

December 11, 2022

My name is Linda Gaudreault and I am a kindergarten teacher at Holy Name of Mary School in San Dimas. I am applying for the San Dimas Rotary Mini-Grant in the hopes to be able to purchase STEM bins, STEM activities, and STEM task cards for my students. Research supported by the National Science Foundation concludes that young children benefit from learning STEM subjects, which include Science, Technology, Engineering, and Math. These disciplines play a fundamental role in setting the foundations for future learning.

I have been teaching kindergarten and first grade for twenty one years. I have always believed in a hands-on teaching approach and now more than ever, students need to be engaged and excited about their learning. Engineering is already part of the DNA of young learners. Elementary school is the perfect time to introduce the engineering design process through simple STEM activities. It builds on children's natural curiosities to create. Teaching STEM in the early years enables children to make those vital connections between everyday life and the STEM disciplines. It also lays down the foundations for future academic success because the skills learned are transferable to other subjects.

STEM bins are plastic boxes filled with engineering manipulatives of one's choice. They can include Legos, pattern blocks, Dixie cups, toothpicks, Playdough, etc. I have attached some examples for reference. The boxes also contain task cards that picture a variety of basic real world structures to inspire students to build. I would place the

STEM bins in an easily accessible shelf in our classroom. During a designated time of the day, students could take a STEM bin or two to their seat or our carpet area and have a moment to engineer independently or with a partner.

The students would use the materials in the box to construct as many different structures on the task cards as they can. Instead of just being “busy,” students would be engaged in creative, complex tasks and encouraged to think like inventors. Kinesthetic learners, spatial learners, and logical thinkers would love exploring the different possibilities for the building materials.

I would use STEM bins during morning work, literacy centers, math centers, or for early finishers. They would help my students to grow in technology, science, arts, literacy, engineering, math, and even socially.

STEM bins would take learning to the next level. They would challenge my students to measure their structure, test its weight, or turn it into something useful. They could also write about their structure or use iPads to create a picture collage or how-to videos. Young children also benefit from STEM learning because they are generally naturally inquisitive and want to explore and make sense of themselves and the environment in which they live. I greatly appreciate your consideration for this grant.