

How to Make Holiday Shopping Exciting for All Ages

by Christina Elston

The winter holidays create a season of giving-but first comes a season of shopping. And for families intent on not letting holiday consumerism, or even holiday cheer, shove learning aside the shopping season also offers tremendous opportunity.

"If it is guided by the parent, shopping becomes a really good learning event," says Robert Capraro, Ph.D., an assistant professor and Regents Fellow at Texas A&M University. "Math at the mall would be very beneficial for kids who are not so great at math."

Shopping, says Capraro, offers children a chance to learn math in an experiential way that gets their attention more effectively than textbook exercises. "Just like adults, kids tend to learn those things that are most important to them," he explains. "When they have to stand up and hand someone money, it drives home the importance of the experience in a way that a textbook activity can't. Kids are money savvy."

Beginning with beginners

Shopping generally starts with making a list, and children just starting to learn about numbers can learn plenty this way. For preschoolers and kindergartners learning to count and recognize numbers, the simplest activity might be to count the items on your list. How many things do you need to buy? Help your child write the number on the bottom of the list.

As the shopping trip progresses, have your child count the number of items in your shopping bags. How many things do you have? Is it more than or less than the number of items you need to buy? As you add items, you are giving a very real demonstration of the concept of addition.

It is also worthwhile to do at least some of your shopping with cash, and show your child the bills and coins. He won't be able to count change yet, but he can start learning the difference between a quarter and a nickel, or a \$1 bill and a \$5 bill. By the end of first grade, he should be catching on.

Second-grade shoppers

When your child reaches second grade, she can do a little shopping of her own. At this point she might have an interest in buying gifts for family and friends, but should only tackle making one purchase at a time.

Give her a set amount of money, and make sure she knows how much she has to spend. Then go with her through the store and help her look for items that fit within her budget. If she has \$10, can she find a \$10 item? Talk about whether various items cost more or less than \$10. "You can introduce the concept of budget," says Capraro, adding that second graders are old enough to tackle the word. "Budget isn't such a hard word," he offers. "Kids run around saying Tyrannosaurus." Capraro suggests making sure your child's prospective purchase is within her budget before sending her to the checkout counter. At this age, the embarrassment of not having enough money for the purchase could make her reluctant to go on future shopping trips.

Comparison shopping is elementary

When he reaches third grade, your child should be able to take his first forays into the world of comparison shopping, Capraro says. But first, of course, you have to tackle estimation. Have your child choose an item, and round the price on the price tag up or down as needed to figure out if he has enough money to purchase it. If you live in a state where there is sales tax, or if the item is on sale, that will require additional calculations.

Once your child can estimate the final cost of one item, he can try estimating the tally for two or more purchases. You can also look for the same items at different stores, or compare prices in newspaper advertisements. Help your child learn to spot the better buy.

At this age, Capraro says that making a small mistake or two at the checkout counter is a learning experience that you should allow your child to have. This helps drive the lesson home. "Money makes things relevant very quickly," he says. Of course, you should be on hand to help. If your child makes a mistake in his estimating and doesn't have enough money for his purchases, ask him how much more he needs, and be ready with the cash.

In fact, having a loan from Mom or Dad can be a valuable learning experience in and of itself, says Capraro. Owning money to someone gives kids experience with the concept of negative numbers, which they will encounter further as they continue their math studies. Loans are one of the easiest ways for kids to work with the concept.

If your child has zipped through all of these experiences and can confidently figure the cost of various purchases, you can add the element of "discount" items. One example Capraro mentions is a shoe store offering customers one half-price pair of shoes for each pair they purchase at full price. Figuring out how many pair of shoes you can afford can turn into a complex algebra problem, says Capraro.

Making it part of life

Capraro reminds parents that they shouldn't try to use shopping trips to teach the ideas behind math, but rather to help practice skills kids have already learned in school. "I believe that math skills have to be taught at a conceptual level," he says, explaining that children have to understand the concepts behind math operations. They need to know, for instance, that multiplication is repeated addition.

Your child doesn't have to master a skill totally-for instance, he needn't be able to multiply large numbers in his head-but he should be fairly comfortable with general math skills before you practice them at the mall. This helps keep the experience

positive, so that your child will want to try again.

Another way to keep the experience positive is to keep things informal. Don't drag out calculators, reward charts and notepads unless your child is inclined to do that on his own. "Math should be a part of life, but kids shouldn't look at math as a life sentence," Capraro advises. The rewards on a shopping trip should be intrinsic. Either your child estimates correctly, determines the best buy and makes his purchase, or he does not. This might mean making a mistake at the checkout counter, or not getting the best price on an item.

To extend the learning experience, you can do a little follow-up at home. "Follow up is very situational," says Capraro. If your child has money left over, what will she do with it? If she doesn't have enough yet for her purchase, how long will it take her to save up? If she needed a loan, how long will it take her to pay you back?

By the time the final gifts are wrapped, you could have the satisfaction of giving your child practice with valuable life skills-and, of course, of knowing the shopping is finally finished.

Resources:

Math Forum: <http://mathforum.org>

National Council of Teachers of Mathematics: www.nctm.org