



Winter 2005 Newsletter

Dr. James H. Porter Center for Science and Mathematics

STRATEGIC PLANNING IS A PRIORITY

Dr. James H. Porter Center for Science and Mathematics

8140 Auburn Road
Painesville, OH 44077
Phone & Fax 440.352.8850

www.lcesc.k12.oh.us/PorterCenter

Ed Dombroski, LCESC
Director,
Continuous Improvement

Yvonne Delgado, Director,
Porter Science Center

Teachers:

Robbie Ajdinovich
Lisa Booher
Kelly Krause
Beth Modic
Carolyn Rice

Cookie Cardina
Admin. Assistant

The Dr. James H. Porter Center for Science & Mathematics recently was awarded a \$32,800 grant from the Cleveland Foundation to embark on an intensive Strategic/Business Planning process. We have contracted with Dr. Stephen V. Barone's Transformation Systems, Ltd. (TSL) to have one of his staff, Matt Guerriere to provide us executive coaching on our project. Locally, we have contracted with the team of Dr. Paul Kapostasy and Dr. George Tarbuck to help us with the implementation.

Some of the key objectives include:

- Develop a strong and intentional Porter Center mission, goals, and objectives
- Ensure support for those schools most in need academically and financially
- Develop an equitable and cost-effective charging plan for all participating districts
- Expand the business/education advisory concept
- Consider new revenue-generating products and services (e.g., science/math summer camp, professional development services for teachers, etc.)
- Present a short & long term sustainability plan to the Lake County ESC Board of Education.

This grant initiative is key to the continued sustainability of the Porter Center programming;" explains Yvonne Delgado, Director of the Porter Center, "done right, strategically aligning our work will allow us to be an exceptional asset to our communities to help compliment existing science and math curriculum in our classrooms." Step one of the Strategic/Business Planning process is to pull together a Core Team to work on our vision, mission and goals. We definitely need the voice of our districts and will be looking to them soon for some representation on our various Strategic/Business Planning teams.

INVITING ALL FAMILIES TO OUR FAMILY SCIENCE 2-DO NIGHTS!

Don't wait too long to inform families and sign up for our Family Science 2-Do Nights! We're anticipating a great turn out! The venue is slightly different than in the past; this year we have one topic per night (plus the Little Scientist Lab). With this new schedule, those very scientific families can attend all three nights for up to three different learning experiences! The cost is \$3.00 per child and accompanying adults are free. The main program is geared to grades 3-4 but kids grades K-5 are all welcome.

Thurs., March 3rd, 6:00-7:00, Volume
Thurs., March 10th, 6:00-7:30, Turtle Science Mystery
Thurs., March 15th, 6:00-7:00, Owl Pellets

We are also introducing a "Little Scientist Lab" for pre-K kids. The Little Scientist Lab will be offered all three nights. While families are working with their elementary-aged children in the Porter Center classrooms, a special room in Auburn Career Center and age-appropriate activities will be available to our littlest participants.

Space is limited! Be sure to register today by contacting Cookie Cardina at 440.352.8850 or lc_cardina@lgca.org. Feel free to leave a message complete with your child's name, school, and your name and phone number.

PORTER TEACHERS RECEIVE SCIENCE MINI-GRANTS



Carolyn Rice, a teacher at the Porter Center, recently received a \$500 grant award from The Partners in Science Excellence program (PSE). The purpose of the PSE mini-grant program is to encourage hands-on, student centered science projects and activities that target as many students as possible. Rice’s grant supports a module on the *Effects of Technology*. During the session, student teams use scientific tools to observe real scenarios of environmental impact, investigate methods of determining impact, experiment with environmental clean-up options, chart, analyze and present results.



Robbie Ajdinovich, another teacher at the Porter Center, received a \$500 grant award from First Energy Corp. for an electricity educational project for 5th grade students. Electricity is a component of the Ohio Department of Education’s science standards. Modeled from a research-based educational program, which was piloted last year, the modified version will provide a classroom “kit” to bring this lesson to our classrooms.

