Dinosaur Museum Virtual Field Trip

Summary
This unit will cover visiting the Thanksgiving Point - Dinosaur Museum in Lehi, Utah. A Slide Show tour of the Museum will be used. It can be used as a Preview to going to the Museum, Virtual Field Trip - as a replacement Field Trip, and/or a Final Review of the trip. Instructions for a Student Booklet, a sample student booklet, and instructions for a student created slide show will be included.

Additional Core Ties
Digital Media 1A
Strand 2 Standard 1
Digital Media 1A
Strand 2 Standard 2
Digital Media 1A
Strand 2 Standard 3
Digital Media 1A
Strand 2 Standard 4

Time Frame
10 class periods of 45 minutes each

Group Size
Small Groups

Life Skills
Thinking & Reasoning, Communication, Social & Civic Responsibility, Employability

Materials
TV, VCR, Computer, Internet Access, Student Booklets, Permission Slips, Student Evaluations, and Prentice Hall Boos - Earth Systems & Inside the Earth.

Background for Teachers

Student Prior Knowledge
Basic background of the History of Life & the formation of the Earth and various time periods of the Earth.
Ecology relationships between Producers, Primary and Secondary Consumers, (Prey & Predator) and Decomposers.
Knowledge of the effects that change rocks in the Rock Cycle.
Earthquakes and Volcanoes effects that change the surface of the Earth.

Intended Learning Outcomes
1)Students will conceptualize and connection various factors that effect and support the theories of the formation of the Earth, Extinctions of Species, and the Various Time Periods of Life.
2) Students will create and explain different sections of the 8th Grade Science Core of Utah that connect to Earth Systems.

3) Students will create visual products to present their research.

**Instructional Procedures**

This unit plan is designed for a teacher to use various activities in teaching Earth Systems, Dinosaurs, Geological Timelines, Fossils, and Rock Cycles to students. Handouts and activities are included that can be used with materials you are already using or assist in teaching a whole unit on Earth Systems - Geological Timeline.

The main idea is to assist students in retention of the Earth Systems principles. Select the whole unit or just certain parts to incorporate hands-on, inquiry, and discovery learning. These activities are focused on having students discover that they are Discovers, Geologist, Explorers, and Paleontologists. They will become aware about how this affects their own daily lives.

**Lesson Plan - Virtual Field Trip - Thanksgiving Point Dinosaur Museum**

**Lesson Objectives:**

1) Students will be divided into groups to work as a team doing research and designing a salt clay map of their topic to be presented to the class.
2) Students will either attend or view the Dinosaur Museum Virtual Tour.
3) Students will complete the student booklet about the Dinosaur Museum.
4) Students can prepare an enrichment activity to create a Power Point Slide Show of their topic.

**Whole group work** -- Teacher Led Activity

**Time** -- 45 minute / 3-4 days

**Objectives - 8th Grade -- Integrated Science Earth Science Standards Core**

**Part 1 - Pre Field Trip Presentation**

The slides will be presented to the students before they attend the field trip to point out the highlights and areas that they will visit. A short narration is included to give Museum Background. These slides can be re-arranged or modified to tailor information to prepare the students for the field trip. (See the Power Point Tips and the Slide Narration)

Present the slide show of the various points of the museum that you plan on touring. Slides include a walk through of the Thanksgiving Point Dinosaur Museum. The beginning starts in the Foyer and Quarry Room with a short questions and answers about the Rock Cycle and Plate Tectonics Theory.

**Optional** -- Student Booklet to be completed on the fieldtrip.

**Supplies:** LCD Project with Cables
Cart and Extension Cord
Laptop Computer or Teacher Computer with Cable connections
Power Point Presentation or similar software (i.e. Corel Presentations)

**Slide Show Topics:**

1) **Foyer & Quarry Room** - Dinosaur displays, rock cycle, fossil formations, Paleontologist room and model of a Quarry.
2) South Room - Earth Creation Tunnel and Pre-Cambrian Time Period (Ocean Species)
3) Middle Rooms & Activity Areas -- Large Herbivores, Larger Carnivores, Erosion Table, Fossils, and Flying Species.
4) North Room & Activity Areas - Large Ocean species, Green River Project, and Age of the Mammals (Man).
5) Ending with the final exhibit of the extinct Butterfly.

