

Lesson 5

How Can I Improve My Ability to Produce What People Want?

Lesson Overview

Students read about the life and career decisions of Philip Simmons, a blacksmith and artist from Charleston, South Carolina. They analyze the skills and knowledge Mr. Simmons used to make different products throughout his career.

Students produce several products, analyzing the human capital they used for production. Like successful producers, they increase and adapt their human capital as the demand for goods and services changes.

Lesson Objectives:

Students will

- Describe how changes in technology and consumer wants may alter career plans.
- Identify the human capital used to produce goods and services.
- Identify incentives that affect behavior and explain how incentives affect their behavior.
- Explain how workers benefit by developing special skills and strengths.

Materials for the Lesson

- Visual 5.1: *Products*
- Visual 5.2: Answers to *Human Capital for Production*
- *Student Journal*, page 5-1: *Human Capital for Production*
- *Catching the Fire: Philip Simmons, Blacksmith*, by Mary E. Lyons
- Play Dough or clay
- Tools to cut and flatten clay
- Tools to make designs in clay
- Toothpicks
- Rulers

Overview of the Economics Content

Improvements in human capital improve the ability of workers to produce. When a worker invests in development of new human capital, the worker is better able to produce goods and services. When workers produce more, incomes increase and workers are able to purchase more goods and services to satisfy their wants.

Vocabulary

- blacksmith
- consumer
- demand
- goods and services
- human capital
- incentives
- income
- producer
- productive resources
- wrought iron

LESSON PROCEDURES

Part 1

Catching the Fire: Philip Simmons, Blacksmith

by Mary E. Lyons
Houghton Mifflin Co., 1997
48 pages

Literature Summary

This is the biography of Philip Simmons, telling how he learned his trade and taught others through his example. Mr. Simmons' story begins with his journey to Charleston, South Carolina, in 1920 at age eight and ends with his retirement in 1987.

Philip Simmons is a blacksmith, an entrepreneur, and an artist. He combined his love of art with ingenuity and business sense. As a young boy, he worked to learn his trade. As a young man, he learned to adapt to changing times. At age 64, he became an artist worthy of recognition by the Smithsonian Institution.

Introduce

What does a blacksmith do? (*Makes nails, horseshoes, farm tools, hinges, and other objects from wrought iron.*)

The name "blacksmith" comes from the black smoke of the forge and red-hot iron used to make horseshoes and other products from wrought iron.

Blacksmith: A person who makes horseshoes and/or other products from wrought iron, usually with a forge and hand tools.

Wrought iron: Iron products made directly from iron ore, containing very little carbon, usually shaped by forging, hammering, rolling, or extrusion.

Activity

Identify the location of Charleston, South Carolina, and the time frame of the biography, 1920 to 1987.

Read:

Catching the Fire: Philip Simmons, Blacksmith.

Discuss

In the beginning of the story, why did Philip Simmons say he wanted to work? (*He wanted to earn income, money to spend.*)

Why do most people work? (*To earn income to purchase the things they want.*)

Income: Wages or salary payments for human resources; payments for productive resources (rents, wages, interest, or profit).

Do you work?

What do you learn when you work?

How does working make you feel?

What benefits did Philip Simmons get from working? (*He earned income. He also developed his skills, learned to do new things, and enjoyed helping others.*)

Create a chart listing the goods and services that Philip Simmons produced during his career.

Goods/Services	Human Capital
Horseshoes	
Repairing wagons	
Fixing cars and trucks	
Making and repairing iron gates	
Iron sculptures	

Good: An object that can be used to satisfy a person's wants.

Service: An action that can satisfy a person's wants.

What happened to the demand for horseshoes and repairing wagons? (*The demand for horseshoes and wagon repairs decreased when automobiles replaced horses and wagons.*)

Define demand.

Demand: The willingness and ability to purchase quantities of a good or service at various prices; a relationship between the price of a good or service and the quantities demanded; the quantities of resources, goods or services that are demanded at various prices in a given period of time.

