

Productivity

LESSON DESCRIPTION AND BACKGROUND

The students examine ways to develop their human capital. They discover that they make themselves more productive by developing their human capital and by using capital resources, the tools of their trade. As they become more productive, they become more valuable to employers. As they become more valuable to employers, they gain earning power, thus improving their standard of living.

Lesson 6 is correlated with national standards for mathematics and economics, and with personal finance guidelines, as shown in Tables 1-3 in the introductory section of this publication.

ECONOMIC AND PERSONAL FINANCE CONCEPTS

- Capital resources
- Human capital
- Productivity
- Wage

OBJECTIVES

At the end of this lesson, the student will be able to:

- Give examples of **capital resources** used in various careers.
- Explain ways in which **productivity** can be increased.
- Explain ways in which the use of **capital resources** increases **productivity**.
- Identify the **human capital** required for particular jobs.
- Explain how certain skills are acquired.

TIME REQUIRED

One 45-minute class period

MATERIALS

- A transparency of **Visual 6.1, 6.2, and 6.3**
- A copy for each student of the **Introduction** and **Vocabulary** sections for **Lesson 6** from the *Student Workbook*
- A copy for each student of **Exercise 6.1** from the *Student Workbook*
- A copy for each student of **Lesson 6 Assessment** from the *Student Workbook*
- Calculators
- A clock with a second hand for students to access

ADDITIONAL RESOURCES



To download visuals, find related lessons, correlations to state standards, interactives, and more, visit <http://fffl.councilforeconed.org/6-8/lesson6>.

PROCEDURE

1. Begin the lesson by asking the students to read the Introduction and Vocabulary sections for **Lesson 6** in the *Student Workbook*. Then explain that many adults work very hard at their jobs. And many others—those temporarily unemployed, for example—would like to work hard. Ask: Why do people work so hard? What do workers receive in return for their work? (**Responses will vary. Suggest a two-part summary: Overall returns from working might include intangible benefits such as self-gratification and self-esteem; the economic returns from working are wages and benefits.**)

2. Observe further that some workers earn more, in wages and benefits, than others. Introduce the concept of “productivity” as a factor related to earnings. Display **Visual 6.1**. Use the visual to explain that some workers are more

productive than others, and more productive workers are more valuable to employers than other, less productive workers. Point out that Yolanda considered Mike to be more productive than Chris because Mike could accomplish more work than Chris in the same amount of time.

3. How might employees increase their productivity? Display the first part of **Visual 6.2**. Use the visual to explain that employees can increase their productivity by using “capital resources.” Capital resources are goods produced for the purpose of producing other goods and services. A hammer is an example of a capital resource; so is a computer. Hammers and computers enable workers to produce other goods and services—the wood trim needed for a new home, the documents needed for the operation of insurance companies, hospitals, accounting firms, and many other organizations.

4. Explain that capital resources include tools, machinery and buildings. Ask:

a. What capital resources might be used by a doctor? (**Certain tools—e.g., a stethoscope, a computer; also certain buildings—e.g., clinics, hospitals.**)

b. What capital resources might be used by a police officer? (**Again, certain tools—e.g., a squad car, radio, weapon, handcuffs; also certain buildings—e.g., a police station, a courthouse.**)

5. Display the rest of **Visual 6.2**. Explain that employees can also increase their productivity by developing their “human capital.” Human capital is the combination of knowledge, skills, health, experience, and attitudes that a worker acquires over time. The development of human capital enhances an employee’s value as a worker. Suggest a way for the students to imagine this: On the day you were born, you were given a large, empty box; as you have grown older and have learned many new things, you have added a great deal of knowledge and skills to be placed in the box.

6. Invite the students to elaborate on this point. Ask: What skills have you placed into this box at

this point in your lives? (**Possibilities include reading skills, math skills, social skills, critical thinking skills, athletic skills, child-care skills, cooking skills, etc.**) Explain that this is only the beginning. They will acquire many other skills by the time they set about looking for their first full-time job. At that time, they will present their skill sets to their employers as if they were offering their employers a gift box of skills that the employers could use to build their businesses.

7. Explain that the quality of workers’ human capital will likely determine the workers’ levels of income. In general, people who are better educated and more highly skilled are more valuable as employees. Employers compensate workers in large measure according to the knowledge and skills they bring to their jobs.

8. Introduce the concept of “investing” in “human capital.” When people take steps to improve their human capital—e.g., by mastering the uses of a new software program or by completing an electrician’s training program—we say they are investing in their human capital. In this expression, “investing” refers to spending time, effort, and perhaps money now in order to gain something that will be valuable in the future.

