Proposal
Simulation in Global Warming
(This one received a grade of B)

Proposed Course Title: GLOBAL WARMING

Course Description: Set in a small village in Ohio, population 600 that has been in existence since 1851. The village is fairly self-sufficient with groceries, restaurants, water treatment plant, and school. A major source of revenue comes from agriculture and all available land is utilized in crop and livestock production. The power company supplies various fossil fuels (coal, natural gas, petroleum) to all residents, businesses and the school. The area is also home to the county’s landfill and has been for generations.

This is supposed to be the description of the course for which the simulation is a method of instruction used. You have described the simulation.

Course Justification: Global warming has become a major topic of controversy and as such will continue to have major impact statements on the living environment. Additionally the strain put on existing resources (land, energy, food supplies, fresh water, etc) from a growing population has further reduced the possibility for the world to continue providing for all mankind. As such the federal government has tasked communities with taking a hard look at what measures they can implement to curb pollution and energy waste. Students will have already been introduced to sources of energy, biotechnology, and associated environmental issues as part of the class.

Again, this is supposed to be the reasons why the COURSE is being offered, not the simulation.

Target Audience: This simulation would work well with a group of 20 students and no more than 25. There would be 5 groups with 4-5 participants and an elected spokesperson in each group. The students (participants) need to be at least seniors in high school where this could serve as a final project. I also could see this being used in a general education technology course at the college freshman level.

Target audience should be limited to describing the students. “High school seniors who are enrolled in . . .???? or college students taking a freshman-level general education technology course.”

Justification for using technology-based training: This will be done solely with written material supplied to the participants.

Description of the simulation:
Type: This simulation will be a social system multi-agenda simulation designed to increase student awareness of environmental issues and of the political decision making processes.

Scope: From this simulation, participants will engage in communicating, problem-solving, critical thinking, and decision-making skills. Working in and with groups is a major theme to this project as is consequences resulting from a political groups decision. Presenting evidence and supporting data is also a skill being developed. Participants will be exposed to new technologies being developed that seek to solve man-made environmental issues. Participants will be provided enough data from controller to present their positions and will hopefully do additional research on their own prior to presenting these positions.

Learning Objectives:
Define Global Warming.
Name five contributors to Global Warming.
Describe the impacts on social communities following political policy decisions.
Organize information from a variety of sources.
Prepare evidence to support a position.
Formulate and defend ideas in a public forum.

Framework:
Problem/Scenario
The federal government announced that is was requiring that all incorporated communities develop an implementation policy for reducing energy waste and pollution of the environment. Communities were given six months to submit their programs; failure to do so and the government will stop all monetary aid and possibly introduce their own measures.

Let’s research this a get a federal law in which local communities receive funding, or point out that the President recently signed into law the “Local Environmental Planning Law” which requires submission of the plan before they will receive federal environmental funds.

Participant Roles:
City council - this group will hear arguments and proposals from all parties and ultimately make a decision on what actions the town will take based on the data it is presented.

Power Company - opposes any measures that will require modification or improvements to existing plant operations that are not of their own innovation.

Citizen Action group - will present arguments for the power company to change its current structure based on data from other locales and environmental impact statements it as paid for.

Lobbyist group - has the power company's interest at heart, will attempt to sway any council decision in favor of power company and discredit any scientific research or statements from consumer group

Scientist - will present research data that has been tabulated from within the scientific community concerning the causes of global warming
Staff Roles:
The controller - will focus on introducing any data that the students do not obtain concerning news reports and findings on this topic, inputs will not be biased and will be presented to both the advocates and the lobbyists. The main focus of the controller (teacher) is to ensure attention and direction remains on the topic and the impending resolution.

Anticipated events: The setting will be a town hall meeting with all groups present. Two weeks ago at a town hall meeting the council, energy company and citizen group met and scheduled this meeting requiring proposals be submitted and discussions started on courses of action. That meeting concluded with the agreement that the energy company and citizen group submit proposals to the council in a week, this was done and discussions will now be held as to the course of action to take. The lobbyist, power company, scientists, and citizen group will each be given 15 minutes to present their evidence/findings in support of the proposal they endorse. Each group will have been provided data from the controller as to what points/issues to address.

Projected sequence: Following discussion period the council will have a scoring sheet to score elements from the proposals and reach a decision as to the direction the town will take. The controller will introduce material that may or may not be true to add to the turmoil the council should feel. The council’s decision is final.

I wouldn’t give them a scoring sheet. I’d let them develop any system they want to devise, if any, to evaluate what action they would take. Make it real!

Also, I was looking for the sequence of planned events or problems the learners would face as the simulation progressed.

Consequences:

If the council votes to do nothing the federal government does indeed cut off aid and decides that the village is not large enough to justify expending the money needed to resolve all the environmental issues. The town folds in 3 years.

If the council votes to go with the citizens proposal the power company cuts jobs, raises the utility rates and not only are the residents of Kyle Drive displaced but all residents of Williams St, Osbun St, and N Elm St will also be impacted, and this is where the influential members of town live.

If the council votes to go with the power company’s proposal property taxes and sales taxes are increased to fund the bioremediation and ash-recycling center.

I don't understand these consequences. They don't seem real to me.

What I’d do is have position papers for each group outlining what general goals they have. Let them develop the reasons they want this.
I think the consequences: I’d have a number of blank consequences and have these ready for controller responses to be issued based on realistic responses to actions the groups take.