PORTER SCIENCE CENTER & HOLDEN ARBORETUM EXPAND PARTNERSHIP

The Dr. James H. Porter Center for Science & Mathematics recently received a generous grant from the Martha Holden Jennings Foundation for \$17,150 to expand upon their collaborative partnership with the Holden Arboretum. The grant funds will be used to offset the cost of implementing a 4th grade unit on the Life Cycles of Plants. The unit consists of a pre-visit to each school by Porter Center staff and a visit to the Holden Arboretum. This fourth grade unit is designed to address the Ohio Department of Education’s 4th grade science benchmarks and indicators. The overall objective will be to discover a plant’s life cycle by comparing stages of growth in classroom plants with the collections at Holden .

LOCAL BUSINESSES GENEROUS IN THEIR SUPPORT OF SCIENCE CENTER

We would like to thank the following local businesses for their generous contributions of time, money, expertise and/or materials. Because of these offerings we are able to continue to provide, update existing, and create new and exciting high-quality educational programs for our elementary students!

 Painesville \$500 for Spooky Science and Family Science 2-Do Nights \$2,400 towards replacement of microscopes	 Wickliffe \$300 towards the sponsorship of the Turtle Science Mystery Family Science 2-Do Night
Euclid Spring, Euclid Using a unique process, Euclid Spring donated the de-rusting of our springs used annually in our photosynthesis module.	 Newbury Partnering with us to update our Effects of Technology module coming to the Center this spring, Kinetico has generously provided much expertise, hi-tech equipment, baseline water testing, new approaches to scientific procedures, posters, and a large visual model to use in the classrooms.


Auburn Career Center, Painesville
 One our biggest supporters, the Auburn Career Center always, always makes their in-house services and support available to us on a regular basis – such as: maintenance, laminating, electrical wiring made by the students, etc.

REPRESENTATIVE DOLAN TO TOUR PORTER SCIENCE



On March 4th at 11:00 a.m., State Representative Matthew Dolan will be visiting the Dr. James H. Porter Center for Science & Mathematics. The visit is to provide Rep. Dolan an opportunity to see what the Porter Center is all about and to help garner his support in securing continued funding from the State.

Currently the Porter Science Center is in its last year of funding through the Ohio Board of Regents. The Porter Center is in its 14th year of existence. It provides hands-on interactive science discovery for all 3rd, 4th and 5th graders throughout Lake and Geauga County public schools. The Porter Center serves over 16,000 students annually!

Rep. Dolan is the Representative of the 98th House District. Rep. Dolan is also the Vice Chair of the Finance Primary & Secondary Education Committee.

SCHEDULE NOW FOR DISTANCE LEARNING

Our Distance Learning (DL) program has been growing by leaps & bounds- and we are close to unveiling our new Distance Learning Studio (thanks to a generous NEO-LINC SchoolNet grant)! With the addition of this new lab- we now have three classrooms.

The DL program is fee based and helps us offset some of our operating expenses at the center. Our Distance Learning Schedule and fee structure has been set for this school year at \$95/session.

Please see our website for information and details:

www.lcesc.k12.oh.us/PorterCenter/dist_learn_opps.htm

REPRESENTATIVE CASSELL VISITS PORTER SCIENCE CENTER

On January 21st, Representative Tim Cassell visited the Porter Center. Cassell (D) is the representative of the 63rd district. With state budgeting around the corner, the focus of Representative Cassell's visit was on supporting the financial continuation of the Center. "It is important to recognize, the educational importance of programs that teach beyond the classroom," states Rep. Cassell. " He is one of the many legislatures that have come to tour the Center this year.



