

Why Stay in School?

LESSON DESCRIPTION AND BACKGROUND

Against a background of information about the relationship between educational attainment, employment, and income levels, the students weigh decisions about education in light of costs and benefits.

Lesson 4 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

- Benefits
- Costs
- Income
- Marginal benefit
- Opportunity cost
- Wage

OBJECTIVES

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

- Explain the **benefits** associated with levels of educational attainment.
- Explain the **costs** associated with levels of educational attainment.
- Define **opportunity cost**, and explain the **opportunity cost** of dropping out of school.

TIME REQUIRED

One 45-minute classroom session

MATERIALS

- A transparency of **Visual 4.1, 4.2, and 4.3**
- A copy for each student of **Introduction to Theme 2** and **Introduction and Vocabulary**

sections of **Lesson 4** from the *Student Workbook*

- A copy for each student of **Exercise 4.1** and **4.2** from the *Student Workbook*
- Calculators (one per student)
- Rulers (one per student)
- Unlined paper (one sheet per student)

ADDITIONAL RESOURCES



To download visuals, find related lessons, correlations to state standards, interactives, and more, visit <http://fffl.councilforeconed.org/6-8/lesson4>.

PROCEDURE

1. Begin by asking the students to draw a picture of a set of stairs, with at least five steps, from a side view. They should use only a pencil and unlined paper—no ruler or other guide.

When they have completed their drawings, tell them to use their rulers to measure the vertical distance between each step by measuring the riser for each step. Have them write the measurement of each step by the riser. Ask: How many of you drew a set of stairs where the riser measurements were the same for each step? (Emphasize the number of students who have unequal risers.)

2. Ask all the students who think of school as an uphill climb to raise their hands. Explain that becoming educated is like climbing a set of stairs. However, the stairs the students climb to get an education are more like the stairs the students drew than the perfectly measured stairs we climb in our homes or in school. Some subjects in school and some levels of schooling take more effort; they require that we take bigger steps to reach the goal.

3. Distribute a copy of **Introduction to Theme 2** and **Introduction** and **Vocabulary** sections of **Lesson 4** from the *Student Workbook* to each student. Have the students review the handouts and discuss them briefly, if necessary. Then distribute a copy of **Exercise 4.1** to each student. Tell the students that they will conduct a brief self-inventory of the challenges they face in school. Direct their attention to the columns headed Difficult, Comfortable, and Easy on **Exercise 4.1**. Under the column headings, the students should list subjects, assignments, or skills related to their schoolwork that strike them as difficult, comfortable, or easy. For instance, some students might find math difficult, or might find some area of math, such as word problems, difficult. They might find writing easy but the oral presentation of their writing difficult. They might have difficulty with personal traits, such as study skills. They might find neatness and organization easy to master. As necessary, help the students get started with this task. (Retain the completed inventory sheets for the assessment and for parent involvement.)

4. Explain that just as certain subject areas and tasks may be difficult, comfortable, or easy, different levels of education may also be more difficult than others. However, each level brings rewards.

5. Have the students take home their completed self-inventories to show their parents. Ask the students to work with their parents to develop a plan for dealing with aspects of school work that seem difficult.

6. Display **Visual 4.1**. Explain that the set of stairs depicted on this visual represents different levels of educational attainment and the median income associated with each level. Note that the median level of income increases with each step, as educational attainment increases.

7. Distribute a copy of **Exercise 4.2** from the *Student Workbook* to each student. Ask the students to complete Question 1, calculating the differences in median income for a-d. (**a. \$8,580; b. \$7,540; c. \$12,584; and d. \$13,000**). Point out that each difference is an

annual difference. For instance, someone with a bachelor's degree earns, on average, \$12,584 more every year than the person with an associate's degree.

8. Note that the median level of income for a high school dropout is \$22,152. Point out that this doesn't mean that someone who drops out of school at age 16 will earn \$22,152. The "median wage" (for all working people without a high school diploma) means that half of those people earn more than this amount and half earn less than this amount.

