

Kids Healthy Outdoors Challenge (KHOC)

2012–2013 School Year

Pilot Project

I. Executive Summary

PURPOSE OF THE PILOT PROJECT

East Bay Regional Park District (EBRPD) worked with educators to ensure that the *Kids Healthy Outdoor Challenge (KHOC)* supported third grade curriculum content standards, including new Core Content Standards. Lessons included *Connecting with the Past* (e.g., exploring Ohlone Native American culture), *Planting a Seed*, *Exploring Nature*, and *Following a Trail*. The curriculum also contained activities that students could explore with their families outside of school time.

During the school year, each teacher was asked to complete at least three of the ten outdoor education-based lessons in the *KHOC* booklet with their class, and to go on one class trip to an EBRPD park. Anticipated **outcomes** for the teachers piloting *KHOC* included:

- Increased comfort and skills teaching outdoors.
- Diverse teachers supported in meeting third grade curriculum content standards.
- Increased use of EBRPD resources to support learning.
- Increasing level of physical activity outdoors, promoting health and well-being, and life-long parks use, both for teachers and their diverse students.

As a frequent EBRPD visitor, I am so happy to be helping to plant seeds of stewardship with children, and to see their enthusiasm for nature and outdoor exploration. It made me so happy to hear that many of my students took their families back to the parks we visited on field trips.

To determine whether project outcomes were met, all participating teachers were asked to complete an *Educator Survey* in June 2013. Eighteen of thirty-three participating teachers completed the survey.

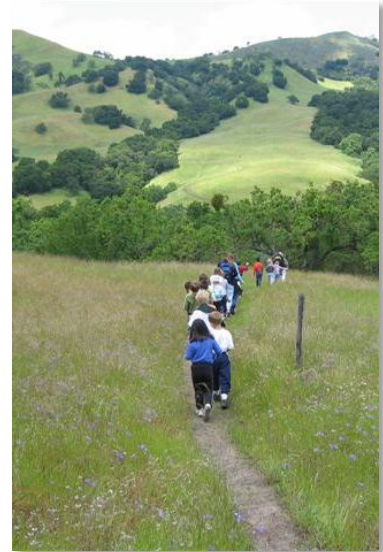
EBRPD also asked teachers to complete a year-end *Teacher Activity Log* summarizing activities completed during the year, and numbers of students participating. Although the log was submitted by just fourteen of the thirty-three participating teachers, data underscored the diversity of participating students: **40% Latino/a, 19% African American, 17% Caucasian, 15% Asian, 5% Pacific Islander and 4% Other/Multi-racial**. Average class size was **twenty-six** children.

Summary of Survey Results: Of the eighteen survey respondents, 17 (**94%**) had completed *KHOC* by completing at least three lessons and taking the class trip.

One of the major goals of *KHOC* was to increase educator comfort and skills teaching outdoors. The project appears to have achieved this goal: **89%** Agreed or Strongly Agreed that *KHOC* increased their comfort with leading classroom activities outdoors; **72%** agreed that participating in the project increased their skills teaching outdoors.

It was also critically important that teachers not feel like *KHOC* was taking time away from meeting critical state curriculum standards; **78%** Agreed or Strongly Agreed that *KHOC* helped them to meet curriculum standards. These teachers cited Science and History/Social Science as the curriculum standards *most* supported by *KHOC*.

During the *KHOC* pilot year, EBRPD sought to increase student (and educator) enthusiasm for activity and learning outdoors, particularly in natural park settings.



Survey results show that this outcome was successfully met:

- **100%** of teachers surveyed agreed that participating in the *KHOC* made their class want to spend more time being active outdoors
- **89%** agreed they spent more time teaching outdoors this school year than they did the last school year.

Moreover, **78%** of teachers said they learned about EBRPD resources to support learning, including transportation resources, maps and information about programs on the EBRPD website, and specific program offering at parks.

Finally, information was collected from educators on how the *KHOC* could be improved in future years. Section V of this report details their suggestions, including clearer directions about scheduling park trips, increased focus on water safety, and increased time for check-in with EBRPD staff in future years.

