

**GRANT WRITING TEMPLATE**

**PROJECT SUMMARY**

STEM (Science, Technology, Engineering, and Math) is an integration of content areas that must be combined with activity and creativity to truly teach 21st century thinking skills. Using **STEM Skillastics**, an evidence-based oversized board game, children will perform exercise games combined with STEM questions that integrate the mind and the body. The game ties all the pieces together; creativity and movement join the STEM content and questioning to create a balance of learning.

**NEED**

STEM has long been taught in science classrooms with large technology budgets that look at problems in isolation. This proposal seeks to show that STEM is everywhere and especially adaptable to the physical education class. STEM is how our modern world seeks to solve all problems! Nothing is considered in isolation, but always includes technology, engineering, and physical movement. Research shows that exercise optimizes brain function (John Ratey, MD, Harvard Medical School). The Skillastics game pushes the brain to work as hard as the body while each child participates in a physically challenging but non-competitive exercise. Skillastics is built of developmentally appropriate physical activities that meet the Physical Education standards. STEM questions are linked to the activity and answered by the students as they move around the game board. There are 30 questions in each area (Science, Technology, Engineering, and Math) for a total of 120 STEM questions. The entire class is moving, answering questions, and playing the game at the same time. Like real life, the STEM game is about connecting a STEM problem with physical activity.

**GOALS AND OBJECTIVES**

The goal of the project is increase interest in STEM while making the connection of physical movement and creativity. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_State Standards for Science and PE will be combined with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Standards for Math and English Language Arts. The entire project unites all the content areas increasing skills in standards that include speaking, reading, physically activity, math and science. The connection is the creation of STEM real world thinking skills!

**EVALUATION**

Each student in third through fifth grade will take a pre and post survey and skills assessment. The survey will calculate the interest level of the students as related to STEM class and careers. All students are currently enrolled in a class called, “STEM” as part of their weekly specials rotation. The surveys will include the following:

* Rate your current interest in STEM class,
* Rate your interest in pursuing a STEM career,
* Rate your interest in studying STEM,
* What is your current grade in STEM class?
* Rate your physical performance in specific physical activity skills

**MEASURABLE OUTCOMES**

Pre and post survey results will show a 25% increase in STEM interest and skill levels at the end of the grant period. The pre and post surveys will be conducted in the PE and STEM classrooms.

**PROJECT TIMELINE**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 2016: The project will begin with the purchase of STEM Skillastics game for \_\_\_\_\_\_\_\_elementary schools.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 2016: PE teachers introduce basic physical movements and explain the STEM game. Pre-test is completed.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 2016: Game is reviewed and playing begins.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 2016: Game is played.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 2016: Business partner visits providing a STEM problem. STEM game is played at least one time in PE classes.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 2016: Business partner visits seeking STEM solution. STEM game is played at least one time in PE classes.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 2016: Post-test/survey is complete. End of school. Pre and post survey results are compared.

**BUSINESS PARTNERS**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Public Schools has a host of business partners including:

\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. We also have a list of business partners posted on our website,

By using a different partner for each of the \_\_\_\_\_\_ elementary schools, we can involve \_\_\_\_\_\_\_\_\_\_ community businesses with this grant request. Each school will invite a business to propose a real world STEM problem to the students. A follow up session will allow children to present solutions to the business. This fulfills the \_\_\_\_\_\_\_ contact hours and involves larger amounts of the community into the project.

**BUDGET**

**STEM Skillastics**: $299.95/each, plus 12% shipping

**Contact**: Jess Wadleigh at: jwadleigh@skillastics.com, or (310) 431-8205 for multiple order discounts.