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Style

# Kids solve the carpool problem

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By — Margaret Webb Pressler May 31, 2011

The second-grade science club at Concord Hill School in Chevy Chase has proved it: Kids *can* change the world.

The club entered the Siemens We Can Change the World Challenge, a national science competition asking kids to solve an environmental problem at their school. The 13 students wanted to improve their school's afternoon carpool line, after calculating that the 50 to 60 cars were burning gas at the rate of six gallons an hour while waiting in line.

"The Earth is getting warmer, and we needed to help save the environment from pollution," said Lindsay Kaplan, 8.

And they did. The kids not only won first place in the competition for their age group — along with a \$5,000 award for the school — they also solved Concord Hill's carpool problem.

The kids' winning entry was a "powerful example of how we can all find ways to improve the world around us simply by observing our surroundings," said Jeniffer Harper-Taylor, president of the Siemens Foundation, which ran the competition along with Discovery Communications.

## **Born of beans and pennies**

Schools with afternoon carpool pickups have to get a lot of cars in and out in a very short time. How do you prevent a traffic backup?

First, all 19 second-graders acted it out by lining up, each holding a cup and taking one bean from their science teacher. “The faster she put the beans in the cup, the faster the line went,” said Macy Daggitt, 8. Getting kids into cars faster would help carpool go faster, the kids concluded.

But when they studied the carpool line itself, they realized that wasn’t enough. They noticed that “the cars that came first waited the longest, and the cars that came last waited the shortest,” said Eli Brotman, 8. They also observed that most of the cars “came at about the same time, like 3 or 3:05,” said Zoe Wrathall, 7.

The kids re-created the carpool on paper, using pennies as cars — and came up with a solution. “We thought we could put [the cars] in different groups, and then it’s not like all the cars are coming at the same time,” said Wynter Sara Bramao, 8.

### **An idea becomes reality**

When the school tested the kids’ idea on the real carpool line, the improvement was so dramatic that school director Denise Gershowitz immediately adopted the new system. Families are given staggered arrival times over 20 minutes, based on their last names: those beginning with A to C arrive at 3 p.m., names ending in D-K arrive at 3:05, and so on. But “if you have an appointment and you have to go earlier, you’re allowed to,” said James Carrington, 8.

Families have had no problem keeping to the strict schedule. “It’s made my life much easier,” said one parent in a recent carpool line. Most cars spend a minute or less going through Concord Hill’s carpool line now, compared with up to 15 minutes before.

“Honestly, it’s changed our lives,” Gershowitz said. “And the kids did it.”