

Who Decides?

PROCESS OBJECTIVES: Students will develop their problem solving, communicating, and decision-making skills by:

1. exploring the decision-making process used in the community for planning land use and land regulation;
2. solving several hypothetical problems concerning the land use planning and land regulation processes within their communities;
3. using their local land use planning agencies to answer several questions concerning differences between public and private land use.

CONTENT OBJECTIVES: 3, 5, 10, 12

SETTING THE STAGE

Land use planning is the process of shaping the use of land for different purposes, based on the needs and resources of the area and the characteristics of the land. It can be considered an attempt to predict the future and plan the best use of land to accommodate future needs and growth. Most communities have some kind of system, such as a city plan, a set of zoning regulations, or ordinances prohibiting or permitting certain kinds of activities. This system may regulate how land is used, where parks and factories can be located, or where highways can be built. Because the land available to meet the needs of an increasing population has remained the same, the demands placed on it have increased, and thus comprehensive land use planning has become more important.

To help your students learn some of the ways they use land, guide them in listing the services and places their families use, such as grocery stores, clothing stores, electricity, playgrounds, telephone communication, swimming pools, factories, dentist offices, libraries, hospitals, and roads. Students could also gather pictures and show these places on a collage. These questions may help them start thinking about land uses:

1. What recreational facilities do you use?
2. Where do your parents work?
3. Where do you shop?
4. What items do you own? Where did you get them? Where do you take them for service?
5. Where is your food grown?
6. Where do you live?
7. Where does your electricity come from? How does it get to you?
8. Where is your water obtained and/or purified?

When your students have an extensive list of places, work with them to group the items on the list into categories. Your students will probably suggest zoning categories such as commercial, industrial, and recreational.

If you can, take a short walking tour of the area right around the school. This can be particularly effective in urban areas. Do you see a variety of land uses? How does the location of the school relate to the adjacent



Teacher Instructions

land use? Now your students are ready to explore the land use planning process within your community.

PROCEDURE

1. Explain to your students that they will be contacting local agencies to find out the answers to land use questions. These county or municipal offices are responsible for making decisions that many people don't think about but are very important in our daily lives.
2. Assign each of your students one of the problem questions listed below. (This is not an exhaustive list. The class may be curious about other aspects of community services and regulations, and students may want to answer their own questions, as well.)
 - a. How many building permits were listed last month in your community/county? How many were commercial? What agency issued these permits?
 - b. How many fire hydrants are in your community/county? Where did you find out how many there are?
 - c. How many sanitary landfills are in your community? What agency manages them? What company or agency collects the garbage that goes into the landfills?
 - d. How many sewage treatment plants exist in your community/county? Are the treatment plants in compliance with Federal regulations? Are they adequate to serve the community's needs?
 - e. Which land use category (residential, commercial, industrial, agricultural, etc.) covers the largest land area in your community/county?
 - f. How many zoning categories are there in your community/county?
 - g. How many parks are in your community? What agency is responsible for managing them? Where are the parks located? Are they evenly distributed throughout the community?
 - h. How many members sit on the zoning board? Are these zoning board members appointed, elected, or paid employees?
 - i. How many public buses are owned by your community/county?
 - j. How many miles of county-maintained roads exist?
 - k. How many miles of city/community-maintained roads are there?