I enjoy several East Bay Regional Parks regularly with my family, but I hadn't thought about bringing my students to a park as a field trip. Now, I hope to do this annually with my students. I also wasn't aware of the transportation resources that are available through EBRPD. Now, I will try to take advantage of this!

EBRPD feels very encouraged by these results, and hopes to continue to promote outdoor education in our local school districts. All (**100%**) of teachers said they intend to continue teaching lessons that get kids active outdoors in the future.

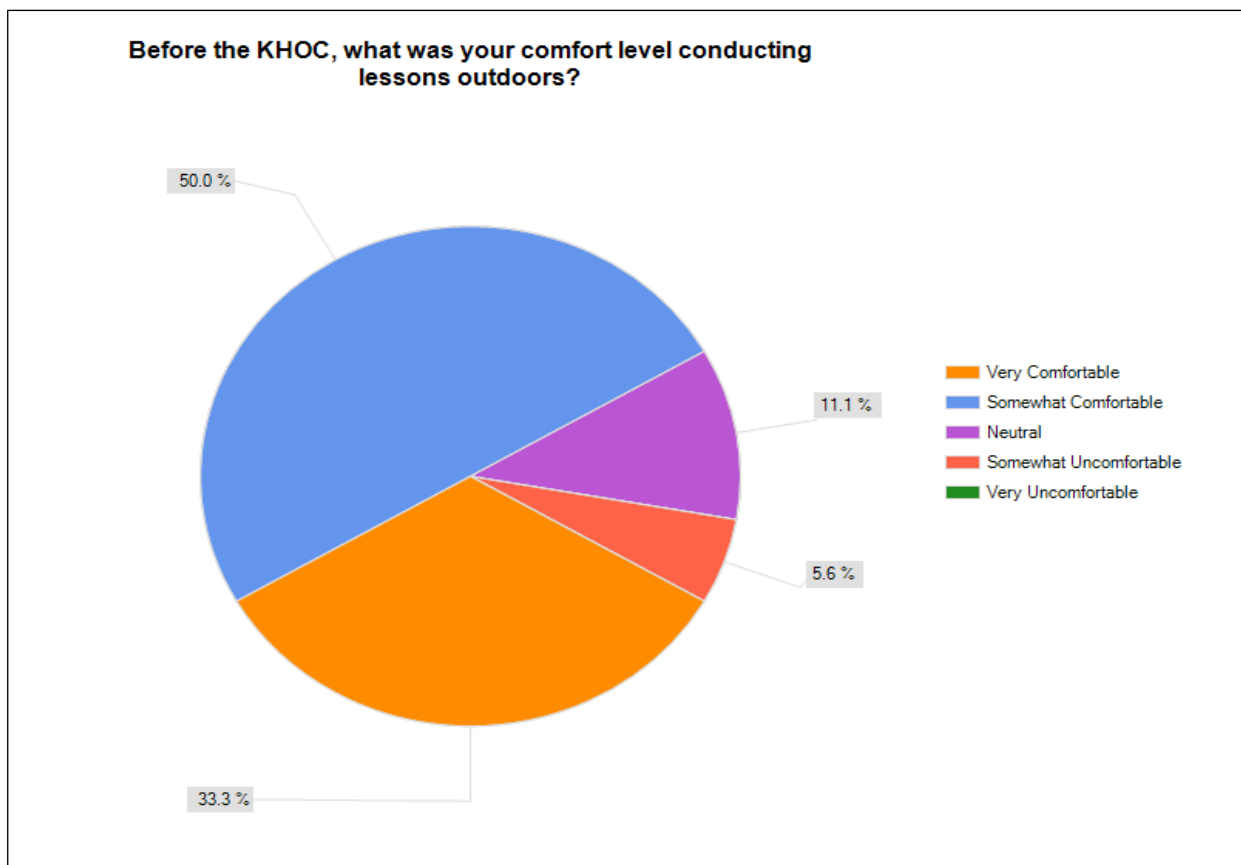
Note: A student pre- and post-test was also administered to measure project outcomes for the third graders who participated in *KHOC*. A student outcome report is noted in Exhibit A.

