

AMANDA "MASTERS" HER FRIENDSHIP STEM CLASSES



Above: Second graders Lilian Garrison, Mia Buendia, & Ali Cantu built a house that stood up to the Bid Bad Wolf.

By Ron Barry

When it's so hot outside that if you saw a dog chasing a cat, they'd probably both just be walking, it isn't easy for teachers to keep the attention of elementary students who might rather be playing outside on a "normal" day.

On Thursdays at Friendship Elementary School, STEM instructor Amanda Masters continues to find several creative ways to hold her students' minds to the task at hand.

STEM is the acronym for Science, Technology, Engineering, and Mathematics, and Masters likes to focus on one of the four entities during her time with the children.

But sometimes, a little creativity helps a particular class session involve all of them - like yesterday's second-grade group.



Above: Outside the door, crayons are melting in a science experiment.

Masters, who spends most of the week teaching physical education at the school, added the STEM instruction to her slate just last year, but it's clear she's as fascinated by the new areas of learning as her students are. Yesterday, she read the classic story "The Three Little Pigs" to her kids.

What's so creative about that?

Well, while she read, she had already staged the beginning of a science and math lesson at the outside door of her classroom. Taking a package of crayons and attaching them to a chair - above a basic empty cooking pan - she was going to show the students exactly what the effects of an extremely hot day can be.

The "science" was in the fact that crayons will actually melt at a certain temperature - which was easily achieved during yesterday's blistering heat wave. The "math" was in the charting on the whiteboard of the times and rising temperatures as the day went on, allowing the children to compute the differences as the increasingly now-liquid crayons were blending together colorfully in the pan.

"I had just seen this the night before in another place where the heat was unbearable," Masters said, "so I thought I'd put it in motion here and see exactly how it would work." It was working wonderfully, except for the reminder that no human being would want to be outside for very long Thursday.

Meanwhile, inside the classroom, Masters chose “The Three Little Pigs” to target the engineering phase of STEM, since the point of the story is that the pig who eventually built the sturdiest house was the only one who had a house left after the Big Bad Wolf blew the less-sturdy ones down.

When she finished the story, Masters distributed a variety of “STEM Bins” to the children, who were then instructed to build a house with whatever materials they were given that would stand up to the blows of the Big Bad Wolf. As the children worked with the various pieces, Masters designated whoever was working the quietest to be the Wolf who got to see if he or she could “destroy” the others’ construction efforts with the force of a self-created wind.

Since the bins had differing levels of stability regarding their materials, it took some trial-and-error “engineering and technology know-how” to build something that would stand up to the Wolf.

Masters, a graduate of Union University, loves the addition of STEM to her duties.

“Since I get all the grade levels coming in at different times on Thursdays, I get to see how differently they process the ideas at the different ages. I love watching them use their creativity to design things and try to apply what I’m trying to get across to them. Some days I give them booklets of various pictures of things, and let them just try to use their materials to make something like they see in the pictures.”

The classroom in which Masters works her “magic” is also equipped with educational bots and other technological wizardry that allows her to maintain interest among the older children as well.

“Some things, obviously, that work great with the younger kids won’t appeal in the same manner to the older ones,” she said, “but that just helps keep me on my toes to learn how to adjust to each group so I can keep their interest. That’s one of the things I love about teaching this.”

While Friendship Elementary is a relatively small school, it boasts one of the “smartest” learning environments as principal Cindy Nolen has attempted to equip it with creative areas that have considerable visual and audio appeal to children. Several colorful layouts in the STEM area use light, sound, stuffed animals, books, and other things that easily keep students fascinated and get their minds to think creatively.

“Sometimes it gets noisy in here,” Masters laughed during her Thursday class with the second-graders, “and I hope we don’t disturb the other rooms nearby. But when the students really get engaged with something we’re doing, their enthusiasm shows. That’s what makes this so much fun.”

Even on a day when crayons can melt outside your door.

Below: Amanda Masters shares “The Three Little Pigs” story with her STEM class.



Above: Masters hands out the STEM bins for the children to build houses.