Exploring Careers in Economics

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Standards and Benchmarks (see page 11)

Lesson Description

Students identify famous people in business law, politics, public service, sports, entertainment, and other areas who have degrees in economics. Students visit two websites—the University of Fraser Valley's list of famous people with economics degrees and the American Economics Association's page on careers in economics to ascertain the types of careers people with economics degrees have. Students participate in a "line-up" activity to learn about careers like economists, the education required for these careers, and the median pay earned by those with these careers. Finally, student access the Bureau of Labor Statistics Occupational Outlook Handbook to learn more about economists. To obtain the Exploring Careers in Economics Handout and Assessment Answer Key, contact Amy Hennessy at amy.hennessy@atl.frb.org.

Concepts

Careers
Economics
Economists

Objectives

Students will be able to

- define career, economics and economist;
- identify possible career paths for those with a background in economics;
- identify career fields that are related to economics;
- compare pay and educational requirements for economists and fields related to economics;
- identify skills needed to work in fields that use economics and how the study of economics can be useful in those fields; and
- describe the type of work economists do, the outlook for the field, the education needed, and the median pay.

Compelling Question

What careers are available to individuals with a background in economics?

Time Required

75 minutes

Materials

- *Exploring Careers in Economics Power Point deck, Slides 1—12*
- *University of Fraser Valley's video "A Career in Economics": https://vimeo.com/135871291?fl=pl&fe=sh*
- *American Economic Association's Page on Careers in Economics at https://www.aeaweb.org/resources/students/careers*
- *Video: What Career Paths are Possible in Economics? at https://youtu.be/uOrwKqEtRQ0*

- *Handout 1, one copy for each pair of students*
- *Handout 2, one copy cut into strips, one slip for each student or pair of students*
- *Handouts 3 and 4, one copy for each student*
- *Handout 3– Answer Key, one copy for the teacher*
- *Internet access (for student research)*

Preparation

Prior to starting the lesson, cut apart strips on *Handout 2: Economists and Related Fields*. Mount the strips on the back of cardstock or construction paper with tape or glue. Write the name of the career found on the slip on the front of the cardstock or construction paper.

Procedure

1. To begin the lesson, display Slide 2 and ask the following questions.
   - What comes to mind when you think of an economist. *(Answers will vary, but may include nothing, or boring, male, good at math, geeky, rich.)*
   - What do Ted Turner, the former CEO of Microsoft and current owner of the LA Clippers, the former CEO of Hewlett Packard, Warren Buffett, presidents Ford, Reagan, and George H.W. Bush, and Treasury Secretary Janet Yellen have in common with Mick Jagger, Arnold Schwarzenegger, and Karina Smirnoff from Dancing with the Stars?" *(Answers will vary, but may include they are famous, they are on TV, they belong to a similar political party.)*
2. Explain that all of those people majored in economics. Display Slide 3 and define economics as the study of decisions people make when faced with scarce resources.
3. Display Slide 4 and use the link on the slide to show students the University of the Fraser Valley's video on "A Career in Economics" (https://vimeo.com/135871291?fl=pl&fe=sh). Discuss how students use their study of economics to find a career.
4. Display Slide 5 and use the link to navigate to the American Economic Association's website on Careers in Economics, found at https://www.aeaweb.org/resources/students/careers. Tell students that the American Economic Association categorizes five areas that draw the most economics majors after graduation:
   - the corporate world (the corporate world and the MBA)
   - economic consulting
   - law (the legal profession)
   - government and not-for-profits
   - academics and research (the economics profession)
5. Place students in pairs and distribute a copy of *Handout 1: Careers in Economics Overview* to each pair. Display Slide 6 and tell students they will work with their partners to find information to complete the table. Then pairs will share information with the class to complete Slide 6.

6. Instruct partners to access the https://www.aeaweb.org/resources/students/careers site and read through each of the five career categories. They should also access the Famous People with Economics Degrees site at https://www.aeaweb.org/resources/students/careers.

