EDUCATIONAL SOFTWARE FOR MATH AND SCIENCE

(1) General Software Review  Review four or more software titles in math or science. Write a paragraph describing each program and your professional opinion concerning its usefulness in education.

<table>
<thead>
<tr>
<th>Title</th>
<th>Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 World of Warcraft</td>
<td>An online game that creates a fantasy role-playing game in which economics with a real supply and demand takes place as well as a user-created bartering system. Group play is needed and therefore teamwork is reinforced.</td>
</tr>
<tr>
<td>2 Celestia</td>
<td>Celestia is an astronomy program that simulates movement through the universe. I feel that this program offers many valuable opportunities to study heavenly bodies in a very unique way.</td>
</tr>
<tr>
<td>3 DC Circuits</td>
<td>DC Circuits is a program that lets you build simple circuits using batteries, switches, and resistors. It simulates the building of a circuit and would be a useful tool to teach the concept of electricity.</td>
</tr>
<tr>
<td>4 Sim City 4</td>
<td>A computer game that I feel helps to teach the concept of development of cities. This includes understanding of geography, learning how the geography is planned out to suit developing cities, and the money that is needed to make these changes.</td>
</tr>
</tbody>
</table>

(2) Formal Software Reviews  Select the best for formal review and presentation to the class (see form below).

(3) Formal Presentation of Software: See newsgroup for details. Include title(s) of software presented.
SOFTWARE REVIEW #1

World of Warcraft

by
Blizzard

(1) DESCRIPTION OF PROGRAM (Paragraph) •

World of Warcraft is an online game that creates a fantasy role-playing game in which economics with a real supply and demand takes place as well as a user-created bartering system. Group play is needed and therefore teamwork is reinforced.

(2) BASIC INFORMATION
   (a) Title World of Warcraft
   (b) Publisher Blizzard
   (c) Cost $34.99
       (Order a catalog from Microwave/Macwarehouse, CD-ROM Warehouse (1-800-237-6623); Educational Resources (1-800-624-2926); Fast-track (1-800 927-3936).)
   (d) ___shareware ___freeware ___commercial

(3) TARGET POPULATION
   (a) Is this designed for ___ teachers or ___ students to use ?
   (b) If students, in what subject and at what grade level ? Economics, 8th+
   (c) Where would this best fit into the curriculum?
       1. Subject • math
       2. Grade level • 8+
       3. Academic ability • all abilities
   (d) Would this software maintain the interest of this population. Explain.
       • As a video game, I believe that all students have somewhat of an interest in it. I feel that there is educational value in this game, if applied correctly. It provides a “real” world situation in which economics takes place and is not formulated, but is actually created.

(4) CONTENT GOALS
   (a) What, if any, concept(s) does this program introduce ?
       • economics, supply and demand
   (b) How effective of a job does it do at teaching these concepts?
       • depends on the ability of the student
   (c) Compare with traditional techniques for teaching this concept(s). (What, if anything, does this software accomplish that traditional forms of instruction could not do as effectively. Explain)
       • This software is not comparable to traditional techniques

(5) PROCESS GOALS
(a) **What type(s) of reasoning does this program encourage** (rote memorization, comprehension, application, analysis, synthesis, evaluation, deduction, induction, etc.)?
   - It promotes comprehension, application and deduction.

(d) **Compare with traditional techniques for stimulating these reasoning skills.** (What, if anything, does this software accomplish that traditional forms of instruction generally do not do as effectively. Explain)
   - I feel that this software presents a dynamic way into which to approach these different reasoning skills.

(5) **LESSON PLAN.** Write three specific tasks, questions, goals, or projects that you would have your students accomplish or answer after using this software.

   (a) • What difference did you see in prices between the weekdays or weekends on specific items?

   (b) • What do you think caused these differences? Do you feel it was based on supply or demand?

   (c) • What would happen if there was a sudden rarity of a certain item?

(6) **SUMMARY** Assuming that you had access to this software, would you use it in your classroom? Explain why or why not.

   - I would definitely use this software, however the requirements for this program make it almost impossible to make this happen. I feel that this program gives you an ability to explore concepts in real life without any of the consequences. Also it is dynamic.
SOFTWARE REVIEW #2

Sim City 4

by

Maxis

(1) DESCRIPTION OF PROGRAM (Paragraph)

A computer game that I feel helps to teach the concept of development of cities. This includes understanding of geography, learning how the geography is planned out to suit developing cities, and the money that is needed to make these changes.