- l. Is there a community/county land use plan in existence? Where was it written?
 - m. Is there a planning commission in your community? Is it different than the zoning board? How many members are on the planning commission? Are these members appointed, elected, or paid employees?
 - n. How early can construction workers start using noisy equipment in your community? Who enforces this regulation?
 - o. At what hour can telephone, gas line, or other utility repairmen start working in residential areas?
 - p. How early can airplanes start taking off and landing at the nearest airport? How late can they operate?
 - q. What does the "hospital zone" sign mean to trucks?
 - r. What citizen action committees or organizations exist in your community?
3. Allow your students plenty of time to gather the answers to these questions. Some suggestions for making their contacts are included in the **CLASS Project Introduction**.
4. When students have gathered their information, have them share the processes they went through to answer their questions with the rest of the class.
- a. Who had to call or contact the most people before getting the needed information?
 - b. Which student had the most difficult time obtaining the information?
 - c. Who had the easiest time?
5. Once the questions from Procedure #2 have been answered, use them to make an organizational chart of the planning system in your community. You can then use the chart to follow zoning variances and building permit requests through the approval system and to show the relationships among the various agencies responsible for land use planning in your community. You should also be able to use the chart to identify the steps in the process where citizen action is most effective.
6. Now that your students have gathered information about their local planning authority, they should explore the impact land use planning has on private rights. People have traditionally been able to do almost anything they wished with their land, but this is no longer true in some places. Your students should solve the problems below, using the information they have gathered and the agencies they have identified to help them find the answers. (They may want to change the problems slightly to make them more specific to your own community.)
- a. A man who owns land in a residential section of town wants to build a fast-food restaurant on the land. Can he do it?
 - b. A cattle rancher owns land close to a small group of homes. The smell from his feed lots is bothering the residents. What can they do about it?
 - c. A developer wants to build a small apartment building on the lot next to your home. You are afraid it will lower your property value. Can you legally stop or change the developer's plans?
 - d. You bought a house on a hillside because it has a wonderful view of the river valley below. Recently, construction was started on a highrise apartment building just down the hill that will obscure your view of the valley. Can you legally stop or change the plans?
 - e. The local electric company plans to build a nuclear power plant in your community. Citizens do not want it there. Can they stop the construction?
 - f. Your city is growing rapidly and your street is now being used by commuters to get to work. It is noisy and dangerous for young children. Can the residents do something to stop the use of the street by commuters?
 - g. The State Highway Commission is building a new highway and has bought most of the houses and lots on which the highway will be built. One family does not want to sell and has refused the state's offer. Who has the legal right to determine the land use—the state or the citizen?
 - h. The county wants to widen your street to a four-lane road because of increased traffic congestion. You don't want the street widened because it will increase the danger to the children in your neighborhood. What can you do?
 - i. The county wants to sell some land which was supposed to be developed as a public park. The local citizens want the land to remain county property and to be developed as a park. Can they stop the sale?

SUMMARY

1. What amount of influence do students think the private citizen has on land use decisions, especially regarding his or her own land? ►What concessions must one make when he or she lives in a heavily populated area? In a small community?◄
2. Which agency is most influential in planning land use within your community?
3. What environmental issues were identified having to do with land use planning in your local community? What special interest groups have become involved in the issues?
 - How easy or difficult is it for the individual citizen to have input into land use decisions in your community? Could the process for citizen input be improved, and if so, how?

A Look At Conflicting Viewpoints



Teacher Instructions

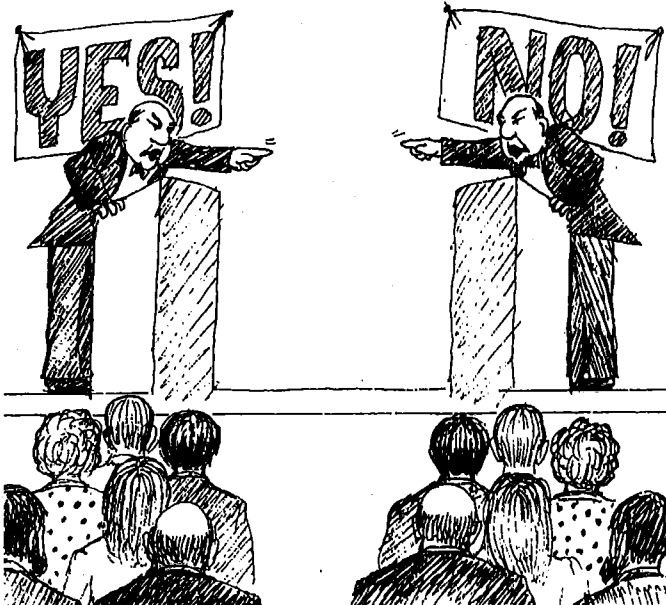
PROCESS OBJECTIVES: In this investigation your students will develop their data collecting, measuring, analyzing, inferring, valuing, and communicating skills by:

1. researching the nuclear power issue;
2. learning to distinguish between facts and opinions;
3. developing campaigns for and against the use of nuclear power;
4. analyzing results of a schoolwide referendum on nuclear power.

CONTENT OBJECTIVES: 3, 4, 6

SETTING THE STAGE

Only a few years ago nuclear power seemed to be the answer to our energy needs, while today its opponents and proponents are locked in a sometimes confusing and often emotional battle over its use. The controversy stems from questions about the safety of nuclear power plants and the problems of radioactive waste disposal, issues about which even nuclear scientists disagree. In this issue, as in others that are complex and emotionally charged, people can sometimes assert their opinions with such authority that their audiences may accept them as facts, rather than examining them critically. Learning to distinguish among facts, opinions, and opinions stated as facts will be important to your students as they conduct their investigations into the nuclear power issue. Facts will not lead the audience to any particular set of values or judgement. They are neutral regarding issues, and will usually simply enumerate things. Opinions, on the other hand, express conclusions which may have been drawn from facts. They will definitely lead the audience toward a point of view.



