2016-2017 STEAM LEGACY GRANT RECIPIENTS AND PROJECTS

Dunwoody Springs Elementary- Utilizing the school's Project Based Learning initiative, grant funds will be used to implement an after school program in which students will study the sun and its' ability to impact their lives in new and exciting ways. Students will be able to construct different objects using the "OWI Solar Kits". These kits enable students to construct over 20 different objects that are run on solar power.

Heards Ferry Elementary - Grant funds will be used to create a Maker Space Challenge after school project designed to engage students in STEM related activities. Students will present a project idea or concept that has the intention of improving the function of an existing system. They will then be placed in teams to work on their Maker Space project keeping detailed journals of their successes and failures.

High Point Elementary - The original grant project was submitted for a math based after school program engaging students with mathematics in authentic and real world contexts. This after school program would culminate in a Math Olympiad for Elementary and Middle Schools (MOEMS) Tournament which would engage High Point students. The teacher would like to set up a new MOEMS Tournament for the students in our Sandy Springs schools. Currently, three other Sandy Springs elementary schools are interested in participating in this tournament. SSEF plans to sponsor and fund this Math Olympiad Tournament separately as an SSEF Program.

Ison Springs Elementary – Grant funds will be used for an after school program in which students will be designing and constructing a house or city with a variety of materials. They will be adding and installing all of the electricity for their construction projects. Their structures will include, but are not limited to, lights for each room, miniature ceiling fans and other electrical features.

Lake Forest Elementary – Grant funds will be used to continue the after school STEM Club which meets once a week to enhance the understanding of the Next Generation Science Curriculum in grades 3 – 5. The Club members will participate in 1) science experiments, 2) community involvement through the Fulton County Adopt a Stream Program, 3) guest speaker and community leader lectures, and 4) school-based projects. The Club will provide a positive, learning centered after school activity which focuses on encouraging potential student interest in STEM skills and careers, while also enhancing student performance in areas of science.

Spalding Drive Elementary – Grant funds will be used to fund an after school program in which students will be exposed to coding programs such as Tynker and Code.org. After initially learning the basics of coding, students will create STEAM projects that are programmed to be

interactive. Local programmers will come in/Skype with the students to discuss programming and coding jobs in the community. Students in the after school club will participate in Hour of Code with students across the country and finally, students will present their projects at the 2nd Annual SDE STEAM Expo.

Woodland Elementary- Grant funds will enable the start of a First Lego League competition team. Guided by adult coaches, First Lego League teams research a real world problem such as food safety, recycling, energy consumption, etc. and are challenged to develop a solution. The students must design, build and program a robot using Lego Mindstorm Technology. They will then compete on a table top playing field. The entire program culminates in a challenge where students compete against their peers and share their innovative solutions with others.

Ridgeview Charter Middle – Grant funds will be used for an after school program in which students will learn about earthquakes. With the "Earthquake Towers – Getting Started Package", the students will be building buildings and bridges with materials provided in the kits. Testing will be done by the students on their structures to determine earthquake resistance through the use of a Tremor Table earthquake simulator and associated testing equipment. Researching and tracking earthquakes will involve gaining knowledge in both science and technology.

Sandy Springs Charter Middle – Grant funds will be used to purchase 4 data hubs to be used in their after school STEAM Green Club. One of their main focus areas will be to create and maintain a school community garden. The device will calculate real time data, such as pH of soil, water levels and temperature, to help students to make informed decisions (solutions) in their scientific studies.

North Springs Charter High – Grant funds will be used to fund a Spartan Mixers after school club for Music Technology students. The school is developing a Music Technology Program that would prepare students for music and industry careers, both in performance and production. Although the Music Technology class is initially limited to a small number of students, the after school program, Spartan Mixers, will reach additional students with musical talent. Students in the club will create their own audition CDs. They will learn how to mix sound, evaluate recordings and create a final product.

Riverwood International Charter – Grant funds will be used to fund a six week Saturday STEAM Camp for financially vulnerable Lake Forest Elementary 5th graders. Riverwood teachers and identified Riverwood students will deliver this program. Students will learn about the ecology, migration and life cycle of the Monarch butterfly and will complete an art piece, poem or story about the migration and lifecycle of the Monarch butterfly. The students will also document and build a garden, while also collecting statistics about the Monarch butterfly migration. Finally, they will build a Monarch friendly garden at both their home school and Riverwood High School.