II. About the Teachers

EBRPD selected **thirty-three** third grade teachers to pilot the *Kids Healthy Outdoor Challenge (KHOC)* in school year 2012–13. An online survey was distributed in June 2013, completed by **eighteen** of the participating teachers.

The teachers surveyed were fairly experienced educators, having taught for an average of **12.5 years**. The range of teaching experience was from **three** to **thirty-seven** years. As noted from the Teacher Activity Logs, the average class size was **twenty-six** students.

District staff expected that teachers would have a range of skills and comfort level *teaching their classes outdoors*, and this was largely true, although most teachers had at least some level of comfort teaching their classes outdoors:



Of the eighteen survey responders, seventeen (**94%**) completed the *KHOC* by completing at least three lessons and taking the class park trip. Only one did not, although this teacher reported completing all the lessons (and not taking the park trip).

Note: EBRPD recognizes that the data collected in this survey may be skewed by the fact that it was largely *project completers* who also completed the *survey*. There is very little feedback from those who may have had trouble completing the *KHOC*. (See Section V for a discussion of this issue.)

III. Outcomes

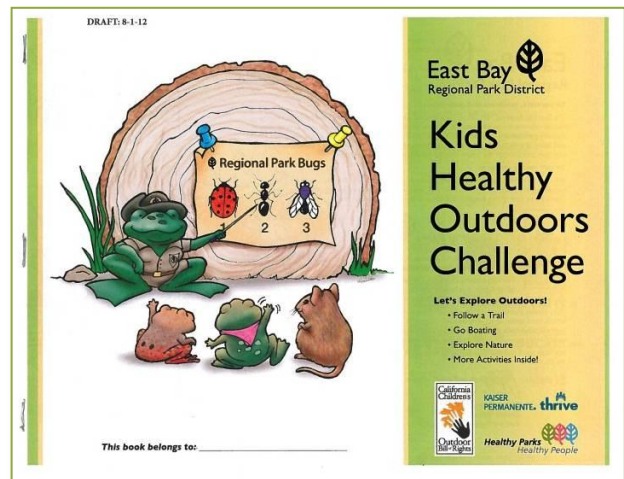
I. Increasing Comfort and Skills Teaching Outdoors: One of the major goals of the KHOC was to increase educator comfort and skills teaching outdoors, and the project appears to have achieved this goal: **89%** Agreed or Strongly Agreed that KHOC increased their comfort with leading classroom activities outdoors; **72%** agreed that participating in the KHOC increased their skills teaching outdoors. (Other teachers were neutral about these statements).

Teacher comments underscored their growth in **comfort**:

- *I was scared to take 27 kids outside but the outdoor field trips really helped me get over that. I feel I teach better and they listen better outside. We loved being outside!!*
- *I was able to practice setting up field trips, taking the kids out, planning activities for them to do on the trips, and debriefing back at school/connecting it to what we were already learning. Every trip I got a little bit better.*
- *I felt confident enough to lead the class on a 5+ mile hike on our trip without relying on rangers for a scheduled program.*
- *I feel like dedicating an hour once a week towards outdoor education gave us all (students and teacher alike) more confidence to go on a more ambitious outdoor field trip (having more appreciation for the experience outdoors and do more too)!*