9. Explain that at a certain age, depending on state laws, students can choose to get off the steps. They can simply stop after completing, say, the tenth grade, and move into the labor force. Or they can continue, step by step, to reach some other goal. Each step represents a benefit as well as a cost.

10. Define "marginal benefit" as the additional benefit that would be obtained from one more unit of some good or service. In the case of education, the marginal benefit could be the additional income per year that would result from one more year of education. The marginal benefit of education also includes the attainment of additional skills that could help people meet important challenges or gain additional job satisfaction. Point out that the marginal benefits would accrue for every year of a person's working life.

11. Refer the students back to **Exercise 4.2**. Have them calculate the lifetime earnings at each level of educational attainment (Question 2). Answers are given in the table on the next page.

12. Ask the students to focus their attention on someone who has dropped out of high school after tenth grade, and on someone who has graduated from high school. Assuming a working life of 52 years for the high school graduate and 54 years for the dropout, the students can find that the dropout's lifetime earnings will be \$1,196,208 ($54 \times 22,152$), while the high school graduate's lifetime earnings will be \$1,598,064 ($52 \times 30,732$). Ask: What is the lifetime difference in earnings? (**\$401,856**) Explain that one cost of dropping out

Answers to Exercise 4.2

	HS dropout	HS diploma	Associate's degree	Bachelor's degree	Master's degree
Annual income	\$22,152	\$30,732	\$38,272	\$50,856	\$63,856
Years worked	54	52	50	48	46
Life earnings	\$1,196,208	\$1,598,064	\$1,913,600	\$2,441,088	\$2,937,376

of school is the lifetime difference in earnings—in this case, \$401,856, or approximately 25 percent lower earnings (401,856/1,598,064) for the high school dropout.

13. Explain an even more distressing point about high school dropouts: They are much more likely to be unemployed. Display **Visual 4.2**. Explain that the numbers shown represent United States average unemployment rates for 2008, by educational attainment. Ask the students to note the unemployment rate for people who attended only one-to-three years of high school (**9.0%**) and to compare that figure with the unemployment rate for high school graduates (**5.7%**). Ask the students to speculate: Why would the unemployment rate be so much higher for those who have not completed high school? (**Those who dropped out probably have fewer skills and less knowledge, and are thus less valuable to employers.**) Prompt the students by asking what an employer's impression of a high school dropout might be.

14. Display **Visual 4.3**. Ask the students if these are fair assessments on the employer's part. (**The students will probably say that these assessments are unfair.**) Allow discussion, but explain that employers often have little information to go on when they are hiring someone. So they use certain measures, such as educational attainment, to determine who is likely to be a good employee. If a high school graduate and a high school dropout apply for the same job, and if their other attributes, such as skills or work experience, are approximately equal, it is almost a certainty that the high school graduate will get

the job.

15. Explain that the class has examined the benefits of staying in school, but they should know that there are also costs. What might those costs be? Ask:

- What full-time jobs might be available to someone who is 17 years old? (**Retail clerk, fast food worker, car wash worker, etc.**)
- What is the average hourly wage paid to people starting in those positions? (**Answers will vary, but the students should recognize that wage rates for these jobs vary from minimum wage to about \$9.00 per hour.**)
- Explain that at 40 hours per week, and 52 weeks per year, it is possible to work 2,080 hours per year. Tell the students to use the most optimistic point of this wage range, \$9.00 per hour, and calculate the annual income for a worker earning that rate of pay. (**$2,080 \times 9 = \$18,720$**)
- By reference to the above calculation, explain that people use money and time to obtain additional education. Allocating money and time to education involves opportunity cost. (As necessary, review the definition of "opportunity cost" as the next-best alternative given up when a decision is made.) The year's salary is the opportunity cost, or income not earned, for a person who attends school full-time for the year.
- To pursue the analysis, tell the students to assume the same wage for a second year, and ask what the opportunity cost of finishing high school is (**$\$18,720 + \$18,720 = \$37,440$**). Remind the students that a high school graduate will earn an average of

