The following programs have been previously determined by DCED to constitute “innovative educational programs” as defined by law for CFGC (based on past grant requests):

- **Watershed Environmental Program (Science K-12)** Student field trips to gather samples and data for classroom analysis.

- **Environthon (Science 6-12)** Students study effects of pollution and prevention of maintenance of the environment then compete on local and statewide level to illustrate their competency.

- **Advanced Computer Application Classes (All Districts, Technology, 9-12)** Students learn about advanced computer applications (i.e. web design, technology applications) and potential to receive technology certifications through various school district partnerships.

- **Advanced Placement Opportunities (All Districts, Various, 9-12)** Provide teachers the proper training needed to offer additional AP classes in the schools.

- **Artist-in-Residence Program – (All Districts, Arts, K-12)**

- **Media Class – (All Districts, Communications, 9-12)** Students compile, produce, and edit school TV and/or newspaper productions.

- **EMT Certification Program (All Districts, 9-12)** Provide elective classes which would conclude with an examination that would be administered by the Greene County Emergency Management staff for certification.

- **Science Matters (All Districts, Science, K-6)** Provide hands-on science kits for students in K-6 grades.

- **Sound, Lighting and Projector System (West Greene, Arts/Communications, 9-12)** Students learn and work with modern/digital sound and light technology systems that enhance student performance and presentations.

- **Forensic Science Curriculum (Science, 9-12)** Students learn forensic science and utilize essential science skills, as well as writing, analytical thinking and inquiry.

- **Smart Boards for Classrooms (Science, K-12)** Students use Smartboards and interactive software/equipment to participate in virtual labs and fieldtrips.

- **School-to-Work Program (CTC, Drafting & Design, 9-12)** V-Flash Desktop Modeler software to permit students to use prototypes completed in Autodesk Inventor 12 and build prototype parts out of plastic.

- **Robotics Curriculum Project (All Districts, Science, K-12)** Students work in teams to design, build and compete with robots.

- **Natural Gas Exploration, Production and Geology Curriculum (All Districts, Science, 9-12)** Students participate in interactive web conferences, visits to drilling sites, lectures by leading authorities in the gas industry and a curriculum designed to provide a comprehensive overview of the industry and possible careers.
• **Groundwater Model simulation software** (All Districts, Science, 9-12) Students use visual simulation software *enVision Groundwater Model* to provide hands on activities to demonstrate components of the water cycle and how water finds its way into local watersheds and beyond.

• **Greenhouse and Outdoor Learning Center** (Carmichaels School District, Science, 9-12) will provide hands-on research and entrepreneurial activities for high school environmental science students to identify and differentiate between native plants and invasive plants, propagation of native plants, and restoration of a local ecosystem with native vegetation, as well as developing a walking nature trail through the restored ecosystem.

• **Natural Gas Industry Career Exploration** (All Districts, 8 - 12), grade students will participate in a career development session explores the five sectors of the gas industry as part of a two hour to a half-day program through the Westmoreland County Community College.

• **Apple iPad™ Learning Technology Project** (Southeastern Greene School District, 7 -12, English/Language Arts/Math) will incorporate iPads™ as learning tools for students primarily as part of the Reading/English/Language Arts curriculum, though applications will also be used within other curriculum based subjects such as mathematics, science, social studies, civics/government, etc.

• **Digital Arts Program** (West Greene School District, K-5, Arts) will be used to incorporate hand-held computing devices such as the Apple iPad or similar Windows-based technology to create art through photography, video, animation, etc. and developing final art production and display.

• **Digital Learning Laboratory Project** (Carmichaels School District, 8-12 Science) will allow students access to internet-based textbooks and resources to use in at least three new courses: Field Ecology, Engineering/STEM, and Creative Writing; as well additional courses that may be added in the future.

• **Emergency and Protective Services** (Greene County Career & Technology Center, 10 - 12, Career) to prepare students for careers in four broad public safety areas: law enforcement and criminal justice, fire protection, emergency health services, and emergency management.

• **Digital Elementary Science** (Southeastern Greene School District, 1 - 6, Science) will provide elementary grade level students with access to digital technology to conduct virtual science experiments (such as dissecting a frog), take photographs of experimental results, use the word processor to write notes and create reports.

• **Outdoor Classroom and Learning Laboratory** (Southeastern Greene School District, K-12, Science) will provide a pavilion-style structure for students to study the flora and fauna of the environment in its natural setting for a fully integrated, hands-on experience

• **Quarterbacks For Life (QBFL)** (All districts, 6-12) - QBOL offers students a very unique and challenging, semester long, opportunity to research a historical NASA Mission where students learn how NASA project participants achieved success using Language Arts and Interpersonal Skills and 5 Stepping Stones to Success, developed by the BTO Foundation, and highlighted in its Quarterbacks of Life Student Success and Leadership Program.
• **Digital Elementary Reading Technology (All Districts, K - 3, Reading)** will provide tablet style computers such as Kindles, Nooks, iPods, iPads and/or other technology to students, along with software, subscription websites and other applications (apps) specific to grade appropriate reading materials and activities. The technology will help students increase their current reading levels and assist them in reaching curricular targets by allowing students to use technology to integrate what they are reading and/or writing with hands-on activities through various applications to track reading, comprehension, word/vocabulary/spelling, and writing.

• **STEM in the Science Classroom (All Districts, Grades 6-8; 9-12, Science)** will integrated with the schools’ science, technology (computer), engineering and math curriculum courses that will provide students with an understanding and comprehension of how all aspects of STEM work together in our society and world and incorporate robotics, 3-D printing and hand-held technology to prepare students for the current technology being used in STEM related fields.