



PORTS

Parks Online Resources for Teachers and Students

2015/2016 School Year Teacher Survey Report

EXECUTIVE SUMMARY

The PORTS Teacher Survey examines the program's overall usability; the relevance of its instruction materials; the effectiveness of its live presenters; the efficiency of scheduling and logistics; and the technology tools and infrastructure in increasing student knowledge and appreciation of resources protected by California State Parks. This year, 74% of teachers gave PORTS the highest grade for overall experience. However, we once again received the lowest recorded score for satisfaction of the "videoconference presentation." Teachers' comments reflect that we need to continue to work on personally engaging students, while also evolving with technology and education practices. The implementation of new software broadened and improved ease of access by teachers, but there are still some technology issues that need to be addressed. Of teachers we surveyed, 77% were not able to take students on a field trip to a California state park, proving the true need for PORTS. The fact remains PORTS was likely the only point of contact with California State Parks for these classrooms this past school year.

BACKGROUND

The Department uses a standardized School Group Program Evaluation (SGPE) for school group interpretive programs throughout the state. Seven years ago, PORTS staff created a hybrid online version of the school group evaluation, which incorporates many of the key questions on the standard SGPE along with new questions that better serve the needs of the PORTS program. Two years ago, PORTS took the initiative to recreate the form using Google Forms, a free online tool. We received 328 responses to the survey this school year.

PORTS PROGRAM EXPERIENCE GRADES

The key questions asked of the participants were graded using a scale of 1-5, with 5 as the highest grade.

- 74% of participants gave PORTS the highest grade for "Overall Program Experience"
- 69.5% of participants gave PORTS the highest grade for "Videoconference Presentation"
- 51% of participants said they used the PORTS online lessons; 57% of those gave the "Online Lessons" the highest grade
- 73.5% of participants gave PORTS the highest grade for "Scheduling Process and Logistics"
- 77% of participants said they were not able to take their students on a field trip to a California state park.

PARTICIPANT COMMENTS

The following comments underscore the relevance and importance of PORTS in K-12 classrooms:

- "My students come from low income and low socio-economic backgrounds. Some have never been to the beach and never will get that opportunity. PORTS allows children to get academics in reading, writing, and critical thinking skills through the designed lesson plans. They also are linked directly to science standards. Then students get a chance for a virtual field trip and they love it! I as a teacher love it too as it makes lesson planning for science standards easier, and gave me a fun and engaging way to teach subjects such as reading and writing."
- "The PORTS program allowed my students to visit an area we would never have been able to get to because it is too far away. I also find it very valuable for students to be able to talk directly with an expert in a field in order to learn more about the science as well as be exposed to jobs in the field of science. Finally, it was an extremely engaging activity that held the students' attention and made science exciting."
- "What a fantastic way for students to visit and understand places that they might not ever get to experience otherwise! The more students are exposed to, the more intelligent they become. Plus, it

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makes them excited and motivated to want to give back to the community, help take care of our beautiful state, and even visit places that they didn't know even existed."

- "I have worked with the PORTS program before at another school and love the experiences that it brought to my students. I really appreciate the authentic experiences it provides for my students and the ability for my students, who are largely from low income households, to experience places that are not close to us geographically."
- "This was an excellent wrap-up for our Life Sciences/Life Cycles unit. Loved that the students got to interact with a park interpreter—something many of them may never/have never gotten the chance to do!"
- "I found some of my students more engaged than they have been in quite a while! In addition, our district recognizes the importance of using technology to bring the 'outside world' into the classroom, and this fits that goal perfectly."
- "This ties to our standards and curriculum. It was great for 21st century learning; critical thinking, collaboration, communication and creativity in learning and teaching. The PORTS program gets my 'city' kids out of their comfort zones. For some of them, this is the only 'traveling' they do."
- "My students are low income and don't have opportunities to visit parks. This is one way to introduce them to the parks and encourage them to go to parks nearby. Maybe as they become adults and have better economic opportunities they will visit and support parks."
- "Great way to introduce students to all that the California state parks have to offer."

PROGRAM PARTICIPATION

The following statistics were obtained regarding the "very important" factors for respondents' participation in the PORTS Program. Exposing students to real-world experiences still remains the most important reason teachers cite for participating in PORTS.

- Introduce/review academic content standards—58%
- Bring technology into your classroom—76%
- Improve student communication—62%
- **Expose students to real world experiences—95%**
- Introduce California state parks to your students—82%
- Because it's free—71%

ONLINE LESSONS

Participants were asked if they use the PORTS Online Units of Study. 51% of respondents stated they use the units. Of those respondents, 57% gave the material the highest grade.

VIDEOCONFERENCE PRESENTATION

The following statistics were obtained regarding whether the Videoconference Presentations definitively fulfilled the following objectives (i.e. answered "Definitely").

- Did the presentation present unifying theme(s) and big ideas rather than just facts?— 92%
- Did the presentation build on the students' knowledge of the subject?— 95%
- Did the presentation have the students actively engaged?— 88%
- Was the presentation relevant to your students' grade level and lives?— 92%
- Were the students challenged to consider the importance of the park resource and what they can do to help protect similar resources?— 72%

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**Lawrence Hall of Science & PORTS Program
Science Learning Activation Study**

PORTS partnered with University of California, Berkeley's Lawrence Hall of Science to conduct a large-scale student survey. Using the Activation Lab survey tools developed by the Lawrence Hall of Science, PORTS piloted the Science Learning Activation Survey for the Anza-Borrego Desert PORTS program. The survey is designed to assess students, ages 10-14 years old, on three dimensions—fascination, values, and competency belief. The goal for piloting the survey was to gather data about the impact of PORTS on students' beliefs and learning, determine if the Science Learning Activation Survey is a viable tool for PORTS, and provide the Lawrence Hall of Science feedback on the usability of the survey tool.

Approximately 365 students, grades 4-7, took part in the survey between January and April 2016. The selected schools represented a geographic diversity: Empire Elementary (Stanislaus County), Blanche Reynolds Elementary (Ventura County), Sunflower Elementary (Imperial County), and Martinez Junior High School (Contra Costa County). Of the four participating schools, three are Title I schools receiving federal funding for low-income students.

Anza-Borrego Desert PORTS program was chosen for the survey as the program serves the largest number of students that fall in the survey's targeted age range, 10-14 years old. The survey was built using the Survey Construction Tool provided by the Lawrence Hall of Science staff. A survey link was provided to the participating teachers. Teachers administered the pre- and post-survey at least one week before and after the videoconference program. Of the 365 students who completed the survey, we were only able to link a subset of 175 students from pre- to post-survey. Staff from the Lawrence Hall of Science assisted with the survey analysis of those 175 data sets.

In analyzing the survey results, some inferences can be drawn. Overall, out of a score range of 1-4, the majority of scores were above a 2.5 average, indicating the scores fall in a positive range. Given that we conducted three analyses with correlated data from the same dataset, there is an increased chance of finding a false positive. We accounted for this threat by making a Bonferroni correction. After this correction, we found no difference in the responses to the Fascination, Values or Competency Beliefs scales.

If the student survey is conducted again with a larger survey population, we might then be able to detect a difference in score for the three dimensions.

CONCLUSION

PORTS staff will continue to solicit participant feedback through surveys and evaluations as we constantly strive to streamline, expand, and improve the Parks Online Resources for Teachers and Students park interpretive programs.