- \$401,856 more than a dropout over a lifetime, and will work two fewer years. Ask: Do the costs of completing high school outweigh the benefits, or do the benefits outweigh the costs? (**The benefits certainly outweigh the costs.**)
- f. Explain that as students move on to college, the costs become significantly higher. Annual college tuition costs can range from an average of approximately \$6,600 at a public university to an average of approximately \$25,000 at a private university. These figures do not include housing costs, because such costs occur whether the student is in school or not. Ask: Are there any other costs that must be considered when calculating the cost of attending college as a full-time student? (**The amount of forgone income that could otherwise be earned, fees, books, and supplies.**)
16. Refer the students again to **Visual 4.1**. Explain that as people increase their educational attainment they also increase their income. Ask: Why might the additional income be important? (**Answers will vary. Guide the students to recognize that greater incomes provide people with a wider range of choices about goods and services, and with greater financial security.**) Explain that higher educational attainment, in general, brings about greater income, which brings about a higher standard of living. Also, higher levels of educational attainment can bring about greater job satisfaction. People who have reached high levels of education generally have more choices about jobs.

CLOSURE

Use the following questions to review the lesson:

- At what level of educational attainment is there likely to be the greatest level of unemployment? (**The level of the high school dropout.**)
 - Why is the unemployment rate so much higher for high school dropouts? (**Answers will vary. The students should recognize that the high school dropout is likely to be unskilled and that employers are less likely to believe a high school dropout can face the challenges of holding a job.**)
- What are the benefits associated with increasing educational attainment? (**Greater incomes, higher standards of living, greater job satisfaction, more choices.**)
 - As people consider the benefits of increasing their educational attainment, what must they also consider? (**The costs.**)
 - What is opportunity cost? (**The next-best alternative given up when a choice is made.**)
 - What is the opportunity cost of staying in high school until graduation? (**The wages that could have been earned during that period.**)
 - In addition to forgone wages, what are some additional costs of attending college? (**Costs of tuition, fees, books, and supplies.**)

ASSESSMENT

Refer again to **Exercise 4.1** in the *Student Workbook* and the inventories the students conducted early in the lesson. Explain that the students' lists in the Easy column probably refer to their special aptitudes and skills. Ask each student to write a list of occupations that require the aptitudes and skills she or he listed in the Easy column. Then tell the students to choose one of those occupations and write a brief essay about it, including the following:

- The level of education required for this occupation,
- The costs of obtaining the education required in terms of time spent and lost earnings,
- The expected benefits in terms of financial rewards and fulfillment.

For help with their essays, the students can consult the *Occupational Outlook Handbook* at <http://stats.bls.gov/oco/>. They may also discover helpful information by interviewing someone in the occupation they are considering.

