

Everyday Math

by Lisa Sirgo

from *Montessori LIFE Spring 1995*

We are continually challenged, as teachers, to help children see the practical applications of the new knowledge. In the area of mathematics, we can do this through measurement. Children can measure objects in their environment. They can apply their knowledge of measurement to cooking and woodworking.

Knowledge of time can be applied through the use of clocks and calendars. Knowledge of graphing is applicable to the measurement of temperature and water conditions.

Money provides a most practical application of new knowledge. Dr. Montessori recommended the use of “new, shiny, crisp” money as a point of interest. Initially the child can be introduced to the names of *penny, dime, one dollar, and 10 dollars* in the same manner that he/she has been introduced to the decimal system. Next, a tray can be prepared with 10 pennies, 1- dimes, 1- 1-dollar bills, and a 10-dollar bill. This tray would be used in a manner similar to the function tray for the decimal system. Children can match dimes and a \$1 bill with the hundred chain. Five nickels and one quarter can be compared with the squaring chain of five. Pennies can be matched to the thousand chain and then paced in a large jar next to other jars with 100 pennies, 10 pennies, and 1 penny. This gives children a sense of the true quantity and helps them to see the convenience of paper currency.

Finally, an exchange game can be introduced to the children. This game was brought to my attention by Patsy McBride. Materials include dice, pennies, nickels, dimes, quarters, half-dollars, and dollar bills. Each player takes a turn to roll the dice and then takes the coins equivalent to the amount on the dice. ON each turn, players check to se if they can make any exchanges. Play continues until each player reaches \$1!

The computer can be introduced to the class during the second half of the school year. This allows time to focus first on the manipulative activities.

Of course it is always vital to integrate songs, games, and children’s literature through-out the curriculum. These can be used to reinforce math concepts, such as sequencing, patterns, counting, and ordinal values. They can also help develop a global perspective. The dreidel game and the African mancala can be easily incorporated into the early childhood classroom.

If you have gained practical ideas from this article and you are able to view the math area with a fresh spirit, my goals have been met!