

Ain't nobody got thyme for that

Greenhouse falls short of expectations; neglect by intended classes responsible for vacancy

Shwetha Sundarajan | Reporter

It's a building that's cluttered with pots, PVC pipes and gardening tools. It's been two years since its construction, yet most students don't know anything about it. The greenhouse, a personal project of former principal John Shaughnessy, has not fully bloomed yet.

Plans began back in 2015 and the facility was estimated to cost nearly \$180,000. Funds came from various school activities accounts, the Lancer Parent Organization and some private donations.

Despite Shaughnessy's vision of having the preschool, Special School District (SSD), Family and Consumer Sciences (FACS), science and the engineering classes use the greenhouse, only two of those groups are actively utilizing the facility.

Early Childhood teacher Jennifer Swihart said the preschool classes have never gone inside the greenhouse, despite original intentions to involve early childhood students.

SSD is one of the few groups that do visit the greenhouse two or three times a week. However, SSD only started going down to the greenhouse this year due to one student's avid interest in horticulture: the science and art of growing fruits, vegetables and flowers.

"One of our students, Leah Reeves, takes our applied skills students down to the greenhouse where she builds her leadership skills while teaching them how to plan and maintain their plants, what to look for as they grow, how to trim them back, how to transplant them," special education teacher Terri Warnars said.

Reeves, a sophomore, has always had an interest in plants, and it was her idea to take students down to the greenhouse.

"For Leah, this is really helping her out since she's looking into horticulture as a career choice. For the applied skills students, it gives them appreciation to take care and maintain a living thing. They have to plant it, water it, take care of it and make sure that it doesn't die. Since their understanding of living things is more basic than most people, it teaches them that they have a responsibility if they want to keep it going," Warnars said.

The students chose what to plant, ranging from vegetables to flowers. As of now, students are growing basil, sweet peppers, sunflowers, tomatoes, marigolds, carrots and squash.

Reeves helped students choose what to plant, such as cat grass. "Cat grass grows quickly, which keeps them interested. When we go to the greenhouse, I show little pointers about each plant, and they all crowd around me, asking questions," she said.

Through their work in the greenhouse, SSD students gain on-site job training which means they do not have to travel off-campus to gain those skills.

"It improves their [the applied skills students'] communication skills. They now have the ability to go home and tell their parents what they've done for the day. It gives them a sense of responsibility around the house if their parents decide to have a community garden or



photo by Shwetha Sundarajan

Special school district teacher Terri Warnars sprays a combination of water and vinegar to combat the aphids that have infested the greenhouse. Her students have been growing basil, sweet peppers, sunflowers, tomatoes, carrots and squash, all from seedlings.

plant a couple of plants," Warnars said.

The student involvement doesn't just end there. Senior James Truong and graduate Raj Kondaveeti constructed a hydroponic system last year to automatically water the plants in the greenhouse as part of their engineering class.

"The hydroponic system is called the Nutrient Film Technique or known as NFT, where the nutrient is pumped from a reservoir, and it's pumped slowly so the plants can absorb the nutrients, but not slow enough where algae grows on the plant's roots," Truong said.

Truong said last year, FACS teacher Becky Lawrence asked the two to construct a hydroponic system with certain constraints with certain pipes and pipe sizes.

"It only took half a semester to organize the materials and lists and build the system, but we had to keep working on it for the rest of the year because of maintenance problems. It kept leaking," Truong said.

But, as of now, the hydroponic system sits broken in the corner. Earlier this year, two students fell into the system, breaking it.

"I have to write a instructional guide after I leave, so if it breaks again, any student can use the manual to fix it," Truong said.

Still, despite the original plans for the greenhouse to have widespread usage, not many people have used the greenhouse as intended.

FACS used the greenhouse last year, but has not used it this school year in part due to Lawrence's maternity leave this semester.

Principal Karen Calcaterra said, "Since her [Lawrence] classes are semester classes, the first semester classes never get around to harvesting them. By the time the plants produce the vegetables, it's a whole new set of students."



photo by Shwetha Sundarajan

Science teacher Carrie Hall's Environmental Science class is growing lettuce, one of the fastest growing plants. "Right now, we're growing romaine and butter head lettuce. Only 10 plants out of the 27 are thriving," senior Environmental Science student Amanda Cook said.

Currently the FACS classes are growing a small herb garden in the greenhouse to use in their classes but maintaining it over weekends and school holidays is challenging.

And, there are other challenges. Those academic areas that regularly utilize the greenhouse face difficulties in implementing it in their class curriculums.

This is especially true for science teacher Carrie Hall. As an environmental science teacher, she and fellow science teacher Dana Imler have worked to implement greenhouse projects into their syllabus.

"We try to incorporate it into chapters that have anything to do with the greenhouse, like agriculture. But, it's very difficult because it takes time out of the regular required

curriculum. We can only use it five weeks first semester and eight weeks second semester," Hall said.

Currently, Hall's class is growing lettuce because it grows quickly. At the end of the unit, they plan on having a salad party.

"We were going to have a salad party with the lettuce that we grew. So everybody was supposed to bring in a condiment," Hall said.

Students in her class enjoy the hands on experience the greenhouse provides.

"We're learning about different biomes and what kinds of plants and animals thrive there, and we're learning about soil. Going to the greenhouse to see plants grow is helpful because we can see how plants thrive in each environment," Amanda Cook, senior, said.



16447 Village Plaza View Dr.
Wildwood, MO 63011

(636) 458-9000

ADAM FEIN
Attorney at Law
afein@rsflawfirm.com

120 S. Central Ave.
Suite 130
St. Louis, MO 63105
rsflawfirm.com

Office: 314.862.4332
Fax: 314.862.8050