(2) BASIC INFORMATION

(a) Title • SIM CITY
(b) Publisher • Maxis
(c) Cost $29.99
   (Order a catalog from Microwave Appleware/Macwarehouse, CD-ROM Warehouse (1-800-237-6623); Educational Resources (1-800-624-2926); Fas-track (1-800-927-3936).)
(d) ___ shareware  ___ freeware  ___x_ commercial

(3) TARGET POPULATION

(a) Is this designed for ___ teachers or ___ students to use?
(b) If students, in what subject and at what grade level? Geography, history, 8+
(c) Where would this best fit into the curriculum?
   1. Subject • science, history
   2. Grade level • 8+
   3. Academic ability • all abilities
(d) Would this software maintain the interest of this population. Explain.
   • I feel that the ability to create your own civilization is always interesting to anybody. However, I feel that this provides a unique learning opportunity to students.

(4) CONTENT GOALS

(a) What, if any, concept(s) does this program introduce?
   • The concept of geography in its relation to city building.
(b) How effective of a job does it do at teaching these concepts?
   • I feel that it does an excellent job in giving students a dynamic learning experience.
(c) Compare with traditional techniques for teaching this concept(s). (What, if anything, does this software accomplish that traditional forms of instruction could not do as effectively. Explain)
   • It provides students with the opportunity to actually build their own city and change geographical features.
(5) PROCESS GOALS
(a) What type(s) of reasoning does this program encourage (rote memorization, comprehension, application, analysis, synthesis, evaluation, deduction, induction, etc.)?
• comprehension, analysis, evaluation

(d) Compare with traditional techniques for stimulating these reasoning skills. (What, if anything, does this software accomplish that traditional forms of instruction generally do not do as effectively. Explain)
• It gives the students the ability to apply these reasoning techniques to a changing situation which requires them to not only act, but to act quickly and efficiently.

(5) LESSON PLAN. Write three specific tasks, questions, goals, or projects that you would have your students accomplish or answer after using this software.

(a) • What geographical features need changing to start the building of your city?

(b) • What geographical features are most important to your city? How do you think this applies to real cities?

(c) • What is the most cost effective way to manage water in your city? Did you find that the location of your city helped to manage the cost?

(6) SUMMARY Assuming that you had access to this software, would you use it in your classroom? Explain why or why not.
• Yes I would. I feel that it could be used to help explain biomes and geographical necessities for civilization.
SOFTWARE REVIEW #3

(1) DESCRIPTION OF PROGRAM (Paragraph)

(2) BASIC INFORMATION
   (a) Title  
   (b) Publisher  
   (c) Cost $  
      (Order a catalog from Microwarehouse/Macwarehouse, CD-ROM Warehouse (1-800-237-6623); Educational Resources (1-800-624-2926); Fas-track (1-800 927-3936).)  
   (d) ____shareware  ____freeware  ____ commercial

(3) TARGET POPULATION
   (a) Is this designed for ____ teachers or ____ students to use ?  
   (b) If students, in what subject and at what grade level ?  
   (c) Where would this best fit into the curriculum?  
      1. Subject  
      2. Grade level  
      3. Academic ability  
   (d) Would this software maintain the interest of this population. Explain.

(4) CONTENT GOALS
   (a) What, if any, concept(s) does this program introduce ?  

   (b) How effective of a job does it do at teaching these concepts?  

   (c) Compare with traditional techniques for teaching this concept(s). (What, if anything, does this software accomplish that traditional forms of instruction could not do as effectively. Explain)

(5) PROCESS GOALS
   (a) What type(s) of reasoning does this program encourage (rote memorization, comprehension, application, analysis, synthesis, evaluation, deduction, induction, etc.)?

   (d) Compare with traditional techniques for stimulating these reasoning skills. (What, if anything, does this software accomplish that traditional forms of instruction generally do not do as effectively. Explain)
(5) LESSON PLAN. Write three specific tasks, questions, goals, or projects that you would have your students accomplish or answer after using this software.

(a) •

(b) •

(c) •

(6) SUMMARY Assuming that you had access to this software, would you use it in your classroom? Explain why or why not.