

STEM

How many pounds can a few toilet paper rolls hold? “20?” someone speculated. “40?” I murmured. A 25 pound weight was added to the structure. The toilet paper rolls didn’t budge. As 25 lbs, 35 lbs, and 45 lbs were stacked on top, my eyes widened in disbelief. The stack of weights grew to two feet tall, and weighed over 300 pounds before the cardboard rolls crumpled. “300 pounds? That’s all of our weights combined!” we said. If none of us could lift that much, how could just a few measly toilet paper rolls? What made them so strong? Personal experiences like this were what inspired curiosity and a drive to solve problems in me and my friends, leading us to STEM fields as we grew up. To inspire younger generations to pursue STEM, we should first fuel their hunger for problem solving.

The four elements of STEM are unified into one category because they all help solve problems. If we can inspire children to problem solve, they will naturally want to enter STEM. In my case, the toilet paper demonstration was one aspect of a competition called Destination Imagination. Each year, we created and presented creative solutions to new problems. The sense of accomplishment that I experienced after completing each project inspired me to do the competition year after year, and delve deeper into STEM even after we stopped competing.

Youth can be inspired to pursue STEM if they are introduced to it through smaller problem solving challenges. For instance, my Destination Imagination team volunteers at a local museum where we help children build small balsa wood structures. Opportunities like this allow children to experience the engineering process, and spark their curiosity about science and engineering.

Inspiring children into STEM can be hard, but motivating them to want to problem solve will lead them directly into STEM fields.