SUTEP Partnership Grants 2011-2012
Project Report

Name: Dr. April Avery-Ferguson

Project Title: STEM in a 2nd Grade Classroom
Position: 2nd Grade Teacher

School: Cullowhee Valley School  Phone: 828-293-5667
School address: 240 Wisdom Drive
City and Zip Code: Cullowhee NC 28723
School System: Jackson County Schools LEA 500

1. Who was/were your WCU project partner/s? Approximately how much time did they spend working on the project with you? Please describe how this partnership contributed to the goals of your project.

Dr. Sloan Despeaux- Math
Dr. Chip Ferguson- Computer Engineering Technology
Dr. Brian Howell- Electrical and Computer Engineering Technology
Dr. Thomas Hodges- Math Education
Dr. Julie Barnes- Math
Dr. Karen Kandl- Biology
Dr. Melissa Wargo- Archeology
Dr. Tracie Rice- Audiology
Dr. Shanna DeSilva- Chemistry
Dr. Axelle Faughn- Math
Dr. Robert Houghton- Technology
Donnie Howell- Technology
Monica Li- Chinese Exchange Teacher

The goal for the STEM Project was to introduce elementary grade students to the various STEM fields and to the possibilities of future study and/or employment within the STEM disciplines. Specifically, students will understand the relevance of the core subjects supporting the STEM fields such as: mathematics, engineering, technology, biology, chemistry, geology, environmental science, and computer science.
The faculty and staff listed above were all invited via e-mail and/or phone. Each presenter collaborated with me via e-mail and/or phone when planning their presentation. The lessons were planned according to the needs, interests, and academic ability of my students. Each presenter came into my classroom during the spring semester and spent approximately 1 hour presenting a lesson and directing motivating activities with the students. After each presentation, my class discussed the presentation and brainstormed the interesting facts we collected from the lesson.

2. Did you accomplish your project goals? Please explain how you evaluated the project’s success.

I administered the Draw a Scientist Test (Chambers, 1983) at the onset of the project. I modified the Draw a Scientist Test to encompass all STEM fields in the test. I then, administered the same modified test at the end of the project to evaluate if the students were more knowledgeable about the STEM fields.

The students did show measured growth when comparing the pre and posttest. The test indicated the students were much more knowledgeable about the STEM fields especially the STEM presented by the faculty and staff from WCU.

3. How were the grant funds used? Please provide an itemized list of expenditures, and copies of purchase orders/receipts or other relevant documents that show that the funds were spent as specified in the grant proposal.
Growing up in the mountains of North Carolina has been one of the greatest experiences I could imagine. With the beauty and remoteness of the WNC Mountains there was also the lack of exposure to many of the STEM (Science, Technology, Engineering, and Mathematics) related careers. This lack of exposure continues even today. In the current global economy, I feel that students need to be exposed to the various STEM careers so that they may form a broader foundation for making educated decisions as to what career they would like to pursue.

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I invited faculty and staff from Western Carolina University into my 2nd classroom to present information and lead interesting activities that pertained to their specific STEM field. Each presenter came into my classroom during the spring semester and spent approximately 1 hour presenting a lesson and directing motivating activities with the students. After each presentation, my class discussed the presentation and brainstormed the interesting facts we collected from the lesson.

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Thanks to the following faculty and staff at WCU for your time and effort:

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