College and Career Resources

econNECTIONS
WITH THE FED

Welcome

Logistics

- Call-in number: 888-625-5230
- Participant code:
- Link:
- This call is being recorded and will be available at a later date.
- You can listen through your PC or dial in to the phone.
  Remember: your specific connection matters; if PC audio diminishes, dial in to the toll-free line.
- Use the Materials button to access a pdf version of this presentation.

How we'll take questions

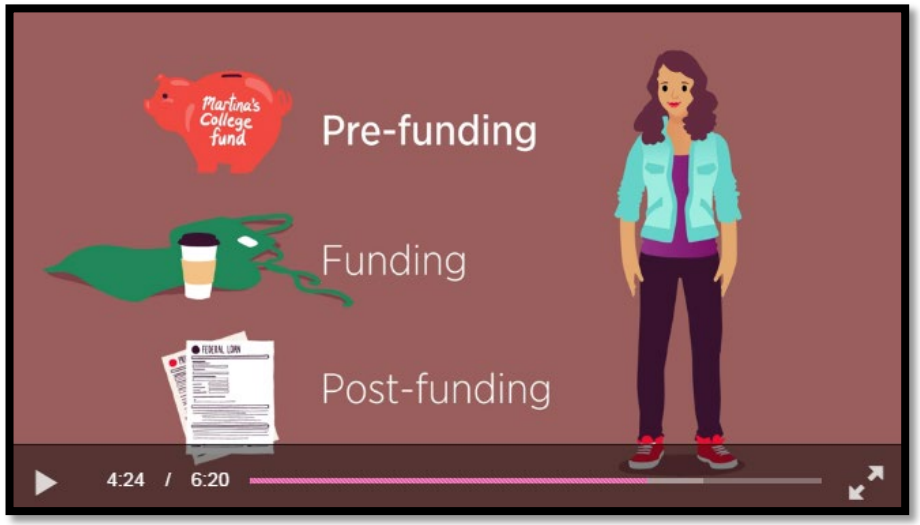
- Type your question in the field in the lower left corner of the webinar page and click the "Ask" button.

econNECTIONS
WITH THE FED

College Readiness Resources from the St. Louis Fed

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

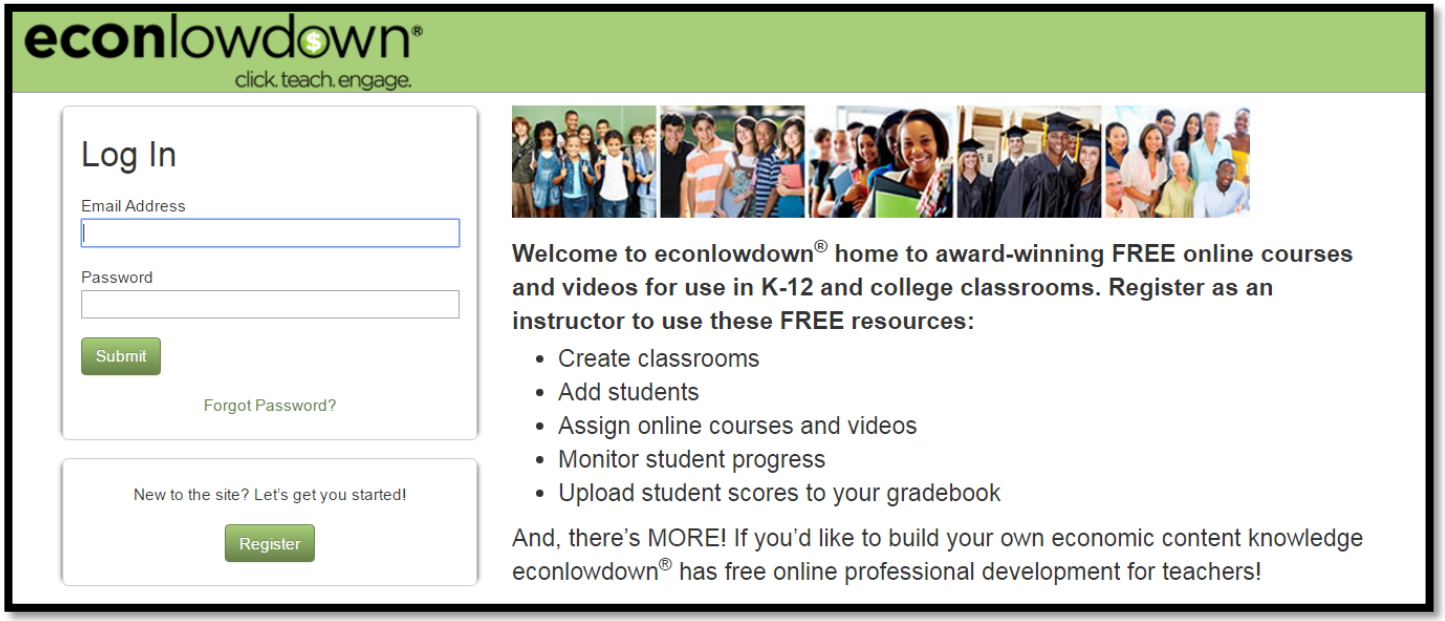
The views expressed in the presentation are mine and not the views of the Federal Reserve Bank of St. Louis or the Federal Reserve System.



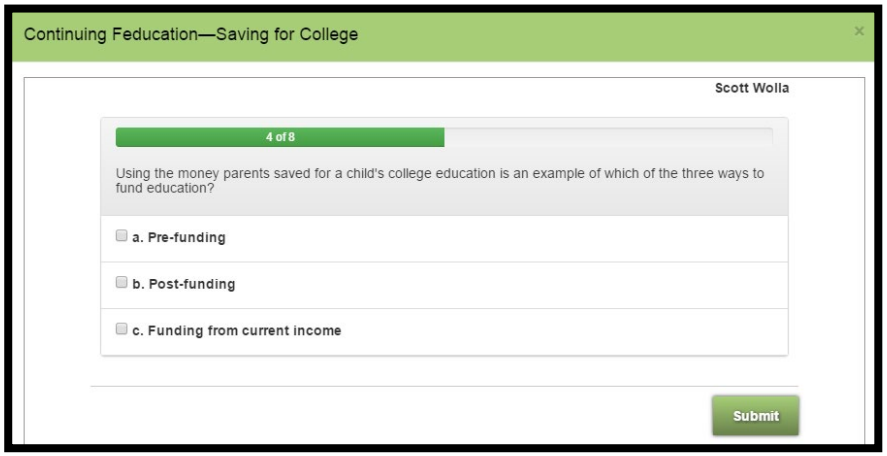
Saving for College Video

Follow Martina as she:

- picks a major;
- chooses a college; and
- considers ways to pay for her education.

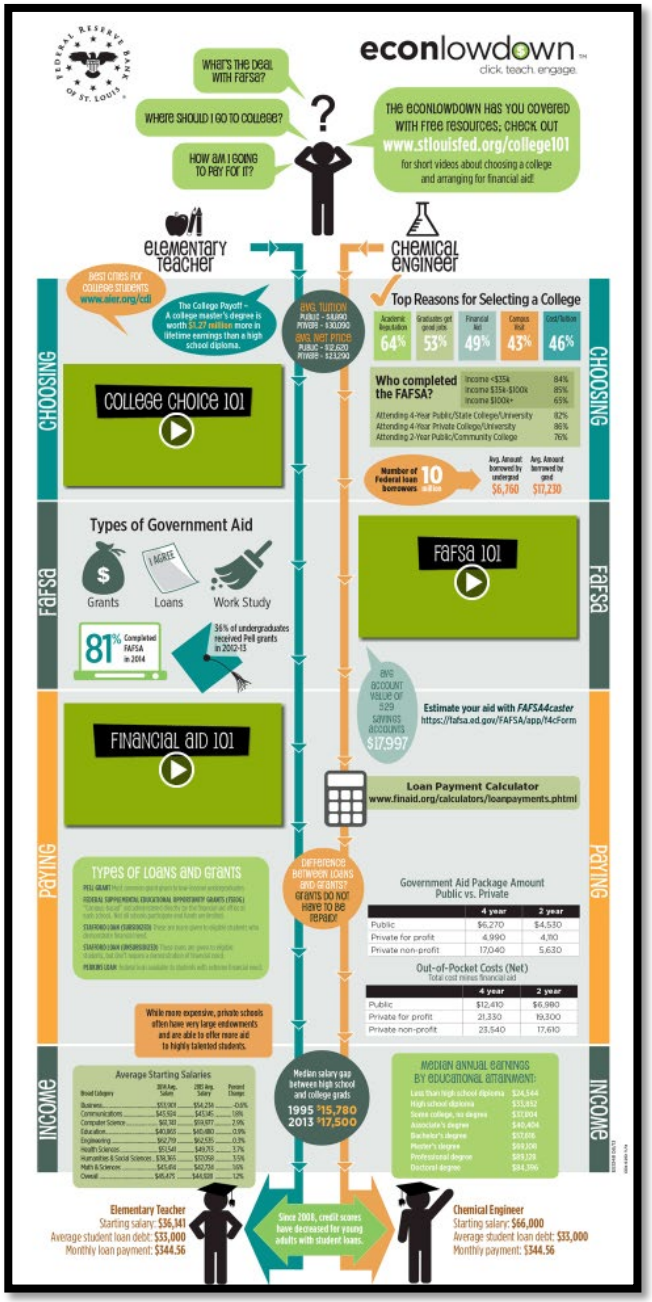


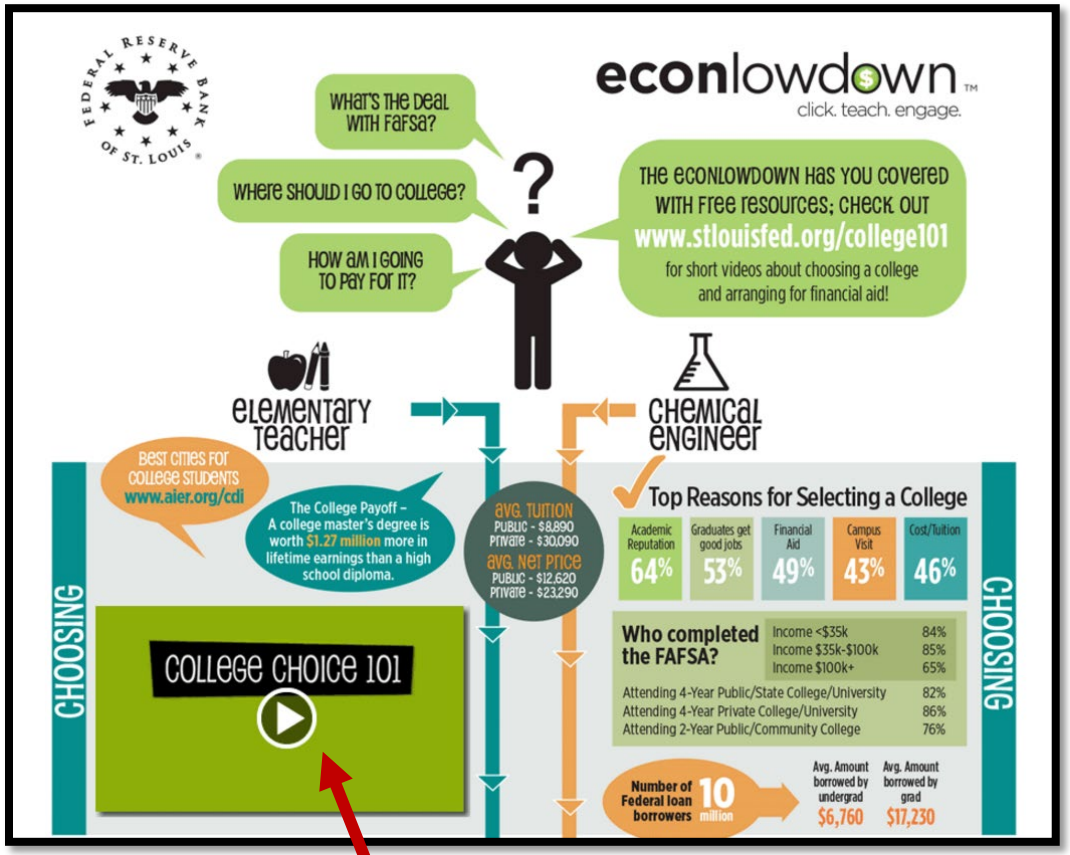
Saving for College video



Saving for College video Q&A

College 101 Infographic

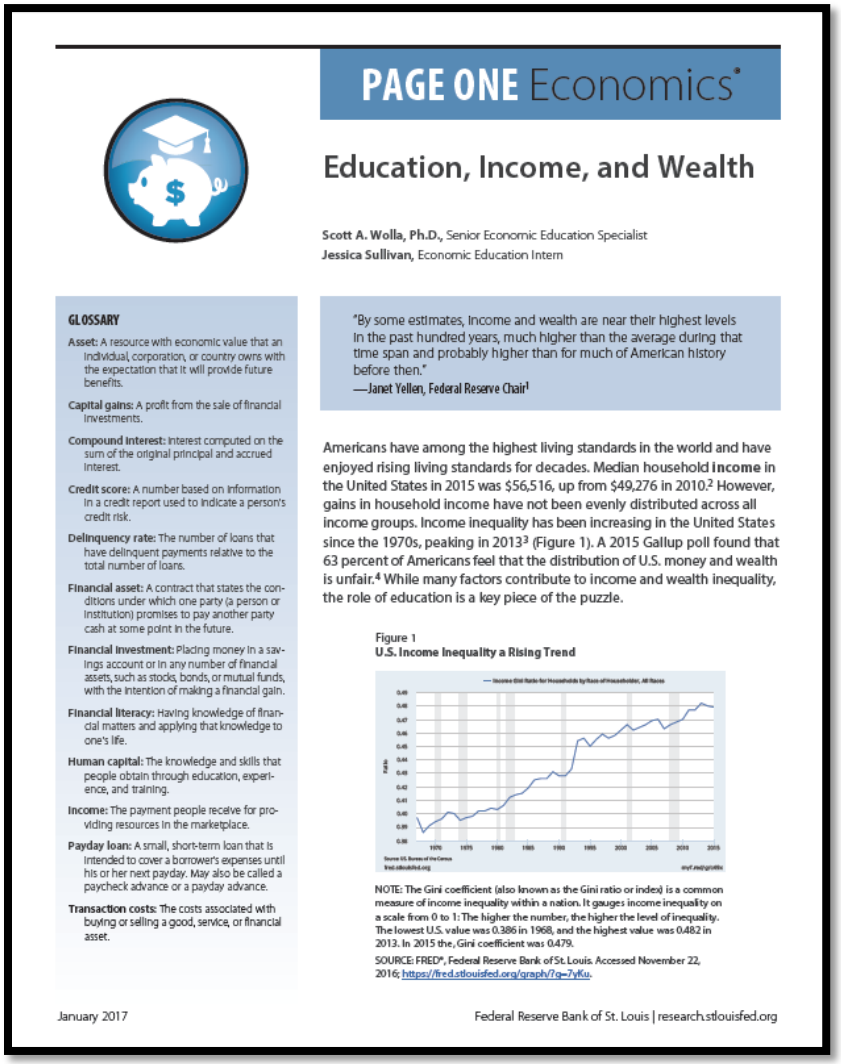




Embedded Video Content

https://www.stlouisfed.org/education/college-101-infographic

Page One Economics



PAGE ONE Economics®

Education, Income, and Wealth

Scott A. Wolla, Ph.D., Senior Economic Education Specialist
Jessica Sullivan, Economic Education Intern

GLOSSARY

Asset: A resource with economic value that an individual, corporation, or country owns with the expectation that it will provide future benefits.

Capital gains: A profit from the sale of financial investments.

Compound interest: Interest computed on the sum of the original principal and accrued interest.

Credit score: A number based on information in a credit report used to indicate a person's credit risk.

Delinquency rate: The number of loans that have delinquent payments relative to the total number of loans.

Financial asset: A contract that states the conditions under which one party (a person or institution) promises to pay another party cash at some point in the future.

Financial investment: Placing money in a savings account or in any number of financial assets, such as stocks, bonds, or mutual funds, with the intention of making a financial gain.

Financial literacy: Having knowledge of financial matters and applying that knowledge to one's life.

Human capital: The knowledge and skills that people obtain through education, experience, and training.

Income: The payment people receive for providing resources in the marketplace.

Payday loan: A small, short-term loan that is intended to cover a borrower's expenses until his or her next payday. May also be called a paycheck advance or a payday advance.

Transaction costs: The costs associated with buying or selling a good, service, or financial asset.

"By some estimates, income and wealth are near their highest levels in the past hundred years, much higher than the average during that time span and probably higher than for much of American history before then."
—Janet Yellen, Federal Reserve Chair[1]

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 $56,516, up from $49,276 in 2010.[2] 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, peaking in 2013[3] (Figure 1). A 2015 Gallup poll found that 63 percent of Americans feel that the distribution of U.S. money and wealth is unfair.[4] While many factors contribute to income and wealth inequality, the role of education is a key piece of the puzzle.

Figure 1
U.S. Income Inequality a Rising Trend

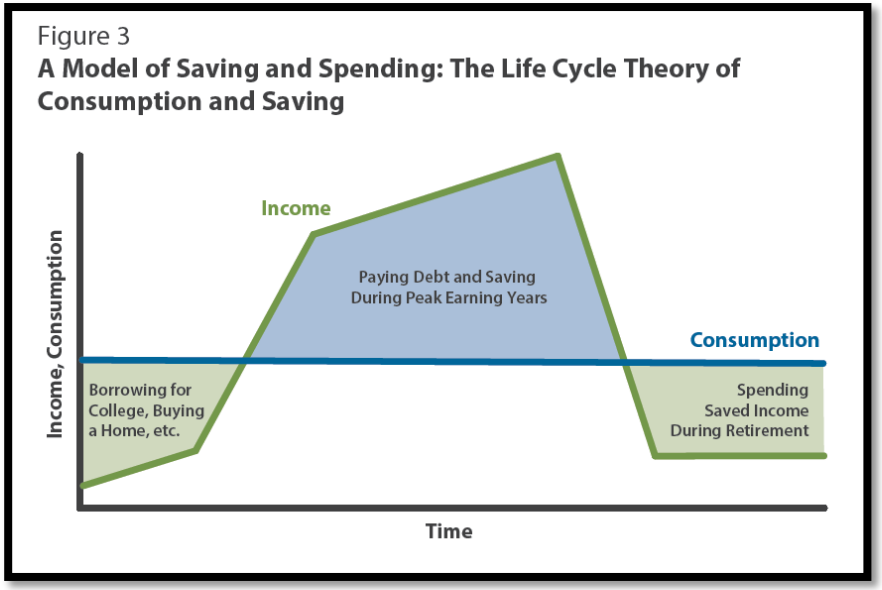
NOTE: The Gini coefficient (also known as the Gini ratio or index) is a common measure of income inequality within a nation. It gauges income inequality on a scale from 0 to 1: The higher the number, the higher the level of inequality. The lowest U.S. value was 0.386 in 1968, and the highest value was 0.482 in 2013. In 2015 the, Gini coefficient was 0.479.

SOURCE: FRED®, Federal Reserve Bank of St. Louis. Accessed November 22, 2016; https://fred.stlouisfed.org/graph/?g=7yKu.

January 2017

Federal Reserve Bank of St. Louis | research.stlouisfed.org

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.



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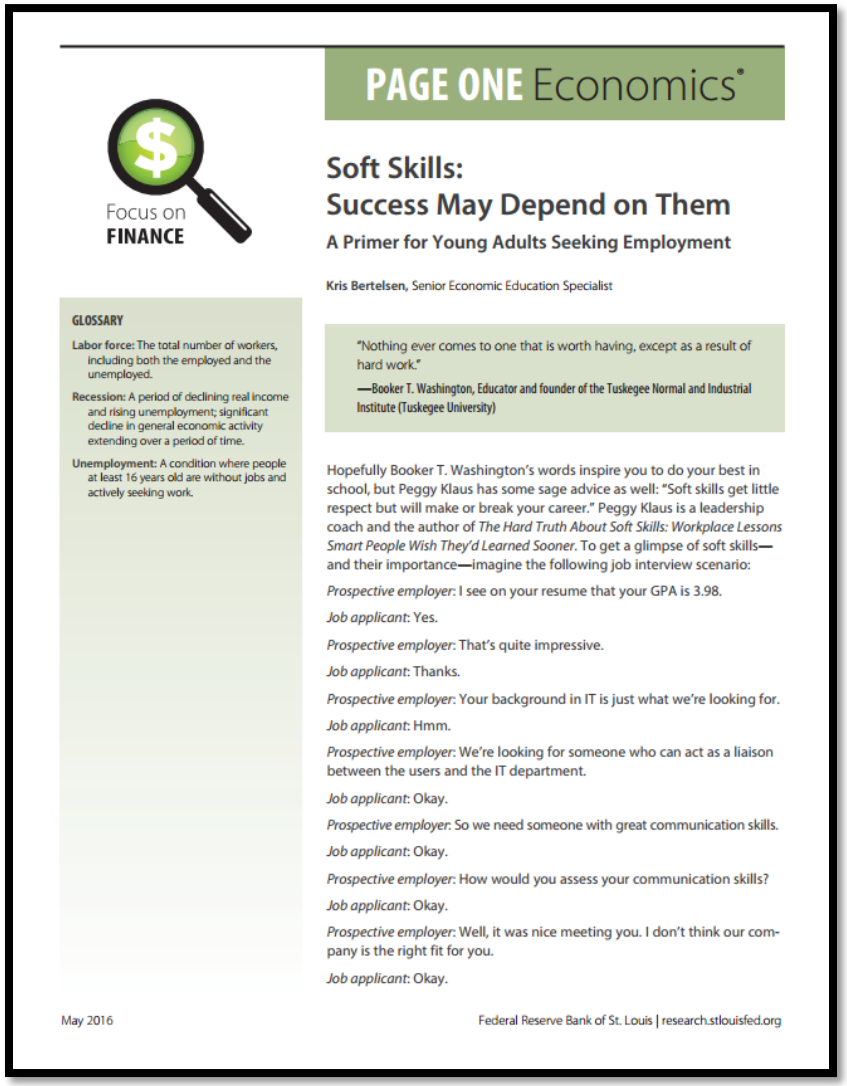

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Focus on FINANCE

Soft Skills: Success May Depend on Them

A Primer for Young Adults Seeking Employment

Kris Bertelsen, Senior Economic Education Specialist

GLOSSARY

Labor force: The total number of workers, including both the employed and the unemployed.

Recession: A period of declining real income and rising unemployment; significant decline in general economic activity extending over a period of time.

Unemployment: A condition where people at least 16 years old are without jobs and actively seeking work.

"Nothing ever comes to one that is worth having, except as a result of hard work."

—Booker T. Washington, Educator and founder of the Tuskegee Normal and Industrial Institute (Tuskegee University)

Hopefully Booker T. Washington's words inspire you to do your best in school, but Peggy Klaus has some sage advice as well: "Soft skills get little respect but will make or break your career." Peggy Klaus is a leadership coach and the author of *The Hard Truth About Soft Skills: Workplace Lessons Smart People Wish They'd Learned Sooner*. To get a glimpse of soft skills—and their importance—imagine the following job interview scenario:

Prospective employer: I see on your resume that your GPA is 3.98.

Job applicant: Yes.

Prospective employer: That's quite impressive.

Job applicant: Thanks.

Prospective employer: Your background in IT is just what we're looking for.

Job applicant: Hmm.

Prospective employer: We're looking for someone who can act as a liaison between the users and the IT department.

Job applicant: Okay.

Prospective employer: So we need someone with great communication skills.

Job applicant: Okay.

Prospective employer: How would you assess your communication skills?

Job applicant: Okay.

Prospective employer: Well, it was nice meeting you. I don't think our company is the right fit for you.

Job applicant: Okay.

May 2016

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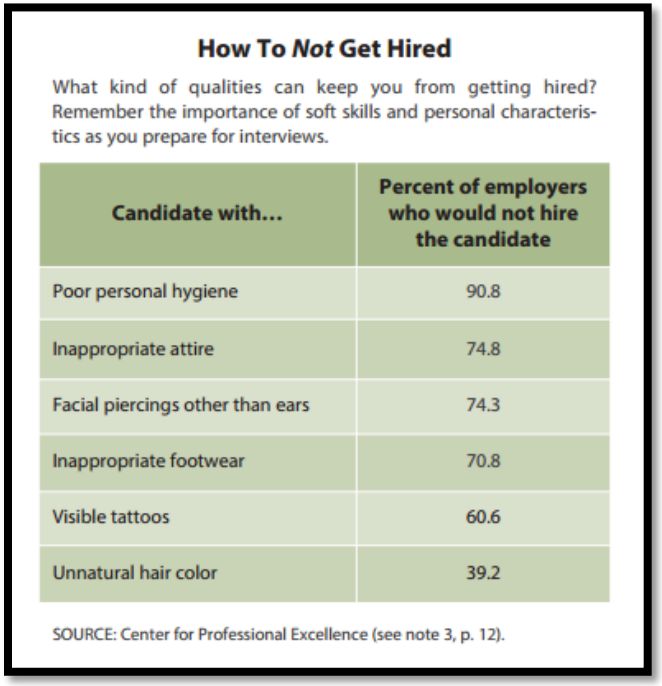
What skills do you need to develop for future success? Learn about soft skills, the labor force, and unemployment in this Page One Economics: Focus on Finance essay.



How To *Not* Get Hired

What kind of qualities can keep you from getting hired? Remember the importance of soft skills and personal characteristics as you prepare for interviews.

Candidate with...	Percent of employers who would not hire the candidate
Poor personal hygiene	90.8
Inappropriate attire	74.8
Facial piercings other than ears	74.3
Inappropriate footwear	70.8
Visible tattoos	60.6
Unnatural hair color	39.2

SOURCE: Center for Professional Excellence (see note 3, p. 12).

https://research.stlouisfed.org/publications/page1-econ/

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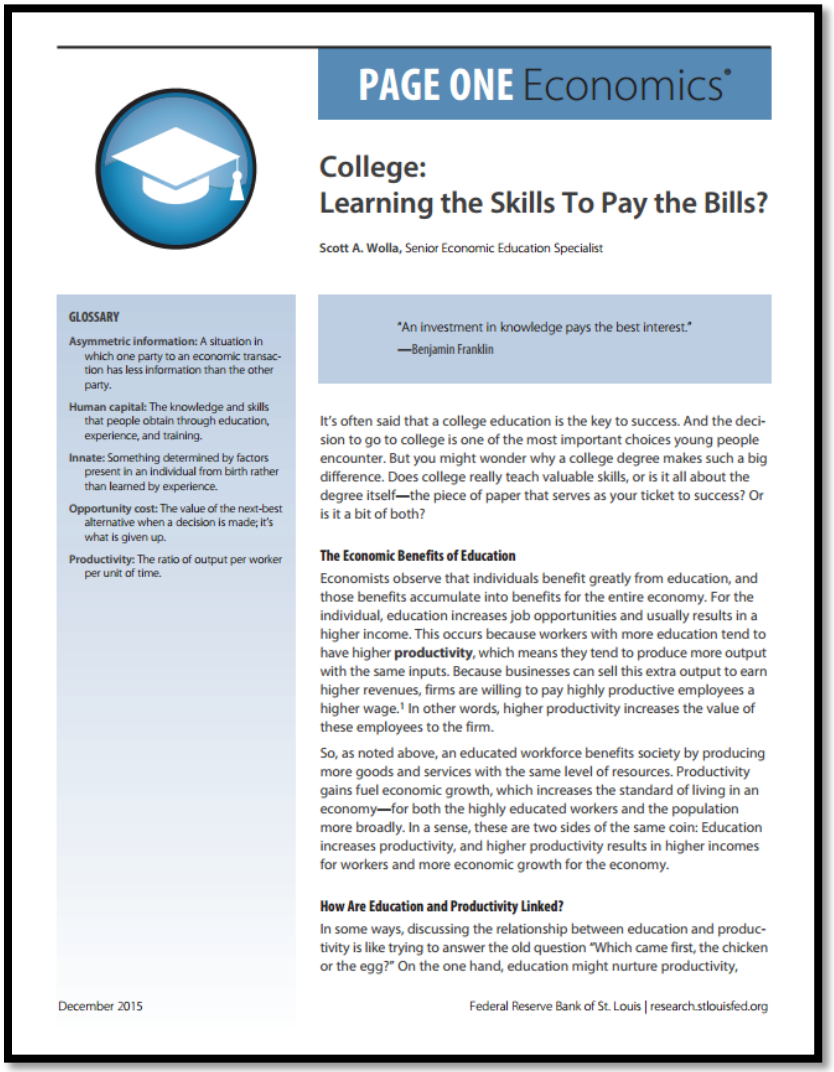


PAGE ONE Economics®

College: Learning the Skills To Pay the Bills?

Scott A. Wolla, Senior Economic Education Specialist

GLOSSARY

Asymmetric information: A situation in which one party to an economic transaction has less information than the other party.

Human capital: The knowledge and skills that people obtain through education, experience, and training.

Innate: Something determined by factors present in an individual from birth rather than learned by experience.

Opportunity cost: The value of the next-best alternative when a decision is made; it's what is given up.

Productivity: The ratio of output per worker per unit of time.

"An investment in knowledge pays the best interest."
—Benjamin Franklin

It's often said that a college education is the key to success. And the decision to go to college is one of the most important choices young people encounter. But you might wonder why a college degree makes such a big difference. Does college really teach valuable skills, or is it all about the degree itself—the piece of paper that serves as your ticket to success? Or is it a bit of both?

The Economic Benefits of Education

Economists observe that individuals benefit greatly from education, and those benefits accumulate into benefits for the entire economy. For the individual, education increases job opportunities and usually results in a higher income. This occurs because workers with more education tend to have higher **productivity**, which means they tend to 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.[1] In other words, higher productivity increases the value of these employees to the firm.

So, as noted above, an educated workforce benefits society by producing more goods and services with the same level of resources. Productivity gains fuel economic growth, which increases the standard of living in an economy—for both the highly educated workers and the population more broadly. In a sense, these are two sides of the same coin: Education increases productivity, and higher productivity results in higher incomes for workers and more economic growth for the economy.

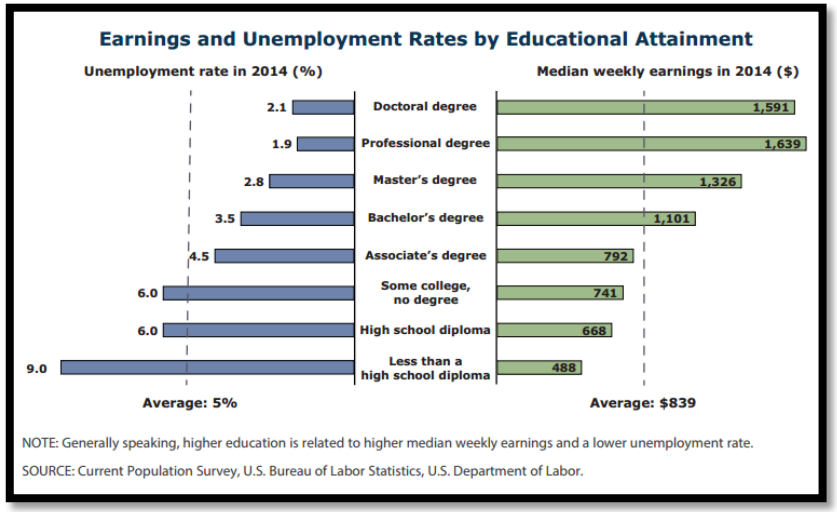
How Are Education and Productivity Linked?

In some ways, discussing the relationship between education and productivity is like trying to answer the old question "Which came first, the chicken or the egg?" On the one hand, education might nurture productivity,

December 2015

Federal Reserve Bank of St. Louis | research.stlouisfed.org

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.



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Page One Economics Newsletter
Classroom Edition – Study Guide w/ Answer Key

Name_____ **Period**_____

Federal Reserve Bank of St. Louis *Page One Economics®*:
"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?

2. In the human capital model, what is the relationship between education and productivity?

3. In the signaling model, what is the relationship between productivity and education?

4. In the signaling model, how does a college degree reduce the problem of asymmetric information?

5. If you blend the two models, how might you describe the benefits of education?

Teacher's Guide

Federal Reserve Bank of St. Louis *Page One Economics®*:
"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.

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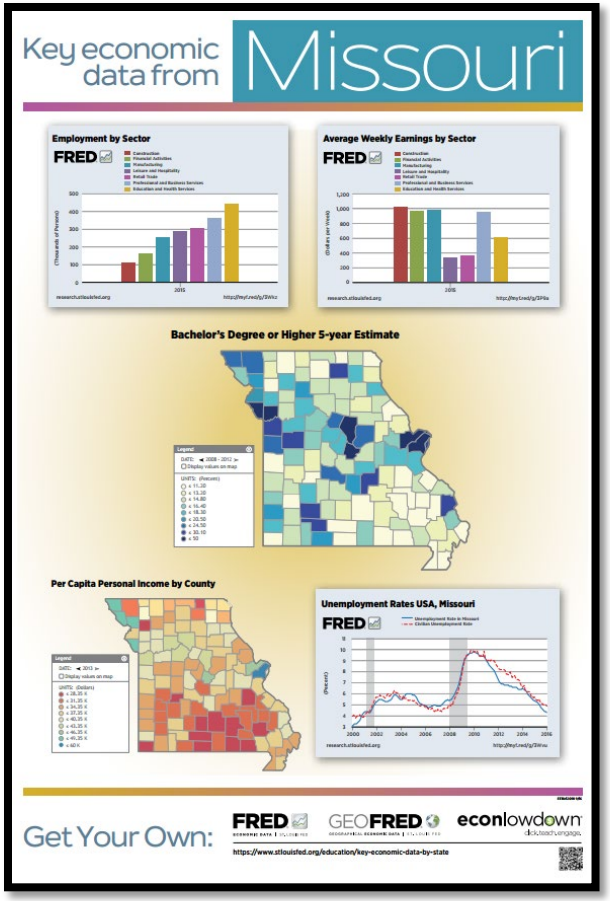
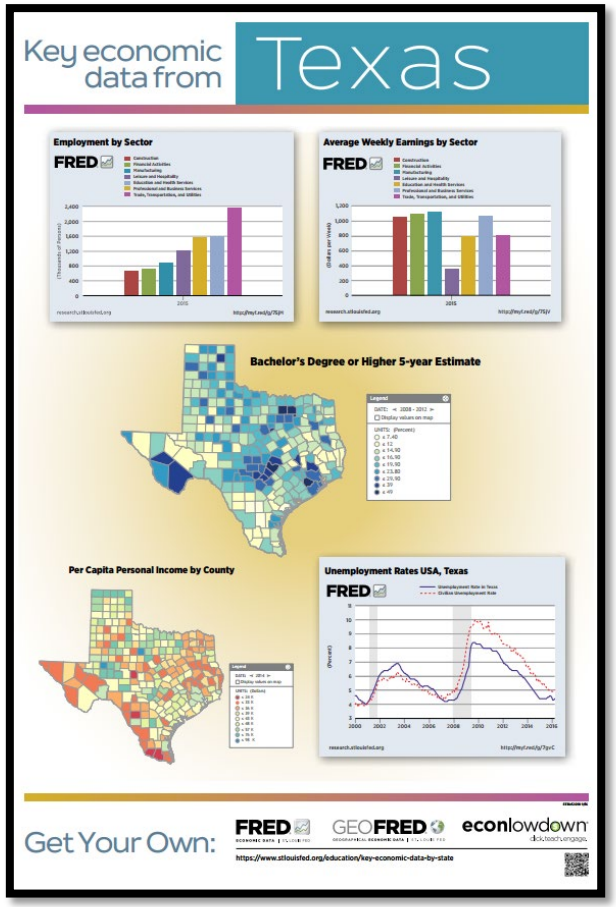
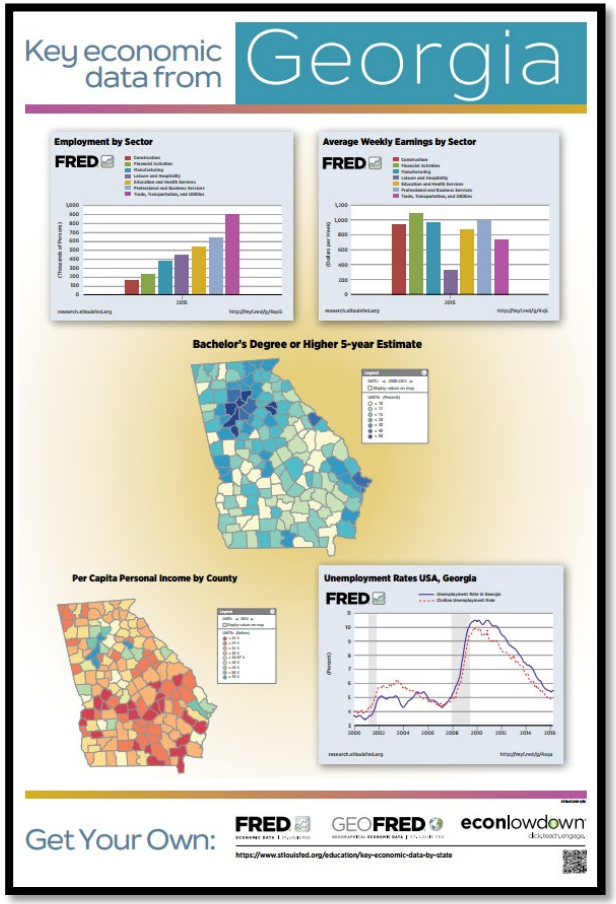
Key Economic Data – Classroom Data Posters!







Questions?

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314-444-8624

Find us at: www.stlouisfed.org/education

Classroom ECONnections with the Fed: College and Career Resources
March 8, 2017

Presented by:
Nick Haltom, Federal Reserve Bank of Richmond

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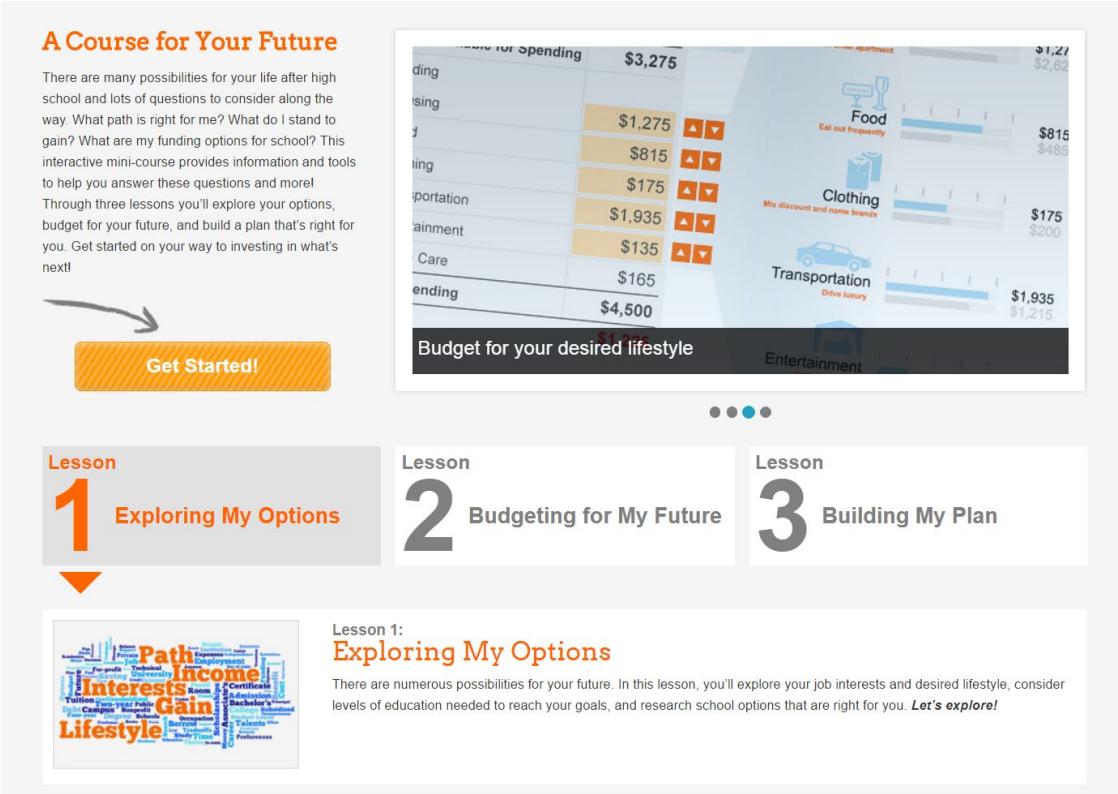
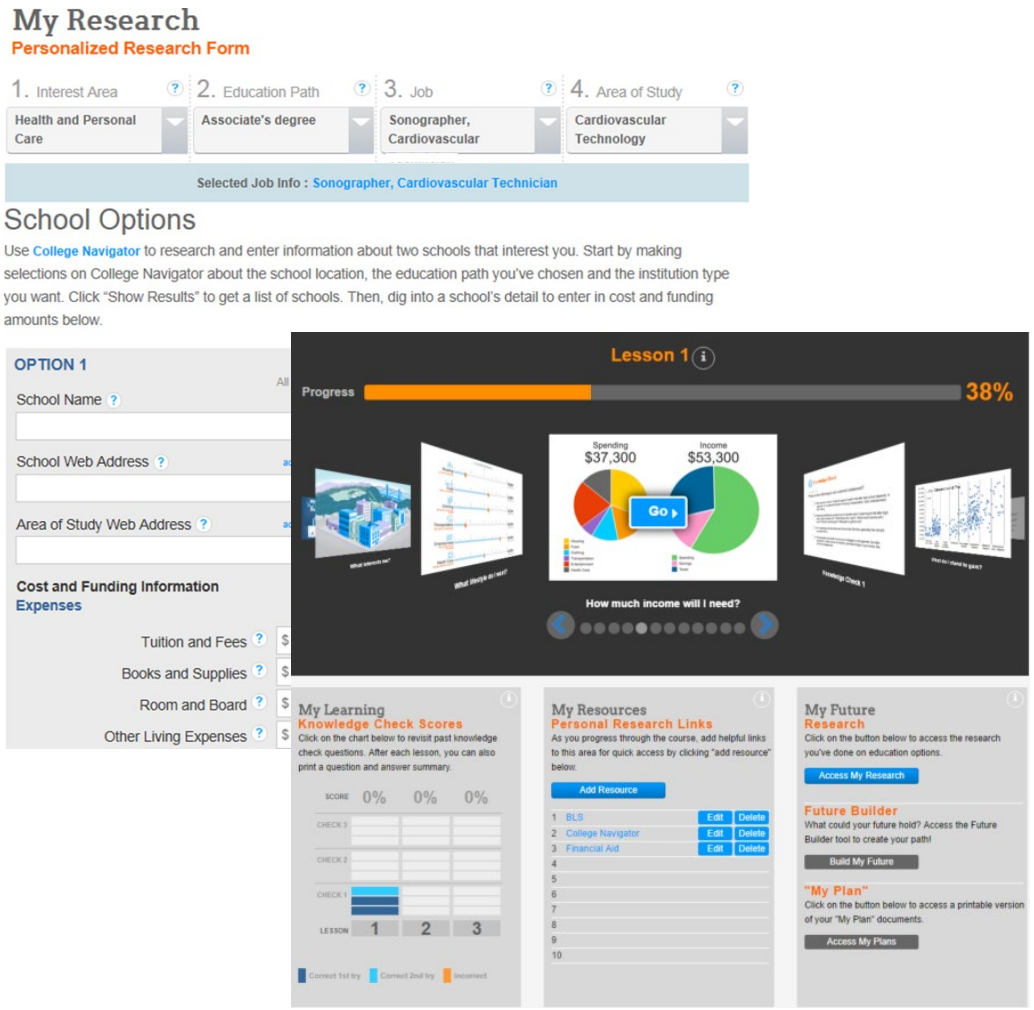
Presentation Outline

1. Course Goals
2. Visual Tour
3. Key Features



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

$$\max_{S} \int_{S}^{\infty} \exp\left(-\left(r+\nu\right)t\right) w\left(t\right) h\left(t\right) dt$$ *

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

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

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

Lesson 2 Budgeting for My Future

Lesson 3 Building My Plan

Lesson 1: Exploring My Options

Lesson 2: Budgeting for My Future

Lesson 3: Building My Plan

Guiding Questions

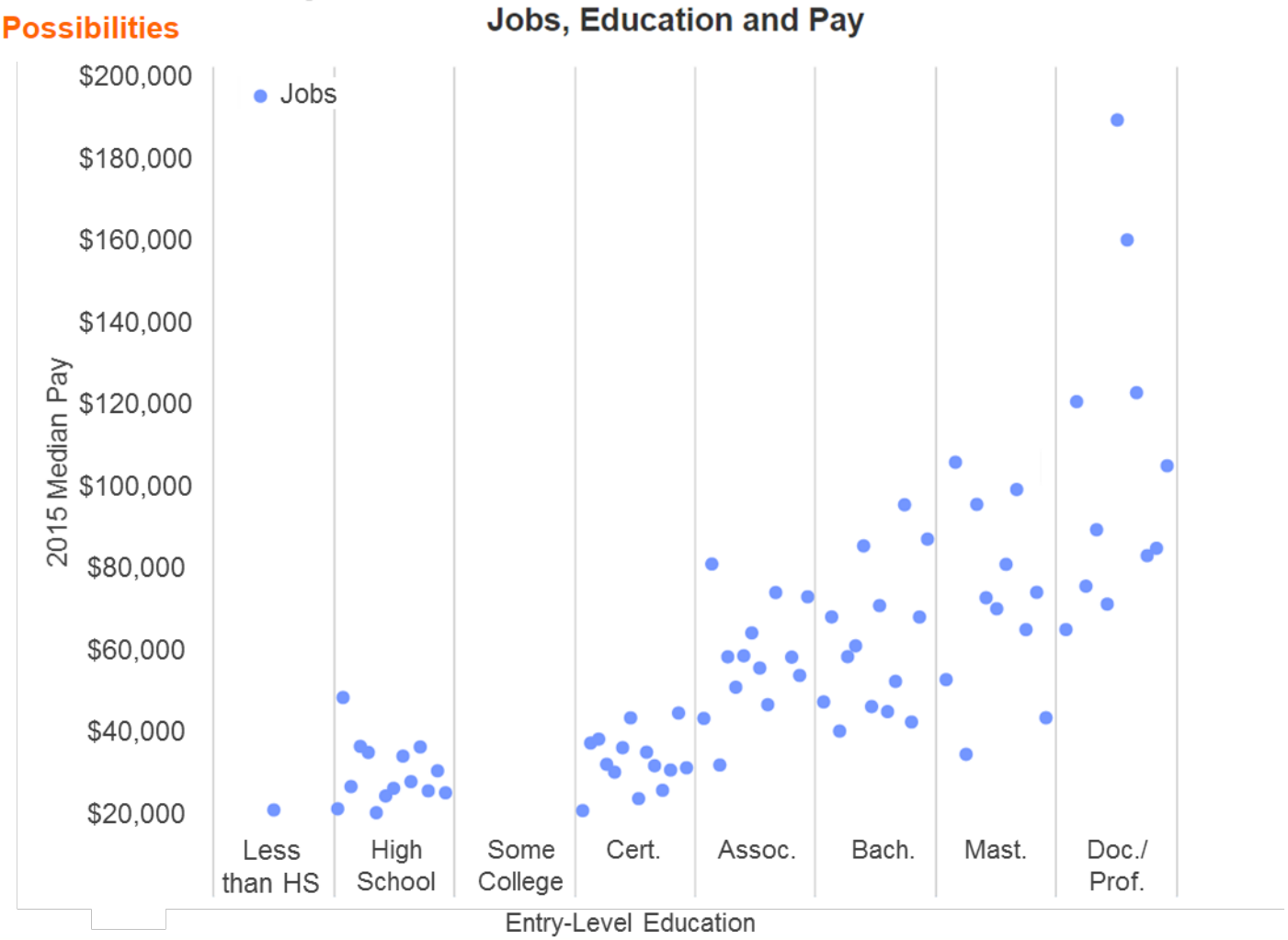
- What's included in **my plan**?
- How do I **evaluate** my plan?
- How well does my plan handle **change**?
- How do I **prepare** for my path?
- How can I **compare** my different options?

Interactions and Data Connections

What do I stand to gain?

Sorting My Possibilities

Health and Personal Care

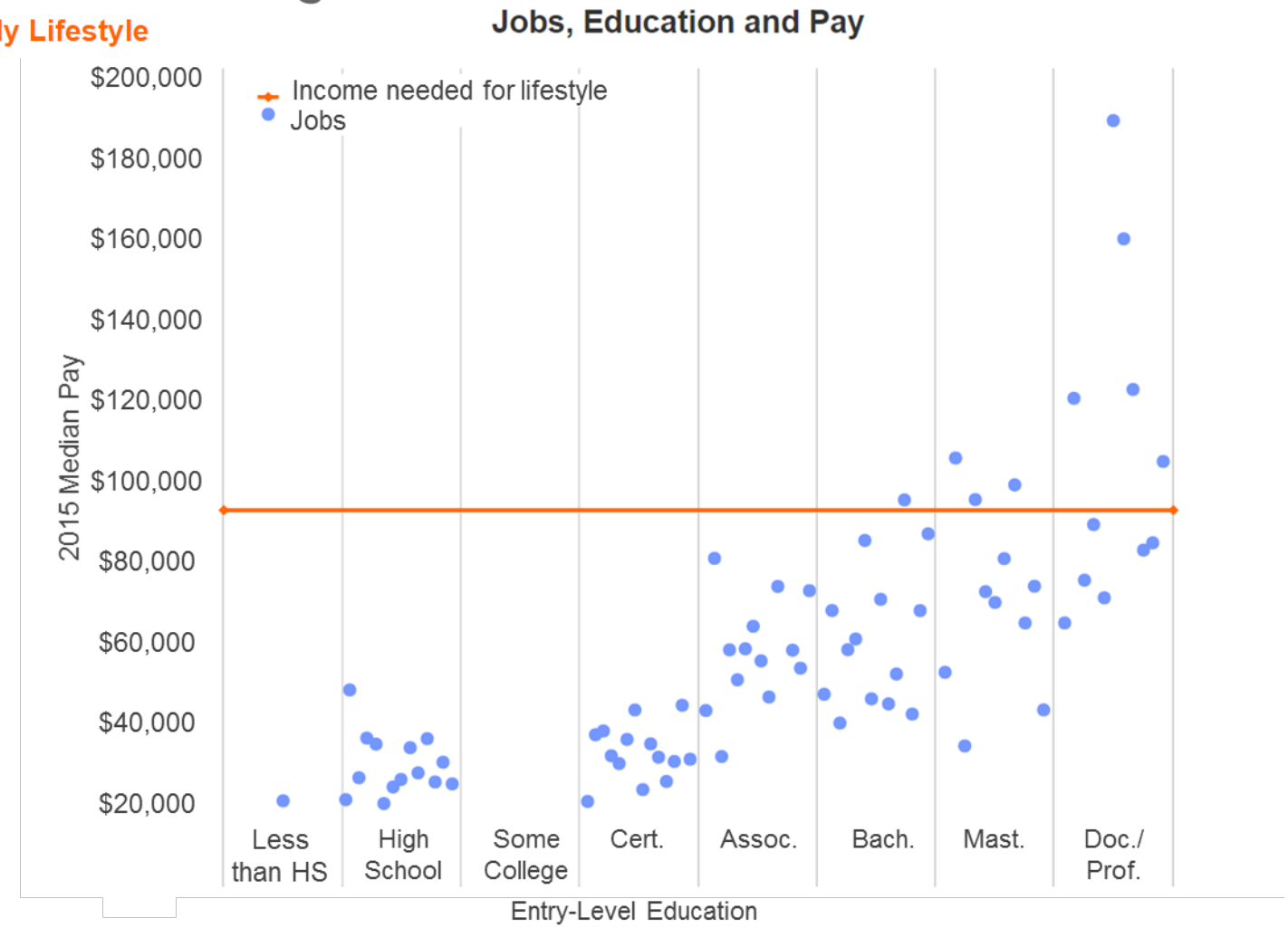


Interactions and Data Connections

What do I stand to gain?

Health and Personal Care

Leveling My Lifestyle



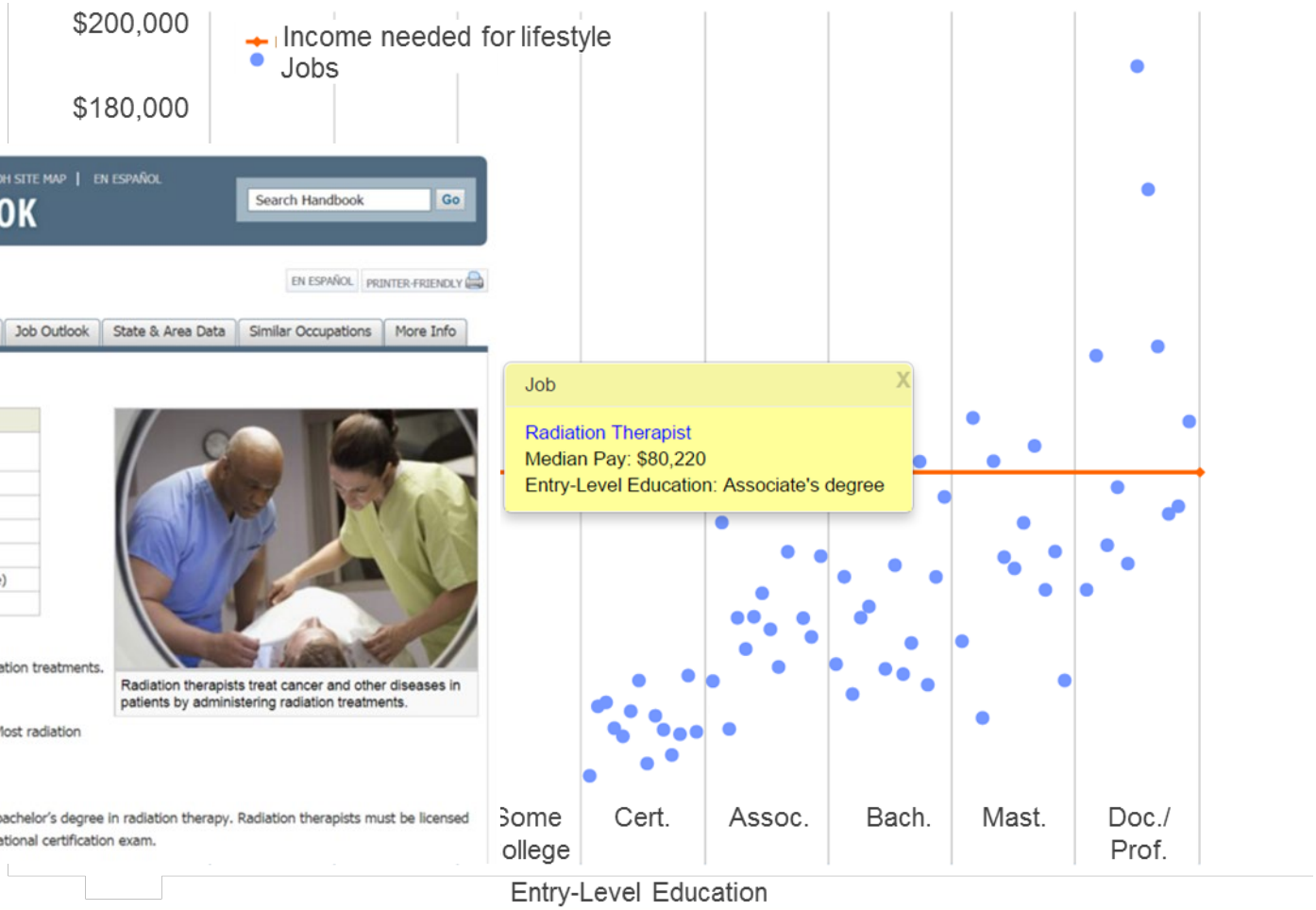
Interactions and Data Connections

What do I stand to gain?

Leveling My Lifestyle

Health and Personal Care

Jobs, Education and Pay



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vironment | How to Become One | Pay | Job Outlook | State & Area Data | Similar Occupations | More Info

Radiation Therapists	
	$80,220 per year $38.57 per hour
	Associate's degree
on	None
	None
	16,600
	14% (Much faster than average)
	2,300

r diseases in patients by administering radiation treatments.

ces of physicians, and outpatient centers. Most radiation

st

ms that lead to an associate's degree or a bachelor's degree in radiation therapy. Radiation therapists must be licensed vary by state, but often include passing a national certification exam.

Radiation therapists treat cancer and other diseases in patients by administering radiation treatments.

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?

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

Question 1 of 3

What main purpose does a personal budget se 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

INVEST IN WHAT'S NEXT
LIFE AFTER HIGH SCHOOL

Welcome Nick | Sign Out

Lesson 2: Budgeting for My Future — **Name: Nick**

Knowledge Check Summary — **Score: 83%**

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

ion to others

urred last year

ing currently

or the future

o plan for your financial future. A personal budget is a reflection of your
g at what you've earned, saved and spent in the past can be helpful to
ngs helps you see if you're sticking to your budget. However, budgets

income to get disposable income?

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
	Print	Print	

Correct 1st try | Correct 2nd try | Incorrect

Key Features of the Course

Personalized Research

- Go off-site
- Bring data back to course

1. Interest Area: Health and Personal Care
2. Education Path: Associate's Degree
3. Job: Radiation Therapist
4. Area of Study: Radiation Therapy

Selected Job Info: Radiation Therapist

OPTION 1 (All Fields Required)

School Name: Virginia Western Community College

School Web Address (add to dashboard +): virginiawestern.edu/

Area of Study Web Address (add to dashboard +): http://virginiawestern.edu/academics/health/oncology/i

Years to Complete Education Path: 2

Expenses

	Dollar Amount
Tuition and Fees	$ 4,713
Books and Supplies	$ 1,500
Room and Board	$ 6,936
Other Living Expenses	$ 4,086

OPTION 2 (All Fields Required)

School Name: Southside Regional Medical Center Schools

School Web Address (add to dashboard +): http://www.srmconline.com/Southside-Regional-Medic

Area of Study Web Address (add to dashboard +): http://www.srmconline.com/Southside-Regional-Medic

Years to Complete Education Path: 2

Expenses

	Dollar Amount
Tuition and Fees	$ 15,062
Books and Supplies	$ 1,000
Room and Board	$ 7,126
Other Living Expenses	$ 4,050

Correlation with Standards

CEE Voluntary National Content Standards in Economics

- Standard 1: Scarcity
- Standard 2: Decision Making
- Standard 4: Incentives
- Standard 13: Income
- Standard 19: Unemployment and Inflation

CEE National Standards for Financial Literacy

- Standard 1: Earning Income
- Standard 2: Buying Goods and Services
- Standard 3: Saving
- Standard 4: Using Credit

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

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**

Exploring Careers

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OCCUPATIONAL OUTLOOK HANDBOOK

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Architecture and Engineering >

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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.

Explore: Your Career

My career choice:

Describe where you work:

Explain what you do:

How much education will you need?

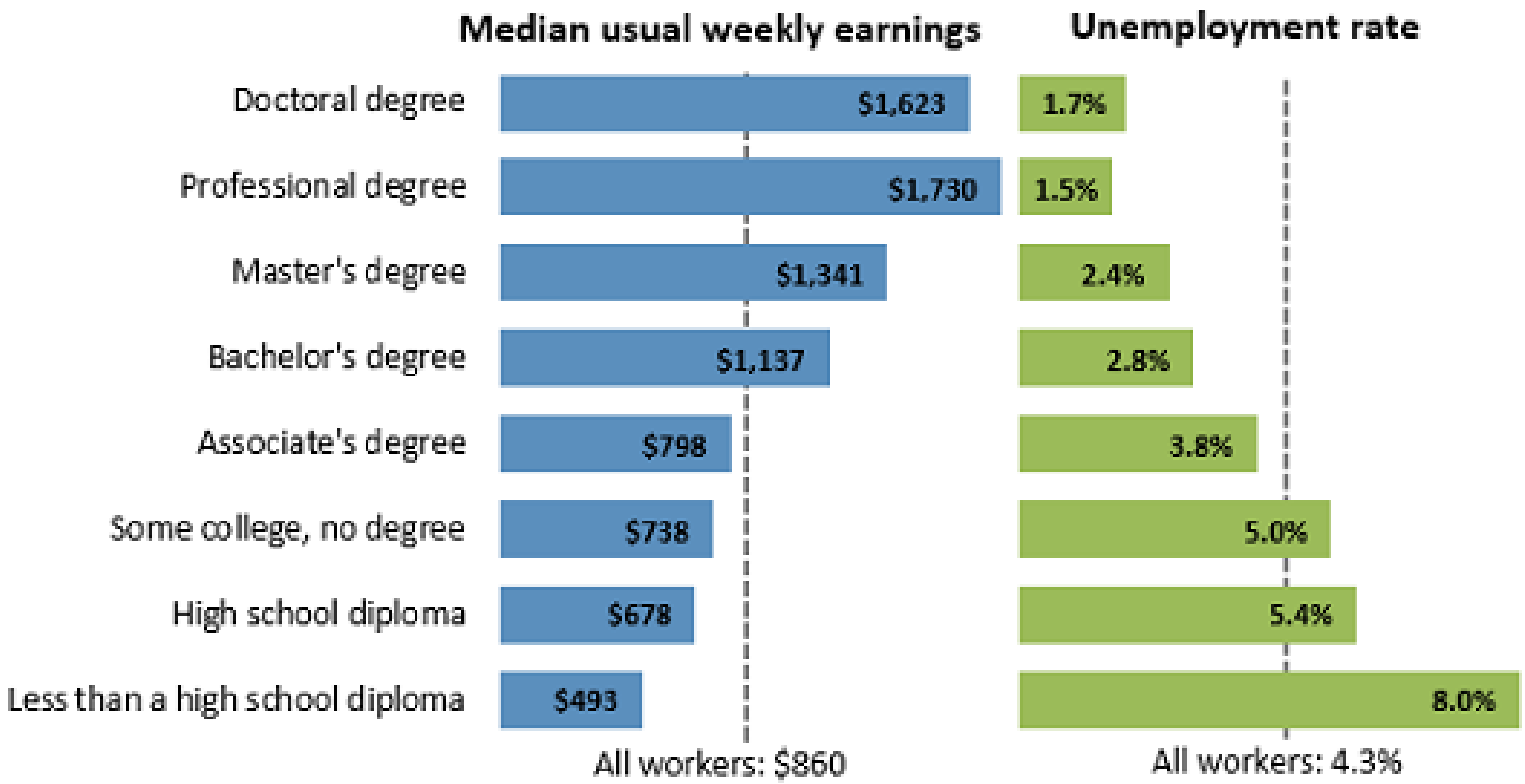
- ◯ High school diploma or GED
- ◯ Postsecondary non-degree award (certification)
- ◯ Associate degree
- ◯ Bachelor's degree
- ◯ Master's degree
- ◯ Doctoral or professional degree

How much will you earn?

Yearly:

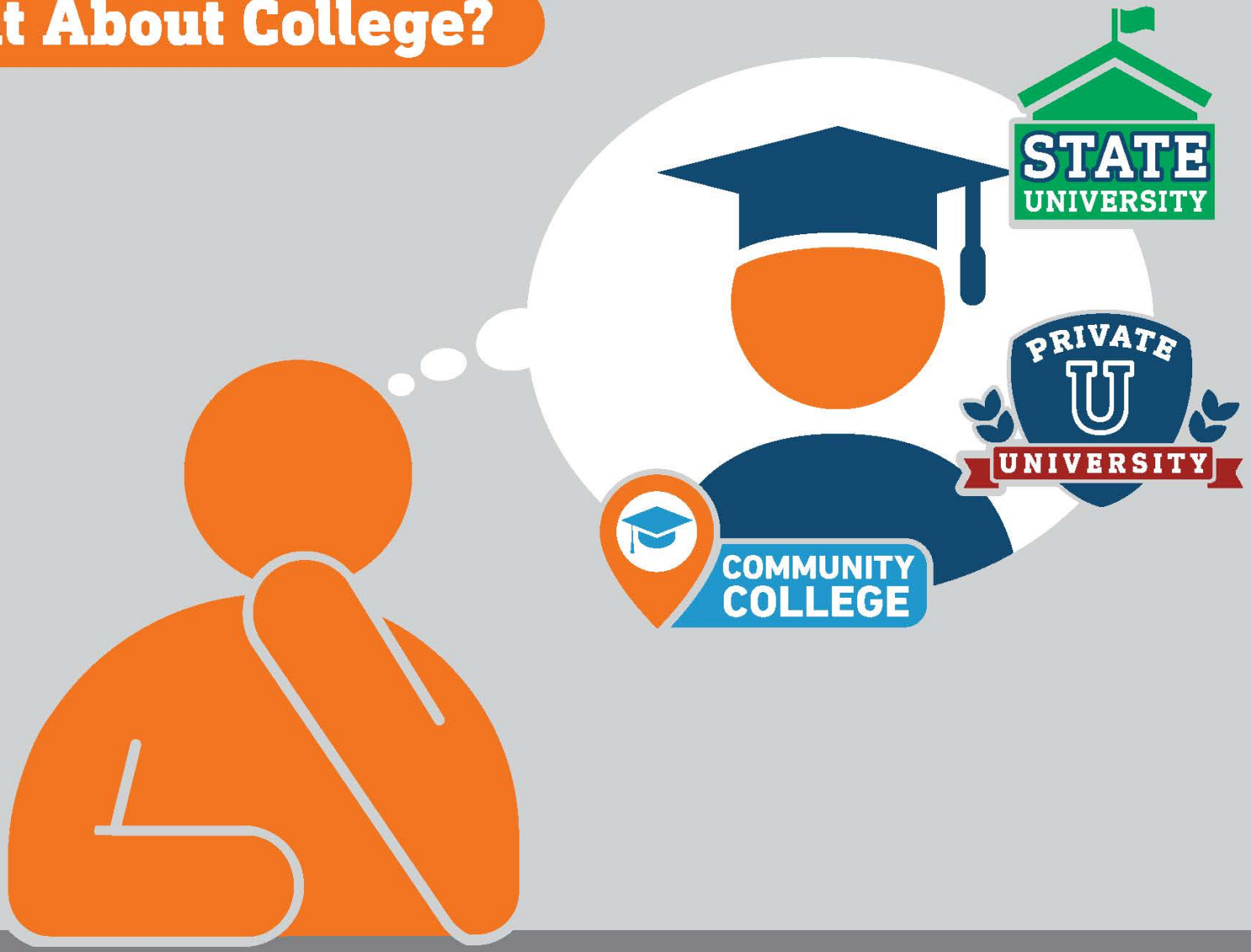
$

Earnings and unemployment rates by educational attainment, 2015

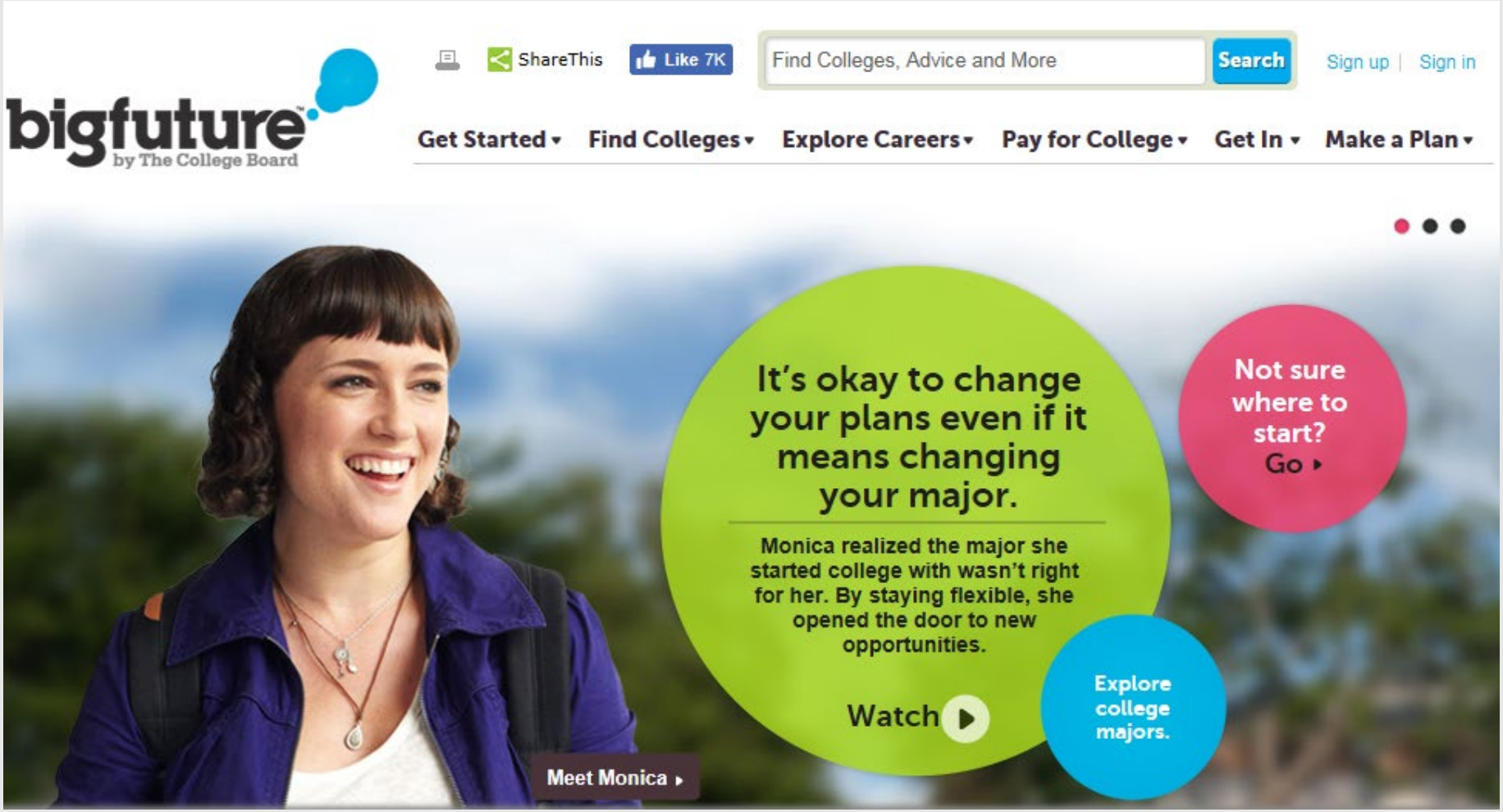


Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
Source: U.S. Bureau of Labor Statistics, Current Population Survey

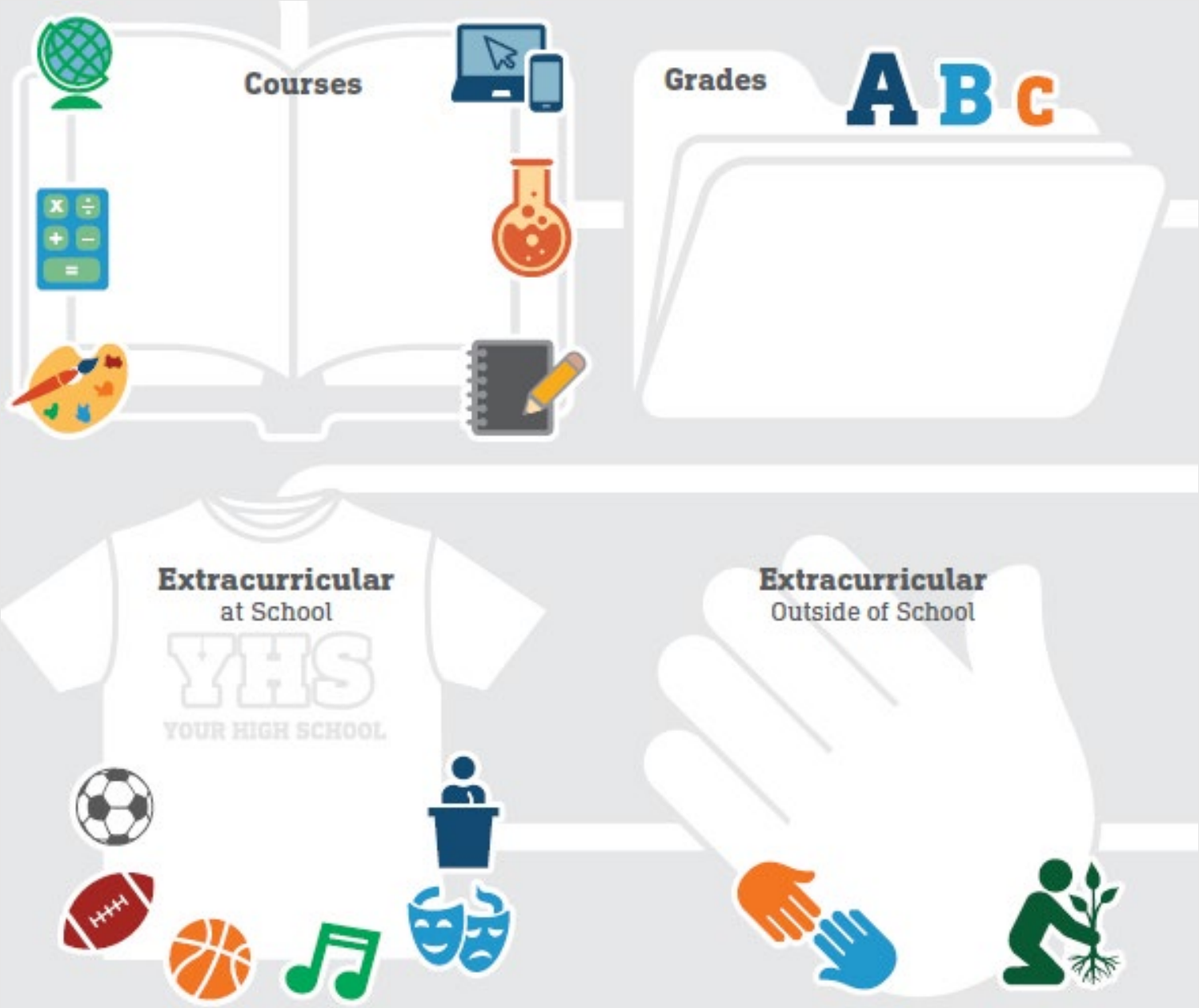
What About College?



bigfuture.collegeboard.org



How Do I Get In?



NAVIGATE
Exploring College and Careers

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How Much Does College Cost?

STATE UNIVERSITY	PRIVATE U UNIVERSITY	COMMUNITY COLLEGE
$	$	$
$	$	$
$	$	$
$	$	$
$	$	$

Personal Expenses

National Average

$2,105 per year*

or

$234 per month

(School year = 9 months)

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.

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

Total Expenses

$725

Was working with this budget difficult?
Some students work part-time while they

Paying for College

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.

YHS

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.

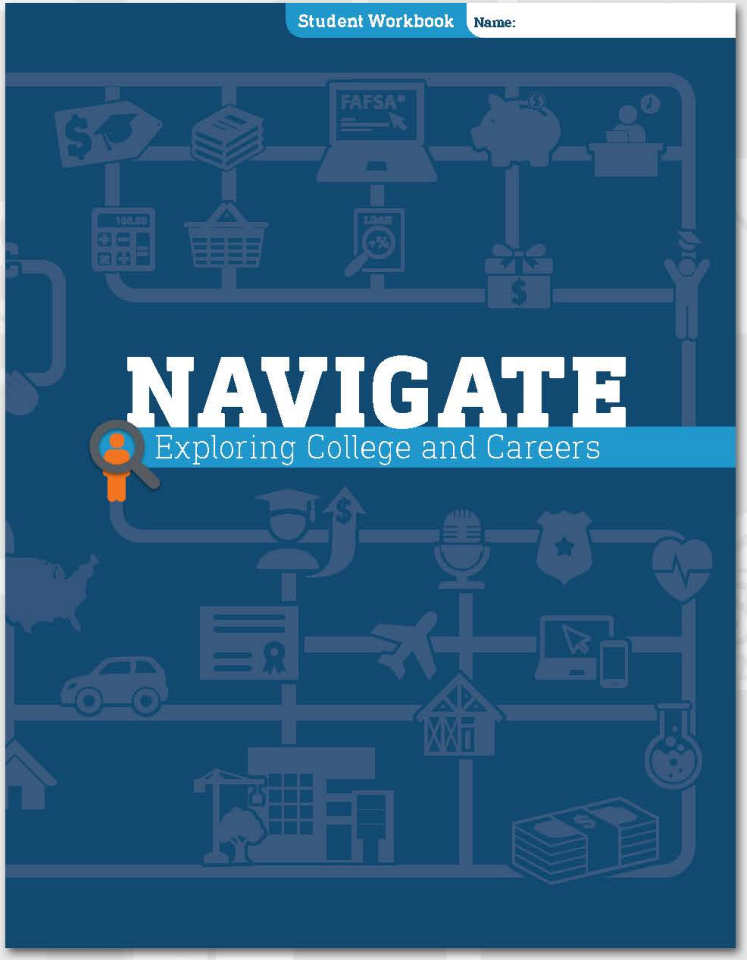
- What did you do in high school to prepare for your career?
- What type of education did you pursue after high school? How did you pick the school? What did you study?
- What challenges did you face? How did you overcome them?

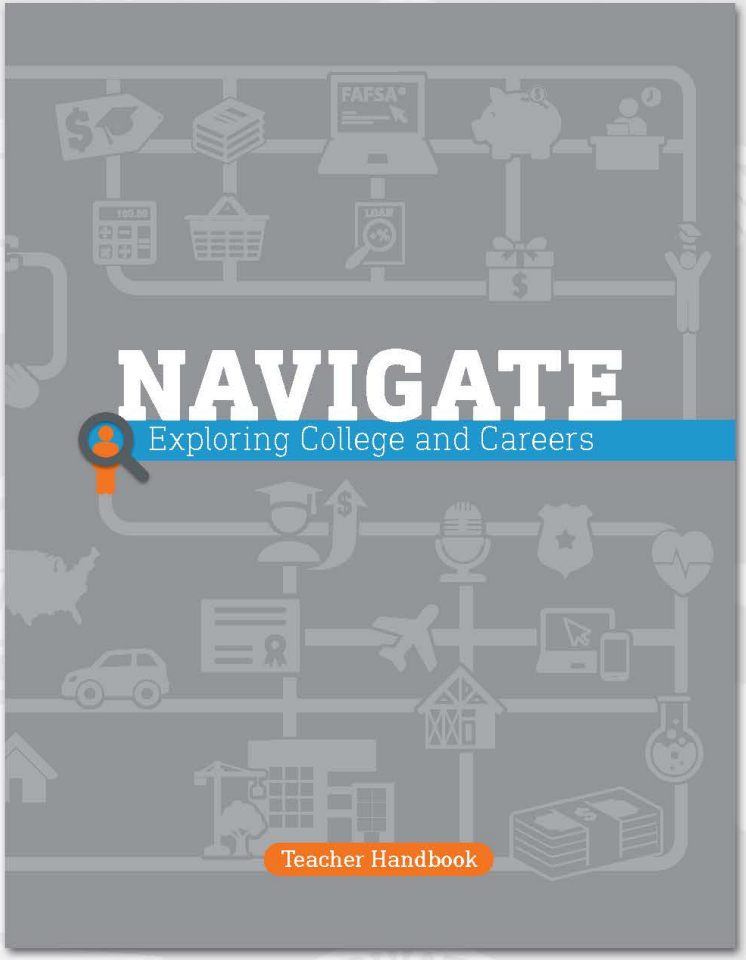
We look forward to sharing with our incoming students the details about the choices that contributed to your success.

Sincerely,

The Student Council President

Preview the lessons and order copies at **www.dallasfed.org/educate/navigate.**





Economic Education at the Dallas Fed

Federal Reserve Bank of Dallas

QUESTIONS?

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