

NASA NICE Workshop – Wrap up Activity

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
The course, **EDUC 203 Introduction to Computer Instructional Technology** would utilize the environmental and software data tools from the UNH Student Climate Data website. The student climate website is ideal to show the pre-service teachers (elementary education students) to use the Picture Post and the Carbon Mapper software tools in creating lessons for their respective content areas such as mathematics, science, history, and etc.
- When will this most likely be implemented Fall 2012, Spring 2013, Summer 2013
Fall 2012 and Spring 2013 semesters
- 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. **A total of 40 students**
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- Describe the overall learning objectives for the lesson plan or unit that will include the workshop tools and datasets

The learning objectives will involve the pre-service teachers in utilizing the Carbon Mapper and PicturePost animation tools in creating ideal GPS navigation, satellite imagery, and environmental monitoring lessons for K-6 curricula.

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

- **L.O1:** The pre-service teachers will utilize the PicturePost and Carbon Mapper in creating online instruction involving GPS navigation, satellite imagery, and environmental monitoring by forming instructional connections with specific content areas and using a hypermedia product called a web quest for online instructional delivery with 85% accuracy.
- 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.

The specific climate education modules I will plan to use from the workshop are the Carbon Mapper, and the PicturePost animation online data tools.

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

I propose to teach the pre-service students in how to utilize create an online lesson that would address all possible content areas such as science, math, geography, and language arts to associate learning connections with the Carbon Mapper and PicturePost animation data tools. The technology used in conjunction of this educational venture is a hypermedia application tool called a webquest to serve as an online instructional delivery for the instructional content. The webquest website is called Zunal, (<http://www.zunal.com>).

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

The biggest challenge represents the technology integration aspect for the pre-service teachers in knowing how to implement climate data tools for the lesson development. For instance, the pre-service teacher must decide whether to utilize inquiry-based (individualized learning) or constructivist-based (group learning) as the best teaching practice for instruction. There are some limitations in discovering specific and available computer resources for the K-6 context. The blending of 21st century skills and its suitability with online instructional delivery is challenging but attainable.

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 have created a rubric to assess the students' development of their web quests in meeting the overall learning objectives and specific climate education objectives. The rubric is an attached PDF file.



Web Quest Assignment

Criteria	Not Demonstrated 0	Developing 1	Proficient 2	Accomplished 3	Score/Level
Completeness	Significant required components are not met	Most requirements are met	Includes at least 3-4 of the following: graphical images, page content, animations, multimedia tools, and other technological interface in the web quest project	Includes exemplary level of relevant detail (Goes the extra mile)	
Instructional Content and Activities using STEM themes	Content and activities are unrelated to objectives with STEM themes. Many activities are extraneous and irrelevant. No attempt is made to individualize activities for learning styles or strengths.	Content and activities relate peripherally to objectives with STEM themes. Some activities are extraneous or irrelevant. Activities are not accessible to students with different learning styles and strengths.	Content and activities relate to objectives with STEM themes. Almost no activities are extraneous or irrelevant. Activities are accessible to students of more than one learning style or strength.	Content and activities provide a logical path to meeting objectives with STEM themes. No activities are extraneous or irrelevant. Students of many learning styles and strengths can benefit from activities.	
Alignment with NETS-S (National Educational Technology Standards and Performance Indicators for Students)	No NETS-S standards are mentioned in lesson. Lesson is not related to standards.	NETS-S Standards are included, but there is not a clear sense of what students will know and be able to do as a result of the lesson.	Most content and activities specifically address NETS-S Standards.	Content and activities demonstrate a deep understanding of the NETS-S Standards and provide PK-12 students with rich opportunities for learning.	
Aligning NCDPI (North Carolina Department of Public Instruction)	No NCDPI goals and objectives are mentioned in lesson.	NCDPI Goals and objectives are included in lesson, and lesson	Most content and activities specifically address NCDPI goals	Content and activities demonstrate a deep understanding of the NCDPI	



Competency Goals and Objectives for the lesson	Lesson is not related to goals and objectives.	may be related to goals and objectives. Objectives may not provide a clear sense of what students will know and be able to do as a result of the lesson.	and objectives. Lesson may include too many or too few standards are included. (Lesson may name many goals and objectives instead of focusing on important, key goals and objectives.	goals and objectives are referenced. Lesson is guided by goals and provide PK-12 students with rich opportunities for learning.	
Formatting and using of technology tools	Does not meet requirements of the project.	Formatting and use of technology tools demonstrates some understanding of appropriate selection of tools for a specific purpose.	Utilizes appropriate and required features in web quest templates, desktop publishing including importing and exporting images and text content, YOUTUBE videos, audio files and other multimedia tools.	Selection of technology features maximizes readability for all users, including users with high-incidence disabilities. Limits use of extraneous features that detract from the reader's understanding.	
Assessment Techniques (Rubric and Testing tools)	Assessment techniques are not evident.	Assessment techniques are somewhat related to Competency Goals and Objectives. Assessment may not be appropriate for all students' learning styles and strengths; may not meet the technology integration tool methodology.	Assessment techniques are related to Competency Goals and Objectives. Assessment may be less accessible for students with certain learning styles and strengths. Uses some technology integration to assess learner's skills.	Assessment is directly related to Competency Goals and Objectives. Assessment provides opportunities for students with varying learning styles and strengths to excel. Selection of assessment tool makes good use of technology integration tools AND appropriately assesses learning skills.	



Writing quality	Spelling and grammar errors in the response are extensive and significantly impact the readability.	There are many spelling and grammar errors in the response.	There are very few spelling and grammar errors in the response.	Any spelling or grammar errors in the response do not detract from the reading experience.	
Total points with grade					

Name:

Date:

Explanation:

A rubric is applied in grading each assignment for this course. A required set of tasks for each assignment is rated based on the following listed point value scale:

Not Demonstrated	0 points
Developing	1 points
Proficient	2 points
Accomplished	3 points

Each rubric has a defined criterion description table which interprets the point value of each required task of rated performance. The rubric will show the calculated earned points.