

Income and Careers Career Survey

PwC's *Earn Your Future*[™] Curriculum

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Introduction

“The reality is that all children don’t know the basics of saving and investing. It’s a skill they need to be successful in our economy.”

- Education Secretary Arne Duncan, April 2011.

Recent history underscores the immediate need for youth to develop skills in math and financial literacy, and yet, current data shows there is a lack of access to curricula for students to learn:

- A 2011 survey conducted by American Express found that a majority of parents with children in high school or college gave schools below-average or failing grades in teaching responsible spending.
- A 2012 survey by Junior Achievement and Allstate Foundation showed 23 percent of teens are uncertain about their ability to budget successfully.
- Despite the fact that 13 states mandate personal finance coursework as a high school graduation requirement, there is no national legislation mandating that it be a requirement in schools.*

The enclosed lesson plan about financial literacy is designed to increase students’ proficiency in financial literacy. Your expert knowledge and real-life examples, coupled with this one- hour lesson plan aligned to national standards in personal finance education, will fill a critical gap in our current education system, and better prepare the next generation of leaders to make sound financial decisions and be productive citizens.

We applaud your efforts to bolster students’ understanding of concepts critical to the health of our economy and stability of our nation. Furthermore, we thank you for serving as an ambassador for PwC, reinforcing our commitment to helping students improve their skills in financial literacy and to youth education overall.

Lesson description

Students will complete a career survey to assist them in better understanding college majors and the academic requirements for each college major. Students will identify a college major and develop a plan and timetable for obtaining a college degree.

Grade(s)

9-12

Lesson time

55-65 min

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Pre-visit prep

- Review the 5-minute prep to familiarize yourself with the lesson topic, vocabulary and background
- Obtain the lesson materials listed under the “Materials” section below
- If completing the technology enhanced version of Activity B, download the free app titled JA Build Your Future from the Apple App or Google Play stores on your smart phone or tablet and familiarize yourself with the app.

Student learning objectives

Students will:

- Identify a career/field of study
- Research post-secondary education options aligned to career choice(s)
- Identify training/licensure requirements for career choice(s)
- Examine expenses and costs associated with career preparation
- Develop a career plan and timetable

Materials

For up to 30 students, obtain ahead of time-

Class/group

- (1) blackboard OR chart paper
- Markers (optional – only needed if chart paper is used)
- National Occupational Employment and Wage Estimates Report (Handout E)

Student (one for each student)

Packet Including Handouts A,B & C:

- Interest Assessment (Handout A)
- John Holland’s Theory of Vocational Choice Handout (Handout B)
- Career Planning Worksheet (Handout C)
- Job Opening and Labor Turnover Report (Handout D)
- Education Versus Income Handout (Handout F)
- College Financing Tips Handout (Handout G)
- College Self-Assessment (Handout H)

5 Minute Prep

Background

The high school years play an important role in shaping and preparing students for college and the 21st century workforce. Prepared, equipped high school students are more valuable than ever for the health of our economy, for civic life and to ensure equal opportunity.

Approximately 3 million students graduate high school each year. According to *The New York Times* (April 2010), more than 70 percent of the high school graduating class of 2009 were enrolled in college for Fall 2009. That is the highest portion on record, which goes back to 1959, according to the U.S. Labor Department. For the 2009–10 academic year, the average costs for undergraduate tuition, room, and board were estimated to be \$12,804 at public institutions and \$32,184 at private institutions.

In March 2011, the U.S. Bureau of Labor Statistics reported 3.1 million job openings. *Forbes Magazine* (January 2011) reported the top 10 careers as technology, science and/or math professions, while the 10 worst careers were manual labor related and/or manufacturing positions. CareerCast.com conducted the research, reported by Forbes. CareerCast.com used five core criteria to rank careers: pay, job outlook, work environment, stress and physical demands.

Vocabulary

- **529 College Savings Plan:** A 529 plan is a tax-advantaged investment plan designed to encourage saving for the future higher education expenses of a designated beneficiary (typically one's child or grandchild). The plans are named after Section 529 of the Internal Revenue Code and are administered by state agencies and organizations.
- **Free Application for Federal Student Aid (FAFSA):** A form that can be prepared annually by current and prospective college students (undergraduate and graduate) in the United States to determine their eligibility for student financial aid (including the Pell grants, and work-study programs).

