

## U.S. lags in math education

Early learning should start at home Amy Souza 7/27/2009

Are U.S. early elementary-age children being adequately prepared to apply the mathematical ideas so vital to academic and career success? Statistics are grim: On the national level, according to the American Mathematical Society, U.S. students are falling behind students in most industrialized countries when it comes to math. Closer to home, only 21 percent of Chicago Public School preschool and kindergarten classrooms cover math on any given school day.

This past April, the Chicago-based Erikson Institute, one of our nation's premier graduate schools in child development, brought together experts from Japan, Singapore and Australia to discuss how math is taught in other nations and how to apply this knowledge to improve math skills in the U.S.

Deemed the Early Mathematics Education Project, the aim of the conference was to spark discussion on how to increase and improve early childhood math education. The preliminary findings: Math education needs to begin earlier and be integrated into early childhood education programs with more intensity.

What can parents do at home to increase understanding of mathematical concepts? First of all, remind yourself that math is everywhere. Measuring sugar and flour for a recipe or digging around for milk money? Ask your child to help you. Even the youngest children can grasp mathematical concepts: measurement, comparison, patterns—so start talking math with your kids.

## Go beyond shapes and counting

Introduce concepts that may seem just a bit out of their reach. Here are a few ideas to get you started:

- Bake a simple cake together. Have your children measure the ingredients.
- Take your child to a local bank and help her set up a savings account. Leave it to your child to add up the change and fill out deposit slips. Reward them by taking them shopping for a small toy when they've managed to gather a reasonable amount of money, but encourage them to keep on saving.
- Talk about division and equal distribution as you slice up pizza on a Friday night.
- On road trips, give your children a copy of the map. Ask them to estimate how far they think you have traveled and how much more you have to travel. Have them keep a tally log of the number of items spotted along the way.
- Check out some fun early childhood online math games at pbs.org/parents/earlymath/prek\_games.html.
- Ask your child's teachers and school administration: how is math being integrated across the curriculum?