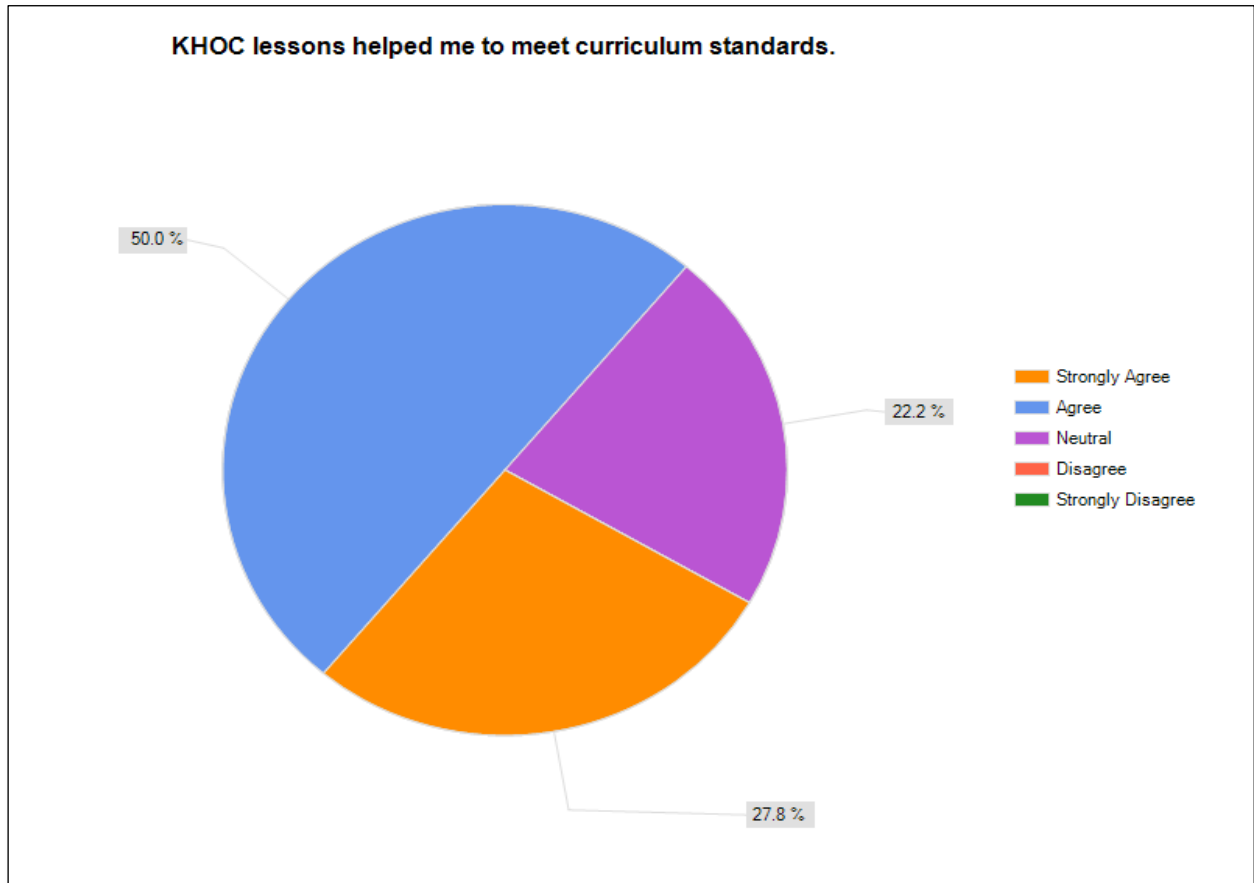
Teacher comments underscored their growth in **skill set**:

- *I feel that it showed me that it's not hard to teach science and outdoor science. It showed me that the students really need this exposure in order to get them away from their video games.*
- *My lesson planning skills in this capacity improved as I learned how to use our immediate surroundings for the studies in observing nature, wondering/learning about the history of our surroundings, and how to encourage outdoors fitness / play activities.*
- *We practiced a lot more following a series of directions and the children improved in following directions with several steps. I became better at explaining outdoor activities that required more alert and careful listening from their part.*
- *I think they loved hiking and moving around and that helped them focus on the learning.*



2. Helping Teachers Meet Curriculum Standards: As part of introducing outdoors education into third grade classrooms, it was critically important that teachers not feel like *KHOC* was taking time away from meeting critical state standards (e.g., in Science, Social Studies, PE, etc.). EBRPD designed *KHOC* to support and not detract from curriculum standards.

