By the end of this module, students will be able to...</i>	<i>You can assess this using...</i>
<b>1. Describe</b> one challenge that is threatening the Crystal Cove SMCA.	Whole class discussion
<b>2. Apply</b> science communication strategies to begin framing science ideas for a particular audience.	Research team products
<b>3. Select</b> a challenge, an audience, and begin drafting a call to action.	Research team products

*Session Overview*

<i>Section</i>	<i>Description</i>	<i>Length</i>	<i>Format</i>
<b>Launch</b>	Holly introduces students to the idea of science communication and how we can use it to help protect Crystal Cove State Park.	5 minutes	Whole class
<b>Explore</b>	Research teams choose a challenge to address and decide what audience they need to reach. After, they begin framing a science idea and drafting a call to action.	35-40 minutes	Research teams
<b>Share</b>	Optionally, research teams share their progress with the entire class.	5-10 minutes	Whole class
<b>Reflect</b>	Students reflect on their experience during Session 8.	5 minutes	Individual

## Overview of the Social Media Final Product

During the final three sessions of the MPA Exploration, student research teams help to create a social media piece that raises awareness about some of the challenges that threaten the Crystal Cove State Marine Conservation Area. During this process, students will choose a challenge to address and identify the audience they need to reach, draft a call to action, choose a social media platform, create a pitch packet, draft an evaluation plan, swap feedback with another group, and execute their final product.

Before starting these last three sessions, we strongly recommend reviewing the **project rubric** and deciding on how you want to structure the project for your class. You may want to put limits on what platforms or approaches students use based on the time available.

Just like always, the work that students are doing on this project is real, and their creations can help us to really raise awareness about some of the challenges that put our underwater park at risk. If possible, Crystal Cove Conservancy and our partners at Newport Landing would love to be able to share students' final products on our social media.

If you'd like to share final products or have questions about this process, please contact Holly Fletcher by emailing [holly@crystalcove.org](mailto:holly@crystalcove.org).

Session 8		Session 9			Session 10
<i>Choosing a Challenge and an Audience</i>	<i>Drafting a Call to Action</i>	<i>Choosing a Platform &amp; Creating a Pitch Packet</i>	<i>Drafting an Audience Engagement Plan</i>	<i>Giving &amp; Getting Feedback</i>	<i>Executing the Final Product</i>

**You are here!**

## Virtual Materials

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- Session 8 Google Slides Presentation: <http://bit.ly/3hgzgsk>
- MPA Social Media Project Rubric: <http://bit.ly/34I7cJm>
- Session 8 Field Notebook Template (optional): <http://bit.ly/3prP5iR>

## Each student will need...

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- A device with internet access (a computer, smartphone, or tablet will all work!)
- Field notebook and pencil

## Before You Start Teaching

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- Briefly skim *Sessions 8, 9, and 10* and review the *project rubric*. Decide how to structure the project based on the time that you have available.
- Copy over the *Session 8 Slideshow* for your chosen platform to your own Google Drive account. Test to make sure that the videos work. (If not, you may have to check the permissions on the Crystal Cove Conservancy Youtube Account.)
- Update the project rubric with any specifics relevant to your class. Make any adjustments to *Slide 5*.
- Decide how you want to structure the session as a class. Will you move through everything together, or will you allow research teams to work independently and move at their own pace? If it is the latter, each research team will need access to the slideshow.

## Learning Sequence

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### Launch

#### Getting Started (5 minutes)

1. Open the [Session 8 Slideshow](#) and play the video on [Slide 2](#) for your class. In this video, Holly will introduce the final project for the MPA Exploration: Student research teams will be tasked with creating a social media piece to help address a challenge that threatens the Crystal Cove SMCA.
2. After watching the video, move on to [Slide 3](#), which gives an overview of what students will do and learn during Session 8.

### Explore

#### Launching the Project & Choosing a Message (35-40 minutes)

1. Move on to [Slide 4](#) and play the video. Holly will introduce the students to the idea of science communication.
2. Advance to [Slide 5](#), which gives students an overview of the final project. Depending on the time you have available, you can visit the link to review the project rubric with students.
3. After you've answered any questions about the overall project, move on to [Slide 6](#). Holly will frame the first step of the process for students: They'll get a chance to meet some of the Crystal Cove SMCA's stakeholders via video and hear about some of the challenges threatening the underwater park. Afterwards, each research team will need to pick a challenge to address.

