Universe Theories and Technology PowerPoints / Poster

Summary
Student groups will research various topics related to the universe and its formation. They will design a presentation to make to their class. They can make a power point presentation or a poster presentation.

Main Core Tie
Science - Earth Science
Standard 1 Objective 1

Time Frame
3 class periods of 60 minutes each

Group Size
Small Groups

Materials
- computers with access to PowerPoint, Internet to conduct research
- a way for students to save and turn in PowerPoints (hand in folder on server, disks, thumb drives, etc.).
  - student worksheet
  (attached)
  - presentation note sheet
  (attached)

Background for Teachers
Time needed notes:
  - for power point: 2-3 50 minute periods for development, 50 minutes for presentation. For poster presentation: 50 minutes of preparation, 30-50 for presentation
  - 2-3 fifty minute class periods to introduce and create the PowerPoints. Another 1-2 days for presentations.

Student Prior Knowledge
Students should have been introduced to these theories and technologies so that they have a basic understanding and can determine whether information they find is relevant. Students also need to understand how to use PowerPoint. You can show them a quick tutorial, most students do know how to use it. If some students are completely clueless, have them partner up with a student who is good at PowerPoint. I also spend a day discussing plagiarism with my students before this assignment. If you don't they will likely just copy and paste information from the web into PowerPoint and not have any idea what it means.

Instructional Procedures
1. Hook :
   Ask students how they think scientists come up with theories and create new technologies. Does the idea just pop into their head from nowhere? Open it up for class discussion.
Discuss with students how theories and even technologies build on the ideas of others over hundreds of years. The knowledge of past scientists helps scientists today continue to move forward.

You can allow students to work alone or in pairs. This may depend on how many computers you have available. You can decide if you need to partner them up or if they choose their own partners.

Handout the student sheets and read through the procedures with them. Be sure to include how students need to go about saving their PowerPoints and how to turn them in.

Assign each group a technology or theory to research.

Allow students to research their topic and create their PowerPoint. Be prepared to redirect them on some of the information they may find that isn't valid.

Remind students to fulfill all the requirements first. Then they can add all the fun animations, sounds, or backgrounds they want.

If you want the students to present their PowerPoints to the class, have them do so. They can fill out the notes page as the other groups present.

Assessment Plan
Use the PowerPoint rubric (attached) or the poster rubric (attached).

Bibliography
Lesson Design by Jordan School District Teachers and Staff.

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