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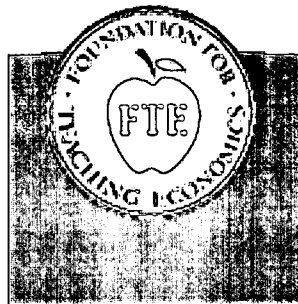
## ABSTRACT

This lesson plan introduces students to the concept of supply and demand by appealing to bodily/kinesthetic intelligences. Students participate in a fitness class and then analyze the economic motives behind making an individual feel better after a fitness activity; i.e., analyzing how much an individual would pay for a drink and snack after a workout. The lesson seeks to develop skills and a comfort level in interpreting economic concepts through graphic analysis. It provides a content objective and a process objective; cites two economics standards; gives background information; lists materials needed; suggests class duration; details an agenda for the lesson; and suggests closure. (BT)

# Foundation for Teaching Economics

## *Fitness Day* Lesson Plan

By Jeanne McNamara



2001

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# Fitness Day

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**Content Objective:** Introduce students to the concepts of Supply and Demand

1. To develop an understanding of the inverse relationship between price and quantity demanded that results in a downward-sloping demand curve, the direct relationship between price and quantity demanded that results in an upward-sloping supply curve, the significance of the intersection of the two curves - the equilibrium price and quantity demanded
2. To recognize the rational motives of buyers and sellers and be able to connect those inferential concepts to the supply and demand analysis.
3. To build upon the principles of supply and demand to introduce the concepts of demand elasticity and consumer preference/utility theory

**Process Objective:**

1. To appeal to bodily/kinesthetic intelligences through participating in a fitness class and then analyzing the economic motives behind making oneself feel better after a fitness activity, i.e. analyzing how much an individual would pay for a drink and a snack after a good work-out
2. To develop skills and a comfort level in interpreting economic concepts through graphic analysis

**Economic Standards:**

**Standard 7:** Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

**Standard 8:** Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.

**Agenda:**

The purpose of today's lesson is to release some of your tension and break set from our regular classroom activity. We'll be working through a circuit training interval so that everyone will have the benefit of working in his/her target heart rate zone for a duration of about ten minutes. We will then commence into a cool-down activity that will not only bring down your heart rate, but will stimulate your motor neurons.

*NOTE: I don't tell them in advance what the ultimate goal is because they seem to be more interested in the fact that we're doing something different than the typical classroom routine. In addition, their homework from the previous evening is to make sure that they are dressed to exercise. Additionally, I tell them to bring money because we are taking donations for a class donut fund.*

**Materials:** graph worksheets (made up) and blank supply and demand schedules and corresponding transparencies overhead projector or presentation equipment one cold beverage (Snapple/Gatorade) one candy bar signs for circuit training stations (push-ups, tricep dips, abdominal crunches, lunges, squats) an upbeat exercise tape

**Duration:** One class period (43 minutes) (perhaps longer depending on the questioning patterns and depending on how much time I have to integrate consumer preference and elasticity)

**Lesson Agenda:**

Room alignment:

1. If weather is not cooperating, we are in the room and I've moved all desks out of the way and hung up signs around the room for circuit training stations (push-ups, tricep dips, abdominal crunches, lunges, squats). (If the weather is favorable, we will go on to the track and do activities that are more outdoor-appropriate.)
2. I work the students through 15-20 minutes of an exercise routine. They usually get a big kick out of how silly they think this is, but I maintain a level of seriousness throughout and keep reminding them that this is really important research in the field of economic education. Because our class periods are short (43 minutes), we rearrange the room and/or bring them back into the room to begin the debriefing activity. I pass out the graph worksheets and I make a big deal about how hot it is and how famished I get after a good work-out and then I lead into "Hey, would anyone like a nice, cold drink?" (NOTE: When they ask to go out and get a drink at the water fountain, I defer them to add to their eagerness bid on the drinks/snacks.) At that point I take the drink out of a cooler and the candy bar out of the bag and begin asking them how many would buy it for \$.01? (Usually, most will raise hands, although there may be one who just doesn't. I like the particular combination of drink and snack that I've selected and will not participate in the bidding.) As the bidding continues, students will see that as the price goes up, fewer will want to purchase it. A hypothetical schedule may look something like this:

P(in \$)	Q(S)
.01	20
.05	20
.10	19
.20	18
.30	17
.50	15
.75	14
1.00	13
1.25	12
1.50	10
2.00	5
2.50	3
3.00	2
3.50	1

3. When we are completed with the graphing and the awarding of the prize to the highest bidder, we begin to consider the inverse relationship between price and quantity demanded that describes the demand curve. If the group demonstrates understanding, now is a good time to introduce elasticity and consumer preference theory, with the understanding that both will be addressed in greater depth a little later. Examining the demand schedule, you could pick out someone who removed himself/herself from the bidding at \$1.00. You could probe why he/she didn't want it anymore and then contrast that decision to the individual that won the bidding at \$3.50. You would be able to show that one was more responsive to price than the other.
4. Now it is time to generate the supply curve. NOTE: I generally do this two times; once with an unrelated item, i.e. given the fitness theme, I casually mention that I am willing to award some cash bonus for some set number of push-ups. I start by saying, "Who would do 1 push-up for a \$.01?" A hypothetical supply schedule could be generated as follows:

P(in \$)	Q(S)
.01	1
.05	2
.10	3
.20	5
.30	10
.50	12
.75	13
1.00	13
1.25	15
1.50	16
2.00	20
2.50	22
3.00	25
3.50	30

5. and then when they are feeling comfortable with the upward sloping nature of the supply graph, I revert back to the drink/candy auction and simulate myself as the seller, so as to develop equilibrium price using the same products. At this point we are also able to determine the equilibrium price and quantity combination that is described by our example.

After the supply analysis and the determination of equilibrium price is set, the concept of consumer preference could be introduced by probing the individual who won the bidding and demonstrating that he/she could have gotten this combination for a lower equilibrium price but chose instead to pay a higher price, thus illustrating the concept of consumer surplus.

**Closure:**

Following their syllabus, students are asked to practice with some worksheets out of the Morton AP book - TBA.



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