7. Ask students to identify individuals from the list or others they may know who majored in economics that fit into each of these five categories and write the information on their copy of Handout 1. After partners have had time to work, use student responses to fill in Slide 6.

   Suggested Answers:

   - The corporate world *(Ted Turner, Sam Walton, Meg Whitman [former CEO of Hewlett Packard], Steve Ballmer [former Microsoft CEO], Warren Buffett)*
   - Economic consulting *(many people have served in this role—Warren Buffett famously gave Lebron James financial advice:* http://www.cnbc.com/2015/03/02/warren-buffetts-advice-to-lebron-james.html*.)*
   - Law *(former president Ford was also a lawyer.)*
   - Government and nonprofit work *(former presidents Ford, Reagan, Trump, and George H.W. Bush, Arnold Schwarzenegger as governor of California, former Chair Yellen)*
   - Academics and research *(economics teachers, professors; former Chair Yellen was previously an economics professor and is currently U.S. Secretary of the Treasury)*

8. Display Slide 7 and explain that **careers** are based on working at jobs in the same occupation or profession for many years. Different careers require different education and training. **Economist** is a career option. Explain that an economist is an expert who studies economics. Tell students that to better understand what someone can do with an economics degree; they will watch a video on career paths that are available in economics.

9. Display Slide 8 to play the video: What Career Paths Are Possible in Economics? Or access the video at https://youtu.be/uOrwKqEtRQ0.

10. After playing the video, display Slide 9, reveal questions one at a time and discuss the following:

    - What are some important factors to consider when choosing a career? *(Income, benefits, quality of life, meaningful work, and work-life balance.)*
    - What are some fields in which people with an undergraduate degree in economics are hired? *(Banking, public service, finance, real estate, etc.)*
    - What are some examples of jobs available to those with economics degrees? *(Research analyst, market researcher, business journalist, non-profit worker, data scientist, etc.)*
    - What is one thing you learned about careers in economics that you did not know before watching the video? *(Answers will vary.)*

11. Tell students that as they saw in the video, there are many occupations or careers, like being an economist. Ask for eleven volunteers. Give each volunteer a slip from the *Handout 2: Economists and Related Fields* that has been mounted on cardstock or construction paper (see preparation section).

12. Have students line up at the front of the class, facing the desks and the seated students who do not have a career slip. In turn, have each student read their name and occupation on the slip of paper. For example, “Hello, my name is Rosa and I’m an economist,” or “Hello, my name is Steven and I’m a political scientist.”

13. As each student introduces themselves and their job title, have the rest of the students respond in unison, asking: “What does a(n) (economist, political scientist, actuary, etc.) do?” Then have each student read their job description until all those holding career slips have participated.

14. After all the students have read their job descriptions, ask students to sort themselves in groups according to the type of education needed for each job (bachelor’s, master’s, or PhD degree).

15. Have the students re-identify themselves, going group by group, so everyone knows what job belongs in each category. Discuss the requirements and time needed to earn each type of degree. Be sure to note that all these jobs require at least a college education (bachelor’s degree).
    - **Bachelor’s**: actuary, budget analyst, financial analyst, market research analyst, operations research analyst; time required 4 years.
    - **Master’s**: economist, mathematician/statistician, political scientist, survey researcher, postsecondary teacher, urban and regional planner; time required additional of 2 years following a bachelor’s degree.
    - **PhD**: Postsecondary teacher; time required 3 + years following a master’s degree.

16. Next, have students line up according to their median pay. Ask students what median means. *(Half of those with this occupation earn more than the median pay and half earn less.)* Discuss the following:
    - What education level do the highest-paying jobs require? *(Out of the top five, three require a master’s degree)*
    - Where does an economist rank? *(Economist ranks third.)*
    - What is the highest-paying job on the list that requires a bachelor’s degree? *(Actuary)*
    - Why do postsecondary teachers have two levels of education listed? *(Answers will vary. Some students may know that people with master’s degrees and people with Ph.Ds teach at colleges and universities.)*
    - Point out that some colleges and universities only require a master’s degree for their faculty. However, other colleges and universities require faculty to have Ph.Ds.