You can let students move through [Slides 7-11](#) at their own pace, or go through them as a group. Remind students that they need to pick a challenge threatening the Crystal Cove SMCA to address via a social media piece. They can choose something mentioned in the videos or pick something else -- but, if they pick something on their own that wasn't mentioned, they'll need to justify and explain why it's a problem.

Give the research teams time to discuss and choose their challenge, and then move on to the next step.

4. Once students are ready, move on to *Slide 12*. Here, students will be challenged to decide which audience they want to target with their social media piece.

Advance to *Slide 13*, and give research teams time to discuss and pick the audience for their project.

5. Advance to *Slide 14*, where Holly will introduce students to the basics of framing a science idea and tailoring it to their specific audience.

Move on to *Slide 15*, and give students time to talk. This will likely take a bit more time, as students need to decide what science information their audience will need to understand, and then begin to frame it in relatable terms. It is okay if research teams don't entirely finish this discussion -- they will have more time to refine their framing when they create their pitch packet in Session 9.

6. When the time is up, move on to *Slide 16*, where Holly will challenge students to draft a call to action.

Advance to *Slide 17* and give the research teams time to work. Each team will need to make a decision about what they want their audience to do as a result of their social media piece. This could be participating in a beach clean-up, following the rules when they visit the Crystal Cove SMCA, responding to the post on social media, or something else.



Share

*Sharing Our Progress (Optional) (5-10 minutes)*

1. If there is time, bring the whole class back together. Move on to *Slide 18* and ask students to share their progress so far.

- What challenge did you choose?
- Which audience do you intend to reach?
- How are you framing the science idea?
- What is your call to action?



Reflect

*Reflecting on Session 8 (5 minutes)*

1. At the end of the discussion, advance to **Slide 19** in the slideshow and play the video, where Holly will ask students to spend a few minutes reflecting on their progress so far
2. Advance to **Slide 20**, which will share reflection questions. Ask students to spend five minutes reflecting on their experiences today in their field notebook.
3. Finally, thank the class for their time today. Remind them that they will continue working on their social media project in Session 9 , where they'll begin fleshing out their plan by developing a pitch packet.

**Focus:** Communicating Science Ideas

**Grade Level:** 7-12

**Session Length:** 90-120 minutes

### Driving Questions

- How can we protect the Crystal Cove SMCA?
- What do we need to plan in order to create a social media piece that will raise awareness about challenges that threaten the Crystal Cove SMCA?

### NGSS Links

- Communicating, Evaluating, & Sharing Information

*In the ninth session of the MPA Exploration, student research teams continue planning a social media piece to help raise awareness of challenges related to the Crystal Cove SMCA.*

Research teams begin refining their materials from Session 8 as they create a pitch packet. During the process, they meet Crystal Cove Conservancy's Communications Manager, who introduces them to different social media platforms and assessment metrics.

During this session, student teams select a platform, create a rough draft of their script or written text, and draft an evaluation plan. Finally, they pitch their plan to another team and swap feedback.

### Learning Outcomes & Assessments

<i>By the end of this module, students will be able to...</i>	<i>You can assess this using...</i>
<b>1. Evaluate</b> the pros and cons of different social media platforms and select one to reach their chosen audience.	Research team pitch packets
<b>2. Create</b> a rough draft of their social media piece.	Research team pitch packets
<b>3. Draft</b> an audience engagement plan that includes at least 2 metrics to assess the effectiveness of their social media piece.	Research team pitch packets
<b>4. Give</b> feedback to another team on their pitch packet	Research team discussions



## Session Overview

Section	Description	Length	Format
<b>Launch</b>	Holly frames the task for the day, as student research teams begin working on their pitch packet.	5 minutes	Whole class
<b>Explore</b>	Research teams begin working on their pitch packets, including selecting a social media platform and creating a rough draft of their text.	45-70 minutes	Research teams
	Research teams draft an audience engagement plan.	20-25 minutes	Research teams
<b>Share</b>	Research teams present their pitch packet to another team and swap feedback.	15-20 minutes	Paired research teams
<b>Reflect</b>	Students reflect on their experience during Session 9.	5 minutes	Individual

## *Overview of the Social Media Final Product*

During the final three sessions of the MPA Exploration, student research teams help to create a social media piece that raises awareness about some of the challenges that threaten the Crystal Cove State Marine Conservation Area. During this process, students will choose a challenge to address and identify the audience they need to reach, draft a call to action, choose a social media platform, create a pitch packet, draft an evaluation plan, swap feedback with another group, and execute their final product.

Before starting these last three sessions, we strongly recommend reviewing the *project rubric* and deciding on how you want to structure the project for your class. You may want to put limits on what platforms or approaches students use based on the time available.