Sources

- *Council for Economic Education 2011 Survey of the States
- Vocabulary adapted from Wikipedia: <http://en.wikipedia.org/>
- National Association of Colleges and Employers 2012 Salary Survey
- College costs obtained from 2012-2013 average published charges for full-time students drawn from the College Board Advocacy & Policy Center
- U.S. Bureau of Labor Statistics, July 2013

Pre and Post Assessments

Before beginning the lesson, facilitators should introduce themselves and **distribute** the Pre-Assessment to the students. If time allows, consider conducting a mini icebreaker before the Pre-Assessment.

Note: It is highly recommended that facilitators read the questions aloud to the students and encourage students to select answers as they move through the questions. Reassure the students that the assessments are not graded tests or quizzes, and they do **not** need to put their names on the assessments. The assessments are a tool to measure classroom comprehension of a given module and gauge effectiveness of instructor delivery.

Collect the Pre-Assessments once completed.

Facilitators should teach the lesson to the students and administer and collect the Post-Assessment at the end of class, **keeping in mind the same considerations outlined above**. Again, students do **not** need to put their names on Post-Assessments.

Lesson activities

Greeting

Say: Hi everyone! My name is ----- . Thanks for letting me join your program.

Today we are going to talk about careers, college majors, salaries and the cost associated with preparing for a given career. Let's get started.

Activity A – What interests me? (10 minutes)

Materials

Class/Group

- (1) blackboard OR chart paper
- Markers (optional – only needed if chart paper is used)

Student (one for each student)

Packet Including Handouts A,B & C:

- Interest Assessment (Handout A)
- John Holland's Theory of Vocational Choice Handout (Handout B)
- Career Planning Worksheet (Handout C)

Ask: Who can tell me a career they are interested in?

Select 3 or 4 students to share their ideas.

Ask: What are some criteria you and others consider as you begin to think about careers? In other words, what make certain jobs more appealing to you?

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Select 3 or 4 students to share their ideas.

Say: Good answers. Other criteria might include things such as pay, job outlook, education required, interests, work environment, stress and physical demands.

Say: Each of these criteria is critically important as you make choices about college and your career options.

Say: Now let's talk about you and your career interests, and how these criteria can help inform your selection of a given career.

Say: What I'd like us to do individually is to take 5 to 6 minutes and complete the interest survey that I'm about to pass out. This survey will help you learn more about your preferences and how these preferences can inform your college and/or training choices.

Distribute: Packet Including Handouts A,B & C (Interest Survey (Handout A), John Holland's Theory of Vocational Choice (Handout B), and Career Planning Worksheet (Handout C)) to each student. *[Note- Handout C will be used later on in class]*

Say: Let's review the directions together.

Read: the directions out loud.

Say: At your desk, please complete the survey. When you are finished, please read the John Holland's Theory of Vocational Choice handout to review various career options related to your interest domain.

Allow: students 5 to 8 minutes to complete the assignment.

Do: While students are completing the survey write on the board the 6 interest domains – Realistic, Social, Investigative, Enterprising, Artistic, and Conventional.

Do: Write a blank line by each word where you will capture the number of students that identify with each interest domain. For example: Realistic: 5 students; Social: 7 students.

Say: Now that everyone has had a chance to complete the survey, I'd like to take an informal poll of the interest survey results.

Say: When I call out a specific interest domain, please raise your hand if that was your highest scored domain. If you have a tie – you can vote more than once.

Do: Call out each domain and count the number of students that scored highest in that domain. The six domains are: Realistic, Social, Investigative, Enterprising, Artistic, and Conventional. As you are calling out the domains, using the information on Handout B, review with the students the type of person who typically falls within that domain. For example, you might say: "Realistic people particularly value people who are practical and mechanical - who are good at working with tools, mechanical or electrical drawings, machines, or animals." Also review the related careers associated with each domain.

Say: Research shows that there are more "Realistic" type personalities than any other type – does that match our results?

Say: Interesting survey. Nice job everyone.

Say: Now, let's transition to understanding how various careers and college majors relate to our interest domains.