Ask your students whether the following statements are facts or opinions. If there is disagreement among students, examine the statements carefully to discover whether or not they are opinions being disguised as facts.

1. "In 1978 nuclear energy produced nearly 300 billion kilowatt-hours of electricity." (fact)
2. "I believe we need nuclear power to supply our electricity needs." (opinion)
3. "One-fourth to one-third of the fuel rods in a nuclear plant are replaced once a year." (fact)
4. "I think nuclear power plants are not safe to operate." (opinion)
5. "Recent increases in our electric power consumption point to the need for nuclear power to meet our needs." (opinion stated as fact)
6. "Over seventy nuclear power plants are licensed to operate in the United States today." (fact)
7. "We have the scientific and technological knowledge to proceed with the development of nuclear power plants." (opinion stated as fact)

Your students should also be aware that advocates of certain sides of issues often do not directly address the areas that opposing groups disagree with them about. For example, if one group complains that nuclear power plants overheat the water they use, while another group replies that they do not pollute the air, the second group has sidestepped the first group's issue. It is therefore important for students to be able to analyze literature from different groups to learn where questions can be asked and where flawed reasoning may appear.

Ask your students if in their travels they have seen advocates of different issues distributing their literature and trying to persuade passers-by to adopt their points of view. Let them know that in this investigation they will be conducting a similar campaign in the school. They will distribute both pro- and anti-nuclear information to students and teachers in the school. After a two-week campaign, the entire school will vote

on whether or not nuclear power should be used as a source of electricity. Let them know that similar referendums are being raised for ballot in some states in the United States.

PROCEDURE

1. Divide your class into two groups, pro-nuclear and anti-nuclear. Try to put students who are already predisposed toward one or the other side of this issue on that particular side.

2. Each group should develop its own point of view by collecting information from organizations and magazines including those listed below (addresses are listed in **Digging Deeper**).

- a. *National Geographic*, April 1979—"The Promise and Peril of Nuclear Energy"
- b. *Newsweek*, April 9, 1979—"Atomic Plant Safety: The Big Questions"
- c. *Newsweek*, April 16, 1979—"Nuclear Power on the Ropes"
- d. *Newsweek*, October 15, 1979—"More Nuclear Woes"
- e. *Time*, April 9, 1979—"Atomic Power's Future"
- f. *Time*, April 16, 1979—"Looking Anew at the Nuclear Future"
- g. Environmental Action Foundation
- h. The Sierra Club
- i. Union of Concerned Scientists
- j. Edison Electric Institute
- k. Nuclear Information and Resource Center
- l. Natural Resources Defense Council, Inc.
- m. Nuclear Regulatory Commission

3. Each group should then prepare literature and posters for its campaign. The groups should first prepare an information bulletin for other teachers and students, telling them that a vote will be held in two weeks on the nuclear power issue. Within the two-week period, information about nuclear power will be distributed to all teachers and students.

4. During the two-week "campaign," students should distribute their pro- and anti-nuclear leaflets and con-

duct their campaigns for or against nuclear power. Let their imaginations guide them to ways to conduct their campaign. Some groups might make posters or send students to talk to other students during lunch and other free periods, while others may want to be more ambitious in their efforts.

5. The emotions of many people run high when discussing nuclear power. Your students may find they will be subjected to "emotional attack" from others during their campaign. Prepare them for this by discussing or role-playing various responses to possible emotional scenes. Also make sure that other teachers understand that students are supporting the side of the issue they have been assigned and may not necessarily agree with their roles.

6. At the end of the two-week period, your class should prepare ballots for all students and teachers in the school and distribute them to each teacher. The results of the referendum could be announced over the school public address system.

SUMMARY

When your class campaign has been completed, ask your students how they feel about the process. These questions may help:

1. How does the literature prepared by pro and anti groups present facts and opinions?
2. Does the class feel there are any unresolved issues about nuclear power and its use? If so, what are they?
3. What alternatives to nuclear power are being suggested by groups who do not want it to be used as a source of energy?
4. What groups or industries are supporting the use of nuclear power? ▶Why are they supporting it?◀
5. What groups are against the use of nuclear power? ▶Why are they against it?◀
6. As a result of the campaign, have any of the students changed their points of view about nuclear power?

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