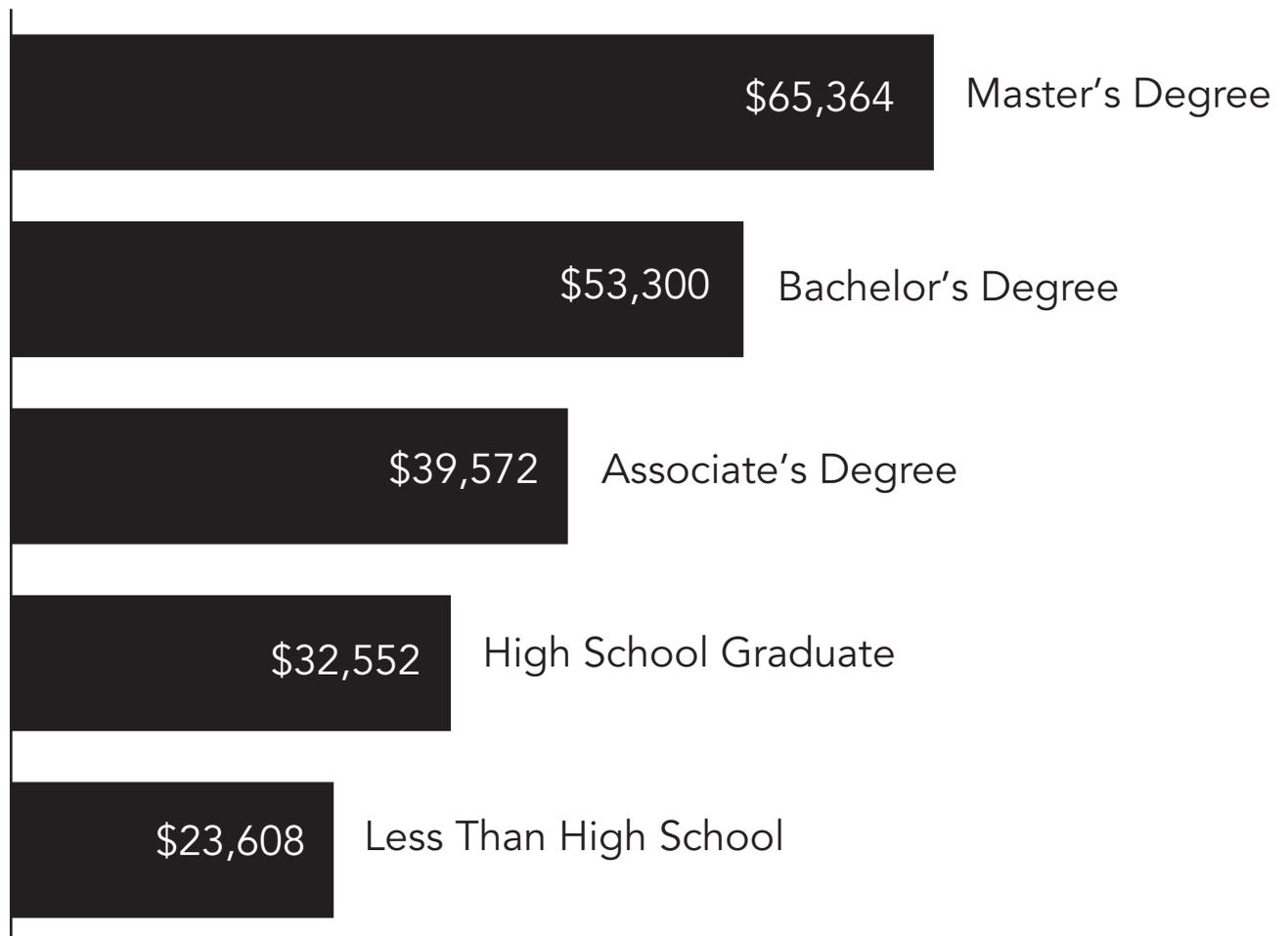
EXTENSION

Have the students interview an adult about his or her job, concentrating on the skills necessary in the job. Some questions might include:

- How did you acquire the skills necessary for your work?
- What were your academic strengths in school?
- How did school prepare you for the position you hold?
- What is your highest level of educational attainment?

