The Marine Mammal Center is guided and inspired by a shared vision of a healthy ocean for marine mammals and humans alike. One of The Marine Mammal Center’s education programs, Ocean Ambassadors, is an academic year-long marine science program that provides middle school teachers access to curriculum, resources, and professional development. Middle School students explore the science of the Center, examine patient charts, and create action projects relevant to their community.

Approximately 3,759 students from 5 Bay Area counties completed a minimum of 40 classroom hours plus connected experiences at The Marine Mammal Center and at various field sites to view wild marine mammals in their natural habitat. Participating students include approximately 19% English Language Learners and 57% receiving Free & Reduced Price Lunches. In partnership with the evaluation firm Public Profit, The Marine Mammal Center fielded a survey of youth participating in the Ocean Ambassadors program across the Bay Area. Below are the results of the survey organized by the intended program outcomes.

### Youth Demographics

<table>
<thead>
<tr>
<th>Grade</th>
<th>Male</th>
<th>Female</th>
<th>Transgender</th>
<th>Not Listed</th>
<th>American Indian/Alaska Native</th>
<th>Asian</th>
<th>Black/African American</th>
<th>Native Hawaiian/Pacific Islander</th>
<th>Identify in a way not listed</th>
<th>Prefer not to say</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>47%</td>
<td>45%</td>
<td>1%</td>
<td>2%</td>
<td>5%</td>
<td>27%</td>
<td>8%</td>
<td>5%</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>7th</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th</td>
<td>13%</td>
<td>44%</td>
<td>1%</td>
<td>2%</td>
<td>5%</td>
<td>27%</td>
<td>8%</td>
<td>5%</td>
<td>12%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Note: Students could select more than one race/ethnicity.

### Knowledge

- **Do students report increased knowledge of science concepts, ocean literacy principles, and science-based career opportunities?**

  - **Before**: 54%
  - **After**: 85%

- **Students are able to correctly identify key ocean principles:**
  - 66% know that the ocean is mostly unexplored.
  - 81% know that the ocean is one large body of water with many features.
  - 85% know that the ocean supports many different forms of life.

- **Students are able to correctly identify ways the ocean helps people survive:**
  - 74% know that the ocean provides vital resources.
  - 70% know that the ocean affects weather and climate.
  - 51% know that the ocean ecosystem produces the oxygen we breathe.

### Confidence

- **Do students demonstrate increased confidence in their ability to engage in science now and in the future?**

  - **Before**: 58%
  - **After**: 79%

- **I feel confident in my science classes.**

- **I think about getting a job in science someday.**

### Belonging

- **Do students identify the local marine wildlife and coastal environment as part of their community?**

  - **Before**: 75%
  - **After**: 87%

- **Coastal habitats are a part of my community.**

- **I feel connected to marine wildlife and the coastal environment.**

### Responsibility

- **Do students express intent to take responsibility for stewardship of their local marine wildlife and coastal environment?**

  - **Before**: 80%
  - **After**: 91%

- **My actions can impact marine wildlife in my community.**

- **I talk to family and friends about the importance of local marine wildlife.**

Source: Ocean Ambassadors Youth Survey, 2018-19 (N= 2,124). Percentages represent the proportion of youth who responded “Agree” or “Strongly Agree” or the proportion who selected each ocean principle as true for the items in the ocean principles section.
What did you like best about Ocean Ambassadors?

- "The thing I liked most about the Ocean Ambassadors program was that we got to see what was happening to marine life and how we were affecting them, whether it was positive or negative. I also liked going on the field trips and being able to participate in a huge project like the Marine Mammal Center’s." - Ocean Ambassador 7th grade student

- "I really enjoyed working with another partner to raise awareness and help out wild life. It helped me to realize, that we can do so much more than we think that we can." - Ocean Ambassador 7th grade student

- "The Ocean Ambassador classroom activity that was more meaningful to me was on the boat, when we were on the top looking for things because it let me explore and see what the marine mammals go through." - Ocean Ambassador 6th grade student

- "I enjoyed our Call to Conserve project. We had to make something that can teach people about the problems marine mammals face. My partner and I made a children’s book, about our patients that were at the Marine Mammal Center." - Ocean Ambassador 8th grade student

- "I think the Ocean Ambassadors program can improve on setting up beach clean up activities on the weekends! I think people would love to attend!" - Ocean Ambassador 8th grade student

- "I think one way we can make the program better is by having a worker coming into the class and answer questions about what the students are learning about and tell them what happens during a rescue. Overall, the Ocean Ambassadors Program was a wonderful experience." - Ocean Ambassador 6th grade student

What are two ways you hope to impact marine mammals and their environment?