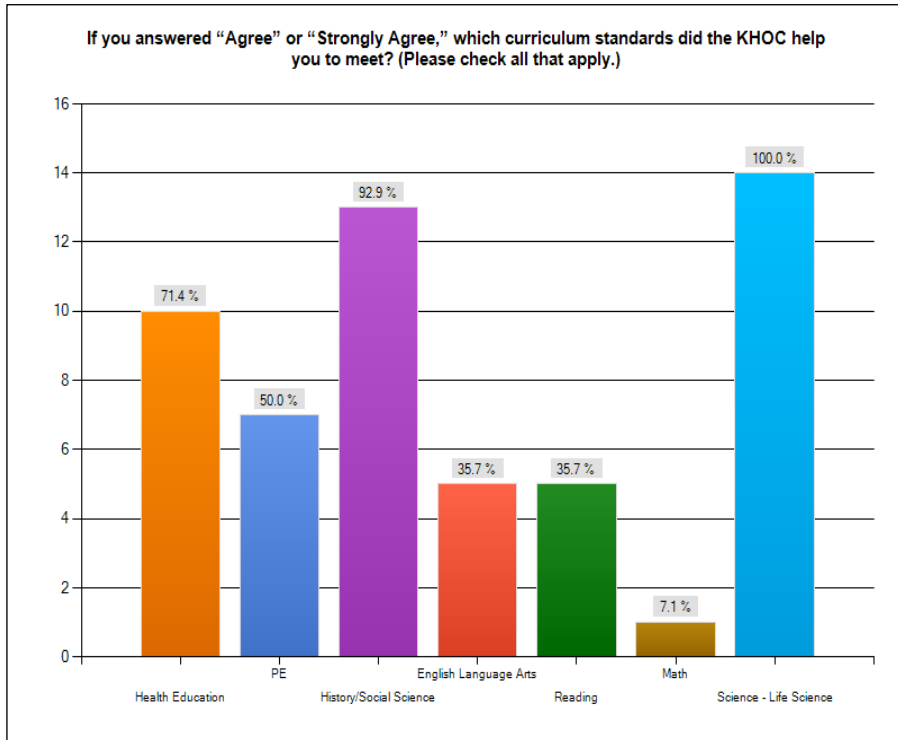
Results showed that teachers largely felt supported by the *KHOC*:



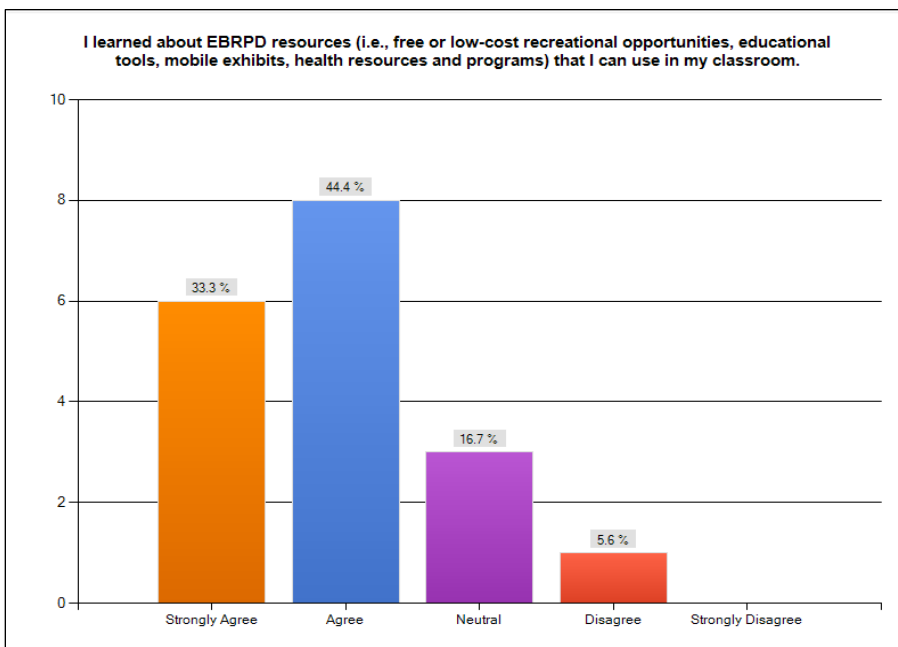
Although the pressure that teachers feel came through in a few comments:

