

The Value of a Degree

The **BIG** Idea

- How does education after high school affect my job opportunities and the money I'll make?

AGENDA

Approx. 45 minutes

- I. Warm Up: Why College? (10 minutes)
- II. How Much Money? (20 minutes)
- III. Earnings and Unemployment (10 minutes)
- IV. Wrap Up: School Rules! (5 minutes)

MATERIALS

STUDENT HANDBOOK PAGES:

- Student Handbook page 45, Same Interest, Different Education
- Student Handbook pages 46 and 47, How Much Money?
- Student Handbook page 48, Earnings and Unemployment

FACILITATOR PAGES:

- Facilitator Resource 1, Career Fair Sign-Up Sheet
- LCD projector
- Laptop

OBJECTIVES

During this lesson, the student(s) will:

- Use RUPrepareND.com to compare earnings for related careers (within the same career cluster) that require different levels of education (high-school vs. college grads).
- Use a bar graph to discover the correlation between education and income and the inverse correlation between education and unemployment.

OVERVIEW

In this lesson, students will explore the connection between education and income. They'll begin by responding to several true/false statements about the benefits of a college education. Then, they'll use RUPrepareND.com to compare earnings for careers in the same field, or cluster, that require high school or four-year degrees. Finally, they'll review a Bureau of Labor Statistics bar graph to compare income and unemployment rates for high school dropouts and college grads.

PREPARATION

- Make arrangements for the class to use the computer lab, and make sure RUPrepareND.com is accessible from students' computers.
- List the day's **BIG IDEA** and activities on the board.
- Write the day's vocabulary and definitions on the board. Write the web address RUPrepareND.com on the board.
- The following handouts need to be made into overhead transparencies or copied onto chart paper:
 - **Student Handbook page 45, Same Interests, Different Education**
 - **Student Handbook pages 46 and 47, How Much Money?**
 - **Student Handbook page 48, Earnings and Unemployment**

BACKGROUND INFORMATION

This lesson should demonstrate a correlation between education and earnings, as well as a correlation between a lack of education and unemployment. In the lesson, you'll share a graph from the Department of Labor that supports this idea. Note: Salaries on this graph represent national averages. Actual salaries in your state may be higher or lower. Please share this information with your students.

Your students will likely point out exceptions to the rule that "more education means more money." (It's true that some jobs that don't require a college education pay better than some jobs that do.) It is not our mission to indiscriminately steer students toward college, but to make them aware of all their options, and the implications of their decisions.

Here are three examples of careers that may have higher wages, yet don't require college education, along with notes about each one:

Skilled Trades: Before you can make a big salary at these jobs, you'll most likely begin by working as an apprentice for low pay. And your education probably won't be over after high school; these jobs often require post-high school certification courses.

Physical Labor: It's true that jobs like mining and manufacturing pay well. But it's also true that many jobs requiring physical labor are disappearing due to automation and factories moving to other countries.

Sports and Entertainment: You might not need a degree to make big money as an actor or an athlete, but there are limited opportunities for these kinds of jobs, and success is a result of both talent and luck. If you want to try and go this route, remember that it's important to have a back-up plan!

VOCABULARY

Occupation: Job.

Annual: Yearly.

Entry level wage: Earnings at the beginning of your career

Average wage: Averages earnings, combines the wages for the beginning, middle, and experienced levels of a career.

Experienced wage: Earnings you make toward the end of your career

IMPLEMENTATION OPTIONS

See **Careers Lesson 1** for background information on computers and modifications in case computers are not available.

For the **Warm Up** activity, you might consider having students discuss the true/false statements in teams or pairs and decide on a group answer. Teams could then share their answers (and the reasons for their choices) with the class.

If you think students will have a difficult time searching for careers by cluster, or navigating the **Money & Outlook** section of the career profiles, you may prefer to do this as a class activity.

Another possibility would be to print out **Salary & Outlook** pages for pairs of related careers (requiring different levels of education), and then have students work directly from the printouts.

