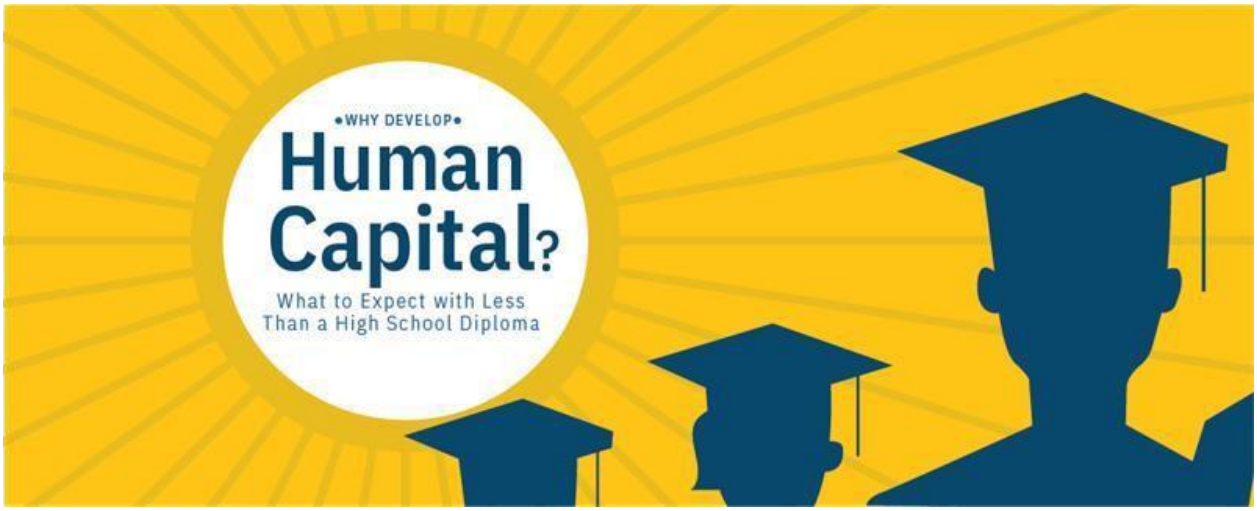


Human Capital and Education: How Long to Earn $1 Million

In this lesson students explore how long it takes to earn $1 million dollars based on different levels of education and graph their estimates and the actual number of years. Students explore human capital and create a table of their personal human capital. Students interpret data related to educational attainment, earnings, and unemployment rates. They calculate the difference in earnings between someone who has a high school diploma and less than a high school diploma and explain the financial impact of this difference in human capital.

Grade Level
6–8, 9–12

Concepts
Human Capital

Objectives
Students will be able to:

- Describe how increasing skills, knowledge, and training can increase levels of human capital
- Analyze the relationship between education levels and earnings
- Evaluate benefits of increasing human capital

Time Required
45 minutes

Essential Question
Why is important to develop your human capital?

Materials

- Infographic: *Why Develop Human Capital? (*bit.ly/human-capital-poster)
- Handout 1: *How Long to Earn $1 Million*, one copy for each student
- Handout 2: Exploring Human Capital