- *The curriculum wasn't aligned with current topics we were leaning in class.*
- *There were too many other areas to teach in the classroom.*

Teachers who felt that the *KHOC* supported curriculum standards cited Science and History/Social Science as the standards *most* supported:



3. Helping teachers learn about EBRPD resources: EBRPD hoped that teachers would learn about park district resources (i.e., free or low-cost recreational opportunities, educational tools, mobile exhibits, health resources and programs) that they could continue to use in their classrooms, and per the following chart, **78%** felt that they did.



Resources mentioned included the following:

- *Boating opportunities at Lake Chabot.*
- *Coyote Hills has an excellent field trip to the shell mound of the Ohlone people.¹*
- *Quarry Lakes, Garin Park trails.*
- *Crab Cove Visitor Center, Big Break Visitor Center at the Delta, Coyote Hills Visitor Center, Tilden Park trails.*
- *My favorite was Black Diamond Mine Tour.*
- *There are many naturalist programs offered for schools, also for families many low cost or free that I was able to share with my student's families.*
- *I found the website developments to be very useful. Though my students would have a hard time navigating that site, it did help me to learn about the resources available in this vast park system!*
- *I learned a lot from visiting the EBRPD website. The different events they have throughout the parks each month and the different activities they offer at different parks. The different programs they offer for school field trips, educators academy, and the mobile educational program. The website offers many resources.*
- *The buses that we can get for a reduced cost, naturalist programs and the wealth of information you can get just by calling a park! They are so helpful!*

4. Engaging Students and Educators in Outdoors Education: During the pilot year, EBRPD sought to increase student (and educator) enthusiasm and engagement in learning outdoors, particularly in natural park settings.

Survey results show that this outcome was successfully met:

- **100%** of teachers surveyed agreed that participating in the KHOC *made their class want to spend more time being active outdoors (56% of teachers Strongly Agreed that this was true).*
- **94%** agreed that lessons were *engaging and fun* for students.
- **100%** felt that the lessons were both *age and culturally appropriate.*
- **89%** agreed they spent *more time teaching outdoors* this school year than they did the last school year.

Teachers were asked to provide anecdotes about how the KHOC was able to successfully engage students:

- *Before our trip the students had done bird reports and the Bird Bill exercise. They seemed to have a deeper understanding of animal adaptations for finding food and survival. Some of my students became almost junior birders.*
- *My students were learning about animal adaptations. In class we did the bird bills lesson, then visited Crab Cove where the students learned about birds in their habitat, held a crab and even dressed as one.*

¹ Coyote Hills was by far the most popular park trip destination among teachers submitting the Activity Log. The artifacts there support the completion of KHOC Lesson 1, *Connect with the Past.*

- *The students were very excited about conducting research on the internet after lesson 1- Connect with the Past. This lesson was a great preview to our visit to Coyote Hills Park.*
- *Students learned about the phases of the moon. They learned the plant cycle and how certain plants grow in different type of soil which lead to an intro to the rock cycle. Students learned about different animals that help pollination and plants.*

In terms of future impact, all (**100%**) of teachers said they intended to *continue teaching lessons that get kids active outdoors in the future.*

Ninety four percent (**94%**) agreed they would return to EBRPD parks with their class next school year, and **100%** said they would return to EBRPD parks on their own in the future; **78%** Strongly Agreed that they would return, showing that the project was also *successful in engaging teachers to spend more time outdoors.*

IV. Teacher Feedback on Project Process

All survey respondents **Agreed (56%)** or **Strongly Agreed (44%)** that they would *participate in KHOC in the future.*

The survey also addressed how the project processes worked (e.g., training and orientation, evaluation forms, park trip requests), and what suggestions teachers had for improvement.