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Activity B – Careers and salaries (45 minutes)

Materials

Option A (technology-enhanced activity)

Student/Group

- Android or Apple smartphones or tablets for students or groups of students.
- The free app titled JA Build Your Future downloaded from the Apple App or Google Play stores on the devices.

Option B (non-technology enhanced activity)

Group

- National Occupational Employment and Wage Estimates Report (Handout E)

Both Options - Student (one for each student)

- Job Opening and Labor Turnover Report (Handout D)
- Education Versus Income Handout (Handout F)

Say: For this next activity, we will further examine the job market and connect the top jobs to an interest domain and then map out the academic requirements, salary information and post-secondary costs.

Say: For this exercise we will use labor statistics provided by the U.S. Bureau of Labor Statistics and the Occupational Outlook Handbook, which is published by the U.S. Bureau of Labor Statistics.

Do: Distribute the Job Opening and Labor Turnover Report (Handout D) to each student.

Say: Let's look at the report from the U.S. Bureau of Labor Statistics. This report is called the Job Opening and Labor Turnover Report.

Say: Every month, the U.S. Bureau of Labor Statistics releases information indicating the number of vacant positions and the number of turnovers. Turnover data includes retirements, layoffs, firings and quitting.

Say: Take two or three minutes to review this report. Then we'll discuss your observations.

Say: Now let's discuss this report's data. Which industry contains the most vacant jobs?

Select one student to share their observation.

Say: There are over 3 million private industry positions. Private industry positions include manufacturing, healthcare, financial activities, and other industries not listed on the report.

Say: Which industry contains the least open positions?

Select one student to share his or her observation.

Say: There are less than 50 thousand Arts, Entertainment and Recreational positions available.

Say: How is the information relevant and important to you?

Select three or four students to share their ideas.

Say: These are all good points. Vacancy job data is important in that it gives you an indication of existing employment needs. Additionally, this kind of data can assist you in planning your future career.

Say: Understanding job outlooks and salary information will assist you in calculating your return on your investment. As you select a career and finance college or other training programs, it is critically important to weigh the cost of additional academic training and whether the salary and job outlook compensates for the financial investment of obtaining additional academic training.

Say: Some interesting facts: the average undergraduate degree costs (excluding room & board) per year are approximately \$10,000 at an in-state public institution and \$30,000 at a private institution. Thus, costing approximately \$40,000 for a bachelor's degree at a public institution and \$120,000 for a bachelor's degree at a private institute. If you include room & board, cost of books, and other fees these amounts can increase significantly. However, because of financial aid and scholarships, many students pay a fraction of this.

Say: According to a survey from the National Association of Colleges and Employers, college students who graduated in 2013 with a bachelor's degree received job offers with starting salaries averaging \$44,259 per year.

Do: Distribute one Education versus Income Handout (Handout F) to each student.

Say: The amount of education you obtain dictates your income. Take a look at the handout titled "Education versus Income." As shown on the top graph for adults ages 25-34 (people right out of school), a college bachelor's degree can earn more than \$18,000 more than a high school graduate. A master's degree can earn over \$30,000 more than a high school graduate.

Say: Over time, the gap widens further. As shown on the second graph, considering the average income for people of all ages, a bachelor's degree can earn \$25,000 more than a high school graduate and a master's degree can earn over \$40,000 more. This shows that over time there are larger wage increases for those with post-secondary education than those with a high school diploma or some college.

Say: The key take away is the more you know, the more you can earn.

Say: Let's examine the finances of a given career path.

Say: I'd like to break the class into smaller groups so we can walk through a planning exercise where each group will examine two different careers, each from a different interest domain.

Say: Each group will be assigned two interest domains. Each group must select a career from each assigned interest domain.

Say: After the group selects two careers, the group must complete a planning sheet for each career. Each group will share their plan with the class.

Option A (technology-enhanced activity)

Say: To complete this exercise, each team will need a tablet or smart phone with the app sponsored by PwC titled JA Build Your Future.

Do: Have students turn to their Career Planning Handouts (Handout C) in the packets they received earlier in class and help students download or arrive at the starting page of the JA Build Your Future app.

Say: Before we get started, let's review the planning sheet's directions.

Do: Read the directions on the planning sheet.

Say: At the top of your planning sheet you will find the interest domains that your group chose to focus on. As I mentioned, each group should choose two interest domains and pick one career to focus on from each of those domains (Domains: Realistic, Social, Investigative, Enterprising, Artistic, and Conventional).

