Deconstructing Supply–What Makes a Supply Curve?

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SUBJECT(S): Economics

GRADE LEVEL(S): 9, 10, 11, 12

OVERVIEW:

In this lesson, we will look in depth at the supply curve. In particular, students will look at the role of marginal cost in creating a demand curve, and the inputs that create a marginal cost curve. Students will use the article “Career Insider: Fashion Buyers Play by the Numbers” to think about the supply curve for a fashion designer, or other clothing business.

NBEA STANDARD(S):

- Economics, I. Allocation of Resources
- Economics, IV. Markets and Prices

RELATED ARTICLES:

- “Insights from the Fall of Aleppo”
- “Exploring the Economics of Everyday Life”
- “Educator Toolkit: Energy Economics”
- “Career Insider: Fashion Buyers Play by the Numbers”

Common Core Standard(s):

- Mathematics (N-Q), “Reason quantitatively and use units to solve problems”

Objectives/Purposes: The purpose of this lesson is for students to understand where Supply curves come from.

- Students will be able to define *marginal cost.*
- Students will think about fixed costs and variable costs.
- Students will understand how inputs affect supply.
- Students will think about how inputs and marginal cost affect the supply curve.

Other Resources/Materials:

For Teachers:

- Internet Access (Outside of the Classroom)
- Printer/Copier
- Access to Chalkboard/Whiteboard
- Chart Paper
- Markers

Activity:

The lesson is divided into five parts: (1) Introduction, (2) Guided Reading, (3) Class Discussion, (4) Exploration Activity, and finally (5) Closing

1. Introduction (10-15 mins)

Start this lesson by immediately breaking students into groups of 3-4 students. Each group will think of a business or company that they want to be in charge of (e.g. a clothing store, a restaurant, a retail electronics store, etc.)

Give each group 3-5 minutes to think of all of the *costs* that their business will face. What are all the expenses? What kinds of things will you have to pay for? Have students write down their costs on a large piece of chart paper.

Briefly let each group share their list with the rest of the class.

Next, define the term “fixed” and “variable” cost. A “variable” cost is a cost that changes as you produce more or less of a product. For example, if you are selling clothes, a variable cost would include fabric. The cost of fabric increases as you produce more clothing (because you need more fabric to make more clothes). A “fixed” cost is a cost that doesn’t change with your rate of production. For example, a sewing machine. No matter how many shirts or pants you make, you only need one sewing machine. The cost is fixed.

Give students another 3-5 minutes to go over their lists a second time—this time marking each cost on their list as *fixed* or *variable.* Again, have the groups share out.

2. Guided Reading (5-10 mins)

Next, have students read through the article, “Career Insider: Fashion Buyers Play by the Numbers.” As students read, encourage them to make another list, this time detailing the costs (or inputs) associated with fashion design.

3. Class Discussion (1-5 mins)

Once students have finished reading, encourage students to briefly summarize the article. Again, ask students to share their lists with one another—either in pairs, or as an entire class.

Use this article to start interrogating students’ understanding of supply curves. For example, “What happens to supply when the price increases? Why? Is there a limit to how much a clothing maker will supply? What are the limits?” Throughout this discussion, push students to think about the relationship between cost and supply. In economics, supply is governed by *marginal cost. Marginal cost* is the cost of producing one additional unit of a product. Economic theory suggests that companies will continue to supply goods as long as the sale price is greater than (or equal to) marginal cost. As students are thinking about the limits on supply, encourage them to think about cost. Eventually, present them with the idea of marginal cost, and get their reactions.

4. Exploration Activity (10 mins)

With the remaining time, have students work in groups on the attached worksheet. This worksheet is a more in-depth and quantitative example of the relationship between price and marginal cost.

After students work, briefly go over the worksheet together.

5. Closing (1-5 mins)

Close the discussion by reminding students that there are many different costs associated with doing business: raw materials, labor, capital, etc. Economists break these costs into fixed and variable costs. Economic theory suggests that suppliers will continue to supply their products as long as their marginal benefit exceeds their marginal cost.

Practice Outside of the Classroom:

Outside of the classroom, encourage students to think about the goods and services they provide to others. What are the costs involved? Which ones are fixed? Which are variable? How do these costs (monetary and non-monetary) affect students' willingness to supply their goods and services?

What Worked and What I Would Do Differently:

As you distinguish between fixed, variable, and marginal costs, it can be helpful to work through multiple examples. In my classes, we looked at everything from lemonade stands, to automobile factories, to restaurants. As you go through each example, have students make a list of ALL costs. Next, have the students label each cost as fixed or variable, then talk about the relationship between variable costs and marginal costs.