The chart below details responses to the five process questions:

Question asked	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The <i>Teacher Orientation</i> in Fall 2012 prepared me to implement the KHOC in my classroom.	44%	44%	12%	-	-
The <i>KHOC Lessons</i> were easy to complete during the class time I had available.	25%	56%	13%	6% (N=1)	-
It was easy to <i>plan my park trip</i> (e.g., use the reservation form, schedule a bus, choose a park, etc.)	31%	31%	19%	13% (N=2)	6% (N=1)
I was able to <i>reach a park staff member</i> before my trip to learn about resources available (e.g., educational exhibits, trails, picnic sites, etc.).	56%	25%	13%	6% (N=1)	-
The project <i>Evaluation Tools</i> (e.g., class pre/post surveys and activity logs) were easy to use.	44%	44%	6%	6% (N=1)	-

For the most part, teachers expressed satisfaction with program processes, and just a few thought specific processes had not been effective. In just one area did more than one teacher express difficulty—*planning their class park trip.*

I found this to be the most inspiring project that we worked on this year! Thank you! If you need any more teacher input, I'm happy to assist.

Comments included:

- *We had multiple problems with bus trip arrangements, mainly because of our school district bussing. We ended up not getting our free bus for the year, as I accidentally wrote Chabot Space Center instead of Roberts Park, which we were including both parts in our field trip. The Parks Express ended up not paying for the trip, it came out of our school funds.*
- *We had some problems with transportation at SLZUSD and also confusion about the confirmation to teacher was also the invoice for the office. It would be best that both teacher and office staff received a copy of the invoice for bus cost.*
- *Well I guess it was easy on your part BUT I didn't realize first we had to GET the bus from our district then book the date with park. That is the way we thought it was that the parks not just paid for the bus but provided(!!) the bus. Lesson learned on our part.*

Even outside of KHOC, scheduling school bus trips can be difficult and confusing for teachers. Although a KHOC order form with clear instructions was provided, it was not necessarily surprising that there were some difficulties.

EBRPD staff comments about this problem were as follows:

- *My main suggestion would be to institute a better system of communication between teachers and park staff, e.g. after the teacher decides which of our parks to visit, he or she is ensured a conversation with a naturalist or supervising naturalist from that park. They can provide suggestions for activities, make sure there's room in the visitor center that day (sometime huge groups of students come through), and that the center will be open.*
- *Teachers mistakenly assume they'll automatically get the date they ask for [and have even asked for trips that aren't on the list]. But depending on the time of year, EBRPD Parks Express may not be able to secure busses for Fridays and Thursdays.*
- *Teachers would like an immediate reply on whether or not they can have a bus on their chosen date, but it could be up to two weeks, especially when she receives a "no" from the first (and sometimes second) bus company.*
- *Teachers who have a regular Parks Express bus scheduled (cost: \$110) and also have a KHOC bus (\$0) get confused and think they are all free now.*

Findings from the Teacher Activity Logs: The Teacher Activity Logs provided supplemental information about the process of teaching the KHOC curriculum. The most popular lessons teachers chose were *Connect With the Past* (N=10 times taught), *Explore Nature* (N=8), *Play in a Safe Place* (N=6), *Plant a Seed* (N=6), and *Follow A Trail* (N=5).

Most teachers did *not* complete lessons in their entirety (as presented in the Teacher Guide), and even so, many exceeded the amount of time initially allotted in the Teacher Guide. Lessons with many activities to complete (e.g., *Play in a Safe Place*) seemed to be the hardest to fully complete.

Moreover, all teachers took varied amounts of class time to complete lessons. Some completed in a class period what others did over several days; this is explained by different teaching styles, and the degree to which teachers went in-depth and completed lessons. This feedback suggests that teachers were able to tailor the project to their own needs, styles and schedules, as well as unique classroom needs.

