State Road Elementary







From salad dressing to scavenger hunts, the students at State Road Elementary School are finding that math plus gardening equals major fun.

State Road Elementary School has a unique program that incorporates garden-based lessons that align with the pre-k through grade 5 curriculum. Nonprofit organization Grow La Crosse has a dedicated program director for each of three local schools. At State Road Elementary, that person is Jamie O'Neill. O'Neill has been a part of Grow La Crosse since the beginning, and she draws on her garden-based education graduate studies to create hands-on learning opportunities in the school's garden for kids of all ages.

Grow La Crosse makes monthly classes available to the school's teachers throughout fall and spring. These interactive lessons adapt real-world math problems to the appropriate level for each grade. Last year, for example, all of the classes at State Road Elementary School calculated seed germination rates of different crops, an important part of estimating how many seeds to buy for next year's garden. Kindergarteners counted as a class how many of the ten seeds from each type of plant germinated. The math was much more advanced for 4th and 5th graders, who were each given ten seeds and calculated germination rates using percentages.

The older kids even use math to compare growing conditions and determine environmental factors that would benefit their plants. Over a six-week period, 4^{th} and 5^{th} graders plotted and graphed growth progress of arugula to see if the use of a heat lamp had an effect on the plants' growth rates.

This story was produced by the Wisconsin School Garden Network, a program of Community GroundWorks. For more information, visit www.wischoolgardens.org.



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Math in the garden can even be disguised as a game. Scavenger hunts have been a hit with kids of all ages. Finding a certain-sized leaf of spinach or a tomato with a given circumference not only gets students to use math and measurement skills, it gives them an opportunity to explore and connect with the garden.

But nothing excites the students more than taste testing. And with six outdoor raised beds and six raised beds in a hoop house, there are plenty of fresh cherry tomatoes, greens, peas, carrots, beans, peppers, and ground cherries for the students to taste.

O'Neill recalls that the math just clicked for one 4th grader when it was put in the context of a taste testing activity. "We did a salad dressing and we used proportions of olive oil and lemon juice instead of measurements. One parent was so amazed that their kid came home and made salad dressing by themselves, without needing to use a recipe, just the proportions that we taught."

Parents may be surprised by their children's sudden interest in both math and vegetables, but O'Neill is not. "The hands-on connection to nature and food has helped kids focus on the real-world aspects of the curriculum. Teachers have pointed out that some students seem to understand the math concepts more when they're out in the garden."

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