Say: As a group, navigate through the app to learn about the different careers chosen based on the selected domains. The app will help provide information about the career including duties performed, typical salary, education background required, and help you calculate a Return on Investment score based on options selected to pay for college.

Ask: Earlier I mentioned the term return on investment (or ROI) (it's also the last question on the planning sheet), who can tell me what ROI means? And who has specifically heard about return on investment as it relates to education?

Allow students a moment to respond.

Say: To simplify, when someone talks about a return on investment from education, they are considering the future earnings potential of a career based on the cost of education invested to be qualified for that career. If a college bachelor's degree costs \$100,000 but over the life of your career you will earn \$1,000,000, then this translates to a positive ROI of 10, meaning the income generated is 10 times more than the cost of the education.

Say: To help you consider education and career options this app provides an ROI score from 1-5. This score, based on your decisions about career and level of education, represents the percentage of future monthly income that will be used to pay back student loans. A score of 1 suggests it will be difficult to pay off the loans accrued based on future income; 5 indicates that you should have no problem paying off loans with estimated future income.

Say: On each screen there is a button with the letter 'i' that will provide additional information to help you navigate through the activity and each step.

Say: We will spend the next 25 minutes completing the career planning sheets (Handout C) and using the app. I will walk around to answer any questions.

Note: You may want to repeat the directions again for the class. Walk around to support students as they complete this activity. Answer any questions and redirect students as needed if they get off task.

After 3-5 minutes check in with students to make sure they've chosen a career and identified the related salary at this point.

After 6-10 minutes check in with students to make sure they've moved on to the education piece of the app and selected the appropriate level based on career choice.

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After 11-20 minutes check in with students to make sure they've progressed along in the app to the payment tab. Students may need additional help completing the payment options section. Use the 'i' (information page) which provides data about average financial aid packages.

After 20-25 minutes encourage students to move onto the final calculator tab which will provide an ROI score.

Do: Bring the teams back together and have the students share their career planning information.

Say: Each group did a great job completing this exercise.

Say: This planning exercise simulates the types of questions and decisions that you will need to consider as you determine your careers.

Say: Financing your education is a tall order. You already examined several options for paying the costs of college education using the app. We will continue to examine those options for the rest of class.

Option B (non-technology enhanced activity)

Say: To complete this exercise, each team will need (1) Occupational Employment and Wage Estimates Report handout and (2) Career Planning handouts per group.

Do: Distribute (1) National Occupational Employment and Wage Estimates Report (Handout E) and have students turn to the Career Planning Handout (Handout C) in their packets received earlier in class.

Say: Before we get started, let's review the planning sheet's (Handout C's) directions.

Do: Read the directions on the planning sheet.

Say: At the top of your planning sheet you will find the interest domains that your group chose to focus on. As I mentioned, each group should choose two interest domains and pick one career to focus on from each of those domains (Domains: Realistic, Social, Investigative, Enterprising, Artistic, and Conventional).

Ask: Earlier I mentioned the term return on investment (or ROI) (it's also the last question on the planning sheet), who can tell me what ROI means? And who has specifically heard about return on investment as it relates to education?

Allow students a moment to respond.

Say: To simplify, when someone talks about a return on investment from education, they are considering the future earnings potential of a career based on the cost of education invested to be qualified for that career. If a college bachelor's degree costs \$100,000 but over the life of your career you will earn \$1,000,000, then this translates to a positive ROI of 10, meaning the income generated is 10 times more than the cost of the education.

Say: We will spend the next 15-20 minutes completing the career planning sheets. I will walk around to answer any questions.

Note: You may want to repeat the directions again for the class. Walk around to support students as they complete this activity. Answer any questions and redirect students as needed if they get off task.

Do: Bring the teams back together and have the students share their career planning information.

Say: Each group did a great job completing this exercise.

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Say: This planning exercise simulates the types of questions and decisions that you will need to consider as you determine your careers.

Say: Financing your education is a tall order. Let's briefly examine several options for preparing for the costs of college education.

Activity C – Financing college (5 minutes)

Note: If running short on time, consider skipping this activity and providing an overview on some options of financing college.

