Mike Sims, who teaches Economics at Trinity Valley Community College, is the assistant city manager for the city of Terrell, Texas. He makes Economics come alive for students with creative themes ranging from Football Economics to Ski Slope Economics! His SchoolhouseTeachers.com course is located in the Teacher Lesson Archive. Here is one sweet example, perfect for the season.

Chocolate Economics

Week One

Concepts and Definitions

All definitions are taken from the Arnold Textbook or the Sowell Basic Economics Book.
What is economics?

Economics as a formal study grew out of the observation that countries would often go to arms to settle disputes about resource allocation—think feudal kings plundering each other or wars about imperialistic claims. Thus, some began to think that there must be a better way to improve material conditions. Adam Smith, in *The Wealth of Nations*, published in 1776, suggested that perhaps commerce should be used instead of conquest.

**Economics (short version)** — The science of scarcity

**Economics (classic)** — Economics is the study of the use of scare resources which have alternative uses.

**Economics (official)** — The science of how individuals and societies deal with the fact that wants are greater than the limited resources available to satisfy those wants.

**Economics (nickname)** — The dismal science.

The Consumer Experience

Consumers seek a way to maximize utility, adding as many goods as their resources allow. In a market system, if a consumer desires more goods then they have resources to acquire, then they are forced to provide a benefit of some sort to someone else in the economy in order to obtain additional resources. This incentive encourages participation in the market and wealth generation, two hallmarks of people in capitalist market societies.

**Good** — A thing from which consumers receive satisfaction or utility.
Bad — A thing from which consumers receive dissatisfaction or disutility.

The Producer Experience

Producers seek a way to combine the four types of resources listed below in order to maximize the return on their investment. The entrepreneur plays the key role of combining the other resources to some efficient means of producing something consumers want. If a second entrepreneur can come up with a better way to produce a similar or a better good for less, then the first entrepreneur will either change or go out of business because he or she will not be serving the public as effectively. This competition forces innovation and efficiency, two hallmarks of firms in capitalist market societies.

Land — all natural resources, such as minerals, forests, water, agricultural land, and other unimproved land

Labor — the physical and mental talents people contribute to the production process

Capital Produced — goods that can be used as inputs for further production, such as factories, machinery, tools, computers, and buildings

Entrepreneurship — the talent that some have for organizing the other resources to produce goods, for identifying new business opportunities, and for developing new ways of doing things

Why trade?

We trade because everything is scarce and people are always seeking a reallocation of resources that is more favorable, with all goods and resources going to their highest and best use. Thus, we need a market-oriented way to decide how to ration scarce
resources. Because people compete for scarce resources, every society has to come up with a means of allocating resources. If the market doesn't reallocate resources, brute force or family connections or imperial fiat may serve to reallocate resources.

**Scarcity** — the condition in which our wants are greater than the limited resources available to satisfy them

**Rationing Device** — A means for deciding who gets what of available resources and goods

**Opportunity Cost** — the most highly valued opportunity or alternative forfeited when a choice is made

**Exchange** — the process of giving up one thing for another

**How much trade?**

Since goods and the resources needed to produce them are scarce, we should make trades until what we sacrifice (the opportunity cost) for a marginal unit is equal to the benefits that we get from any trade. People and businesses trade to become better off and stop trading only when the only trades they can afford would make them worse off.

**Efficiency** — any condition when marginal benefits equal marginal costs

**Decisions at the Margin** — decision making characterized by evaluating the current situation and weighing the benefits of an additional unit against the costs of an additional unit

**Marginal Benefits** — the benefits connected with consuming an additional unit of a good or undertaking one more unit of an activity
Marginal Costs — the costs connected to consuming an additional unit of a good or undertaking one more unit of an activity

Conclusion

The human desire for more can fairly be described as insatiable. This drives scarcity and the fact of scarcity drives the notion of opportunity cost. My resources are limited, so I can’t have one thing without giving up another. Since giving up something is painful, we have to measure the benefits versus the cost. This is done on the margin—i.e. the cost of one more unit compared against its benefit.

