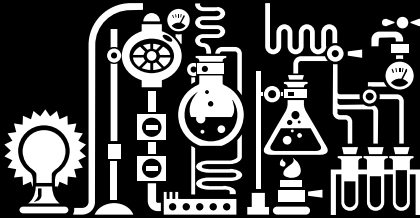


Parents, your involvement matters... IN SCIENCE, TOO!



As a parent, you are your children's first and most influential teacher. Your support can enhance their success in science, as well as other areas. How to begin? Here are some tips to guide your involvement:

1. Set the example. One of the most important ways parents can help is by expressing how much they value learning. Share your science-related interests with your children.

2. Become interested in your children's science interests. Find out what your children enjoy about science. Fuel these fires. If they like dinosaurs, read dinosaur books, discuss dinosaurs, construct dinosaur models, and visit museums to see dinosaur fossils and models. Being excited about your children's science interests and school work can spark their further quests for knowledge.

3. Help children see the science around them. Help children recognize the science in everyday life. Play games and choose activities that help them become familiar with science concepts and scientific thinking.

4. Help children observe objects carefully. Learning to look carefully is an important first step toward forming scientific explanations. Noticing and identifying the characteristics of objects and living things can help children learn how to classify or group things based on their characteristics.

5. Encourage children to ask questions. No one knows all the answers. Learning to ask questions, propose answers, and test them out are keys to learning in all academic disciplines.

6. Listen to children's ideas and explanations. Being listened to gives children confidence. Expressing their ideas helps them sort out what they know and don't know.

7. Introduce your children to stimulating environments. Oceans, swamps, parks, airports, and even kitchens, bathrooms, and backyards are good places to observe and discuss science. Look for situations that encourage playful exploration, a natural way to learn. Toys can also spark discovery and learning. It's not the number of toys that is important, but the kind of toys. Children develop better skills if their toys are varied and educational. The more things a child can do with a toy, the more likely it is to be educational.

8. Seize the teachable moments. Your child sees a beautiful tulip flower in the spring and asks about it. Use that question as a chance to discuss flowers and bulbs. You can follow up by planting bulbs or flower seeds in the garden or in the house and watching them grow. Life at home is full of teachable moments that classroom teachers can only dream about. You can use these moments to help your children become fascinated with science.

Parents' PLACE is pleased to welcome Evelyn Nellum as our new Co-director!




Evelyn brings a wealth of knowledge and experience in program administration as well as early childhood development and learning. Her commitment to children and families has energized all her work, from volunteer efforts to directing early childhood programs for homeless families. Evelyn has her B.A. from the Boston College School of Education and has attended Wheelock College's Master's Program in Early Intervention.

We are excited to be working with Evelyn as we move forward in year one of our new Parents' PLACE PIRC grant.

9. Provide hands-on experiences. Give children the chance to do science. The best way to develop children's understanding of how science works is through hands-on science experiences while having conversations about what is happening. Not only are hands-on experiences a great way to learn, but they are also a great way to get chil-

continues on page 2

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Myths about Science

Parental involvement is important in all subjects. But many parents may feel particularly intimidated about helping their children with science. Clearing up some popular myths about this subject should show that all parents have the skills to help their children learn science.

Myth #1: Science is Difficult.

Really, science is not just about knowing a lot of facts and figures, but is a way of seeing the world and solving problems.

Myth #2: You need to know a lot about science to teach it to your children.

Not true! Saying 'I don't know; let's find out together' is actually better than giving answers.

Myth #3: Science Requires Equipment.

Actually, science is everywhere, and the best way to begin is through conversation and asking open-ended questions.

Myth #4: Science skills should wait for reading skills.

The developmental skills of preschool children are actually more suited to doing science than reading. Learning about science also can motivate children to read."

Adapted from "Helping Your Child With Science," by David L. Haury & Linda A. Milbourne, ERIC Clearinghouse for Science, Mathematics, and Environmental Education, March, 1999 (Updated June 2003). For more information, call Parents' PLACE and ask for a complete copy of this publication.

Getting Familiar with the Standards

In Massachusetts, the education standards are known as "Curriculum Frameworks." These standards describe what all students should know and be able to do as a result of their education. Schools and districts use them as the "framework" for what they will teach each year—the curriculum. Then, the statewide tests

known as MCAS (Massachusetts Comprehensive Assessment System) are set up to test how well students have learned the standards. Below is an example of a standard for grades pre-k to 2 taken from the Massachusetts "Science and Technology/Engineering Curriculum Framework," May 2001.

Strand 1: Earth & Space Science, Grades PreK-2

Learning Standard #1. Recognize that water, rocks, soil, and living organisms are found on the earth's surface.

Ideas for Developing Investigations and Learning Experiences:

Walk around the playground observing and discussing where water, rocks, soil, and living organisms are found.

Additional Activity: Use a hand lens to observe and describe the components and properties of a sample of soil, e.g., color, texture, presence or absence of clumps, etc. Extend the examination to moist topsoil.

Parents, your involvement...

continued from page 1

dren excited about science. Science begins for children when they discover that they can learn about the world through their own actions, such as blowing soap bubbles, or adding a block that causes a structure to collapse.

The best way to tell if an activity is appropriate for a child is to see if the child is interested while doing it. Activities should challenge, but not overly frustrate. Concrete experiences that require children to use their senses, such as planting and watching a seed

germinate, give a strong framework for abstract thinking later in life.

10. Bridge from the media.

Movies, television specials, magazines, newspapers,

books, and computer programs frequently present science-related topics. Talk with your children about the science they encounter: What interested them? What did they learn?

By encouraging your children to think about and interact with the world around them, by providing opportunities for hands-on experiences, and by talking with them about science, your children will develop a firm foundation in science.

Adapted from "Helping Your Child With Science," by David L. Haury & Linda A. Milbourne, ERIC Clearinghouse for Science, Mathematics, and Environmental Education, March, 1999 (Updated June 2003), and "Doing Science With Your Children," by Peter Rillero, ERIC Clearinghouse for Science, Mathematics, and Environmental Education, EDO-SE-94-1, June 1994. For more information, call Parents' PLACE and ask for a complete copy of these publications.

Parents' PLACE Bulletin is funded by the U.S. Department of Education, Office of Innovation and Improvement, Grant #U310A030443. The views and opinions herein do not necessarily reflect the views or policies of the U.S. Department of Education or of the Federation for Children with Special Needs.

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