WATER CLOCK
LEARNING PHYSICAL SCIENCE

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INTRODUCTION:

- Students use their enhancing teaching and communication skills to provide a teaching activity using the diverse characteristics of science to educate future Physical Science students.
- In this lesson future Physical Science students will learn to construct a water clock using elements of science and discovery.
OBJECTIVE:

- Clearly demonstrate a project that will be beneficial to the community and useful to future teachers and students.
THE COMMUNITY:

- We will benefit our community in this project by sharing our knowledge and experiences in creating and using a water clock that will be published in a lab manual for future students and teachers.
This project reflects the dynamic nature of Physical Science in the understanding that basic curiosity and observations are a critical foundation of any science.

Water clocks are an ancient use of keeping time, the Greeks began to use them to around 325BC.

An ancient water clock consists of bowl-shaped containers designed to slowly fill with water coming in at a constant rate. Markings on the inside surfaces measured the passage of "hours" as the water level reached them. These clocks were used to determine hours at night, but may have been used in daylight as well. Another version consisted of a metal bowl with a hole in the bottom; when placed in a container of water the bowl would fill and sink in a certain time.
Along with the concept of basic observations the project includes an excise that requires the knowledge of measurements and time calculating.
TECHNOLOGY:

- Microsoft Office including Power Point and Word documents
- Digital Camera
- Internet
FOCUSED SKILLS

- Team work: Rely on each other's strengths in communication, technology, time management, and resources.
- Communication: In class discuss the issues and create a plan that is understood by both parties. Exchange email addresses, phone number, and other helpful information to keep in contact.
- Technology: Knowledge of equipment seen in previous power point.
The Process

- Find a project relating to science
- Research science and plan on the production of project
- Gather all needed equipment for the production
- Create an outline that reviews the lesson plan
- Practice the presentation of clarity

We debated and sought exciting but simple projects that would benefit students grades 6-12 in their understanding of science. We worked in the hopes that teachers would have the ability to add this as a productive lesson plan in their classrooms.
THE PROJECT

- Either as presenter or in large groups gather all needed materials
- Begin to follow the lab instructions
- While performing the experiment take notes of observations and changes that may occur
- Come together in one large group and discuss the observations that were made, the changes, did something happen unexpectedly?, would this be a good way to keep time?
- Question there knowledge of the experiment through an activity or continuation of discussion
THE RESULT

- Students should grasp an understanding of the fundamentals of science through primitive observations. They will be able to acknowledge the innate desire to seek and discover the mysteries of nature.

- They will know the how to keep an approximate amount of time using water and items found at home.
POWER POINT RESOURCES

- http://www.nwacc.edu/disted/image/front_nwacc.jpg