# Unlimited Preferences — Defining and Measuring Utility

SUBMITTED BY: Michael Ryan Moore, University of

Pennsylvania, GSE

**SUBJECT(S):** Economics, Personal Finance

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

# **OVERVIEW:**

This lesson introduces students to the concept of utility and marginal utility. Using the article "Behind the Scenes at Urban Outfitters" students will think about the relationship between price and utility. Students will examine their own utility as it relates to clothing and apparel, noting the difference between total utility and marginal utility.

# **■ NBEA STANDARD(S):**

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

# **RELATED ARTICLES:**

- "E-Scooters Rev Up Urban Mobility and Debate"
- "Behind the Scenes at Urban Outfitters"

#### Common Core Standard(s):

Mathematics (N-Q), "Reason quantitatively and use units to solve problems."

**Objectives/Purposes:** The purpose of this lesson is to introduce students to the concept of utility.

- Students will be able to define utility.
- Students will understand that utility is relative.
- Students will understand the relationship between total utility and marginal utility.
- Students will recognize that marginal utility decreases with quantity.

#### Other Resources/Materials:

#### For Teachers:

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

#### For Students:

• Pen

# **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 (5-10 mins)

At the beginning of the lesson, ask students, "What was the last thing you bought in a store?" After a few responses, ask a few follow-up questions, "Why did you buy it?" "Were there any alternatives?" For example, if a student says she bought a slice of pizza for lunch, ask her what other options she had. Why choose the pizza over those alternatives? Often, students will think of immediate substitutes (e.g. another meal or snack). 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, 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. Students can think of *utility* as synonymous with "benefits." Ask students to think of examples of products or services with high and low utility.

### 2. Guided Reading (5-10 mins)

After this short class discussion, students should read through the article "Behind the Scenes at Urban Outfitters." Before handing out copies of the article, give students a few guiding questions: (1) What are the costs involved in running a clothing store? (2) What are the benefits? (3) What are the costs of *shopping* at a clothing store? (4) What are the benefits?

#### 3. Class Discussion (5-10 mins)

Once students have finished reading, encourage students to briefly summarize the article. Feel free to repeat the guiding question, asking students about the costs and benefits to both consumers and producers. Encourage students to think about costs and benefits from multiple perspectives and multiple levels. For example, from the perspective of

- 1. a shopper
- a business owner
- 3. a fabric supplier
- 4. a local neighborhood resident
- 5. a nearby tailor

Make sure students think broadly about the multiple stakeholders involved, and each of their attitudes towards a clothing store.

#### 4. Exploration Activity (15-20 mins)

After the discussion, have the students break into small groups. Provide each student with a copy of Worksheet 2: Decreasing Returns

After students finish the worksheet, have groups report back with their work. Open a dialog about total utility and marginal utility. What is the relationship between utility and price? What happens to utility as you acquire more of a certain item? What would this curve look like from the supplier's standpoint?

# 5. Closing (1-5 mins)

Remind students of key takeaways: utility is a measure of individual preferences. Preferences, however, are always relative. The same object can have different costs and benefits to different people—or even to the same person at different times.

# Tying it All Together:

#### 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 the same person can 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 they themselves do not?

#### What Worked and What I Would Do Differently:

After students finished the worksheets, I encouraged them to draw their graphs on the board. This provided several nice contrasts that helped students work out the larger concepts of the lesson. Even when students disagree, these deviations provide a good lesson. You can stress that preferences are *relative*, that different people value different things, and even the same person can value the same thing differently at different times.

U