Just like always, the work that students are doing on this project is real, and their creations can help us to really raise awareness about some of the challenges that put our underwater park at risk. If possible, Crystal Cove Conservancy and our partners at Newport Landing would love to be able to share students' final products on our social media.

If you'd like to share final products or have questions about this process, please contact Holly Fletcher by emailing [holly@crystalcove.org](mailto:holly@crystalcove.org).

Session 8		Session 9			Session 10
<i>Choosing a Challenge and an Audience</i>	<i>Drafting a Call to Action</i>	<i>Choosing a Platform &amp; Creating a Pitch Packet</i>	<i>Drafting an Audience Engagement Plan</i>	<i>Giving &amp; Getting Feedback</i>	<i>Executing the Final Product</i>

***You are here!***

## Virtual Materials

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- Session 9 Google Slides Presentation: <http://bit.ly/3mLNORR>
- MPA Social Media Project Rubric: <http://bit.ly/34I7cJm>
- Session 9 Pitch Packet Template: <http://bit.ly/2WK0XR2>
- Session 9 Field Notebook Template (optional): <http://bit.ly/3nOZXa6>

## Each student will need...

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- A device with internet access (a computer, smartphone, or tablet will all work!)
- Field notebook and pencil

## Before You Start Teaching

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- Copy over the [Session 9 Slideshow](#) for your chosen platform to your own Google Drive account. Test to make sure that the videos work. (If not, you may have to check the permissions on the Crystal Cove Conservancy Youtube Account.)
- Decide how you want to structure the session as a class. The session can be split over 2-3 class meetings or research teams can be given time to work independently outside of class.

If you need to reduce the length of the session, you can cut out the creation of an evaluation plan or the Share step when research teams trade feedback.

- Decide how you want student research teams to get and give feedback on each others' pitch packet. Update [Slide 11](#) with any instructions that are specific to your class.

## Learning Sequence

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### Launch

#### Getting Started (5 minutes)

1. Open the [Session 9 Slideshow](#) and play the video on [Slide 2](#) for your class. In this video, Holly will welcome students back and explain their task for today, as they will move on to creating a pitch packet to help them plan their social media piece.
2. After watching the video, move on to [Slide 3](#), which gives an overview of what students will do and learn during Session 9.

### Explore

#### Part 1: Creating a Pitch Packet (45-70 minutes)

1. Move on to [Slide 4](#) and play the video. Holly will introduce Kian, Crystal Cove Conservancy's social media manager.

[Slide 5](#) includes a link to a Voicethread, where students will get to meet Kian and find out more about some of the different social media platforms. Together as a research team, they'll need to choose a platform (such as Facebook, Instagram, Youtube, Medium, or Twitter) and a medium (infographic or other image, video, or blog post) for their social media post.

2. Give students time to choose a platform and begin working on their pitch packet. Much of the information can be moved over from [Session 8](#), such as the challenge they want to solve, the audience they want to reach, and their strategies for framing a science idea and structuring a call to action.

In addition, they now need to choose a social media platform and medium for their final post.

3. Once it seems like most of the teams have chosen a platform, move on to [Slide 6](#). In the video, Holly will give some more tips on using science communication strategies to design their social media piece.

Afterwards, move on to [slides 7 and 8](#) which will provide additional resources that students may want to use to complete their task. Again, give students time to work. Students will be responsible for completing their pitch packet and creating a rough draft of their social media piece, including any scripts, storyboards, or draft text.

This will likely be the longest stretch of time in the process. If you are dividing this session over multiple class meetings, you might consider breaking here.

*Part 2: Drafting an Audience Engagement Plan (20-25 minutes)*

4. As research teams begin to reach the end of their pitch packet, bring the class together again. Move on to *Slide 9*, where Holly will describe the importance of having a plan to evaluate the audience engagement and success of the social media piece.

*Slide 10* includes a link to another Voicethread, where Kian will describe some of the metrics that he uses to assess engagement on different social media platforms.

5. Let students break back into their research teams. Remind them that they will need to create a draft audience engagement plan, including choosing at least 2-3 metrics to help them measure engagement.

Give them more time to work and finish drafting their pitch packet.



Share

*Sharing Our Progress (Optional) (5-10 minutes)*

1. Advance to *Slide 11* in the slideshow and play the video. Here, Holly will frame the importance of making a pitch and getting feedback on one's plan.

2. Move on to *Slide 12* and divide the research teams into pairs. Go over the expectations for getting and giving feedback.