Materials

Student (one for each student)

- College Financing Tips Handout (Handout G)
- College Self-Assessment (Handout H)

Do: Distribute the College Financing Tips Handout (Handout G) and the College Self-Assessment (Handout H) to each student.

Say: As we wrap up our time together, I wanted to share a few tips with you as you think about the costs of education. I also want you to begin thinking about what type of college environment best suits your needs (i.e., study habits, student body size, geographic area).

Say: First, try to save even a small amount each month. This money can be placed in a 529 College Savings Plan. A college savings plan is a tax incentivized option that allows families to save for college while taking advantage of a tax break.

Say: It's important to work hard for good grades and test scores for scholarship consideration. Every year, hundreds of millions of dollars in scholarship funds are awarded to students. Many scholarships are merit based; however, some scholarships support certain college majors or dependents of special groups like sororities/fraternities/organizations.

Say: Learn about the types and sources of financial assistance available. Talk with your school guidance counselor to learn about other financial assistance options.

Say: Complete the FAFSA – Free Application for Federal Student Aid. This application provides you access to all federal college funding opportunities; both grants and loans.

Say: Finally, apply for financial assistance during your junior and senior years.

Say: Furthermore, be sure you take time to research colleges. Think of what subject areas interest you for a possible major and/or career, and put some thought into what characteristics your ideal college would have.

Closing reflections (5 minutes)

Say: Today we completed a career survey and discussed various careers associated with our interests. We also developed a career plan that challenged us to examine the academic requirements for each career. Finally, we briefly discussed college financing and selection options, as college is truly a professional and financial investment.

Ask students to share what they learned today.

Use the following questions to prompt students, if necessary.

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- What new information did you learn today?
 - Do you feel your career choice(s) will provide you with a strong earnings outlook?
 - How do the costs of college impact your career choice(s)?

After the discussion:

Say: Thank you for allowing me to spend this time with you today. Charting your career path is an important decision that should be informed by your interests and involve the support of your family, your teachers and your guidance counselors.

Evaluation/assessment of student learning

During lesson/In-class

- Each student completes an Interest Survey requiring students to identify an interest domain and career options within the interest domain
- Each student analyzes the Job Opening and Labor Turnover Report requiring students to analyze Labor statistics and salary data
- Each group completes the Career Plan Handout per group/per career requiring students to develop a career plan for two careers

Ideas for Post-Lesson assessments

- Each student develops a career plan that outlines various career considerations.
- Groups of students research a chosen career and develop a “career handbook” that captures their research and includes five to eight critical elements necessary to prepare for the selected career (i.e., post-secondary training, certification, pre-requisite high school courses, etc.).
- Each student identifies a college major/minor. Utilizing a public and private college catalogue, students will map out degree course requirements, the course tuition and the total degree costs. Have students compare and contrast the course and tuition differences for a public and private college.
- Students research colleges that have majors related to their career of interest, and complete Handout H - College Self-Assessment to sort out which colleges and universities have the curriculum, facilities and atmosphere that will be best for them.

Extensions/enrichment

- Each student identifies a professional in their community and conducts an interview of the person and shadows the person for the day to gain a deeper understanding of the profession.
- Each student meets with the guidance counsellor to discuss high school course scheduling and college majors based on the Interest Survey data.
- The class attends a college fair and discusses college majors, admission criteria and process, and financial aid options.
- Deliver PwC’s Financial literacy: Paying for college module for students grade 9-12 focused on selecting a school and financial options available.

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Additional teacher tips/resources

Encourage students to further explore their interests and various careers at the following websites:

- Occupational Outlook Handbook, 2010-11 Edition (<http://www.bls.gov/oco/>) – A comprehensive guide to hundreds of occupations published by the Bureau of Labor Statistics. This career guide provides career information organized by type of industry.
- Mapping Your Future (<http://mappingyourfuture.org/>) -- Helps high school students explore the many careers available and provides college students with detailed career planning strategies.
- Career One Stop (<http://www.careeronestop.org/>) – A career-oriented federal-state partnership web portal. This site has an area just for students and learners, as well as a Career Info Net, which helps people make informed career choices.
- U.S. News Career Center (<http://money.usnews.com/money/careers>) – U.S. News' Career Center provides information on emerging career fields and other career planning information.