

### AFTERSCHOOL *news*



#### Discover Math in Everyday Activities

For many students, math makes more sense—and is more fun—if they study it in the context of everyday activities. The key goals of this strategy, Finding Math, are to engage students in math through activities they already enjoy, build their problem-solving and collaboration skills, increase their desire to learn, and ultimately extend their understanding of math.

For example, a cooking activity enables students to use math by measuring ingredients, comparing measurements of liquids and solids, converting between standard and metric systems, and reducing or enlarging a recipe's yield. This activity can be easily adapted to students' school-day math skills. You might have younger students use measuring cups to compare and estimate volume as they make a healthy snack. Older students can practice with fractions and multiplication to double or triple a recipe.

A vegetable garden also provides wonderful opportunities for Finding Math activities in expanded learning programs. Students can measure the garden space and individual areas within the bed. Once the garden is planted, they can track the growth of their plants over time, count and weigh the yield, and compare their harvest to that of other students. You can also incorporate science into the gardening project and teach students about photosynthesis and the role of bees and butterflies in plant growth. As an added benefit, the physical exercise of gardening will provide students a release after the school day.

Parents and guardians can also participate in Finding Math activities. Parents with young children who are just learning number recognition and counting can teach them to recognize bedtime on a digital clock. Parents can count clouds, birds, or squirrels with their children. Parents can also use street addresses and house numbers to reinforce older students' recognition of larger numbers and to teach them about odd and even numbers.

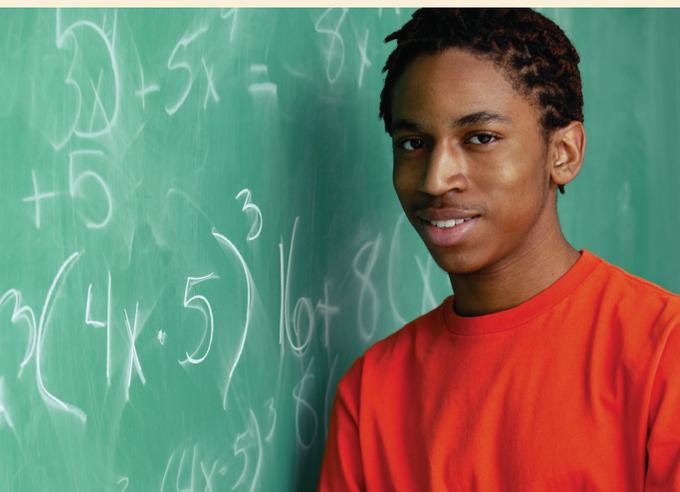
Research suggests that the best math activities are based on students' interests, incorporate physical activity and social interaction, and provide meaningful learning for students. By providing opportunities to learn about math outside the classroom, you can help build students' understanding of math concepts and increase their desire to learn. For more information about finding math activities, visit the math section of the National Center for Quality Afterschool's Afterschool Training Toolkit ([www.sedl.org/afterschool/toolkits/math](http://www.sedl.org/afterschool/toolkits/math)).



*A vegetable garden also provides wonderful opportunities for Finding Math activities in expanded learning programs.*

The SEDL National Center for Quality Afterschool helps state education agencies and local practitioners develop high-quality programs for academic enrichment as well as youth development activities.

[www.sedl.org/afterschool](http://www.sedl.org/afterschool)



### RECOMMENDED *resource*

#### MATH LESSON PLANS THE AFTERSCHOOL LESSON PLAN DATABASE

This resource has activities for six content areas, including math. Lessons are browsable by content area and grade level.

[www.sedl.org/afterschool/lessonplans](http://www.sedl.org/afterschool/lessonplans)



Photo by SHINE After-School Program

*"Our job in afterschool is to find as many creative ways as possible to reinforce the standards."*

**JEANNE YOHO MILLER**  
program director

## Lehigh Carbon Community College SHINE After-School Program

### NORTHEAST PENNSYLVANIA

At the SHINE After-School Program, instructors use the flexibility of afterschool to reinforce math skills through fun, engaging activities. "Our job in afterschool," explains program director Jeanne Yoho Miller, "is to find as many creative ways as possible to reinforce the standards."

SHINE serves 225 children in preK through 4th grade at nine schools in rural Carbon and Schuylkill counties in northeast Pennsylvania. Before the school year begins, afterschool instructors collaborate with school-day teachers to create goal-based instructional plans and math checklists for each student. They also outline monthly themes and activities like learning centers with short activities for students who can stay focused only for short periods of time. Other activities include physical fitness through the use of GeoFitness Mats, which provide exercise while teaching specific math skills. SHINE instructors also provide Junior College Experience Days where children visit with college professors and learn about the importance of science and math in careers such as robotics, health sciences, and biotechnology.

Students attending SHINE have increased their math and reading test scores, as well as their attendance and promotion rates. Miller attributes the program's success to teachers who tailor activities to each student's academic and social needs. She also credits SHINE's success to its emphasis on connecting home and afterschool. The program's full name—Schools and Homes in Education Program—reflects this emphasis. SHINE instructors conduct home visits, and the curriculum has a strong parent-engagement component.

## IN YOUR *words*

How does your expanded learning program approach math enrichment? (Select one.)

- We integrate math with other activities.
- We offer math enrichment as a separate activity.
- We do both: integrate math with other activities and teach it separately, depending on what is the most appropriate.

To participate in this survey and view results, submit your vote at [www.sedl.org/afterschool/afterwords/survey200907.html](http://www.sedl.org/afterschool/afterwords/survey200907.html).

Produced by

## NATIONAL CENTER FOR QUALITY AFTERSCHOOL

Advancing Research, Improving Education



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## TRAINING *tip*

### Communicating About Math

To help students master math skills, support conversations where they listen and consider the thinking of their peers. When this is done well, students hear ideas that stimulate their own thinking. Model listening by asking students to clarify or repeat their thinking for others to hear. Encourage them to ask follow-up questions such as, "How did you think of that?" or "Where did you get that idea?" Finally, take care to support reflection and thinking by providing adequate "think time" answers from raised hands.

## EVENTS *calendar*

- Oct. 19–20 School's Out Washington: The Bridge to Afterschool and Back 2009 Conference  
[www.schoolsoutwashington.org](http://www.schoolsoutwashington.org)  
VANCOUVER, WA
- Oct. 22 Lights On Afterschool  
[www.afterschoolalliance.org/loa.cfm](http://www.afterschoolalliance.org/loa.cfm)  
NATIONWIDE

For more events, visit our calendar at [www.sedl.org/afterschool/training/calendar.html](http://www.sedl.org/afterschool/training/calendar.html).

Newsletter available online at [www.sedl.org/afterschool/afterwords](http://www.sedl.org/afterschool/afterwords)