We recommend using the *3-2-1 Format*:

- **First**, Team A spends three minutes making their initial pitch.
- **Next**, Team B spends two minutes giving feedback, highlighting parts they liked and parts that could be improved. While receiving feedback, Team A must listen silently in order to take it in and is not allowed to speak, aside from answering clarifying questions.
- **At the end**, Team A spends one minute describing the changes they want to make as a result of the feedback.
- **Finally**, the two teams switch places and repeat the process.

This process works best if the teacher is extremely strict with timing, and encourages students to fill out the entire time available.

3. Once teams have had a chance to give and get feedback, if there is time, give them a few minutes to regroup with their original research team and make a plan to update their pitch packet based on the feedback they received.



Reflect

*Reflecting on Session 9 (5 minutes)*

1. At the end of the discussion, advance to **Slide 13** in the slideshow and play the video, where Holly will ask students to spend a few minutes reflecting on their progress so far
2. Advance to **Slide 14**, which will share reflection questions. Ask students to spend five minutes reflecting on their experiences today in their field notebook.
3. Finally, thank the class for their time today. Remind them that they will continue working on their social media project in Session 10, they'll create their final social media piece and will have a chance to share it with Crystal Cove Conservancy to promote on our social media platforms!

## Session 10: Executing Your Plan

**Focus:** Communicating Science Ideas  
**Grade Level:** 7-12  
**Session Length:** 45-60 minutes or longer

### Driving Questions

- How can we protect the Crystal Cove SMCA?
- How can we create our final social media piece that will raise awareness about the challenges that threaten the Crystal Cove SMCA

### NGSS Links

- Communicating, Evaluating, & Sharing Information

*In the tenth and final session of the MPA Exploration, student research teams execute their plan to create a social media piece that will help raise awareness of challenges related to the Crystal Cove SMCA.*

Research teams use the pitch packet that they created in Session 9 to create their final social media piece, which can take the form of a post, video, or blog post.

Unlike previous sessions, this session is largely self-guided, giving students time to finalize their project. You can decide how much time to give students, and whether to give students another opportunity to give and get feedback on their final product.

### Learning Outcomes & Assessments

<i>By the end of this module, students will be able to...</i>	<i>You can assess this using...</i>
<b>1. Create</b> the final draft of a social media piece that will address a challenge threatening the Crystal Cove SMCA.	Final social media pieces
<b>2. Share</b> their social media piece with Crystal Cove Conservancy.	Screenshots or reports of research team submissions
<b>3. Reflect</b> on the role that science communication plays in helping to protect places like the Crystal Cove State Marine Conservation Area.	Student reflections

*Session Overview*

<i>Section</i>	<i>Description</i>	<i>Length</i>	<i>Format</i>
<b>Launch</b>	Holly welcomes students to the final session of the MPA Exploration, where they will execute their plan to create a social media piece.	5 minutes	Whole class
<b>Explore</b>	<p>Research teams are given time to work on their final product.</p> <p>Optionally, if there is time, you can break halfway through to give students another opportunity to give and get feedback on their final product.</p>	<p>30+ minutes</p> <p>15-20 minutes</p>	<p>Research teams</p> <p>Research teams</p>
<b>Share</b>	Research teams present their final products to the class.	15-20 minutes	Whole class
<b>Reflect</b>	Students reflect on their experience during the MPA Exploration program.	5 minutes	Individual



## Overview of the Social Media Final Product

During the final three sessions of the MPA Exploration, student research teams help to create a social media piece that raises awareness about some of the challenges that threaten the Crystal Cove State Marine Conservation Area. During this process, students will choose a challenge to address and identify the audience they need to reach, draft a call to action, choose a social media platform, create a pitch packet, draft an evaluation plan, swap feedback with another group, and execute their final product.

Before starting these last three sessions, we strongly recommend reviewing the *project rubric* and deciding on how you want to structure the project for your class. You may want to put limits on what platforms or approaches students use based on the time available.

Just like always, the work that students are doing on this project is real, and their creations can help us to really raise awareness about some of the challenges that put our underwater park at risk. If possible, Crystal Cove Conservancy and our partners at Newport Landing would love to be able to share students' final products on our social media.

If you'd like to share final products or have questions about this process, please contact Holly Fletcher by emailing [holly@crystalcove.org](mailto:holly@crystalcove.org).