Finally, **100%** of teachers submitting the Log reported that they were able to complete portions of the *KHOC* curriculum on their park trips. This is precisely the kind of alignment EBRPD hoped would support teachers, without taking time away from meeting curriculum standards.

I loved the program. My students really had a chance to explore nature, enjoy being outdoors and hiking and connect the knowledge they had in their books with first hand experiences at the parks. . . . They learned to respect and preserve the environment and all creatures at the park. . . . Our Science also became alive.

V. Recommendations for the Future

For Future Teacher Orientation: The *KHOC* Teacher Guide might outline ranges of times suggested for completion of lessons, along with recommendations for tailoring each lesson to classroom needs (e.g., lessons to omit if there isn't enough time). These suggestions could be reiterated during teacher training, reassuring each teacher that there isn't just one "right" way to teach *KHOC*.

For Park Trip/Transportation: EBPRD might make transportation (and related staff capacity) limitations clearer at future teacher trainings, and state these in writing on the bus order form. It also appears that teachers need a definition of the distinction between *KHOC* and Parks Express.



However, it is also important to note that the majority of teachers didn't have problems scheduling their trips. One remarked: "The bus you provided was key to making the program work. Keep doing that since we don't have that kind of resource available at schools anymore. Also the booklet was well made and kids enjoyed doing the activities."

Follow-up with "Lost" Teachers: Eleven (11) of 33 teachers who undertook *KHOC* at the beginning of the school year were lost to follow-up; they didn't complete the survey **or** submit Teacher Activity Logs. It might be useful to contact a sampling of these teachers to find out what prevented them from completing the project (e.g., the year was too busy, they didn't understand the curriculum, etc.).

During future years, conditions might be set before the park trip is scheduled (e.g., you must have completed the Introduction and one lesson before your class can go on a trip).

Finally, we asked teachers: "**Are there any other aspects of the *KHOC* you would like to comment on? Any other ideas for improving the project?**"

Some teacher comments related to specific timing and project resource issues:

- *I wish I didn't wait until the last week of school to have the kids complete their survey, as they didn't do their best work on it. They were done with school.*
- *Some of the lessons are designed to be completed at parks with families, and some of the lessons required materials that were not readily available (e.g. maps, information about local landmarks.)*

Some comments were contradictory, pointing to the need make the KHOC process as user-friendly as possible:

- *Although I didn't find the Student workbook as user-friendly as I had hoped, I am whole-heartedly appreciative that I had the opportunity to participate in this project.*
- *I look forward to using the lessons in the following school years. My students enjoyed the lessons and the workbook is easy to use and kid friendly.*

Some teachers had excellent, specific feedback for program improvement:

- *Suggestion for more detail on water safety: "On a sad note, I lost a former student (12 years old) to a drowning accident on May 25th. Perhaps you heard of the child falling in a canal in Antioch. Ironically, he was doing what I hope all of my students will do this summer, play outside, search for lizards, [and] toss rocks into the water. He accidentally fell though; he didn't know how to swim; he wasn't supervised by anyone who could have helped him. This loss has made me think about all of our children (especially of color and in poverty) who do not know how to swim, who often go unsupervised, and who know little about water safety. I've decided to renew my lifeguarding credentials this weekend, and I'm thinking about how to incorporate more water safety instruction into my own teaching... I think more information on water safety could be included in the KHOC curriculum."*
- *Suggestion for increased interaction with EBRPD: "A mid-year meeting to check in would have been nice. We could have turned in initial evaluations at that point and begun to share our experiences teaching the lessons. I would like to have more pre-trip resources available to my students for certain parks, too. For example, the on-line resources for Coyote Hills were limited. There is a very interesting history to that park and its surrounding, but I basically had to learn it and regurgitate the info as I showed pictures from the website. I would have liked to have more site-specific, engaging learning resources encouraging the children's curiosity about the park."*

For the most part, enthusiasm for the program, and the desire to deepen outdoors education activities, were clear.

In the future, EBRPD faces the related needs of increased funding for outdoor education pilot projects and increased staff capacity to effectively train and support an increasing number of participants.