Procedure

1. Distribute Handout 1: *How Long to Earn $1 Million*. Explain to students that the levels of education start at the top of the table with the lowest level of education and work down the column to the higher levels of education.
2. Have students work with a partner to discuss and estimate the national median annual earnings for the various levels of education. (Define median as the middle value in a data set. Median is a good measure of the average value when the data include exceptionally high or low values.) Students should use their best estimate based on what they currently know about these levels of education. They should then calculate the number of years to earn $1 million for the level of education based on the earnings. Students should record their answers in the estimate columns. Have students then graph their estimates.
3. Ask the students:
   - What were your estimates for the number of years to earn $1 million with a high school diploma? *(Answers will vary)*
   - Why did you make that estimate? Continue this questioning for two or three other levels of education. *(Answers will vary)*
   - Why did you estimate that higher levels education generally took less time to earn $1 million? *(Answers will vary; generally, jobs that require higher levels of education have higher earnings)*
4. Display the infographic (bit.ly/human-capital-poster). Refer to the "How Long Does it Take to Earn A Million?" section of the infographic. Have students record the answers from the infographic in the actual column and graph the actual numbers.
5. Ask the students:
   - Were your estimates close to the actual numbers? *(Answers will vary)*
   - Do any of the timeframes for earning $1 million surprise you? Why? *(Answers will vary)*
   - In looking at your graph in part 2, how would you interpret the graph? *(Workers with lower education levels generally take longer to earn $1 million)*
6. Distribute Handout 2: *Exploring Human Capital*. Have students use the infographic to complete the handout.
7. After students have completed the handout, ask them:
   - What is **human capital**? *(The skills, knowledge, and training people possess, measured by their economic value)*
   - Share an example of your human capital from your responses on the handout. *(Answers will vary)*
   - What is your interpretation of the graph in the "Education Pays" section of the infographic? *(Generally, higher levels of education result in higher earnings and lower levels of unemployment)*
   - Is this always the case? *(No, there may be exceptions to this based on the industry and a particular person's human capital)*
   - When you calculated the difference in earnings between someone who has a high school diploma and less than a high school diploma for the following time frames, what were your findings? *(Based on 2021 data – One Week: $183 (809-626=183); One Year:$9,516 (183*52 weeks=9,516); Ten Years: $95,160 (9,516*10 years=84,960).*
   - Explain the potential financial impact of obtaining at least a high school diploma. *(Answers will vary; by not completing high school a person may be giving up earning nearly $100,000 over 10 years and may be more likely to be unemployed, especially during difficult economic times.)*

- Why might some people forego getting higher levels of education? *(Answers will vary; People vary in their willingness to obtain more education or training due to the immediate costs of obtaining the education or training, current job opportunities, or other life circumstances)*

8. Ask the students the following questions to close the lesson:
   - Why might having higher levels of human capital be important? *(Higher levels of human capital generally make an individual more valuable in the economy and labor market)*
   - What are some things you can do to increase your human capital? *Answers will vary; graduate from high school, obtain post-secondary education, take dual enrollment or advanced placement courses, acquire industry certifications or other credentials, gain experience through internships or work, etc.)*

Handout 1: How Long to Earn $1 Million

Part 1

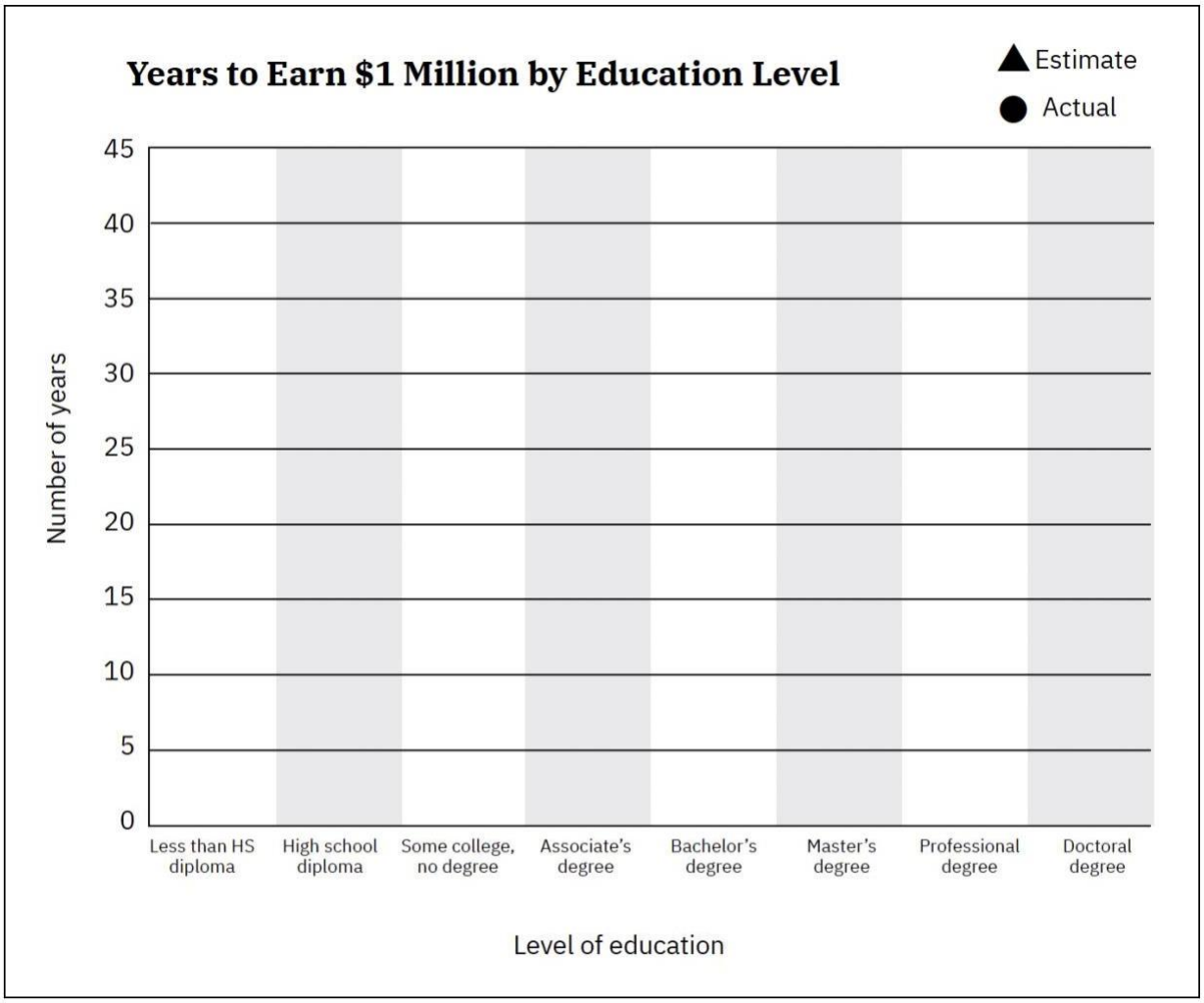
Work with a partner to discuss and estimate the national median annual earnings for the various levels of education (based on all jobs) listed in the chart. Also, calculate the number of years it will take to earn $1 million based on the estimated salaries. Record your answers in the estimate columns.

Level of education	Estimated national median annual earnings*	Estimated number of years to earn $1 million**	Actual number of years to earn $1 million
Less than high school diploma			
High school diploma			
Some college, no degree			
Associate's degree			
Bachelor's degree			
Master's degree			
Professional degree			
Doctoral degree			

*Estimated median annual earnings = median weekly earnings x 52 weeks
**Number of years to earn $1 million = $1 million / Estimated median annual earnings

Part 2

Using a triangle for each data point, graph the estimated number of years it would take to earn $1 million for each level of education.



Part 3

When the actual number of years to earn $1 million are shared, record those numbers in the actual column. Using a square for each data point, graph the actual number of years it would take to earn $1 million for each level of education.

Handout 2: Exploring Human Capital

What is human capital?

Complete the matrix to identify your current human capital.

Your Current Human Capital	
Areas or subjects you have a lot of knowledge or information about	
Education	
Additional training or certifications	
Employment or work history	
Other skills	

Education Pays

What is your interpretation of the graph in the Education Pays section of the infographic?

Calculate the difference in earnings between someone who has a high school diploma and less than a high school diploma for the following time frames:
One Week: ____One Year: _____Ten Years: _____

Explain the potential financial impact of obtaining at least a high school diploma.