Spring 2013

spark


Photo by Justin Miel

Happy Spring!

This season is a perfect one to discover nature with the children in your life. Get outside and explore! You can foster their inquisitive spirit and help them become lifelong learners.

Honor Inquiry

HOW TO FOSTER INDEPENDENT LEARNING IN YOUR CHILD

One of the best parts of being an educator at CuriOdyssey is hearing the questions children ask. One of the most challenging parts is answering them. This dichotomy arises from the fact that children's questions are often more insightful than we give them credit for. As adults, the onus is on us either to provide an accurate answer or to teach children how to find out for themselves. To help navigate these moments I use three educational concepts: chunking, the "teachable moment," and modeling.

During a recent conversation with a first grade class, one student asked me, "Why is the sun so bright if it's so far away?" To this question one could simply answer, "Because it's so big and bright." But that answer would be an injustice because it provides no insight into why the sun is as big and bright as it is. On the other hand, presenting a complete answer is a daunting task for most of us, but it's one everyone can handle by using a few of these tools.

CHUNKING

Chunking is exactly what it sounds like. You take a large concept like "why the sun is bright" and break it down into smaller, more manageable chunks. To understand the sun you must grasp certain constituent concepts: all stuff is made of tiny pieces called atoms, atoms move around and sometimes smash into each other, sometimes when this happens pieces of the atoms turn into energy, the energy is the light we see (source: European Space Agency). While each of these "chunks" could fill a college course of its own, each one constitutes a small logical step toward understanding the larger concept.

TEACHABLE MOMENT

Of course, many of us lack a complete understanding of how gravity and pressure compete to make the sun appear the size it does. This is a perfect "teachable moment": an opportunity to teach yourself something new and to teach your children how to search for answers. The first step is to acknowledge that you do not know. Step two is to find a reliable source for new information, and step three is translating that information into something your child can grasp. Children are learning much more from a question than simply the answer.

MODELING

If you went through the steps already described, you have already engaged in modeling. In education, modeling is the process of actually doing what it is that is helpful for children, and it is very effective. If your child asks a question to which you do not know the answer, express your curiosity, ask follow up questions, take the time to find an answer, and find out how it relates to other ideas.

Many seemingly simple questions are laden with rich principles in physics, biology, and chemistry. Your child's questions can be answered with these three tools that do justice to their inherent complexity. So even if you can't teach a child nuclear fusion, these tools can help your child become a lifelong and independent learner.

*- **Bryan Holmes** is an educator at CuriOdyssey where he teaches and develops meaningful learning experiences for elementary school students.*

CURIODYSSEY IS NOW ON INSTAGRAM

Get a glimpse of science and nature through beautiful photo filters! Follow CuriOdyssey on Instagram and see what's going on behind the scenes with our artfully composed photos of animals, events, and programming!

Just download the free Instagram app in your smartphone's marketplace.

GET SOCIAL WITH US

Find us on your other favorite social networks. Send us a tweet, post a photo, or repin a link! We love finding new science and animal-loving friends online.

EARTH DAY: APRIL 21, 2013 12PM-5PM

earth day AT CURIODYSSEY

Save the date for our sixth annual Earth Day celebration and uncover the tools you need to understand our changing world!

CURIODYSSEY FEATURED IN CONNECT MAGAZINE

Congratulations to three of our volunteer photographers for having their photos of our animals published in the Association of Zoos and Aquariums' annual photo issue.

Their photos were selected from a pool of other photographs from Association of Zoos and Aquariums-accredited institutions. They were published in the December 2012 issue of CONNECT magazine.

Congratulations to Sanders Fabares, Justin Miel, and Graham Paterson.

Watch our Bobcat Cam!

It's no secret that CuriOdyssey's bobcats hold a special place in the hearts of many. When they arrived to us in 2009 from the National Bobcat Rescue and Research Center, they were less than a year old. Frankie and Caro have since grown up, but their playful personalities and curious behavior has only become more apparent.

Through the generous donation of an HD wi-fi monitoring camera from Dropcam, you can now watch the bobcats not only when you're at CuriOdyssey, but also when you're using your computer at home or on your smartphone. Watch Frankie and Caro explore enrichment, cuddle up together, and even race through their habitat.

The CuriOdyssey Bobcat Cam is available during daylight hours, 365 days a year. Visit http://curiodyssey.org/connect/animal-cams to see what they're up to, or download the free Dropcam app in your smartphone's marketplace.

Photo: Michael Piña

Did you know? A bobcat's voice is in many respects comparable to a housecat; it will growl, hiss, purr, and meow.

New Animal on Exhibit

California Tiger salamanders have yellow-white blotches or stripes, poisonous glands that produce a toxin for self defense, and spend six to nine months each year burrowing in substrate or burrows.

Come visit the newest addition to our animal habitats and see a California tiger salamander up close!

Did you know? California tiger salamanders are listed by the state government as Threatened Species. These creatures are threatened by wetland destruction and introduction of non-native animals to their habitat. A local Stanford University population is the largest remaining group in California.

