

Kids Explore Agricultural Science On Wheels

Ahhh! Remember the days of taking classroom field trips? Bet you never had one like this—a virtual visit by a classroom on wheels that drives right up to the school! Such was the recent treat for K-5 students at Beltsville Academy in Beltsville, MD, just down the road from BARC.

Over the past several years, BARC and FAR-B have coordinated numerous science enrichment programs at Beltsville Academy (formerly Beltsville Elementary School) to help kids learn more about agricultural science. This fall, FAR-B teamed up with the school and the school's PTA to sponsor a visit from the Maryland Agricultural Education Foundation's "Agricultural Products" mobile science lab.



Maryland Agricultural Education Foundation's classroom on wheels—the "Agricultural Products" Mobile Science Laboratory.

Retired science teachers skilled in making science "come alive" promote the importance of agriculture in our daily lives, and conduct experiments featured on the lab's kid-sized workbenches. Younger students heard a story about cows, talked about dairy foods, made butter from heavy cream ("shaka, shaka, shaka" for an arm-exhausting 10 minutes), and then taste tested their experiment on graham crackers.



Young chemists in action.



Student separates curds from whey.

Older students played “chemist,” producing glue from milk and then testing its strength against a commercial variety using several objective tests. Problem, hypothesis, procedure, results, conclusion—the scientific method in action!

Now I remember having great fun making paste with flour and water when I was a kid—it even makes great wallpaper glue. But this one from milk was new to me. Basically, you separate the curds by adding vinegar, discard the whey, add hot water and baking soda to the chopped curd, then mix until smooth. The results? I overheard a 3rd grader say, “I’m going to save my glue so we don’t have to buy it anymore.”

The school’s principal, Mrs. Rashida Edwards, praised the program. “This was a great experience for the kids. It reinforced the importance of agriculture in our daily lives, showed how science can be fun, and you just never know what might motivate kids—maybe we’ve even inspired some future scientists!” Maybe even some for BARC!

By Dianne Odland, ARS Information Staff



Preparing strips to compare strength of the two glues.