**Student Booklet Activity** -- 8 page booklet to complete while attending the field trip.

**Modifying the Slide Show**
Select Slides to emphasize the points to see and activities to complete.

**Part 2 - Attend Field Trip or Replacement Virtual Field Trip Activity**
Choose the option of either attending an out of school field trip or presenting a Virtual Field Trip slide show on the Thanksgiving Point -- Dinosaur Museum.

**Field Trip Activity**
If attending the field trip, set up:
- Schedule Museum
- Set dates on School Calendar
- Arrange Buses
- Arrange Chaperones
- Set students Groups
- Make copies of the Student Booklet & Maps
- Make copies of schedule and chaperones instructions
- Permission Slips
- Collect Money
- Make payment arrangements
- Make group and bus signs
- Make alternative activity for the students not attending
- Set Substitute to cover students not attending
- Make a list of students attending and not attending
- Send emails to staff and let them be aware of the activity and students attending

**Virtual Field Trip Alternative Activity**
Use the slides to take a walking virtual tour through the museum replacing the actual field trip activity. See the narration comments for each slide. Set up slide projector and laptop computer to display power point slide show. These can be modified to fit the curriculum standards. (See the Power Point Slides to modify by deleting, re-arranging, or adding slides. Also See the Slide Narration)

**Handout:** Provide a handout -- *Dinosaur Museum Virtual Field Trip Tour Questionnaire* to answer during the slide show.

**Supplies:**
LCD Project with Cables
Cart and Extension Cord
Part 3 - Post Field Trip Activity

Select the parts of the slide show to emphasize the review of the field trip. Have the students explain the various room, displays, and activities. Or use as a review and narrate the script and slides that need to be emphasized.

Optional
- Review the student booklet questions with the students.

Supplies:
LCD Project with Cables
Cart and Extension Cord
Laptop Computer or Teacher Computer with Cable connections
Power Point Presentation or similar software (i.e. Corel Presentations)

Part 4 -- Enrichment Activity (Optional)

Have the students then produce a Power Point Presentation on an assigned research topic involving their experience relating to the Dinosaur Museum - Earth Systems Core. The student will research and draw a story board outline of the assigned topic. Then schedule 5 days in the Writing Lab to allow students to complete an 8 slide informational slide show. (i.e. -- How Plate Tectonics Effect Species or the Surface on Earth? or Explain the Effects of Earthquakes and the Rock Cycle.)

Provide a List of Research Ideas. Spend a few days researching either in the media center or on the internet. Outline the information and sketch out 8 slides. Work in writing lab for 5 days to create a slide show. Demonstrate various steps like inserting pictures, adding / changing text, animations, transitions, and samples.
1) Once the slide shows are completed, save by class periods and student last name on a CD.
2) Load files onto the main computer to be presented to the class.
3) Arrange for the projector and computer.
4) Have the students narrate their slide shows as they are shown to the class.

Conclusion
Have student write a 1 page reflection page on their personal experience.
Print a paper copy of the slide show in "audience notes" style -- 4 slides to a page.

Supplies:
LCD Project with Cables
Strategies for Diverse Learners

**Resource Students:** 
Require less involved computer projects. (ex. 4 slides vs. 8 slides) Peer tutoring on the projects
Collaboration partnership for computer project

**Non-Native English Speakers:** (ESL) 
Give information to language teacher to help assist student in ESL classes. Request other ESL students to help new ESL students understand the project. Have them work on the computer projects in their language (if computer keyboard is set up in their language)

**Gifted Students:** 
Give them a more advanced topic. Have them assist other students.

Extensions
Student Slide Show Presentations

Rubrics

Multimedia Presentation Rubric #1
Science Writing Rubric

Bibliography
- Website Movie Paleontology
- Thanksgiving Point Home Page
  http://www.thanksgivingpoint.com/museum/index.html
- National Dinosaur Park
  http://www.nps.gov/dino/

Authors

LAURIE HUTCHINSON