Steps to Success

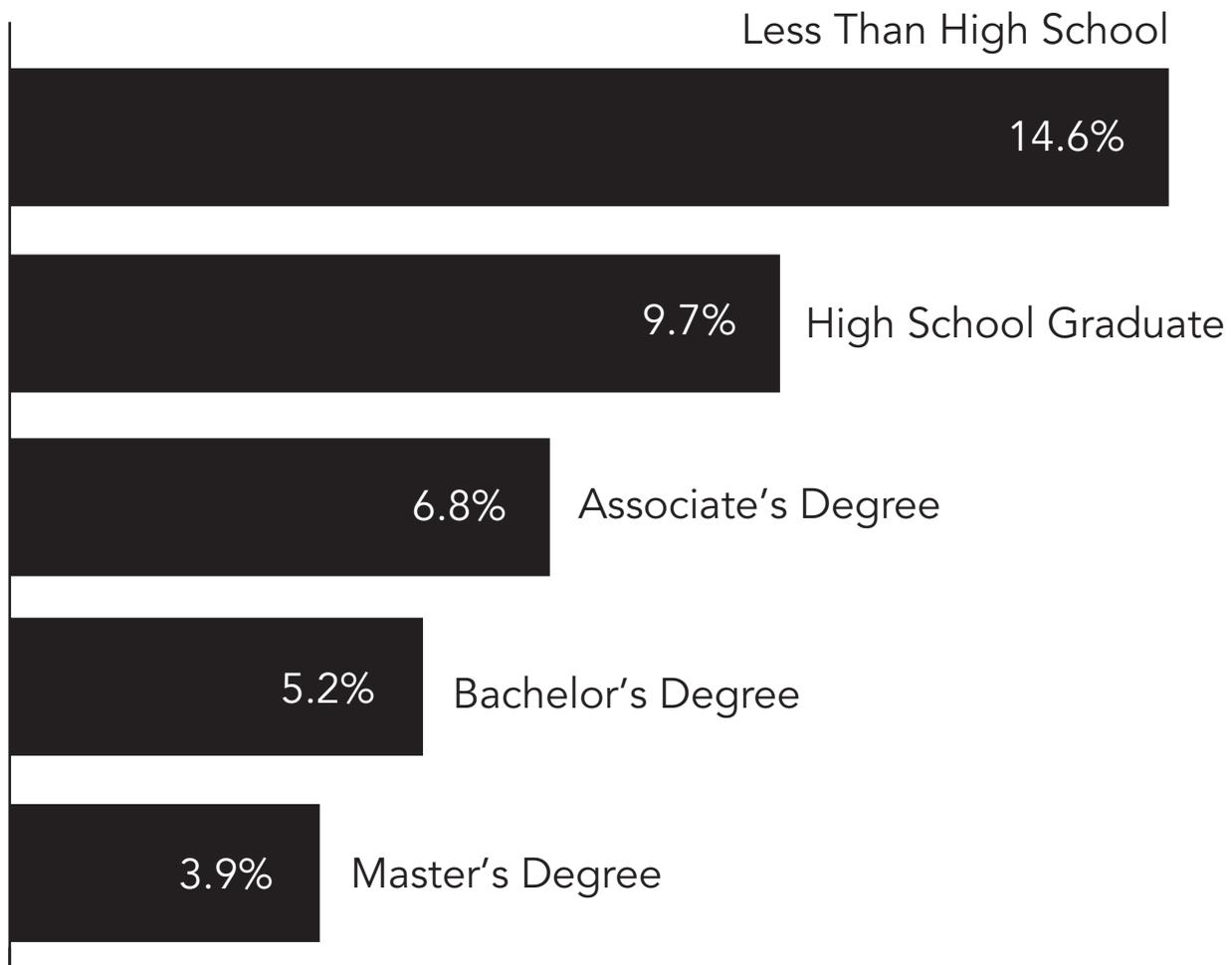
2009 Median Annual Earnings by Levels of Educational Attainment:



Source: Bureau of Labor Statistics, Current Population Survey, <http://www.bls.gov/emp/emptab7.htm>

Uneducated = Unemployed

Unemployment Rates by Levels of Educational Attainment:



Note: Data are 2009 annual averages for persons age 25 and over.

Source: Bureau of Labor Statistics, Current Population Survey, <http://www.bls.gov/emp/edupay.txt>

An Employer's Perspective

"Someone who couldn't complete high school probably finds it difficult to complete any task."

"How bright can a high school dropout be?"

"High school can be hard work. A high school dropout is probably scared of a little hard work."

"A high school dropout didn't learn some things that are needed to perform well in this job."