ACTIVITY STEPS

I. Warm Up: Why College? (10 minutes)

1. [Let students know that next week they'll begin preparation for a seventh-grade career fair that will be held in about a month. Each will become an expert in a particular career, and will create materials to share information about that career with their classmates. They should write their names on the sign-up sheet along with the three careers they are interested in investigating, which they've listed in the box at the bottom of **Portfolio page 9, Interest Profiler Results**. Next week, you'll assign a different career to each student, and will try to see that each student gets one of his top choices. (In order to get a diverse selection, you might suggest that students choose no more than one "celebrity" career, and at least one they think no one else will pick. **(NOTE:** Celebrity careers include actor, singer, model, professional athlete, etc.) While students are working, circulate **Facilitator Resource 1, Career Fair Sign-Up Sheet**.]
2. **SAY SOMETHING LIKE:** Last week, you investigated specific careers using RUReadyND.com. This week, we'll use the website to compare the earnings of careers in the same field, but requiring different levels of education. But first, we're going to talk about education—and specifically, college.
3. Let's think about some of the reasons people go to college. I'll read a statement and if you think it's true, give it a thumbs up. If you think it's false, give it a thumbs down. There are no right or wrong answers, so don't worry about being correct.
4. [Read the following statements to the class one at a time. After each "vote," ask some of the students to volunteer their reasons for why they chose true or false. The statements are intentionally ambiguous so that students can make a case for either a true or false answer.]
 - a) College isn't for everyone.
 - b) A person with a high school education will have unlimited job choices.
 - c) People go to college so they can earn more money when they graduate.
 - d) It's important for seventh graders to think about college even though it's more than five years away.
 - e) The more education you have, the more money you'll make.

II. How Much Money? (20 minutes)

1. **SAY SOMETHING LIKE:** It's possible to use RUPrepareND.com to compare individual jobs in the same field, such as a security officer and a police officer (Law, Public Safety, Corrections and Security) or a diagnostic medical sonographer and a family physician (Health Science). One of the big differences between jobs in the same field is the amount of education you need to get hired. What differences in earnings do you expect to find when we compare jobs that require different levels of education? (The more education you have, the more money you make.)
2. [Refer students to **Student Handbook page 45, Same Interests, Different Education** and have them sign into RUPrepareND.com. Choose one Career Cluster and model the following steps using a laptop and LCD projector, noting that the instructions are also on **Student Handbook pages 46 and 47, How Much Money?** if they get stuck.]
3. **SAY SOMETHING LIKE:** We want to find a list of related careers, so click on the Career Planning tab at the top of the page and then Explore Careers. In the section, Browse Career Cluster, you'll find the 16 Career Clusters used to categorize careers.

You're going to see the term Career Cluster throughout this website. A Career Cluster simply refers to a general field of work. For example, look at the list of clusters. In which Career Cluster do you think you'll find doctors, nurses, and physical therapists? (Health Science)

Let's investigate one pair of jobs together to get started. Click on the Health Science cluster and view the list of careers.

4. At the top of the page, you'll see the option to sort these careers **Alphabetically** or to **Sort by Education Level**. Let's click **Sort by Education Level**.

[Have a volunteer read each of the types of education. Explain any questions that students may have.]

- Professional or graduate degree
- Bachelor's degree
- One or two years of post-secondary training
- High school completed (GED)
- High school not completed (but preferred)

5. **SAY SOMETHING LIKE:** Let's compare two careers. You'll see "Dental Hygienist" under the section "One to two years post-secondary education" and "Dentist" under the section "Professional or graduate degree." Let's click on each of those careers and read the **What They Do** page. [Click on the link for **Dental Hygienist** and read the paragraph at the top of the **What They Do** page aloud. Click the **back arrow** to

return to the list of careers and click on the link for **Dentist**. Read the top of the **What they Do** page aloud.]

- How are these jobs similar? (*Both help people care for their teeth.*)
- How are they different? (*Dental hygienists handle routine dental care, like teeth cleaning and x-rays. Dentists diagnose dental problems, fill cavities, repair broken teeth, and treat gum disease.*)

6. Tell students that now they will find out how much money each makes.

[Instruct students to click on **Dental Hygienist**, then **Money and Outlook**. They should scroll down the page to the chart that looks similar to the one on their handbook page.

- Now show the students that the chart reflects U.S. national average annual earnings.
- Explain the vocabulary words: annual, occupation, entry level wage, average wage, experienced wage. Point out that this chart only gives the average wage. This means that you will earn this amount in the middle of your career. You will earn less in the beginning and more near the end of your career.
- Explain the vocabulary words: **outlook, workforce, and growth rate**. Tell students that it will be easier to find jobs with an increasing outlook and a high growth rate. If jobs have a decreasing outlook or a low growth rate, it may be more challenging to find a job in this career.
- Help students transfer the information from the **RUReadyND.com** chart to the student handbook page. Ask students to compare the annual wages for each career.]

7. [Ask students to predict what the earnings will be for the dentist, the occupation that requires a four-year college degree, plus additional years for dental school. Have them return to the Health Science career cluster and select Dentist].

- [As in the previous example, students should click on **Money and Outlook**. Have students fill in the wage and outlook information on the student handbook chart.]
- [Now have them compare the annual earnings of a dental hygienist and a dentist. Does the general rule, “more education, more money,” hold true?]

