

Balancing Acts – Finding Equilibrium Price

SUBMITTED BY: Michael Ryan Moore, University of Pennsylvania, GSE

SUBJECT(S): Economics

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

≡ OVERVIEW:

This lesson uses students' knowledge of supply and demand curves to explain equilibrium prices. Using the Wharton Global Youth Program article "How Much Did You Spend on Prom?," students will consider what happens when markets face excess supply and excess demand. In particular, students will take on the role of small business, calculating earnings and losses at different prices.

≡ NBEA STANDARD(S):

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

≡ RELATED ARTICLES:

- ["Insights from the Fall of Aleppo"](#)
- ["How Much Did You Spend on Prom?"](#)
- ["Career Spotlight: Inside Actuarial Science"](#)

Common Core Standard(s):

- Mathematics (A-SSE), Interpret the Structure of Expressions
- Mathematics (A-REI), Understanding Solving Equations as a Process of Reasoning

Objectives/Purposes: The purpose of this lesson is to understand how *price* emerges from *supply and demand*.

- Students will be able to explain the *laws of supply and demand*.
- Students will be able to define *equilibrium prices*.
- Students will explain why markets tend towards an *equilibrium price*.

Other Resources/Materials:

For Teachers:

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

For Students:

- Copies of [Worksheet 4: Prom Profit](#)

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 (1-5 mins)

Building on the previous lesson, quickly reintroduce students to the concepts of supply and demand. Draw a standard supply and demand graph on the board for students to see (Figure 1). As you draw, remind students of the *law of supply* and *law of demand*. (e.g. Suppliers are happy when they can sell at a high price. Buyers are happy when they can buy at a low price. Supply increases with price. Demand decreases with price).

Figure 1



Once students have a firm grasp on the basics of supply and demand, ask students to think about the role of price. If you are a business, you want to sell your products at a high price. You want to make money. If you are a customer, you want to buy products as cheaply as possible. If both groups want different things, how do they ever settle on a price?

2. Guided Reading (5-10 mins)

Students should read through the article, [How Much Did You Spend on Prom?](#) As students read, encourage them to think about the price of prom. What products are involved? Who are the suppliers? Where does demand come from? What determines the price of these products?

3. Class Discussion (1-5 mins)

Once students have finished reading, ask students to briefly summarize the article. Repeat the guiding questions listed above. Encourage students to share their answers. What products are involved? Who creates supply? Who creates demand?

4. Exploration Activity (15-20 mins)

In this activity, students will learn about *equilibrium prices*. Have students break into small groups. Provide each group with a copy of [Worksheet 4](#).

As students progress through the worksheet, teachers should walk around the room. Feel free to interrupt group work for class demonstrations. (For example, if you notice some groups struggling on a particular problem, bring the class back together. With group input, solve the problem on the board for all groups to see.)

5. Closing (1-5 mins)

Once students have finished the worksheet, ask students to explain their findings. Make sure that students understand what happens when supply is greater than demand, and vice versa. Provide students with a formal definition of *equilibrium price* (e.g. the price at which supply and demand are exactly equal).

Tying It All Together:

Assessment & Extension

During the lesson, use the group activity to measure student understanding of equilibrium prices. Students should recognize that when price is below equilibrium, suppliers can benefit from increasing the price of their goods. Similarly, students should recognize that when price is above equilibrium, suppliers will suffer from surplus — and in turn, will benefit by lowering prices.

What Worked and What I Would Do Differently:

This lesson was polarizing. Some groups loved it. Others did not. For students with a background in algebra, the worksheet should be fairly straightforward; however, I still found it helpful to walk students through the problem step-by-step (after giving them a few minutes of individual work time).

It was also helpful to use the equations as a talking point. Do students think most businesses could really create an equation for their supply and demand? If not, why even bother with supply and demand curves? How do curves (even without numbers) help us understand the economy.

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