This lesson plan features a classroom simulation that helps students understand the characteristics of a market economic system. The lesson plan states a purpose; cites student objectives; suggests a time duration; lists materials needed; and details a step-by-step teaching procedure. The "Paper Airplane Challenge" handout is attached. (BT)
The Paper Airplane Challenge: A Market Economy Simulation Lesson Plan

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The Paper Airplane Challenge: A Market Economy Simulation

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Purpose:
Students will have the opportunity to participate in a simulation that enable them understand the characteristics of a Market Economic System.

Objectives:
Students will be able to:

- define the term “Market Economy” and identify a variety of vocabulary associated with the definition.
- list advantages and disadvantages of the current type of economic system used in the United States.
- evaluate the level of government intervention currently found in the American form of a Market Economy.

Time:
The simulation and the debrief take approximately one class period of 55 minutes.

Materials:
- Hula-Hop
- Large quantity of paper (preferably recycled handout)
- A market for each team
- Overhead of the Rules
- A roll of tape to mark the boundaries

Procedure:

1. Class begins with the following Bell-Ringer: What is a Market Economy? After a few minutes, we have a short discussion on the question. I try to illicit key terms, concepts, etc. relating to markets. I then announce that we are going to do a simulation, which will at first appear more like a game, to help us understand this concept more in-depth.

2. The class is divided into three or four teams depending on class size. Group sizes of about 6-7 is ideal. The object of the game is to win. This is
accomplished by being the team(s) with the greatest number of paper airplanes through the hula-hop at the end of the game. One team member will be chosen to throw the planes, one team member will be chosen to hold the boundary and count their team members' planes. All other team members are available to do whatever task is necessary to win the game.

3. I then reveal the overhead with the objective, rules, and time guideline of the "Paper Airplane Challenge." A smaller version of the overhead is attached.

4. I answer any final questions and then begin the simulation. During the simulation, walk around to the different groups and observe what methods they are using, for example: an assembly line, all for one, etc. Listen for comments from all the players and all the teams.

5. After the simulation has ended, round everyone up and make sure that it is absolutely silent. After everyone is seated, ask each group how many of their planes "flew" through the boundary. Begin this by asking everyone on the team except for the counter and the person who threw the planes. More than likely only the person who threw the planes and the counter know the correct number (a by-product of specialization). Do this with each group and then declare a winner(s).

6. Begin to debrief the simulation with the following question: "Why didn't each group design one perfect plane, make it, and throw it through the boundary? Three minutes was surely enough time for that." Responses will range from, "We wanted to win," to "competition," etc. Record the responses on a piece of flip chart. Also, add in the observations that you made while watching and listening to each group. At the end of five minutes you will have a list of adjectives that describe a market economy. For example: competition, losers and winners, specialization, assembly line, marginal returns, research and design, quality, quantity, etc. Clarify any confusing terms and then add a few more and ask for their definition.

7. Ask if anyone can give a definition of a market economy. Reveal the definition written under the words "Market Economy" on the flip chart at the front of the room. "A Market Economy is a type of economic system where supply and demand regulate the economy, rather than government intervention." You need to double check for understanding of the definition. Stress that the United States is not a "pure" market economy. Government intervention is inherent because we are a democracy, ruled by the people through representation...not ruled by the market.
8. Have the students list advantages and disadvantages to the U.S. form of a market economy. Responses will include: Advantages = competition, increased quality, money spent on R&D, etc.; Disadvantages = only those with resources can participate, the income gap, etc. Discuss the responses given and to what extent they affect the students directly and indirectly.

Debrief and Wrap:

Due to the design of this workshop, the debrief takes place throughout the workshop. That leaves a few options for the final wrap. You can choose to address all of the sections at the end of the workshop, or debrief more in-depth as the workshop progresses and then let the debrief continue into notes on the Market System. Either way, the following topics need to be addressed:

- What was the purpose of the Paper Airplane Challenge? In what ways was it an effective tool to demonstrate a Market Economy and in what ways does it differ from the actual situation?

- We listed a variety of advantages and disadvantages concerning a market economy are government intervention the only way to achieve the advantages and solve the disadvantages? What other options are there?

- Relating back to question number two, speculate on how effectively a different type of economic system (traditional or command) would deal with the advantages and disadvantages?
Paper Airplane Challenge

Object: The team or teams with the greatest number of airplanes through the hoop wins.

Timetable: Each team will have five minutes to design their “ideal” airplane(s). All planes manufactured during this time cannot be used when the competition begins. After the R&D time is over, the game will begin. Each team will have three minutes to make and throw as many airplanes as they can through the hoop. After three minutes the game is over. The winner is the team or teams with the greatest number of airplanes through the hoop.

Rules:

- Only one person may throw the airplanes.
- That person must be behind the line in order for the plane to count.
- Each plane must have the team number on it.
- The plane must resemble a plane (two wings, and a nose).
- Paper balls do not count.
- When the game is over, you must immediately return to your seat, sit quietly and wait for instructions.

A violation of any rule will lead to disqualification.
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