Tribute Gifts

Thank you to the following donors for tribute gifts between October, 1 2012 and December 31, 2012.

Every effort has been made to be accurate. If your name is not present or you are not recognized properly, please contact Sarah Clautero Soto, Development Manager, at 650.340.7571.

IN HONOR OF:

The 50th Anniversary of Betty and Fred Barnes: Mrs. Helen E. Pearse *Marian Erdelyi:* Holly Huyck *Linda Fitzpatrick:* Cheryl and Clark Westmont *Jennifer Gale:* Anonymous *Linda Lanier:* Dr. and Mrs. Michael Rodbro *National Philanthropy Day and Linda Lanier as our honoree:* Joan Martel and David Mitchell *Sterling and Linda Lanier, Elizabeth Brookes, Elizabeth Coonan, Sidney and Linda Liebes, and Eric Richert and Sandy Sloan:* Paul Resnick and Joan Karlin *Linda Liebes:* Sue E. Berryman *Frederick George Pfrommer, in support of school science programs:* Gary P. Jansen *Connie Sevier:* Julia Bott *Hank Stern:* Nancy Stern *Kat Taylor:* Susan Ketcham

IN MEMORY OF:

Mary Henderson: Judith W. Barton *Rosalin App Jones:* Intrepid Investors Club *Mary and "Mac" MacKinnon:* Mrs. Helen E. Pearse *Stef Mallory, in support of the Channel Island Fox:* Jed E. Hartman *Larry Pearl:* John Menicucci *Barbara Peterson:* Dr. Lawrence H. Peterson ***F**rederick George Pfrommer, in support of school science programs:* Allison, MacKenzie, Pavlakis, Wright & Fagan, Ltd., Anonymous, Theodore and Judy Johnson, Chris and Cathy McCune, Jim Pfrommer, Thomas and Mati Stephens, Kent and Sherylee Whelan *Jeanette and Fred Pfrommer:* Ken and Angela Norton

Introducing the Leonardo Lectures

CuriOdyssey inaugurated our Leonardo Lecture series with a presentation on November 7, 2012 by Nobel-prize-winning climate scientist Dr. Terry L. Root, Senior Fellow at the Stanford Woods Institute for the Environment. These lectures will be offered periodically for members of CuriOdyssey's Innovators Circle at the Leonardo Da Vinci level and above. We are grateful to CuriOdyssey Trustee Patrice Wilbur for hosting this special evening of conversation at her beautiful Hillsborough home.

Trustees Andrea Higuera-Ballard and Andrew Ballard with Dr. Terry Root

"We can't change our culture until we have a new generation," noted Dr. Root, in response to a question about the impact of children's education on our planet's future, "and for that to work we've got to educate the young." As Executive Director Rachel Meyer was quick to point out, at CuriOdyssey that's just what we do – we are creating a new generation of scientists and thinkers.

Thank you to all our wonderful donors; you make this lecture series possible.

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CuriOdyssey
AT COYOTE POINT

Events *(March - May)*

SAVE THE DATE

Earth Day
Sunday, April 21, 2013
12pm-5pm
Uncover the tools you need to understand our changing world! Discover how to use science tools of the trade, learn about good garden "pests," make your own seed bomb, create animal enrichment, and participate in a beach clean-up.

***FORCES*: Exhibit Opening**
June 2013
Why do some magnets repel while others attract? How does vibration sound? What does kinetic energy look like? Our next exhibition, *FORCES*, will encourage investigation into those fundamental forces in our world.

CuriOdyssey at Maker Faire
May 18 & 19, 2013
San Mateo County Event Center
Join us at Maker Faire, a two-day, family-friendly festival of invention, creativity and resourcefulness. Embrace the maker spirit and build and experiment with science at the CuriOdyssey maker station!

SCIENCE EXPLORERS

Outdoor Adventures
March 22-April 26
Fridays, 8:30am-12pm
Your preschooler will stroll to the beach, muck in the marsh, and frolic through a field at Coyote Point Recreation Area.

Member fee: $255
Non-member fee: $305
Visit: www.curiodyssey.org/activities/classes-workshops/

WEEKEND WORKSHOPS

Discovery Dissections
May 11
10:30am-12pm
Have you ever seen the lens of an eye, beak of a squid, or brain of a fish? This workshop will have participants comparing and contrasting the organs of several different animals. Participants will have the opportunity to learn the proper use of dissecting tools. Join us for a peek inside biology!

Workshops are for ages 6-11
Pre-registration is required.
Member fee: $20/workshop
Non-member fee: $25/workshop

ON-GOING PUBLIC *PROGRAMS*

Animals In Action
Tues-Sat, 11:00am

Otter Feeding
Tues-Sun, 12:00 noon

Bobcat Feeding
Tues-Sun, 1:00pm

Animal Connections Wildlife Show
Sat-Sun, 1:30pm and 2:30pm