

NASA NICE Workshop – Wrap up Activity  
White  
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.

MTH 142 Math for Elementary Teachers or SED 384 Curriculum and Instructional Methods in Mathematics

- When will this most likely be implemented Fall 2012, Spring 2013, Summer 2013  
Spring 2013

Spring 2013

- 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

In MTH 142, these are usually about 25 in number that desire to be elementary school teachers.

In SED 384, there are about 1 or 2 students who are interested in teaching in grades 6-8. In addition, this course is usually offered for independent study.

- Describe the overall learning objectives for the lesson plan or unit that will include the workshop tools and datasets.

MTH 142

Students will be able to identify the types of data, collect and organize data. Students will be able to identify and use non-standard units of measure.

SED 384

Students will be able to plan, model, and explain the effective use of technologies such as graphing utilities, virtual manipulatives, and spreadsheets as tools for problem solving and understanding mathematical ideas.

Students will be able select, adapt, use, plan, and evaluate instructional resources/ direct instructional strategies within a variety of content strands.

- Describe any learning objectives as they specifically relate to climate education (you must have at least one climate education learning objective).

Students will interpret satellite images of ocean temperature and chlorophyll.

Students will be able to calculate the Carbon absorbed by trees in a land plot in an attempt to understand that role that trees play in absorbing atmospheric Carbon.

Students will be able to calculate and interpret the relationship between chlorophyll concentrations and temperature.

Students will be able to identify the seasonal environmental characteristics of the Southern Ocean.

- Identify what specific climate education module(s) from this workshop you intend to use, and whether you will use the total module or customize it for your specific needs.

I was thinking heavily about using the Ocean Satellite Image Exercise, North Atlantic Phytoplankton Bloom, Carbon Cycle Tree Plot, or the Southern Ocean Exercise. I am not sure how I will customize any of the modules at this point or if I even need to make any changes.

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

For the SED 384 students, I was thinking about doing modeling how to write a unit or lesson plan about simple linear regression using the temperature and Chlorophyll levels. Then have students model the lesson.

For the MTH 142 students, I would use the lessons as they are for the most part without any major modifications.

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

For 384, the biggest challenge is that this course is taught as an independent study course, so I may have to expose students to the materials and allow open undirected inquiry. In this way, students may have a chance to develop a lesson around content they feel comfortable teaching.

Also, I worry about the motivation level for student learning being too low resulting in minimal learning and poor engagement.

- 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.

I would use a short survey.