

What's Happening at Kirk Preschool 2013/2014?

On August 19, 2013, the Kirk preschool will open the school year integrating a STEM curriculum into our current curriculum. STEM is an acronym for the fields of study of Science, Technology, Engineering, and Math.

The purpose of the STEM movement, supported by several national institutions, including the National Science Foundation is to

- increase America's talent pool by improving science and mathematics education;
- strengthen the skills of teachers through additional training in science, math and technology; and
- enlarge the pipeline of students prepared to enter college and graduate with STEM degrees.

How can Kirk, committed as we are to a *developmental* educational philosophy, consider such a change? Technology? Engineering? For three and four-year- olds?

Many of the activities three and four-year-olds do in preschool already fit the definition, and need only to be renamed. Often Pre-K children are fabulous engineers. At free play they build block structures that are thought out and designed to cover half the room, arching over a body lying still to protect the structure, then snaking around toy cars and trucks. The time spent "engineering" this project is the perfect set up for the teacher to move in for a STEM lesson, asking open ended questions to stimulate further thought by the children: Where did you get the idea for this structure? How many blocks did you use to make this? Can you count them? Is there something more you could do with this project? Could you add some signs? Some people or animals? What could you do to make this part of the project stronger or more stable?

That is the essence of STEM: A hands-on project, often with a partner, sometimes initiated by the child and sometimes by the teacher, with follow-up by a teacher who asks open-ended questions. The STEM criteria can be applied to all subjects, language arts, science, music, and movement, and it can be taught developmentally.

The STEM style of teaching is distinctly different from old school academics in which children are taught to copy, memorize, and recite. STEM learning is about reasoning, predicting, hypothesizing, and problem solving. These are skills needed in today's changing and challenging world. Young children in a "brain building"



environment supporting "intellectual learning", not just rote "academics", have the best of all possible worlds to begin their educational journey. Add to that environment the Kirk's nurturing approach that helps ground and balance children for the world they will face in the future, and you have a winning combination for citizens of the 21st century.



Are we losing our developmental touch? Our devotion to art? To music?

Never! It's all still there. The richness of the preschool experience lies in a child's exploration of the world of art and music, not just science, technology, engineering, and math. A good foundation for life long learning includes all these subjects.