17. Tell students that for more information about working as an economist, they will use the Bureau of Labor Statistics Occupational Outlook Handbook to gather additional information about careers in the field. Place students into pairs and distribute a copy of *Handout 3: Economics Occupational Outlook* to each student. Instruct students to complete Handout 3.

18. Use the *Handout 3 Answer Key* found in Exploring Careers in Economics Handout and Assessment Answer Keys to review student responses.

Closure

19. Display Slides 10-11, reveal questions one at a time to review the important points of the lesson.
    - What is economics? *(The study of the decisions people make when faced with scarce resources.)*
    - What is an economist? *(An expert who studies economics)*

- What does it mean to have a career? *(A career involves having jobs in the same occupation or profession for many years)*
  - What are some fields related to economics? *(Answers may include the corporate world, consulting, law, government, not-for-profit, banking, public service, finance, real estate, etc.)*
  - What are some potential career paths for those with a background in economics? *(Answers will vary but may include actuary, budget analyst, financial analyst, market research analyst, mathematician/ statistician, operations research analyst, political scientist, postsecondary teacher, survey researcher, urban and regional planner, etc.)*
  - Describe the work of an economist. *(Economists research economic issues, conduct surveys and collect data, analyze data using mathematical models, interpret and forecast trends, advise business or governments, present research, etc. Economists also make a six-figure salary, higher than other social science fields, and the field is growing.)*
  - Why is a background in economics useful when choosing a career? (*Answers may include helping you build analytical and critical thinking skills as well as math skills.; having a wide variety of good jobs to choose from; etc.)*
  - What education is needed to be an economist? *(master's degree in economics)*
  - What is the median pay for someone with a master's degree in economics? *($115,730)*

Assessment

20. Display completed Slide 6 and distribute a copy of *Handout 4: Assessment* to each student. Review the instructions with students. Allow time for students to work. Review their answers using the *Handout 4: Assessment—Answer Key* found in the Exploring Careers in Economics Handout and Assessment Answer Keys.

Handout 1: Careers in Economics Overview

Corporate	Economic Consulting
Law (The Legal Profession)	**Government and not-for-profits**
Economics Profession (Academics, Research)	

Handout 2: Economists and Related Careers (Page 1 of 2)

Job: Economist
2023 median pay: $115,730 per year
Typical entry-level education: master's degree
What do economists do? Economists study the production and distribution of resources, goods, and services by collecting and analyzing data, researching trends, and evaluating economic issues.

Job: Actuary
2023 median pay: $120,000 per year
Typical entry-level education: bachelor's degree
What do actuaries do? Actuaries analyze the financial costs of risk and uncertainty. They use mathematics, statistics, and financial theory to assess the risk that an event will occur, and they help businesses and clients develop policies that minimize the cost of that risk. Actuaries' work is essential to the insurance industry.

Job: Budget Analyst
2023 median pay: $84,940 per year
Typical entry-level education: bachelor's degree
What do budget analysts do? Budget analysts help public and private institutions organize their finances. They prepare budget reports and monitor institutional spending

Job: Financial Analyst
2023 median pay: $99,890 per year
Typical entry-level education: bachelor's degree
What do financial analysts do? Financial analysts provide guidance to businesses and individuals making investment decisions. They assess the performance of stocks, bonds, and other types of investments.

Job: Market Research Analyst
2023 median pay: $74,680 per year
Typical entry-level education: bachelor's degree
What do market research analysts do? Market research analysts study market conditions to examine potential sales of a product or service. They help companies understand what products people want, who will buy them, and at what price.