When people stopped buying horseshoes, what did the blacksmiths in Charleston do? (*They started repairing automobiles and trucks.*)

How did Mr. Simmons learn to fix trucks? (*He adapted the skills he had used as a blacksmith to the skills needed to repair automobiles.*)

Why did he start repairing and making gates? (*Many old iron gates were rusting, and the people of Charleston wanted them to be repaired.*)

How did he learn to repair gates? (*He adapted the skills he used for making horseshoes and repairing automobiles to the skills needed to repair and make iron gates.*)

How did Mr. Simmons become an artist? (*He made iron gates that were beautiful, and people considered his gates as art.*)

What did Mr. Simmons do that enabled him to stay in business when people no longer demanded what he once had produced? (*He paid attention to what people wanted; he was willing to adapt his skills to make new products.*)

Record the guiding question. **How can I improve my ability to produce what people want?**

Record student responses to the question and keep them visible throughout the remainder of the lesson.

Identify the human capital Philip Simmons used to produce the four products.

Human capital: The quality of labor resources which can be improved through investments in education, training, and health; skills and knowledge; (See also labor resources).

As you ask the following questions, add the students' responses to the chart of Philip Simmons' products.

What human capital did Mr. Simmons use to produce horseshoes and repair wagons? (*Measuring, hammering, knowing the right temperature for the forge, etc.*)

What improved human capital did he use to repair automobiles and trucks? (*Shaping, riveting, flattening, fitting together, welding, etc.*)

What improved human capital did he use to repair and make ornamental iron gates? (*Design, keeping the iron bars straight, more detailed shaping, etc.*)

What improved human capital did he use to create iron sculptures? (*Design, creativity.*)

Goods/Services	Human Capital
Horseshoes	hammering, shaping, measuring, forge temperature
Auto Repair	flattening, fitting, riveting, cutting
Iron Gates	designing, welding
Sculpture	designing, creativity

Conclude

What are some products that have changed in your lifetime? (*Computers, video games, food products, automobiles, toys.*)

Why do producers improve products or make new ones? (*People want new things to make their lives better. New technologies create new things people want.*)

What kinds of goods and services do you think people will want in the future?

Part 2

Prepare

See Visual 5.1: *Products* for illustrations of the products to be produced in this activity.

Recipe for Clay

1 cup flour
 1 tablespoon oil
 1 cup water
 ½ cup salt
 2 teaspoons cream of tartar

Combine all ingredients. Cook over medium heat until a ball forms. Knead in a large zip-lock bag for a few minutes. Remove the air from the bag and seal.

- One clay or Play Dough square, $2'' \times 2'' \times \frac{1}{4}''$ thick. This is the model for Product #1.
- One cube made from six clay squares, $2'' \times 2'' \times \frac{1}{4}''$ thick. *Hint:* Use toothpicks to support the top on the walls. This is the model for Product #2.
- One clay tower, $1'' \times 1'' \times 6''$ tall. This is the model for Product #3.

Introduce

Divide the students into groups of six. Make these resources available for each group:

- modeling clay or Play Dough
- tools to cut or flatten clay
- toothpicks
- tools to make designs in clay
- protractors
- rulers

Students participate in a production activity illustrating the development of new human capital.

Ask how do producers know what to produce? (*They produce the goods and services consumers want.*)

Producer: A person who uses productive resources to make goods and services.

Consumer: A person whose wants are satisfied by using goods or services; a person who buys and uses goods or services.

Activity

Product #1

Display the model square, Product #1. The square is what consumers want.

Each group of students will produce six clay squares like the model, using the productive resources provided.

Productive resource: Natural resources (land), human capital (labor), physical capital, and/or entrepreneurial resources available to produce goods and services. (See also factors of production.)

Discuss

What human capital will you need to use in order to produce squares exactly like the ones consumers want? (*Knowing the size of the square, how to shape clay, right angles.*)

How can you determine the size of the square? (*Measure the square.*)

Why is it important to measure and produce quality squares? (*That is what consumers want.*)

How can you determine that each square has 90-degree angles? (*Use the protractor.*)

What will happen if the squares are of a poor quality? (*Consumers will not purchase them and the producer will not earn income.*)

Establish a time limit for each group to produce six squares.

Use *Student Journal*, page 5-1: *Human Capital for Production*, to list the human capital used to produce the six squares.

Product #2

Using the squares, the groups will make a cube. Each face of the cube should remain flat and not sag. The difficulty of this task is determining how to attach the faces and to prevent the faces from sagging. Display the cube made previously as a model.

Discuss

How can you accomplish the task? (*Use toothpicks as a support, put something inside the cube.*)

Establish a time limit to produce a cube like the model.

Use *Student Journal*, page 5-1: *Human Capital for Production*, to list the additional human capital used to produce the cube.