Session 8		Session 9			Session 10
<i>Choosing a Challenge and an Audience</i>	<i>Drafting a Call to Action</i>	<i>Choosing a Platform &amp; Creating a Pitch Packet</i>	<i>Drafting an Audience Engagement Plan</i>	<i>Giving &amp; Getting Feedback</i>	<i>Executing the Final Product</i>

**You are here!**

## Virtual Materials

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- Session 10 Google Slides Presentation: <http://bit.ly/3rsFVo8>
- MPA Social Media Project Rubric: <http://bit.ly/34I7cJm>
- Session 10 Field Notebook Template (optional): <http://bit.ly/37MKOR9>
- Student Learning Post-Assessment: <http://bit.ly/2WWxNOJ>
- Share Final Products with Crystal Cove Conservancy: <http://bit.ly/34Lftwe>

## Each student will need...

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- A device with internet access (a computer, smartphone, or tablet will all work!)
- Field notebook and pencil
- Their pitch packet from Session 9
- Any other supplies or programs they listed in their pitch packet to create their final social media piece
- Social media stock photo gallery (optional): <http://bit.ly/2PDWbnT>

## Before You Start Teaching

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- Copy over the [Session 10 Slideshow](#) for your chosen platform to your own Google Drive account. Test to make sure that the videos work. (If not, you may have to check the permissions on the Crystal Cove Conservancy Youtube Account.)
- Decide how you want to structure the session as a class. Students will likely need time to complete their final products, so you may want to give them 1-2 class meetings.

Halfway through, if there is time, it is recommended that research teams have a chance to give and receive feedback with another team. If you will not have time for this, you can delete [Slide 5](#) from your slideshow.

At the end, we recommend hosting a final Share discussion so each research team can share their final project with the class, but if time does not allow, you can choose to do a gallery walk or cut this entirely.

- Decide how you want student research teams to share their final creations with Crystal Cove Conservancy. You can gather the posts and email them directly to Holly at [holly@crystalcove.org](mailto:holly@crystalcove.org) or students can submit their projects online at <http://bit.ly/34Lftwe>.

Make sure to update [Slide 7](#) with any special instructions. If you decide to have students submit their own projects, decide what you will accept as evidence that they have completed this final step.

## Learning Sequence

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### Launch

#### Getting Started (5 minutes)

1. Open the [Session 10 Slideshow](#) and play the video on [Slide 2](#) for your class, where Holly will introduce the last session of the MPA Exploration. During Session 10, students will complete their social media piece and share it with Crystal Cove Conservancy.
2. After watching the video, move on to [Slide 3](#), which gives an overview of what students will do and learn during Session 10.

### Explore

#### Executing Your Plan (30+ minutes)

1. Open up [Slide 4](#), which will outline the task for the day. Session 10 is entirely self-driven, with research teams executing their plan to create a social media piece. The teams should largely be able to work independently, with you checking in on their progress.

If students need any stock photo or video materials for their project, you can provide them with a link to our social media content gallery on [Slide 5](#).

2. If here is time, move on to [Slide 6](#), break the research teams halfway through, and give them an opportunity to pair up with another team to share feedback. We recommend following the same process as you did in Session 9.

We recommend using the [3-2-1 Format](#):

- **First**, Team A spends three minutes making their initial pitch.
- **Next**, Team B spends two minutes giving feedback, highlighting parts they liked and parts that could be improved. While receiving feedback, Team A must listen silently in order to take it in and is not allowed to speak, aside from answering clarifying questions.
- **At the end**, Team A spends one minute describing the changes they want to make as a result of the feedback.
- **Finally**, the two teams switch places and repeat the process.

3. Give students additional time to continue adjusting and finalizing their social media pieces. At the end of the project time, ask them to submit their pitch packet and final piece to you for grading.

If possible, it would also be great to have students submit their final projects to Crystal Cove Conservancy so that we can share them on our social media, with optional instructions on [Slide 8!](#)

Share

*Sharing Our Progress (Optional) (5-10 minutes)*

1. Once students have completed their projects, as time allows, give them a chance to share their work with the whole class. If you don't have time to do presentations, you might use Google Slides to set up a virtual gallery walk, where each research team adds their creation to a different slide.
2. If there is time, we also recommend hosting one final class discussion to reflect on the project and the role that science communication plays in protecting places like the Crystal Cove State Marine Conservation Area. You can use the questions on [Slide 7](#) as a starting point for your discussion.

Reflect

*Reflecting on the MPA Exploration (5 minutes)*

1. At the end of the discussion, advance to [Slide 9](#) in the slideshow. Holly will thank the students for taking part in the program and frame one last moment of reflection for them.
2. Advance to [Slide 10](#), which will share reflection questions. Ask students to spend five minutes reflecting on their experiences throughout the program in their field notebook.
3. If possible, please end with having students complete the final post-assessment online!