Understanding Utility: How Do We Allocate Resources?

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SUBJECT(S): Economics, Personal Finance

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

\equiv OVERVIEW:

In this lesson, we will introduce students to the concept of utility. Using the article "Baseball's Bottom Line: The Money Behind the Game," we will look at how economists quantify choice. In particular, students will think abstractly about measuring satisfaction, preferences, and choice.

\equiv NBEA STANDARD(S):

- Economics, I. Allocation of Resources
- Personal Finance, I. Personal Decision Making

■ WHARTON GLOBAL YOUTH PROGRAM ARTICLE:

• "Baseball's Bottom Line: The Money Behind the Game"

Objectives/Purposes: The purpose of this lesson is to get students thinking abstractly about utility. Although everyone has experience making choices, we rarely think about our decisions in economic terms. By introducing students to the concept of utility, this lesson will encourage students to think deeply about the relative nature of individual preference.

Students will be able to define *utility* Students will be able to explain how *utility* relates to *price* Students will understand how *utility* relates to *relative preferences*

Other Resources/Materials:

For Teachers:

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

Tying It All Together:

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

Introduction (10-15 mins)

At the beginning of the lesson, the teacher should ask students, "What was the last thing you bought in a store?" After a few responses, the teacher can follow-up, "Why did you buy it?" Again, after a few students respond. "Where there any alternatives?" For example, if a student says she bought a sandwich for lunch, ask her what other options she had. Why choose the sandwich over those alternatives? Often, students will think of immediate substitutes (e.g. comparing a sandwich with another meal or snack). Teachers should validate these answers; however, eventually, teachers should encourage students to think of other things they could have bought with the same amount of money. Why did the students choose their item over something completely unrelated, say, subway tokens or songs on iTunes?

Once several students have answered, the teacher should introduce the concept of *utility*. Economists use *utility* to refer to "satisfaction," or "happiness." An item with high utility brings a lot of satisfaction. An item with low utility brings relatively little satisfaction. At this point, the teacher can ask students to think of examples of high and low utility.

It is important for students to recognize that utility is relative. Have students think back to the previous day's lesson. If I have a refrigerator full of soda, how much satisfaction, or utility, will one more soda give me? If it's sweltering outside, and I haven't had water all day, how much utility will one cold soda give me?

🐯 Wharton 🛛 global youth program

After a short discussion, the teacher can ask students, "How do we measure utility? How do we measure satisfaction?" The teacher can offer up economists' idea of *utils*—an arbitrary unit of utility. How many *utils* is a soda worth? How many dollars? Encourage students to think about utility in terms of price.

Guided Reading (5-10 mins)

After this short class discussion, students should read through the article. "Baseball's Bottom Line: The Money Behind the Game." Prior to starting this activity, the teacher should ask the students to think about it terms of *utility* and the cost of going to a baseball game.

Class Discussion (5-10 mins)

Once students have finished reading the article, the teacher should encourage students to briefly summarize the article. Next, teachers can repeat the guiding question, asking students how the idea of *utility* relates to Major League Baseball revenues.

In order to further discussion, the teacher can ask students about major league sports more generally. For example, how much do food and drinks cost at a professional baseball game? How does this compare to the grocery store? Why do students think this is the case? Depending on students' examples, the teacher can reiterate points from the previous lesson regarding supply and demand.

Exploration Activity (5-10 mins)

After the discussion, have the students break into small groups. Each group will choose a company that they want to manage (e.g. a clothing company, a restaurant, etc.). Ask the students to think carefully about what products or services their company will offer. Then have the group brainstorm how to maximize the utility for their products. For example, what location or what customers would value their products most? Where would they **not** want to open business?

Have small groups report back with their strategies.

Closing (1-5 mins)

Remind students of key takeaways: utility is a measure of individual preferences. Because we cannot measure utility directly, economists use price. The more money someone is willing to pay for something, the larger the utility, or satisfaction, they expect to receive.

Assessment & Extension

Use the Exploration Activity above as an assessment for this lesson. Within their small groups, students should demonstrate knowledge of *relative* utility—the idea that different customers value products differently, depending on circumstances. The more students can differentiate between varying levels of utility, the better.

Practice Outside of the Classroom:

Ask students to find examples of relative utility in their daily lives. What is something that they value that others do not? What is something their friends value, but the students do not?

What worked and What I Would Do Differently: During this lesson, it was helpful to make an explicit connection between *utility* and "cost and benefits." My students were adept at listing the cost and benefits for multiple products/services, which then made it easy to talk about the relative utility of each. During the breakout activity, I encouraged each group to think about how they would create advertisements based on the utility of their products.