The Three Sisters

A lesson from the New Jersey Agricultural Society Learning Through Gardening Program

Overview: This Thanksgiving, teach your students what Squanto taught the Pilgrims - the Three Sisters method of gardening. Squanto didn't only show the Pilgrims how to fertilize the garden with dead fish. He also showed them how Native Americans across the country planted corn, beans, and squash together in a way that benefited all three crops. Today we call it companion planting.

In November in New Jersey, your Three Sisters will have to be planted indoors in containers. But if you make sure the plants have enough light,



your students will be able to see how the Three Sisters grow together just as they did for centuries of Native Americans.

Objective: The student will be able to:

- explain how Native Americans who lived in New Jersey planted their three major food crops
- explain how Three Sisters gardening reduced the amount of work in the garden and benefited all three crops.

Grades: 1-5

Materials:

large, 2-gallon plastic plant pots (10-12 inches in diameter) one for each group (available for free from garden centers)

corn, pole green bean, and squash seeds (Be sure to buy pole green beans and not the 'bush' type. Pumpkin seeds can be used for squash.) garden soil

Optional: copies of The Three Sisters Legend

Preparation:

In small groups, have the students plant corn seeds only in the middle of 2-gallon plant pots one or two weeks prior to this lesson. Four or five corn seeds planted in the middle of the pot is enough. Corn seeds take longer to germinate than the green beans and squash seeds, so they should be given a head start.

Procedure:

Explain that the Native Americans who lived in New Jersey were called the Lenni Lenape. The Lenape had to get everything they used and ate from nature - they had to make clothes from animal hides, build houses from wood and bark, make tools from rocks and bones, and they had to hunt for or grow all their food. This means the Lenape had a lot of work to do everyday. Even the littlest children had jobs of chasing the birds and animals out of the gardens.

The Lenape ate three major food crops - corn, beans, and squash. They called these crops the Three Sisters. They planted them in a way that would make tending the garden much easier.

First, they planted the corn. Do you know what corn looks like when it's growing? (Have the children stand up straight to look like a corn stalk.) Then they planted the beans in a circle around the corn so the beans will wind up the corn and they would not have to cut a piece of wood to make a stake for the beans. (Have the children act out the way the beans would grow around the corn stalk.) The beans helped the corn because beans leave a nutrient called nitrogen in the soil, which the corn plants need. Last, the Lenape planted the squash around the beans to

push out the weeds and to shade the ground to keep the moisture in for all three plants. (Have the children act out the way the squash spreads out all over the garden.) The nitrogen from the beans also helped the squash grow. Planting different crops together this way is called companion planting.



Draw a picture on the board to show the corn stalk, the beans growing around the corn stalk, and the squash spreading out from the beans all over the garden.

Explain that today we are going to plant the Three Sisters in pots so that we can see how the corn, beans, and squash grow together. Last week we planted the corn because the corn takes a little bit longer to grow. This week we are going to plant the beans and the squash.

In small groups (three to five), the students plant the Three Sisters in large 2-gallon plastic pots.

Evaluation:

The student can name the Three Sisters crops and describe how they were planted by Native Americans to reduce work in the garden and benefit all three crops.

Extension: Ask your students, either individually or in small groups, to write their own legend explaining the Three Sisters method of gardening.



The Legend of the Three Sisters

Once upon a time there were three sisters. The first sister was very tall and strong. Her name was Corn Girl, and she wore a pale green dress and had long yellow hair that blew in the wind. Corn Girl liked to stand straight and tall, but the hot sun burned her feet and hurt her. The the longer Corn Girl stood in her field, the hungrier she got. And every day more weeds were growing up around her and choking her.

The second sister was very thin and quick and fast. Her name was Bean Girl, but she wasn't very strong. She couldn't even stand up o her own. She was good at making food, but she just had to lie there stretched out on the ground, and she would get dirty and wet, which wasn't good for her.

The third sister, Squash Girl, was short and fat and wore a yellow dress. She was hungry, too.

For a long time, the sisters didn't get along. They each wanted to be independent and free, and not have anything to do with the other two. So Corn Girl stood there with her sunburned feet and got hungrier and hungrier. Bean Girl lay there on the ground and got dirtier and wetter. And the little fat sister Squash Girl was hungry, too.

So Bean Girl talked to her sister Corn Girl and said, "What if I feed you some good food, and you can hold me up so I don't have to lie on the ground and get all dirty?" And Corn Girl thought that was a great idea. Then little Squash Girl called up to her tall sister, "How about if I lie on your feet and shade them so you won't get sunburned?" Corn Girl thought that was a great idea, too.

The Three Sisters learned to work together, so that everyone would be healthier and happier. Corn Girl helped Bean Girl stand. Bean Girl fed Corn Girl and Squash Girl good food. And Squash Girl shaded Corn Girl's feet and kept the weeds from growing up around them all.