8. [Now students are ready to do their own research. For research item #1, they should select a career cluster, find one job that requires a high school diploma or two years of training and one that requires a bachelor’s degree, and complete the wage information for each. Students may need to read the **What to Learn** tab on the career

profile in order to learn how much education is required for a particular career. If students are having a difficult time locating earnings information for the careers they've chosen, they may select from the pairs found on **Student Handbook page 45, Same Interests, Different Careers**. If students have time, they should choose a different career cluster and complete item #2.]

9. [When all students have researched at least one career pair, reconvene the class.]

III. Earnings and Unemployment (10 minutes)

1. **SAY SOMETHING LIKE:** Now that you've had a chance to look at the earnings for similar careers, let's look at the average earnings for all careers, grouped by education.

[Refer students to **Student Handbook page 48, Earnings and Unemployment**.]

2. **SAY SOMETHING LIKE:** Let's see what we can learn from these charts. Let's start with the chart on the right. This chart shows average weekly earnings—the amount of money people make each week.

- Which bar is the shortest? In other words, who makes the *lowest* weekly earnings? (*people who drop out of high school*)
- How much do they make each week? (\$451) If you are saying to yourself, “Woo-hoo, I can drop out of high school and make \$451 a week,” hold that thought. In later lessons, we'll talk about what expenses you'll have as an adult, and see how far you can make your money go.
- Now take a look at the middle of the graph—the earnings for people with a four-year college degree—a bachelor's degree. How much do they make each week? (\$1,053)
- Who makes the most money? (*People who have even more education.*)
- What happens to people who graduate from high school but don't finish college? (They make somewhere between \$638 and \$719 a week.)

3. **SAY SOMETHING LIKE:** Now let's take a look at the graph on the left.

- What is being measured? (*unemployment*)
- Who has the longest bar here, or the highest rate of unemployment? (*high school dropout*)
- What percentage of high school dropouts were out of work, or unemployed, in

2011? (14%, or about 14 out of every 100 people)

- How does this compare with a four-year college degree—a bachelor’s degree? (College grads have about 4.9% unemployment)
- What does graduating from college do to your chances of finding work? (Your chances get better)

4. **SAY SOMETHING LIKE:** Let’s summarize the information contained in the graph by completing the first two sentences below.

- The more education you have, the more _____. [money you make]
- The more education you have, the less likely it is that you will _____
_____. [be unemployed]

5. **SAY SOMETHING LIKE:** OK, that’s the big picture. You now know more about the relationship between education, earnings, and unemployment than most adults did when they were your age.

IV. Wrap Up: School Rules! (5 minutes)

1. **SAY SOMETHING LIKE:** How many of you found that the careers you researched supported the Department of Labor graph—that the more education you have, the more money you make? What was an example?

What are some examples of occupations where the “more education, more money” isn’t true? [Point out that many of these occupations are skilled trades like construction, plumbing, electricians. Even though these high-paying jobs may not require a college education, they typically require some kind of additional training or apprenticeship. Have students complete the last sentence on **Student Handbook page 48, Earnings and Unemployment.**]

- Some careers in construction or the skilled trades require on-the-job training rather than additional education. Name some of these careers:

2. **SAY SOMETHING LIKE:** Did everyone sign the Career Fair sign-up sheet? If not, please do so before you leave, because next week I’ll be assigning each of you a career to investigate for the fair.

EXTENSION ACTIVITY

Encourage students in their free time to continue to use RUReadyND.com to look at the education paths for careers that interest them. They might also talk to parents or other adults about how their career choices were influenced by their education path.

Same Interests, Different Education

Career Cluster	Less Education High School or Community College (H or C)	More Education Community College or University (C or U)
AGRICULTURE, FOOD & NATURAL RESOURCES	Animal Trainer	Veterinarian
ARCHITECTURE & CONSTRUCTION	Carpenter	Architect
ARTS, AUDIO-VIDEO TECHNOLOGY & COMMUNICATIONS	Recording Engineer	Film Editor
BUSINESS, MANAGEMENT AND ADMINISTRATION	Receptionist	Conference Organizer
EDUCATION & TRAINING	Teacher Aid	School Counselor
FINANCE	Collection Clerk	Accountant
GOVERNMENT & PUBLIC ADMINISTRATION	Building Inspector	FBI Agent
HEALTH SCIENCE	Paramedic	Neonatal Nurse
HOSPITALITY & TOURISM	Airline Ticket Agent	Recreation Programmer
HUMAN SERVICES	Nail Technician	Social Worker
INFORMATION TECHNOLOGY	Computer Service and Repair Technician	Computer Game Designer
LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY	Correctional Officer	Lawyer
MANUFACTURING	Machinist	Manufacturing Manager
MARKETING	Retail Salesperson	Fashion Editor
SCIENCE, TECHNOLOGY, ENGINEERING & MATH	Avionics Technician	Mechanical Engineer
TRANSPORTATION, DISTRIBUTION & LOGISTICS	Auto Detailer	Pilot

How Much Money?