- "The first way I hope to impact marine mammals and their environment is by sharing the stories we learned to my friends and family. The second way I hope to impact marine mammals is to be aware of my surroundings and pick up any litter because it can get into the ocean and hurt the mammals." - Ocean Ambassador 6th grade student

- "I hope to impact marine mammals and their environment by, Organizing beach cleanups, Finding more ways to impact their lives in a good way, and spreading awareness to others." - Ocean Ambassador 6th grade student

Which of the Ocean Ambassador classroom activities was most meaningful or memorable for you?

- "The Ocean Ambassador classroom activity that was more meaningful to me was on the boat, when we were on the top looking for things because it let me explore and see what the marine mammals go through." - Ocean Ambassador 6th grade student

- "I enjoyed our Call to Conserve project. We had to make something that can teach people about the problems marine mammals face. My partner and I made a children’s book, about our patients that were at the Marine Mammal Center." - Ocean Ambassador 8th grade student

What can we do to make Ocean Ambassadors even better?

- "I think the Ocean Ambassadors program can improve on setting up beach clean up activities on the weekends! I think people would love to attend!" - Ocean Ambassador 8th grade student

- "I think one way you can make the program better is by having a worker coming into the class and answer questions about what the students are learning about and tell them what happens during a rescue. Overall, the Ocean Ambassadors Program was a wonderful experience." - Ocean Ambassador 6th grade student

Source: Ocean Ambassadors Youth Survey, 2018-19 (N=2,124).
The Marine Mammal Center is guided and inspired by a shared vision of a healthy ocean for marine mammals and humans alike. One of The Marine Mammal Center’s education programs, Ocean Ambassadors, is an academic year-long marine science program that provides middle school teachers access to curriculum, resources, and professional development. Through Ocean Ambassadors, The Marine Mammal Center aims to support teachers, while inspiring the next generation of informed and engaged citizens who will care for the health of the oceans and environment.

Forty teachers contributed a minimum of 50 classroom hours and 15 professional development and coaching hours plus additional planning time. Of the 40 participating teachers, 11 of them were returning to the program while the other 29 teachers were new participants this school year. In partnership with the evaluation firm Public Profit, The Marine Mammal Center fielded a survey of teachers participating in the Ocean Ambassadors program across the Bay Area. Below are the results of the survey organized by the intended program outcomes.

Skills and Confidence

<table>
<thead>
<tr>
<th>Questions</th>
<th>Before</th>
<th>56%</th>
<th>After</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do teachers report increased confidence in teaching science?</td>
<td></td>
<td>100%</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>What skills/experiences did you gain through working with TMMC staff and implementing the curriculum?</td>
<td></td>
<td>0%</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>How to seek out other science curriculum and resources.</td>
<td></td>
<td>0%</td>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Project-Based Learning</td>
<td></td>
<td>0%</td>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>I am prepared to lead</td>
<td></td>
<td>0%</td>
<td></td>
<td>60%</td>
</tr>
</tbody>
</table>

85% feel more prepared to teach other science content.

81% are better at incorporating ocean literacy principles.

93% plan to apply the skills they learned into their other science content and lessons.

70% are more knowledgeable about how to seek out other science curriculum and resources.

Ability to Connect

<table>
<thead>
<tr>
<th>Questions</th>
<th>Before</th>
<th>56%</th>
<th>After</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do teachers report increased ability to connect local marine science issues to student interests?</td>
<td></td>
<td>100%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>What feedback did teachers have for the Ocean Ambassadors program?</td>
<td></td>
<td>100%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>The Ocean Ambassadors program is a fantastic - high school science that has helped me to teach topics related to ocean literacy.</td>
<td></td>
<td>100%</td>
<td></td>
<td>80%</td>
</tr>
</tbody>
</table>

89% are more knowledgeable about ocean literacy principles.

Collaboration

<table>
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<th>56%</th>
<th>After</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do teachers report increased collaboration within their school community?</td>
<td></td>
<td>100%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>What feedback did teachers have for the Ocean Ambassadors program?</td>
<td></td>
<td>100%</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>What is something you’d want other people to know about participating in the Ocean Ambassadors program?</td>
<td></td>
<td>100%</td>
<td></td>
<td>80%</td>
</tr>
</tbody>
</table>

89% collaborated with marine science experts because of Ocean Ambassadors.

11% collaborated with community partners because of Ocean Ambassadors.

22% collaborated with field trip sites/providers because of Ocean Ambassadors.

General Feedback

<table>
<thead>
<tr>
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<td></td>
<td>80%</td>
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93% are better at incorporating ocean literacy principles.

81% are more knowledgeable about how to seek out other science curriculum and resources.

89% are more knowledgeable about ocean literacy principles.