Product #3

Reuse the clay to make the third product, a tower, 1" \times 1" square and 6" tall. The difficulty with this product will be keeping the tower from bending or falling.

Discuss

How can you accomplish the task? (*Determine a way to keep the tower from falling.*)

Establish a time limit to produce a tower like the model.

Use *Student Journal*, page 5-1: *Human Capital for Production*, to list the additional human capital used to produce the tower.

Product #4

Students reuse the clay to produce a sculpture, something consumers may want to use to decorate their homes. Encourage creativity.

Students produce a sculpture. Establish a time limit to produce the sculptures.
Display the completed sculptures.

Activity

Use *Student Journal*, page 5-1: *Human Capital for Production*, to list the additional human capital used to produce the sculpture.

Discuss

What new human capital did you use to produce the sculpture? (*Creativity*.) How does being creative help to develop other new skills? (*Answers will vary*.)

Conclude

Revisit the guiding question. **How can I improve my ability to produce what people want?**

I can improve my human capital by adapting my skills and knowledge to produce what consumers want.

Assess

Use *Student Journal*, page 5-1: *Human Capital for Production* to review the skills and knowledge Philip Simmons used to produce the different products. This illustrates an understanding that developing additional skills can be used to produce what consumers want.

Literature Links

- *What's the Big Idea, Ben Franklin?* by Jean Fritz (Paper Star, 1996)
- *Maria Montoya Martinez, Master Potter* by Elsie Karr Kreischer (Pelican Publishing Co., 1995)
- *The Legend of the Indian Paintbrush* by Tomie DePaolo (Paper Star, 1996)
- *My Side of the Mountain* by Jean Craighead George (Penguin USA, 2000)
- *Dear Mr. Henshaw* by Beverly Cleary (Camelot, 2000)
- *Shoeshine Girl* by Clyde Robert Bulla (HarperTrophy, 1994)
- *Mirette on the High Wire* by Emily Arnold McCully (Putnam Publishing Group, 1997)
- Biographies of artists and inventors

*In a world where there is so much to be done, I felt strongly that
there must be something for me to do.* Dorothea Dix

*Far and away the best prize that life has to offer is the chance
to work hard at work worth doing.* Theodore Roosevelt.

Visual 5.1

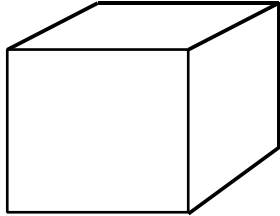
Products

Product #1: 2" × 2" Squares, ¼" thick



*I don't work with my mouth,
I work with my hand.*
Peter Simmons, Philip
Simmons' teacher

Product #2: Cube



Product #3: Tower



*A satisfied customer is an
advertising customer.*
Philip Simmons

Product # 4: Sculpture ?

*A star can shine in different
ways.*
Philip Simmons

Visual 5.2 (Sample Answers)

Human Capital for Production

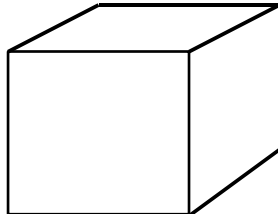
Product # 1: 2" × 2" squares, 1/4" thick



Human Capital

- Measure
- Cut straight edges
- Create four right angles
- Flatten clay evenly

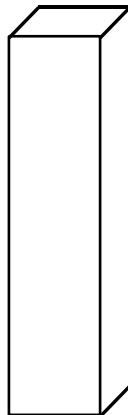
Product #2: Cube



Improved Human Capital

- The above, plus
- Support the faces
- Attach the squares to form a cube

Product #3: Tower



Improved Human Capital

- The above, plus
- Support the tower
- Make it strong enough to stand

Product #4:

Sculpture

Improved Human Capital

- The above, plus
- Creativity
- Designing
- Modeling skills
- Knowing what consumers want

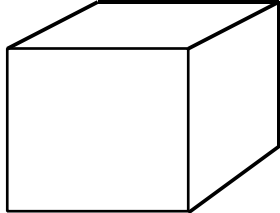
Human Capital for Production

Product # 1: 2" x 2" squares, 1/4" thick



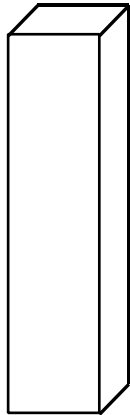
Human Capital

Product #2: Cube



Improved Human Capital

Product #3: Tower



Improved Human Capital

Product #4:

Sculpture

Improved Human Capital