http://educate.intel.com/en/ThinkingTools/VisualRanking/

General Description:

I found this Visual Ranking Tool on Intel's Education website and was immediately impressed by its potential. However, I noticed that another student had already posted this resource so I tried for several hours to find something else. Nothing I found would be as useful to me in my classroom so I got permission to use the same resource but in a much different application.

Generally speaking, the tool allows teachers to create lists that students can reorder in any way they feel is appropriate and explain their reasons for choosing their particular arrangement. It also allows students to compare their lists to those of their classmates. Additional descriptive information about the tool is available at the URL above.

Objectives:

Since I needed a tool that I will be able to use with my class in the spring, I decided to design my own activity around this tool. I intend to use this with a $7^{th}/8^{th}$ grade Computer Applications class as part of our Computer History unit. It would also be appropriate for a general Social Studies or History course. The Technology Curriculum in my district is currently in a state of flux (and is pretty lousy), so I am opting to take base my objectives on the NETS for Students. They are:

- Students will identify and evaluate how various technological achievements have impacted society.
- Students will use technology tools to demonstrate learning and collaborate with peers.
- Students will use technology to locate, evaluate, and collect information from a variety of sources.
- Students will use technology resources to solve problems and make informed decisions and judgments

Activity:

The class will be divided into groups of four. Using a "jigsaw" strategy, each group will be assigned two Computer History events from the list below and, through online research, become experts on those events (*Knowledge*). The students will then be reorganized so that there is a different expert in each group. The experts will be responsible for outlining to the other group members the important points about their events (*Analysis*). Using their new knowledge, each group will judge and rank the Computer History events according to importance in terms of how much each has impacted today's computer industry and society as a whole. They will also add comments stating their reasons for placing the event where it is in relation to the other events (*Evaluation*). All members of the group must be in agreement on the final rankings. Results will be compared to the other groups and each group will have to justify and defend their rankings to the class as a whole (*Evaluation*).

Computer History events to be ranked:

- 1946 - ENIAC (Electronic Numerical Integrator and Calculator) is completed
- 1947 - The first transistor is built at Bell Labs
- 1959 - The Integrated Circuit is invented by Jack Kilby and Robert Noyce

- 1965 - Gordon E. Moore gives us Moore's Law
- 1972 - Pong video game is released
- 1975 - Bill Gates and Paul Allen form Microsoft
- 1977, 1981 - Apple and IBM Personal Computers are launched
- 1980 - Seagate Technology introduces the 5.25" hard drive
- 1984 - Apple releases the Macintosh computer
- 1989 - World Wide Web is invented by Tim Berners-Lee

I have set the activity up online so anyone who would like to see how it will work can go to http://educate.intel.com/workspace/student/login.aspx?LID=en and enter the following information. Please feel free to manipulate any of the information as this is currently only a demo project.

- Teacher ID: MrYoung
- Team ID: Demo1
- Password: Demo1

Effectiveness:

As I cannot use this resource until spring, I cannot comment on its effectiveness at this time. However, I find this tool to be very powerful. Frankly, I am quite surprised that it is available for free. It is also an application of technology in the classroom that never would have occurred to me. There are other teacher resource tools on the Intel website that would certainly be worth investigating.

Dr. Howland did mention in the Questions forum that, in lieu of a commentary on effectiveness, I could briefly discuss my expectations and potential issues that may arise during implementation. I would be lying if I were to say that this activity will go perfectly smoothly the first time around. Students in my school get rather grumpy when they are asked to think deeply. I am sure that my expectations will need to be clarified in the future as well. To acclimate students to the online tool, I will probably use it for a simpler activity prior to going into this higher order application. Also, I usually have one class with several Special Education students (some of them rather low functioning), so I will have to think of some ways to accommodate them.

Project Information

Title: Computers in Modern Times

Description: Students will use the Internet to research events in Modern Computer History then list those events in order according to their degree of impact on today's computer industry and society as a whole. Students will be required to justify and defend their rankings.

Prompt: After you have completed your research on the following events in Modern Computer History, rank the events in order of importance in terms of how much each has impacted today's computer industry and society as a whole. You will also need to add comments stating your reasons for placing the event where it is in relation to the other events. Each member of your

group must be in agreement on the final rankings. You will then compare your results to the other groups and present the justification for your rankings to the class.

List:

1946 - ENIAC (Electronic Numerical Integrator and Calculator) is completed
1947 - The first transistor is built at Bell Labs
1959 - The Integrated Circuit is invented by Jack Kilby and Robert Noyce
1965 - Gordon E. Moore gives us Moore's Law
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