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Origami workshops unfold hidden joys of learning

By BETH LINDSAY

So often in our examination-dominated education systems, the excitement of learning degenerates into rote learning. Not so in Barbara Pearl's hands-on approach to learning math, where every child is *engaged* in the learning process. Children tap into the creative process and discover how to estimate the distance of a jumping frog, measure the angles of a paper sailboat and explore the patterns of a humpback whale. This award-winning American teacher's lessons are, however, about much more than just teaching math. Pearl's background in education and mathematics inspired her to integrate the classic art of origami with reading, writing, and arithmetic.

"Where every child counts" is the motto of Pearl's program. No one is left out, she says. "When children feel successful, they are more motivated to learn. As children learn how to fold an origami whale, they can explore the characteristics of a whale through scientific investigation, read a book about mammals, listen to the song of the whales, write a creative story, or support environmental issues and help to save them and our oceans," Pearl said.

Pearl has been involved extensively in teacher training, both in the U.S. and internationally. She is currently in Japan, bringing enjoyment to teachers and learners alike with her delightful methods. Dressed in a kimono, she weaves in

Japanese music, children's multicultural literature and storytelling.

Her program is aligned with the Common Core State Standards. She explains, "In America, the new Standards is now looking for ways to incorporate more interactive learning with lots more talking and writing about mathematics. Children are not only memorizing facts, figures and formulas, but are also manipulating materials, exploring patterns, and making connections," she explains.

Recently, the Japanese Ministry of Education has been striving to incorporate sogo gakushu, an interdisciplinary approach to teaching. Since the end of last year, Pearl has been invited to lecture in Hong Kong and Japan, to present workshops and demonstrations. Later this year, she is scheduled to speak at several chapters of JALT (Japan Association of Language Teaching).

"Origami captivates children of all ages and encourages exploration," explains Pearl. "It nurtures children's creativity and challenges their imagination. In the classroom, paper folding can be used to develop math vocabulary and concepts, teach number and spatial sense, basic geometry and fractions, concentration, the ability to recognize and understand patterns, make connections, think critically and problem solve. "Teaching in this way is meaningful because students are able to apply these concepts concretely. Children who may have difficulty with mathematics often respond well to a constructivist teaching method."

Pearl's innovative approach to teaching began over 20 years ago when she found herself teaching remedial math at a junior high school in El Paso, Texas, and began to explore strategies to motivate reluctant learners.

Her book, "Math in Motion: Origami in the Classroom," is now in its seventh printing and includes lesson plans, teacher guidelines, and online support. *Math in Motion* is available at **www.amazon.com.** (For a sample lesson plan see: www.mathinmotion.com).

Pearl has been nominated second vice-president of the U.S. Nat'l Council of Supervisors of Mathematics, an organization that supports teaching standards in the math classrooms of America. She often presents for schools and libraries and at major educational conferences of mathematics, bilingual, and for the gifted.

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Visit the **Math in Motion: Origami in the Classroom K- 8** website - *Where Every Child Counts:* www.mathinmotion.com
Contact: Barbara Pearl / Email: pearlhope2018@gmail.com Mobile: 215.840.1190
Teacher In-service, Student Workshops, Family Math Night, Author and Library Programs.