OHIO BOARD OF REGENTS & SENATOR GARDNER GUEST AT THE PORTER SCIENCE CENTER

The Vice Chancellor for Educational Linkages, Jonathan L. Tafel and Senator Robert Gardner both from The Ohio Board of Regents, visited the Porter Center in October 2004. Also present were, Barry Morrison, Superintendent of the Lake County ESC, Thomas Schultz, Superintendent of Auburn Career Center, Brenda Brack, Treasurer of Lake County ESC, Ed Dombroski, Director of School Improvement at Lake County ESC, and Yvonne Delgado, Director of Porter Science Center. The purpose of the visit was to have an opportunity to see the elementary students in action, see how past funds have been implemented, and to discuss future funding alternatives. The visitors saw students from Hopkins Elementary from Mrs. Lipinski's and Mrs. May's 3rd grade classrooms participate in the Porter Center's Marvelous Motion module. For a number of years, the Ohio Board of Regents has been one of the major contributors to the Dr. James H. Porter Center for Science and Mathematics.

From left to right:

Jonathan Tafel, Senator Gardner, both from the Ohio Board of Regents, Ed Dombroski, Director of School Improvement LCESC, and Yvonne Delgado, Director, Porter Science Center meet to discuss future funding alternatives for the Porter Center



ELEMENTARY TEACHERS INVITED TO USE OUR SCIENCE KITS

Elementary teachers, do you ever wish you could simplify the teaching some of your science lessons? We now have available some science kits for you to use in your classrooms. We've had a lending library for some time, but it was sorely in need of updating. Thus, look here and keep an eye on our website to find those kits that are updated and ready to be lent out!! Each kit is all-inclusive and ready for you to open up and use in a classroom of no more than 30 students. Each kit identifies supporting STATE STANDARDS and recommended age/grade levels. Each kit has a lesson plan, special teacher instructions, student handouts, all the materials, supplies, equipment needed to conduct your lessons efficiently and effectively! Of course, there are consumables in each kit. Thus, we do charge a minimal charge to help us restock kit consumables upon return. Simply call our office for more information or to reserve a kit 440.352.8850. Here are the kits that are now available:



CLOUDS: This Lesson is about Clouds and the Water Cycle. It is recommended for grades K-4. In this lesson students will learn the stages of the water cycle by singing fun (and easy) songs. They will discover that clouds are made of tiny water droplets through an activity in which the students will make an actual "cloud". Students will learn to identify various cloud types and predict what kind of weather each type brings. They will also explore how wind moves clouds and can form different cloud types. This lesson is a hands-on approach to clouds that can be simple enough for kindergarteners or intriguing enough to capture the attention of fourth-grade students. Not to mention, it is aligned with the Academic Content Standards! (A)



OWL PELLETS: Designed for grade level 3 and up. Aligned to state standards. Owl pellets can be used to teach a part of the natural food chain. They can also be used to teach skeletal structure of rodents. Owl pellets are compact undigested parts, which the owl eats. The owl regurgitates these compact pellets, which contain fur, bones, etc. of small rodents. The dry pellets we use are sterilized and will not smell or be unpleasant for students to handle. Students will also better understand the interdependence of all living things in an ecological system. (D)



TURTLE SCIENCE MYSTERY: The students will be excited to do the activities in this lesson. The instructor may have the students work on the whole kit at one time or split the lesson into activity sessions depending on the allowed class time. Experiencing the whole kit without explanations will take the students approximately one hour. Set the mood by having the students role play as if they were real forensic scientists. This lesson can be as simple as "fun science" just by performing the activities or more difficult depending on the questions asked to the students. Higher order questions can be formulated using the objectives listed below from the Academic Content Standards. (C)



GRAPE JELLY INDICATOR: Grade levels 4 & 5. This 10 minute activity provides a simple introduction to the concept of chemical indicators. A chemical indicator is a substance that changes color when a chemical change has occurred. The students observe chemical reactions in the presence of a simple acid/base indicator (concord grape juice). The children compare and contrast their results. Throughout the activity, the children refine their lab skills as well as their ability to reason in a scientific way. (A)

Kit Fees:

(A) = \$10	Low amount of consumables
(B) = \$15	Medium amount of consumables
(C) = \$25	High amount of consumables
(D) = \$50	Very pricey consumables