



Dodgertown Elementary Full STEAM Ahead

Overview:

Dodgertown Elementary is “Full STEAM Ahead” for the 2020-2021 school year. Dodgertown is seeking grant funding to support STEAM (Science, Technology, Engineering, Arts and Mathematics) initiatives in their STEAM Tech Lab classroom. Dodgertown wants to be a center for innovation and invention where students work individually and collaboratively to solve problems and apply what they have learned conceptually. Grant funding would help provide technology tools to enhance ways to teach state required science and mathematics standards.

The Issue:

Students need lessons that spark their curiosity and increase their motivation to learn. Incorporating hands on, inquiry-based lessons promotes increased engagement. With innovative technology tools that help assist the teacher in generating enhanced lessons, student achievement in the critical areas of math and science will increase. Dodgertown state assessment scores show a need for increased support in mathematics and science. Forty percent of students showed proficiency in grade level mathematics and twenty six percent of students showed proficiency in grade level science.

Dodgertown’s State Assessment Data and School Improvement Goals:

	Math Proficiency			Science Proficiency
	ACH	LG	BQ	ACH
2018-2019 Data	40	61	58	26
2020-2021 Goals	62	62	62	62

Dodgertown was one of the bottom 300 schools in Florida with regards to state assessments. Eighty three percent of the students are economically disadvantaged and have limited access to technology. To increase science and mathematics scores, the STEAM Specialist will use the technology tools in the STEAM Tech Lab to expose students to inquiry based and hands-on learning experiences helping them become familiar with these fields when other wise they might not have these opportunities.

The Change:

Dodgertown has developed a school wide focus on interdisciplinary learning through STEAM. The STEAM Specialist will use the new technology tools to support students in the STEAM Tech Lab. Students will learn how to plan and carry out investigations, analyze and interpret data then communicate findings and conclusions. Students will be more engaged in lessons and connect their learning to real world situations. By collaborating with others, students will be able to understand crosscutting concepts through higher order thinking skills rather than memorization. Students who learn to design and engineer solutions to local and global problems will be the inventors and innovators of the future.

The Action:

After reviewing district and state assessment data, School Improvement Goals were aligned to the critical areas of mathematics and science. Dodgertown STEAM team leaders attended summer training, visited other STEAM schools in Florida and researched best teaching practices for mathematics and science. With the information gathered, Dodgertown STEAM team has developed a plan on how to implement a school wide focus on STEAM. One new initiative at Dodgertown was to create a space for a STEAM Tech Lab. A 5th grade teacher was transitioned into the new space and has begun the work to transform the physical space and structure of instruction to include mathematics and science lessons. The STEAM Specialist has begun to meet with individual grade levels and special area teachers to align lessons in the STEAM Tech Lab. Dodgertown will use the technology provided by the grant to enhance student learning experiences during these activities. STEAM team leaders will review data to continue to adapt the differing needs of the students and staff.

School District Strategic Plan Alignment:

This project will help support the Strategic Plan Focus Area of Academic Success by ensuring high-quality, equitable, standards-based instruction for all students. Additionally, this project will also help support the Strategic Plan Focus Area of Equity, Culture and Climate by cultivating safe, respectful, and supportive school environments which are equitable and inclusive.

Monitoring Progress and Results:

In the classroom, the STEAM specialist will use projects, informal assessments, exit tickets, quick chats, and accountable talk to monitor student progress towards learning goals. With STEAM team support, data chats will be held with classroom teachers to monitor student mastery of science and math standards on district unit assessments.

Number of children to be served and grade level(s) and Targeted Population:

426 students in Pre-K thru 5th Grade

Volunteers:

At this time volunteers are not permitted on the campus however, when the opportunity for volunteers becomes available, Dodgertown would like to invite community members to help support students in the classroom with STEAM initiatives.

Grant Oversight:

Aretha Vernetto, Principal
Elizabeth Laviska, STEAM Specialist

Amount Requested:

\$9,998.00

Itemized Budget:

Materials	Quantity and Cost	Total Cost
iPads to use science, mathematics, robotics, coding and 3D printing software	13 iPads x \$309	\$4,017
Virtual Reality Googles with Google Expedition	1 classroom kit which includes 10 goggles, 10 devices, 1 teacher tablet, and a carrying case \$3,781	\$3,781
MakerBot 3D Printer	1 classroom kit which includes 2 3D printers, printer filament, STEAM lesson plans and ISTE- certified professional development \$2,200	\$2,200
		\$9,998