

Sunk Costs

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

SUBJECT(S): Economics

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

≡ OVERVIEW:

In this lesson, we will look at the concept of sunk costs. In particular, students will compare “rational” economic decision-making to “irrational” commitment to inefficient outcomes. Using the article “Strong Leaders Encourage Dissent, and Gain Commitment,” students will take time to reflect on their own experiences with sunk costs. Finally, students will look at several economic rationalizations, classifying each as “economically rational” or not.

≡ NBEA STANDARD(S):

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

≡ WHARTON GLOBAL YOUTH PROGRAM ARTICLE:

- [“Paying for College: Why the Money Issue Is a ‘Big, Big Deal’”](#)

Objectives/Purposes: The purpose of this lesson is for students to understand the concept of sunk costs.

- Students will be able to define *sunk costs*.
- Students will understand why economic theorists devalue sunk costs.

- Students will consider whether “ordinary” people behave with “perfectly rationality” as defined by economists.

Knowledge@Wharton Article: [“Strong Leaders Encourage Dissent, and Gain Commitment”](#)

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) Individual Writing, (4) Exploration Activity, and finally (5) Closing

1. Introduction (10-15 mins)

Begin this lesson by providing students with several hypothetical scenarios. In each scenario, students will choose between two mutually exclusive options. Throughout this question-and-answer period, keep track of student responses on the board.

1: Katrina has spent all morning working on a painting for her school’s upcoming art show. After nearly 4 hours of work, Katrina is sick of painting and wants to quit. The painting is due in two hours. Just then, Katrina’s friends call and invite her to a movie.

2: Initech is a large computer manufacturing company. Currently, Initech is trying to decide what to do with one of its old, large warehouses. The warehouse took over \$10 million dollars to build, but it has been abandoned for nearly 5 years. The company can spend \$3 million dollars to renovate the warehouse, or \$500,000 to demolish it.

3: Michael just finished his sophomore year at college. While Michael likes his friends and his classes, he doesn’t know what he wants to major in. Although Michael only has 2 more years

until he earns his degree, those two years will cost over \$25,000 in tuition. Michael has already paid nearly \$35,000 on his degree. Recently, Michael's father has been talking about job openings in a local repair shop. If Michael drops out of school, he can start working at the repair shop immediately.

4: You are on your way to a concert. Tickets to the concert cost \$10. As you leave the house, you grab \$20 and head towards the theater. When you arrive at the ticket window, you realize that somewhere along the way, you dropped a \$10 bill. Do you still buy the concert ticket?

5: You are on your way to a concert. Tickets to the concert cost \$10—but you have already paid. As you leave the house, you grab \$10 and head towards the theater. When you arrive at the ticket window, you realize that somewhere along the way, you lost your ticket. Do you buy another ticket?

With each of these questions, there is no right or wrong answer. Use the questions to encourage students to share their own opinions and institutions.

After going through each of the scenarios, introduce students to the concept of a *sunk cost*. In economics, a *sunk cost* is any cost that has already been incurred and cannot be recouped. Go through some of the examples again, and ask students to name the sunk cost. (e.g. Katrina's time, Initech's \$10 million, Michael's \$35k tuition, and the \$10).

In economics, sunk costs are irrelevant. Because they have *already* happened, they have no bearing on future decisions. For example, it doesn't matter if you spent \$1 or \$1 million on a warehouse. That money is gone. All that matters is the current cost of maintaining it, versus the potential benefit of renovating it, etc.

2. Guided Reading (5-10 mins)

Next, have students read through the article, "[Strong Leaders Encourage Dissent, and Gain Commitment](#)." As students read, encourage them to think about the economists' approach to sunk costs. In particular, ask students if they think it makes sense. Should you forget about sunk costs? Whether or not you should, *do people often forget about sunk costs?*

3. Individual Writing (5 mins)

After a brief group discussion, give students time to write about their own experience with sunk costs. This writing is personal and confidential. No one will read it. It does not need to be shared.

The point of this exercise is just to build awareness about sunk costs and decision-making in students' own lives.

4. Exploration Activity (10 mins)

With the remaining time, give each student a copy of the attached [worksheet](#). Students will work through several examples, deciding whether each is “rational” by economic standards (in this lesson, “rational” decisions are those which ignore sunk costs).

After students work, briefly go over the worksheet together.

5. Closing (1-5 mins)

Close the discussion by reminding students that in economics, the past does not matter. Any money that has been spent is gone. Encourage students to think about the difference between ordinary decision-making and “economic” decision-making. When do the two overlap? When do they not? Is this good or bad?

Practice Outside of the Classroom:

Outside of the classroom, encourage students to reflect further on their own experiences. Have students ever been in a situation where they stick with a bad plan simply because they've invested time and energy in it? Why weren't students able to forget about sunk costs?

What Worked and What I Would Do Differently:

This lesson can be difficult when students fundamentally disagree with the overall takeaway. Many students instinctively value sunk costs. While they understand the concept, they also think it is foolish to “ignore” or “forget” about past investments. Often these feelings are quite strong. Keep these intuitions in mind as you introduce students to the material.