9. Emphasize the point that human capital is related to “productivity.” Recall that Mike was more productive at cutting grass than Chris was. Pose a hypothetical situation: Suppose that Mike and Chris were not in business together, but were competing for the same \$8.00-per-hour grass-cutting job. Which of the boys would get the job? (**For jobs where grass-cutting productivity is the deciding factor, Mike would be more likely to be hired.**)

10. Suggest that the information on **Visual 6.1** might not tell the whole story about Mike and Chris’s grass-cutting service. Distribute a copy of **Exercise 6.1** to each student. Ask them to read the exercise and answer questions 1 and 2. Discuss the students’ answers. (**1. Chris had social and business skills that he used in approaching customers and marketing the grass-cutting service. 2. Mike was more productive**

at cutting grass; Chris was more productive at managing the business. The two boys had different personal qualities and skills, making each one better suited for some aspects of their work and less suited for others.)

11. Tell the students that, to conclude this lesson, they will participate in an activity that illustrates two ways of improving productivity.

- a. Display **Visual 6.3**. Explain that the activity, called Give and Take, will make use of a math exercise to demonstrate productivity. In this exercise, the students begin with a number and multiply it by 2 to get a product. Then they multiply the product by 3, then by 4, and so on, until they reach the final multiplier assigned by the teacher. Then they divide that final product by 2, then 3, then 4, and so on until they reach the number initially used in the multiplication. Point out this scheme on the visual.
- b. Separate the students into teams of two students each. Ask one student in each team to act as timekeeper and one to volunteer to do a Give and Take. Depending on how much time you have available and the skill level of your students, give the volunteers a starting number of one or two digits and have them multiply by 2, 3, 4, and so on, up to the number you designate; then begin dividing by 2, 3, 4, and so on, up to the number you designate. Do not exceed 10 as the multiplier.
- c. Instruct each volunteer's partner to time him or her and record the amount of minutes and seconds it takes the volunteer to complete the Give and Take correctly. Do not allow calculators.
- d. When all volunteers have completed the Give and Take, instruct them to do the exact same problem again. Have the timekeepers record the time it takes for completion of this round of calculations. The students will probably complete the calculations in less time than they needed in the first round.
- e. Ask: What made the difference? **(Discuss responses. As necessary, clarify the point that**

the students were able to complete their calculations more quickly this time because they had developed some skill for the task through practice. Human capital can be enhanced through practice. The more you practice a skill, the better you will become. Employers recognize this. When you are newly employed, your employer will probably assume that you will need time to develop your productivity. With practice doing the job, you will become more proficient.)

- f. Now give the volunteers calculators. Explain that you want to find out how much difference the use of this capital resource can make in the students' productivity. Once again, have the timekeepers record the time it takes the partners to complete the calculations. If time permits, allow the students to do this exercise twice, to demonstrate once again the value of "practice" and "capital resources" in improving productivity.

CLOSURE

Use the following questions to review the lesson.

- What is human capital? **(The combination of knowledge, skills, health, talent, and attitudes that enhances your value as a worker.)**
- Why does investment in your human capital increase your possibility for more income in the future? **(Employers are willing to pay more for more skilled, knowledgeable, talented, and healthy workers because they are more productive.)**
- How do capital resources increase productivity? **(Capital resources allow workers to get work done more efficiently. They do this by allowing workers to produce more output in the same amount of time, or by producing the same amount of output in less time.)**

- How can you increase your human capital?
(Answers will vary, but students should recognize that they must acquire education, practice their skills, and develop their talents.)

ASSESSMENT

Distribute a copy of **Lesson 6 Assessment** from the *Student Workbook* to each student. Assign the students to complete the assessment task. Establish a due date. Evaluate the assignments for completeness and for the extent to which the work shows understanding of the concepts emphasized in this lesson.

EXTENSION

Have small groups of students think about a process that could be improved. It could be a new production method in transportation (e.g. a new kind of car or train; shoes with springs or rockets, etc.), communication, agriculture or some other sector. Instruct the groups to construct a poster with a schematic or picture of their idea. Have each group present their ideas to the class.

The Story of Mike and Chris

Mike and Chris had a grass-cutting business. Week after week, Mike and Chris cut the grass at a ball field. They had identical lawn mowers, began cutting at the same time, and worked for two hours.

However, when they were through cutting the ball field, Mike had cut three-fourths of the field while Chris had cut only one-fourth. The ball field owner, Yolanda, commended Mike for his productivity.

Capital Resources and Human Capital

- Capital resources are goods produced for the purpose of producing other goods and services. For instance, hammers are produced to aid in construction. Using a hammer to pound something is much more effective than using a rock. A hammer increases the productivity of construction workers.
- Human capital is the combination of knowledge, skills, health, talents, and attitudes that a worker obtains over time. Knowing how to use new equipment and efficient procedures increases productivity. The development of your human capital enhances your value as a worker.

Give and Take