You can use RUPrepareND.com to compare the earnings and outlook for different careers in your state.

1. Sign into RUPrepareND.com.
2. Click the **Career Planning** tab at the top of the page. Then select **Explore Careers**.
3. Under **Browse Career Clusters** click on the cluster that interests you most.
4. Click on the career you want to research.
5. Click on the **Money and Outlook** button on the left.

For some careers, the Entry Level Wage or the Experiences wage is marked N/A which means “not available.” In other words, the wage information is not available. If your career has N/A listed for Entry Level or Experienced wages, you should write that in your earnings chart.

SAMPLE

Career Cluster

LESS EDUCATION

MORE EDUCATION

Occupation		Occupation	
Average Annual Earnings		Average Annual Earnings	
Average Hourly Earnings		Average Hourly Earnings	
Outlook		Outlook	
Growth Rate		Growth Rate	

How Much Money? (continued)

RESEARCH #1

Career Cluster _____

Occupation		Occupation	
Average Annual Earnings		Average Annual Earnings	
Average Hourly Earnings		Average Hourly Earnings	
Outlook		Outlook	
Growth Rate		Growth Rate	

RESEARCH #2

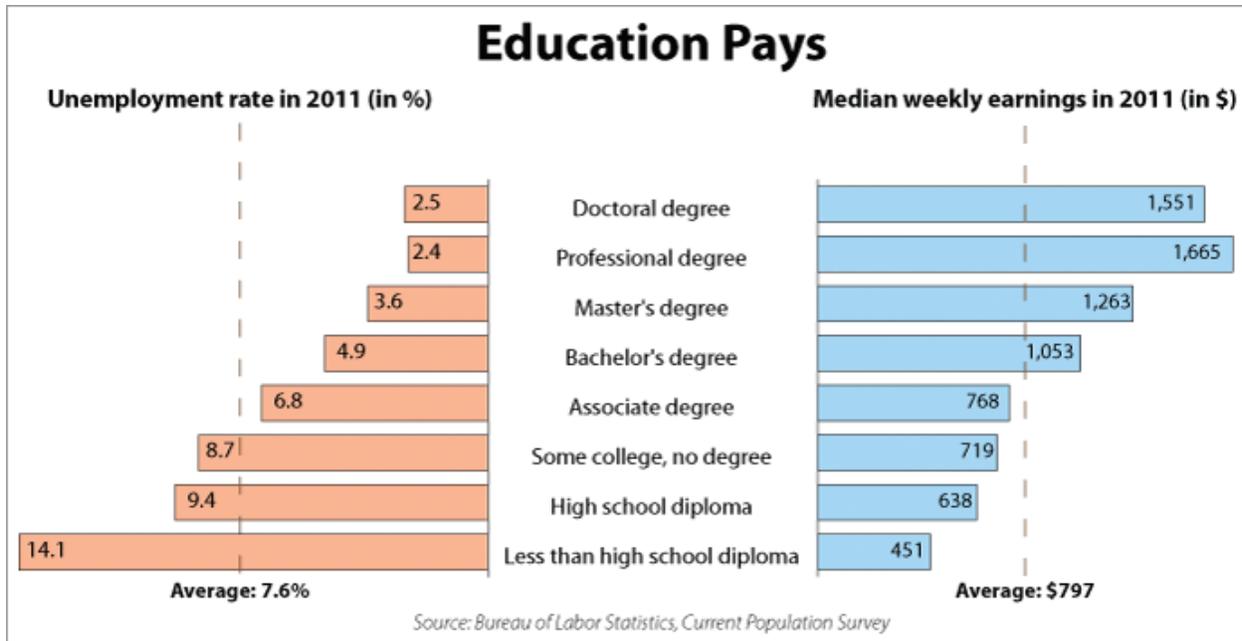
Career Cluster _____

Occupation		Occupation	
Average Annual Earnings		Average Annual Earnings	
Average Hourly Earnings		Average Hourly Earnings	
Outlook		Outlook	
Growth Rate		Growth Rate	

RESEARCH LIKE A PRO: When you compare earnings, you have to compare similar things. For example, compare the earnings for a veterinarian in a small town with the earnings for a plumber in a small town.



Earnings & Unemployment



Source: http://www.bls.gov/emp/ep_chart_001.htm

Data are 2011 annual averages for persons age 25 and over. Earnings are for full-time wage and salary workers. Note: The earnings on this graph represent national averages. Actual earnings in your state may be higher or lower.

The more education you have, the more

The more education you have, the less likely it is that you will

Some careers in construction or the skilled trades require on-the-job training rather than additional education. Name some of these careers: