Helping Students Become College and Career Choice Ready

Nick Haltom
Personal Finance is a Big Deal!
April 28, 2017

The views and opinions expressed herein are those of the author. They do not represent an official position of the Federal Reserve Bank of Richmond or the Federal Reserve System.
This video discusses:

• investing in human capital;
• factors to consider when choosing a college; and
• ways to fund higher education.
No surprise—people with more education often earn higher incomes and are unemployed less than those with less education. Those with higher incomes also tend to accumulate more wealth.

Americans have among the highest living standards in the world and have enjoyed rising living standards for decades. Median household income in the United States in 2015 was $55,516, up from $49,276 in 2010. However, gains in household income have not been evenly distributed across all income groups. Income inequality has been increasing in the United States since the 1970s, passing in 2013 (Figure 1). A 2015 Gallup poll found that 63 percent of Americans feel that the distribution of U.S. money and wealth is unfair. While many factors contribute to income and wealth inequality, the role of education is a key piece of the puzzle.

Figure 3
A Model of Saving and Spending: The Life Cycle Theory of Consumption and Saving

https://research.stlouisfed.org/publications/page1-econ/
What skills do you need to develop for future success? Learn about soft skills, the labor force, and unemployment in this Page One Economics: Focus on Finance essay.

https://research.stlouisfed.org/publications/page1-econ/
It’s often said that a college degree is the key to future success. Choosing to attend college is a major decision for young people. But why is a degree so important? This issue examines two economic models used to study how education, productivity, and income are related.

https://research.stlouisfed.org/publications/page1-econ/
Teacher's Guide

“College: Learning the Skills To Pay the Bills?”

After reading the article, answer the following questions:

1. How does high productivity result in higher wages for workers?
   Workers with higher productivity produce more output with the same inputs. Because businesses can sell this extra output to earn higher revenues, firms are willing to pay highly productive employees a higher wage.

2. In the human capital model, what is the relationship between education and productivity?
   The human capital model says students learn knowledge and acquire skills through education, and workers with more knowledge and skills tend to be more productive.

3. In the signaling model, what is the relationship between productivity and education?
   The signaling model says that only high-productivity students can clear the college hurdle. This process provides information that helps firms separate the low-productivity workers (who do not go to college or fail to finish with a degree) from the high-productivity workers (who earn a degree).

4. In the signaling model, how does a college degree reduce the problem of asymmetric information?
   To prospective employers, the degree communicates that the worker is cut out for high-productivity work. The worker has demonstrated his or her talents and ability while earning a degree, and the college has affirmed that ability by granting the degree. So, the degree serves as a signal that the worker has the qualifications for high-productivity employment.

5. If you blend the two models, how might you describe the benefits of education?
   People should earn a college degree because the knowledge gained and the skills acquired will increase their productivity, and they can use the degree to signal their productivity to prospective employers.
Key Economic Data – Classroom Data Posters!
Questions?

Scott Wolla, Ph.D.
Senior Economic Education Specialist
Federal Reserve Bank of St. Louis
scott.a.wolla@stls.frb.org
314-444-8624

Find us at: www.stlouisfed.org/education
A new classroom resource from the Federal Reserve Bank of Dallas

NAVIGATE
Exploring College and Careers
Program Features

• Designed for easy classroom implementation
• Instructor-led program
• Targeted for 7th to 9th grade students
• Consumable student workbook
• Detailed instructor handbook
Six Units

- Unit 1 Exploring Careers
- Unit 2 What About College?
- Unit 3 How Do I Get In?
- Unit 4 How Much Does College Cost?
- Unit 5 Paying for College
- Unit 6 Future Paths
Architecture and Engineering Occupations

Employment of architecture and engineering occupations is projected to grow 3 percent from 2014 to 2024, adding about 67,200 new jobs. The growth rate is slower than the average for all occupations, in part, because several drafting and technician occupations in the group are projected to decline from 2014 to 2024 as improvements in technology, such as design software and surveying equipment, make workers more productive.

The median annual wage for architecture and engineering occupations was $76,870 in May 2015. The median annual wages for all occupations in this group was higher than the median annual wage for all occupations in the economy, which was $36,200.
My career choice:

Explain what you do:

How much education will you need?
- High school diploma or GED
- Postsecondary non-degree award (certification)
- Associate degree
- Bachelor’s degree
- Master’s degree
- Doctoral or professional degree

How much will you earn?
Yearly:

Federal Reserve Bank of Dallas
Earnings and unemployment rates by educational attainment, 2015

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Median Usual Weekly Earnings</th>
<th>Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral degree</td>
<td>$1,623</td>
<td>1.7%</td>
</tr>
<tr>
<td>Professional degree</td>
<td>$1,730</td>
<td>1.5%</td>
</tr>
<tr>
<td>Master's degree</td>
<td>$1,341</td>
<td>2.4%</td>
</tr>
<tr>
<td>Bachelor's degree</td>
<td>$1,137</td>
<td>2.8%</td>
</tr>
<tr>
<td>Associate's degree</td>
<td>$798</td>
<td>3.8%</td>
</tr>
<tr>
<td>Some college, no degree</td>
<td>$738</td>
<td>5.0%</td>
</tr>
<tr>
<td>High school diploma</td>
<td>$678</td>
<td>5.4%</td>
</tr>
<tr>
<td>Less than a high school diploma</td>
<td>$493</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

All workers: $860

Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
What About College?
bigfuture.collegeboard.org

It's okay to change your plans even if it means changing your major.

Monica realized the major she started college with wasn't right for her. By staying flexible, she opened the door to new opportunities.

Meet Monica
How Do I Get In?

I’ve been accepted!

“Great student!”
“Wonderful worker”
“Very helpful”
How Much Does College Cost?
Create a Budget

Some possible expenses that are included in this budget are listed below. They currently total $725. You must reduce the expenditures to $234 or plan to get a part-time job.

<table>
<thead>
<tr>
<th>Expense</th>
<th>Current Amount</th>
<th>Change</th>
<th>New Amount</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dining out</td>
<td>$120</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student tickets to athletic events</td>
<td>$60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Snacks for dorm room</td>
<td>$100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clothes</td>
<td>$100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fraternity/sorority dues</td>
<td>$125</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Movies</td>
<td>$45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell phone</td>
<td>$60</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal care (haircut, toiletries, etc.)</td>
<td>$75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laundry</td>
<td>$40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Expenses: $725

Was working with this budget difficult? Some students work part-time while they...
Paying for College

How do I pay for college?

What is financial aid?
Future Paths
Imagine that you are 25 years old working in the career on your card. You receive this letter inviting you to write a personal narrative that will be published by your high school.

Dear Graduate,

Our student council is excited to offer incoming freshmen a book about recent graduates from our high school. We are hoping that the book will inspire them to continue their education after high school and inform them of the steps that students from our school took to achieve that goal.

As a successful graduate of our high school, would you write an essay for the book describing your path through high school and beyond? Please address these questions in your essay.

- What did you do in high school to prepare for your career?
- What type of education did you pursue after high school? How did you pick the school? What did you study?
- What challenges did you face? How did you overcome them?

We look forward to sharing with our incoming students the details about the choices that contributed to your success.

Sincerely,
The Student Council President
Preview the lessons and order copies at [www.dallasfed.org/educate/navigate](http://www.dallasfed.org/educate/navigate).
QUESTIONS?

Princeton Williams  
*Director of Economic Education*
Federal Reserve Bank of Dallas  
[princeton.williams@dal.frb.org](mailto:princeton.williams@dal.frb.org)  
214-922-6826
INVEST IN WHAT’S NEXT
LIFE AFTER HIGH SCHOOL

investinwhatsnext.org
Course Goals

- Build economics and personal finance knowledge and skills in the context of a student’s first major financial decision

- Help students evaluate a range of options for life after high school to find the right path for themselves
Course Approach

Characteristics of a Major Financial Decision

\[
\max_S \int_S^\infty \exp\left(- (r + \nu) t \right) w(t) h(t) \, dt
\]

*Acemoglu, Daron and David Autor. “Lectures in Labor Economics.” MIT.

Complex

Infrequent

Irreversible

Long-term

Course Approach

- Guiding questions
- Avenues to related information
- Data-driven, interactive practice
- Personalized selections and research
- Reality checks
- Real-life scenarios
- Long-term look at potential payoffs and obligations
Course Overview

- The mini-course includes three sequential online lessons
  - Lesson 1 and 2 are currently available
  - Lesson 3 is currently in development (expected in early 2018)
Lesson 1: Exploring My Options

What interests me?

What lifestyle do I want?

How much income will I need?

What path is right for me?

What do I stand to gain?

www.investinwhatsnext.org
Lesson 2: Budgeting for My Future

How do I plan for my future?

How can I budget for my education?

What are my funding options?

What if I borrow money?

How will student loans affect my future?

www.investinwhatsnext.org
Lesson 3: Building My Plan

Guiding Questions

- What’s included in my plan?
- How do I evaluate my plan?
- How well does my plan handle change?
- How do I prepare for my path?
- How can I build and compare other plans?
What do I stand to gain?

Leveling My Lifestyle

Jobs, Education and Pay

- Income needed for lifestyle
- Jobs

2015 Median Pay

- Less than HS
- High School
- Some College
- Cert.
- Assoc.
- Bach.
- Mast.
- Doc./Prof.

Entry-Level Education
Interactions and Data Connections

What do I stand to gain?

Leveling My Lifestyle

- Income needed for lifestyle
  - Jobs

Jobs, Education and Pay

Entry-Level Education

- Some college
- Cert.
- Assoc.
- Bach.
- Mast.
- Doc./Prof.

Income Range:

- $200,000
- $180,000

UTLOOK HANDBOOK

Radiation Therapists

- Median Pay: $80,220
- Entry-Level Education: Associate's degree
Key Features of the Course

Student Accounts

- Save progress
- Carry through data selections

Get Started Now

- First Name
- Email Address
- Confirm Email Address
- School/Organization Name
- School/Organization Zip
- Username
- Password
- Confirm Password

I am 13 years of age or older -and- I agree to the Terms and Conditions for using this site.

Already registered? [Link]

[Buttons: Cancel, Register]
Key Features of the Course

Student Dashboard

- Track progress
- See quiz scores
- Store links
- Access research
Key Features of the Course

Knowledge Check

What main purpose does a personal budget serve for managing your income, taxes, saving and spending?

- A: To compare your situation to others
- B: To document what occurred last year
- C: To track what's happening currently
- D: To plan and set goals for the future

Lesson 2: Budgeting for My Future

Knowledge Check Summary

1. What main purpose does a personal budget serve for managing your income, taxes, saving and spending?

Score: 83%

My Learning Knowledge Check Scores

Click on the chart below to revisit past knowledge check questions. After each lesson, you can also print a question and answer summary.

SCORE: 72% 83% 0%

CHECK 3
CHECK 2
CHECK 1

LESSON 1 2 3

Correct 1st try Correct 2nd try Incorrect

INVEST IN WHAT'S NEXT
LIFE AFTER HIGH SCHOOL

Name: Nick
Score: 83%

www.investinwhatsnext.org
Key Features of the Course

Personalized Research

- Go off-site
- Bring data back to course
Questions?

Contact us!
Nick Haltom
Economic Education Director
Federal Reserve Bank of Richmond
Nicholas.Haltom@rich.frb.org
804-697-8180

Or email the Invest in What’s Next team at:
investinwhatsnext@rich.frb.org