

# Unit 1



# Exploring Careers

The idea that education affects earning potential seems straightforward, but the data tell a powerful story. Workers with more education have a higher median salary and a lower unemployment rate. Economists attribute this to the role of education in developing human capital—a person’s knowledge, talent, experience and skills. People invest in their human capital by going to school, pursuing additional training and acquiring skills. Because workers who develop their human capital increase their productivity, they are generally paid more.

To learn about the education and skills related to a particular job, a student can use the Occupational Outlook Handbook, produced by the U.S. Bureau of Labor Statistics. The handbook, an online guide to hundreds of careers, describes the median pay and working conditions of the jobs. It also includes the typical education required at the entry level, along with projections for the growth of the occupation over the next decade. The Occupational Outlook Handbook can be found at [www.bls.gov/ooh/](http://www.bls.gov/ooh/).

## Lesson Overview

To demonstrate the connection between skill development and productivity, students will create a name tent for their desks. Different groups of students will produce the name tent in different ways, such as using their nondominant hand. The students will debrief the activity by discussing how training and skill development affect productivity. Then, the class will brainstorm reasons to further their education after high school. Students will individually use information from the Bureau of Labor Statistics’ Occupational Outlook Handbook to research a career. They will describe the career, its work environment, required education/experience and pay/job outlook.

## Instructional Objectives

- Describe the relationship between education and the development of human capital.
- Describe the required education, the earning potential and the working conditions for a career.
- Compare the earning potential of workers who have different levels of educational attainment.

## Time Required

90 minutes

## Materials Required

### For each student

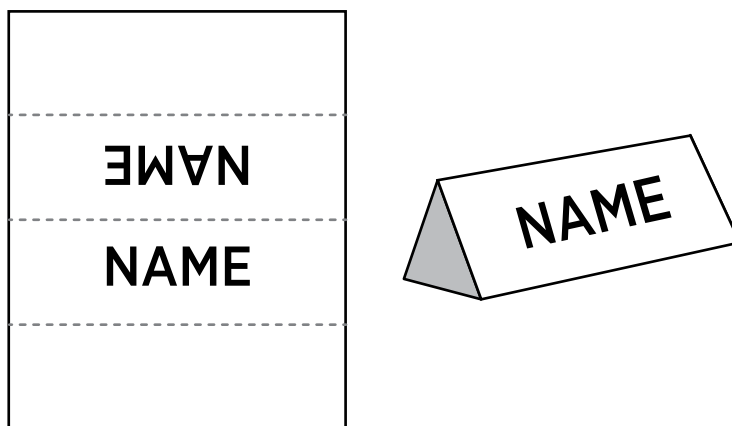
- Student Workbook
- One sheet of light-colored construction paper
- Marker

### For the classroom

- Computer lab access (or printed copies of occupation profiles—see step 10)
- Classroom computer with Internet access and projector
- One sheet of light-colored construction paper for demonstration

## Procedure

1. Tell students that they will create name tents for display on their desks for the day.
2. Demonstrate how to produce a name tent using a sheet of construction paper. Tell the students to watch but not to start their name tent.
  - Fold the piece of construction paper in half by placing the shorter edges (8") together.
  - Crease the center fold. The folded paper should measure 8" x 5.5".
  - Open the paper to 8" x 11".
  - Fold the bottom 8" edge to the middle crease. Crease the fold.
  - Open the paper to 8" x 11".
  - Fold the top 8" edge to the middle crease. Crease the fold.
  - The paper should now have four sections, each measuring approximately 2.75" x 8".
  - With the folds facing you, count down three rectangles from the top of the paper. Print your first name in large letters in the rectangle.
  - Turn the paper upside down. Again count down three rectangles and print your first name in large letters in the rectangle.
  - Fold the paper to create a tent with the name displayed on both sides.



3. Tell students that each of them will produce a name tent, but there will be different rules. Divide the students into four groups and describe the rules for each group as follows. Tell them to wait to start their name tent.
  - **Group 1** will remain seated to produce the name tents. They may use both hands.
  - **Group 2** will remain seated to produce the name tent, but they must keep their dominant hand—the hand with which they write—behind their back. They can only use their nondominant hand—the hand with which they do not write—to produce the name tent.
  - **Group 3** will remain seated to produce the name tent, but they must keep their nondominant hand—the hand with which they do not write—behind their back. They can only use their dominant hand—the hand with which you do write—to produce the name tent.
  - **Group 4** will produce the name tent while standing up and using only the nondominant hand to produce the name tent. They must keep their dominant hand behind their back. They may not use the desk, table, chair or floor. They may not work with another student.
  
4. Distribute a piece of construction paper and a marker to each student. Remind students that each group must fold name tents according to the rules described. Students should raise their hands individually when they have finished their name tents. Tell students to begin.
  
5. After most students have finished, ask everyone to stop producing name tents and discuss the following questions.
  - Did any students find it very difficult to produce name tents? Why?  
*Students in Groups 2 and 4 had the most difficulty. They found that using their nondominant hand was challenging. Standing and folding with the nondominant hand made it nearly impossible.*
  - In general, which group finished most quickly? Why?  
*Group 1 was able to use both hands and was able to remain seated and use the table.*
  - In general, which group of students took the longest time to finish? Why?  
*Group 4 took the longest and had the name tents that were the hardest to read. Students in this group had to use only the nondominant hand and stand. They also did not get to use tools, such as the desk or floor.*
  - What makes using your dominant hand so much easier?  
*Students have been practicing writing since they were very young. They have been trained to write with their dominant hand.*
  - Did using the table make a difference?  
*Without tools and equipment, such as the desk or floor, the task was more challenging.*
  
6. Introduce the idea of **human capital** to the students. Use the following information to guide the discussion.
  - Human capital is the knowledge, talent, experience and skills that people possess.
  - People are able to invest in their human capital by going to school, pursuing additional training and developing skills.
  - Workers who develop their human capital are more productive.
  - Productivity is also increased by using tools and equipment.

Remind students that Group 1—the group that used their dominant hand and the table—produced the name tents faster and at a higher quality than the other groups. They were more productive. Explain that people with more skills, education and training tend to be more productive and, as a result, earn higher incomes.

7. Have students work with a partner to define “human capital” in their own words. Write the definition on page 4 in the Student Workbook. Ask some students to share their definition with the class.
8. Tell students to work with a partner to brainstorm five skills or talents that each one currently possesses. Write them in the appropriate space on page 4. Encourage students to think about interests and talents broadly, including school subjects that they like, hobbies, extracurricular activities, etc. After they identify these skills or talents, ask them to think about ways they could develop these skills and talents through education, training and experiences. Write the ideas on the same page in the box labeled “The Road Ahead.”
9. Tell students that one very important reason to continue their education after high school is to develop skills, increase their human capital and potentially increase their lifetime earnings.
10. Allow students to select a career to research from the list on pages 5–6 of the Student Workbook. Tell students that these are careers that have been studied by the United States Bureau of Labor Statistics. Display the “Occupational Outlook Handbook” page at [www.bls.gov/ooh](http://www.bls.gov/ooh) and demonstrate how to find a career listing.

Visit <http://www.bls.gov/ooh/about/teachers-guide.htm> to find a teacher’s guide to the website. Also, the website provides a printer-friendly option for every profession. If access to a computer lab is limited, the teacher could print enough different occupational information packets for students to complete research.

The screenshot shows the "Occupational Outlook Handbook" Teachers Guide page. The page header includes the Bureau of Labor Statistics logo and navigation links. The main content area is titled "Teachers Guide" and includes a "Dear Teacher:" section. This section explains that the Occupational Outlook Handbook (OOH) is an online career guidance resource that provides information on hundreds of occupations in the United States, updated every 2 years by the Bureau of Labor Statistics (BLS). The OOH allows students to explore different aspects of occupations by clicking on the following tabs:

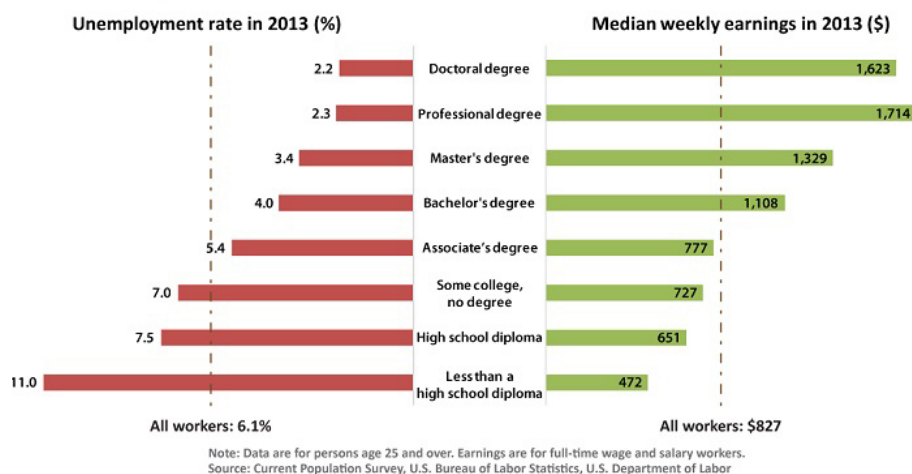
- What workers do on the job
- Work environment
- Education, training, and other qualifications needed to enter the occupation
- Pay
- Projected employment change and job prospects from 2012 to 2022
- Similar occupations
- Contacts for more information

Below this list, there is a section titled "What's New in the 2014–2015 Edition of the OOH?" which lists several new occupational profiles:

- Compensation, benefits, and job outlook specialists
- Computer network architects
- Emergency management directors
- Fundraisers
- Genetic counselors
- Information security analysts

- 11.** Have students open the Student Workbook to page 7. Review the sections of the website that students will use to research the career that they selected.
- The **What They Do** tab contains information about the duties associated with the job and might contain information about specializations within the field. Students should use this information to complete “Explain what you do.”
  - The **Work Environment** tab contains details about the typical workplace, schedule and hazards related to the career. Students should use this information to complete “Describe where you work.”
  - The **How to Become One** tab contains information about required training, education and licenses. The BLS uses the following categories to describe educational requirements. They are defined in the glossary in the Student Workbook. Students should use this information to complete “How much education will you need?”
    - Less than high school
    - High school diploma or equivalent (such as a GED)
    - Some college, no degree
    - Postsecondary non-degree award
    - Associate degree
    - Bachelor’s degree
    - Master’s degree
    - Doctoral or professional degree
  - The **Pay** tab contains the median wage for the career, along with comparisons to similar jobs and all occupations. Students should use this information to complete “How much will you earn?”
    - Remind students that half of all workers in the career earn more than the median wage and half earn less.
    - Students should compute median weekly wage by dividing the annual pay by 52.
    - If only an hourly wage is given, multiply the wage by 40 hours to find weekly wage. Then multiply the weekly wage by 52 to find the annual wage.
- 12.** Tell students to research information about the career they selected and record the information on page 7 of the Student Workbook.
- 13.** Display the graph of earnings by educational attainment that can be found at [www.bls.gov/emp/ep\\_chart\\_001.htm](http://www.bls.gov/emp/ep_chart_001.htm). (Note: See the screen shot on the next page. To search for the graph, visit [www.bls.gov](http://www.bls.gov) and search for “income by educational attainment.”) Use the graph and the information below to discuss the link between higher educational attainment and average earnings.
- This graph compares the median weekly earnings of full-time workers, over age 25, with various levels of education. In general, workers with higher levels of educational attainment have higher wages.
  - The chart also displays the unemployment rate by level of educational attainment. It shows that people with higher levels of educational attainment generally have a lower level of unemployment.
- Have students transfer the data on median weekly earnings from the chart to page 8 in the Student Workbook and answer the questions.

## Earnings and unemployment rates by educational attainment



### Closure

**14.** Have students divide into groups based on the education required for an entry-level job in the career they researched. Within the groups, have students compare median salaries. Discuss the range of salaries within each level of educational attainment, using the information below:

- Salaries within each level of educational attainment will vary based on market conditions, including the number of jobs available, growth or decline in the field and the number of qualified candidates for the jobs.
- The nature of the job, including work environment, hazards and location, can also affect median salary.
- Consumer demand for the good or service produced by the worker affects the earnings.

### Assessment

**15.** Assess student research, using the rubric found on page 8.

### Extension Activity

Have students visit [www.mynextmove.org](http://www.mynextmove.org). Selecting the “I’m not really sure” icon allows the student to complete an interest survey to identify potential careers that match the student’s preferences.

The name tent activity was originally developed by the Federal Reserve Bank of St. Louis and published in *It’s Your Paycheck, Lesson 1: Invest in Yourself*.

## Assessment Rubric

Student Name \_\_\_\_\_

1. Did the student identify a career?

<b>4</b>	<b>0</b>
Career identified	No response

<b>Points</b>

2. Did the student provide clear and complete information about the job description?

<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>Points</b>
Clear and complete information	Some flaws in clarity or completeness	Flaws in clarity and completeness	Significant flaws in clarity and completeness	No response	

3. Did the student provide clear and complete information about the work environment?

<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>Points</b>
Clear and complete information	Some flaws in clarity or completeness	Flaws in clarity and completeness	Significant flaws in clarity and completeness	No response	

4. Did the student identify the educational requirement?

<b>4</b>	<b>0</b>
Education level indicated	No response

<b>Points</b>

5. Did the student correctly compute weekly wage using annual wage?

<b>4</b>	<b>2</b>	<b>0</b>
Correctly computed	Mistakes in computation	No response

<b>Points</b>

6. Did the student complete the graph and answer the questions on page 8?

<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>Points</b>
Clear and complete information	Some flaws in clarity or completeness	Flaws in clarity and completeness	Significant flaws in clarity and completeness	No response	

**Total Points**  
(24 points possible)

--