Job: Mathematician/Statistician
2023 median pay: $104,860per year
Typical entry-level education: Master's degree
What do mathematicians and statisticians do? Mathematicians and statisticians analyze data and apply mathematical and statistical techniques to help solve real-world problems in business, engineering, health care, and other fields.

Handout 2: Economists and Related Careers (Page 2 of 2)

Job: Operations Research Analyst
2023 median pay: $83,640 per year
Typical entry-level education: Bachelor's degree
What do operations research analysts do? Operations research analysts use mathematical and analytical methods to help organizations investigate complex issues, identify and solve problems, and make better decisions.

Job: Political Scientist
2023 median pay: $132,350 per year
Typical entry-level education: Master's degree
What do political scientists do? Political scientists study the origin, development, and operation of political systems. They research political ideas and analyze governments, policies, political trends, and related issues.

Job: Postsecondary Teacher
2023 median pay: $84,380 per year
Typical entry-level education: Master's degree or Doctoral degree (Ph.D.)
What do postsecondary teachers do? Postsecondary teachers instruct students in a wide variety of academic and career and technical subjects beyond the high school level. They also conduct research and publish scholarly papers and books.

Job: Survey Researcher
2023 median pay: $60,960 per year
Typical entry-level education: Master's degree
What do survey researchers do? Survey researchers design and conduct surveys and analyze data. Surveys are used to collect factual data, such as employment and salary information, or to ask questions to understand people's opinions, preferences, beliefs, or desires

Job: Urban and Regional Planner
2023 median pay: $81,800 per year
Typical entry-level education: Master's degree
What do urban and regional planners do? Urban and regional planners develop land use plans and programs that help create communities, accommodate population growth, and revitalize physical facilities in towns, cities, counties, and metropolitan areas

Handout 3: Economics Occupation Outlook

Instructions: Open the Bureau of Labor Statistics' Occupational Outlook Handbook to the page on economists: https://www.bls.gov/ooh/life-physical-and-social-science/economists.htm. Answer the following questions:

1. What was the median pay for economists in the current year? What does "median wage" mean? (Click on the ? symbol to find out.)

2. What type of education is typically needed to work as an economist?

3. How many economist jobs were there in the current year? What is the current job outlook for economists, and what does job outlook mean?

4. What are some of the things economists do?

5. According to the "Work Environment" section, in what type of business environment do most economists work? In what sector of the economy do more than one quarter of economists work?

6. According to the "How to Become One" section, what skills are needed in addition to a degree?

7. How does the pay of economists compare to the total for all occupations?

Handout 4: Assessment

Directions: Write an essay with the following prompt: Of the jobs listed on Slide 6, do any of them appeal to you? Why or why not? Then choose one of the jobs listed on Slide 6 and answer the following:

a. What skills do you think are required to be successful in this career?

b. How do you think studying economics would help prepare you for this job?

Using what you learned in this lesson, answer the following questions.

c. How does the median income earned by economists compare with the median income earned by those in other careers discussed in this lesson.

d. How do the education requirements for economists compare with the education requirements for other careers discussed in this lesson?

e. List two things that you learned about economics and careers that you did not know before this lesson.

Standards and Benchmarks

Voluntary National Content Standards in Personal Finance

Standard 1: Earning Income

Income for most people is determined by the market value of their labor, paid as wages and salaries. People can increase their income and job opportunities by choosing to acquire more education, work experience, and job skills. The decision to undertake an activity that increases income or job opportunities is affected by the expected benefits and costs of such an activity. Income also is obtained from other sources such as interest, rents, capital gains, dividends, and profits.

- **Benchmarks: Grade 8**
    1. Careers are based on working at jobs in the same occupation or profession for many years. Different careers require different education and training.
    2. People make many decisions over a lifetime about their education, jobs, and careers that affect their incomes and job opportunities.
    3. Getting more education and learning new job skills can increase a person's human capital and productivity.
    4. Education, training, and development of job skills have opportunity costs in the form of time, effort, and money.