Relationships, Value, and Exchange

From Nanocivics: Booker T. Washington, Mao Zedong, and the Choice They Demand of You, by Mike Sims

So why do these two visions [composing a civil society from the bottom-up with Booker T. Washington, or eroding civic bonds and installing a top-down system similar to Mao Zedong] consistently generate such different outcomes? A look at the underlying principles that support modern economic analysis provides the answers. Economics studies how individuals, businesses, and societies manage the allocation of scarce resources, and it has much to say about civic composition versus civic erosion when we look at relationships, value, and exchange.

Relationships are the links we have between people and institutions. Value is the sense of utility, worth, or importance (usually not in monetary terms) that we place on using our limited time or resources with someone or something. Exchanges are the interactions that settle up our decisions about relationships and value.
Teacher Lessons

Say you develop a friendly relationship with one of your coworkers or your classmate; you decide that relationship has value, so you exchange some of your time outside of work to be with one another. That common, simple, process repeats in many different ways in everything we do in life. We often say that we “profit” from a relationship, and this saying has more than bit of truth in it.

The core bedrock, relationships, our first principal, are common in some ways to everyone’s life—sibling, parent, spouse, city, etc.—and all form naturally, not perfectly and not painlessly, just naturally. We are born into relationships and typically people continue to grow into and nurture a variety of relationships throughout their lives. Some people look at those relationships and purpose to manage and manipulate them to their own goals. Others would say: Let those relationships hang loose and do their own thing, laissez-faire. Well, what happens if these form freely and we don’t regulate them?

What happens depends on value, the second principal. If I value my relationship with my wife and my church, I adhere to vows and give up alternatives. I forgo bachelorhood in preference to a relationship with my spouse. She forgoes singleness in order to put up with me and all the glorious (I’m sure!) things about being married to me. So, make your list of all the things unmarried people can do without their spouse, look at it, and know that I value my wife (and, hopefully, she values me) more than the items on your list. We have an emotionally and spiritually profitable relationship. Like every couple, my wife and I each had other opportunities, but the benefits of marriage, for us, far exceed what we give up, the opportunity cost.

So, even the most intimate relationships involve some assessment of value. The common relationships of “that’s my car,” “my cola,” or “my wireless company”—all clearly have this value component. I forgo cola because I value juice more. The cost of the cola isn’t so much the money; it’s what I could have spent the money on, the opportunity cost. Opportunity costs weigh in the balance of our third principle, exchange. Exchanges are choices in action. Exchange demonstrates an assessment of value and moves a relationship in a new direction or reinforces an existing relationship.
Be it a marriage, a football team, or a gaming system, there is a moment when a transaction occurs, when value expresses itself through an exchange. It may be the nibbling on a cake, a smear of Oakland Raider face paint, or the click on a console; in any of these and a billion others, we see—moment to moment, day by day, year by year—the making of culture and society. Our relationships, their value, and the exchanges that define them also create our civilization from the bottom up. Our individual decisions set allocations of our scarcest resources, our time, and our capacity to love one another. Because we only live once, these are desperately important. Our decisions to exchange show everyone what we value and what is, for us, an acceptable opportunity cost.

The Fun Stuff!

Household Chocolate Inventory

Is chocolate scarce in your house? It probably depends on how many people you live with, how hard it is to get more, how much money you dedicate to purchasing chocolate each year, and how quickly you eat it up. After you do an inventory of chocolate around your home, ask yourself this question: would you take another bag of chocolate chips? Since chocolate is a good that provides utility, the answer is probably yes. No matter how much you have, you would like more. Therefore, in economics, we refer to chocolate as scarce.

Instructions: Go through your entire home and write down all items with chocolate. Categorize each one; identify the item by brand name, note the weight listed on the package, and if it is available, record the cost. Use extra pages if need be and record each individual package labeled for retail sale separately.
**Suggested categories:** baking chocolates, chocolate chips, chocolate candies (plain), chocolate candies (with peanut butter), chocolate cookies, chocolate chip cookies, chocolate ice creams, chocolate breads, chocolate cereals, chocolate perfumes, chocolates for drinking, chocolate glazes, and syrups.

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Household Scores —

(0 up to 2 lbs = alert!, time for more chocolate!)
(2 lbs up to 5 lbs = warning!, low on chocolate!)
(5 lbs up to 8 lbs = chocolate supplies stable)
(8 lbs to 12 lbs = you might need to eat some of that chocolate; wouldn’t want to see it spoil)
(12 lbs and more = wow, are you planning a chocolate party?)

Read Chapter One of *Basic Economics* by Thomas Sowell.

Week Two


Watch the U.S. Chamber of Commerce feature on *Cocoa Dolce* — [http://www.youtube.com/watch?v=Zeion8O5Kyc&blend=8&lr=1&ob=5](http://www.youtube.com/watch?v=Zeion8O5Kyc&blend=8&lr=1&ob=5)
The Fun Stuff!

Visit a chocolate store (this link to independent chocolate stores might help you).

Fill out the Retailer Questionnaire if you can find a local retailer of chocolate, or perhaps from the Cocoa Dolce website.

Chocolate Economics

Retailer Questionnaire

Name and address of retailer:
__________________________________________________________

Name of person interviewed:
__________________________________________________________

1. How many locations do you have?

2. Do you make your finished product on-site?

3. Where do you buy your raw chocolate?

4. Do you sell your products online?

5. What other products do you carry along with chocolates?
6. How many employees are needed to staff the store on an average day?

7. How many total employees work at this store?

8. How often do you have sales?

9. Why do you have sales?

10. Are there any seasonal variations in your sales volume?

11. What percentage of your total sales volume is chocolate?

12. How many years have you been in business at this location?

13. Have you ever had a supply problem/difficulty in getting chocolate?

14. What are your annual gross sales at this location?

15. What is your favorite chocolate?
Week Three

Visit the industry association on chocolate.

The Fun Stuff

Watch some videos on chocolate production. You can find these on the industry website or search for one. (If this E-Book is being used by students, parents should monitor all Internet uses.)

Walk around the grocery store and just try to count all the products that feature chocolate.

❤ What total did you come up with?
❤ What was the most expensive chocolate item?
❤ The oddest chocolate item?

The Academics

Read Chapter One of Microeconomics by Roger Arnold.

www.TheOldSchoolhouse.com    Bouquet of Fun

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Lesson One: Chocolate Economics

Self-Test Questions

1. What is the classic definition for economics?

2. If something is an economic good, does it provide utility?

3. What are the four economic resources?

4. What is a rationing device? What if the rationing device was fidelity to a political creed; would that be better or worse than what we have traditionally used as a rationing device in America?

5. If I want more chocolate and I have no way to pay for it, what do I have to do in a market economy?
6. Does chocolate grow on trees? Does it grow where it freezes?

7. In economics, what is efficiency?

8. Do all of our actions have an opportunity cost? Or, only our market actions?

9. Consider if you were running your own chocolate store. What if each new sale cost you $1.00 of chocolate and you only make $0.25 on each new sale? Should you keep selling at that price?

10. Consider if I open a chocolate store next to yours. If I come up with a better way to produce similar chocolate for less than you, what do you need to do to stay in business?

The Academics:

Visit the website for *Basic Economics* by Thomas Sowell—the link is given here—and try to answer questions #2 and #13.

Write a 5-paragraph essay on the topic of how the market for chocolate demonstrates the basic concepts introduced in this chapter.

Mike Sims and his wife have been married for 17 years and they homeschool their six children. He teaches economics at Trinity Valley Community College and serves as the assistant city manager for the City of Terrell, Texas, where he oversees the operations of the largest rural Tax Increment Finance district in Texas and works with local citizens solving local problems every day. He received his Bachelor’s Degree in Public Affairs from Indiana University and his Master’s Degree in Economics from the University of Texas at Arlington. He and his wife founded their
family website, Nanocivics.com, in order to spread the word about the importance of nanocivics, the small-scale relationships of local public life.