NASA NICE Workshop – Wrap up Activity

Dixon - Sampson

2012 Elizabeth City State University

Produce 1 to 2 page document that describes your initial plan for using the workshop tools and datasets you have experienced over the last week.

Include in your plan …

- Which course(s) you will include workshop tools and materials
    - GE 152: Principles of Physical Science (Dixon)
    - GE 155: Principles of Biology (Sampson)
    - BIOL 300: General Ecology

- When will this most likely be implemented Fall 2012, Spring 2013, Summer 2013
    - Spring 2013 (Dixon, Sampson, & Ervin)

- Describe the type of students that typically take the course, and be sure to include the approximate number of students that are pre-service teachers

    GE 152: Principles of Physical Science

    - Approximately 75-90 students enroll in the GE 152: Principles of Physical Science course per semester. Most of the students who enroll in the aforementioned course are typically non-science majors. Approximately 15-20 pre-service teachers will enroll in this course per semester. This course is part of the required course sequence for the preparation of teacher education majors (K- 12). It is designed to meet the following guideline(s) and specific competencies as delineated by the North Carolina State Department of Public Instruction.

    - GE 155: Principles of Biology
        - Approximately 200-250 students enroll in the GE 155: Principles of Biology course per semester. Most of the students who enroll in the aforementioned course are typically non-science majors. Approximately 15-20 pre-service teachers will enroll in this course per semester. This course is part of the required course sequence for the preparation of teacher education majors (K-12). It is designed to meet the following guideline(s) and specific competencies as delineated by the North Carolina State Department of Public Instruction.

    - BIOL 300: General Ecology
        - Approximately 30 students enroll in the BIOL 300: General Ecology course per semester. Most of the students who enroll in the aforementioned course are typically non-science majors. Approximately 5-10 pre-service teachers will enroll in this course per semester.

- Describe the overall learning objectives for the lesson plan or unit that will include the workshop tools and datasets
    - Demonstrate a general knowledge of the basic principles and concepts of the life, physical and earth/environmental sciences and their interrelations.
    - Apply instructional models of inquiry which reflect current learning theory to the learning of science.
    - Recognize and understand that technology is the application of science.
    - Infuse current and emerging technologies into instruction for the collection, exploration, and analysis of data; information acquisition and management; communication, presentations, and scientific modeling; and decision-making.

- Describe any learning objectives as they specifically relate to climate education (you must have at least one climate education learning objective)
    - Demonstrate a general knowledge of the basic principles and concepts of the life, physical and earth/environmental sciences and their interrelations.
        - How does greenness, measured by digital images, change over time?

    - Infuse current and emerging technologies into instruction for the collection, exploration, presentations, and scientific modeling; and decision-making.
        - How does NDVI change over time in two different locations?

- Identify what specific climate education module(s) from this workshop you intend to use, and whether you plan to use the total module or customize it for your specific needs.
        - Measuring the Greenness Index
        - Changes in Seasonal NDVI

- In no more than one page, share your current thoughts on what you will use and how.

    The information presented this week will be used to teach current trends and applications of current environmental science thought and bring awareness to changes and impacts observed over time.

- Identify any big challenges or obstacles that immediately come to mind in your implementation?

    None identifiable at this time.

- Describe how you plan to determine (assess) if the climate education module(s) you use was effective at reaching the overall learning objectives, and specific climate education objectives.

    - Pre/post assessments and written interview protocol will be administered