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College Degrees: Why Aren't More People Making the Investment?

BY MARIA E. CANON AND CHARLES S. GASCON

The benefits of higher education have continued to grow over the past 30 years—specifically, greater earnings and lower **unemployment** for those with a college degree. With this in mind, one might assume more students would invest in a college education. Yet, the high school dropout rate has remained at nearly 20 percent and the fraction of high school graduates who do not enroll in any form of college (one-third) has not changed at all. Even though a greater percentage of high school graduates enter college today than 30 years ago, college dropout rates have increased, lowering the college **graduation rate**.

If the benefits to education appear to be so high, why don't more people seek a college degree? Some possible factors explored here include higher tuition costs, changes in assistance programs, fear of failure, earnings risk,

Measuring the Benefits of College

and the recent recession and financial crisis.

It is well documented that college graduates earn more over their lifetimes than those with only a high school diploma (hereafter referred to as "high school graduates"). A measure that highlights this difference is called the **skill premium**. This premium measures the difference between the average earnings of those with a four-year college degree and those without and considers factors such as school choice, major, occupation, and geographic location. Recent estimates suggest that the average skill premium for those with a four-year college

degree is between 65 and 75 percent, meaning they earn an average of between 65 and 75 percent more than high school graduates.

Supply and **demand** help explain this phenomenon. Over time, the demand for college graduates has increased faster than the supply of college graduates, and therefore earnings for college graduates have increased. On the other hand, the demand for less-educated workers has decreased and so have their **earnings**. Figure 1 clearly shows the divergence between earnings for college graduates and high school graduates. (The space between the lines in Figure 1 is a measurement of the skill premium. It is easy to see that the difference between the college graduates' line and the other two lines has grown—not so much due to an increase in earnings for those with a college degree as a decrease in earnings for those without a college degree.) From 1980 to 2008, the skill

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FIGURE 1



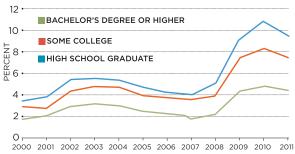
SOURCE: College Board Advocacy and Policy Center and authors' calculations.

premium for male college graduates increased by 26 percent over those with some college and by 33 percent over high school graduates. (It is common to use male earnings because of issues specific to the female labor force participation rate. For example, women with the expectation of high earnings tend to enter the labor force, while women with the expectation of low earnings tend to elect to stay home.)

In addition to higher lifetime earnings, a college degree brings another substantial benefit—a significantly lower **unemployment rate** (Figure 2). Between 2000 and 2007, the average unemployment rate was 4.6 percent for high school graduates but only 2.4 percent for those with a college degree—a difference of 2.2 percentage points. During the recent recession, the rates diverged even more, with a difference of 6 percentage points.

FIGURE 2





NOTE: "Some college" includes associate degrees. SOURCE: Bureau of Labor Statistics, Table A-4.

What Drives College Participation Rates?

In recent years, the college participation rate has grown substantially. According to a 2010 study by economist Gonzalo Castex, between 1980 and 2000

the rate increased from 41 percent to 68 percent. It varied widely across groups, however, with higher participation rates for students with high ability (based on standardized tests) and those from high-**income** families. For example, the gap in college participation rates between students from the lowest-ability quartile and the highest-ability **quartile** was more than 60 percentage points.

To try to explain the growth in the participation rate and the differences across groups, Castex considered four factors: increases in the college skill premium, increases in the availability of merit-based college aid (**grants** and **scholarships**), shifts in both the distribution of family income and individual ability, and increases in tuition costs. Among the four factors, he found that an increase in the college skill premium is the most influential factor affecting college participation.

For some, increased availability of merit-based aid reduced the cost of a college education, making college more desirable. According to Castex, between 1980 and 2000, the ratio of grants awarded to highability students to the cost of education increased by 70 percent for low-income students and by 50 percent for high-income students. This ratio changed little for students with low ability. Castex found that this redistribution of aid accounts for 6 percent of the aggregate increase in college enrollment and has a larger effect for students with high ability.

Holding ability constant, Castex found that students in low- and middle-income families have greater access to need-based grants and scholarships. Since 1980, there has been a significant change in the relationship between student ability and family income. Castex's findings suggest there are now more students with high ability in middle-income families than in 1980, implying more grants for middle-income students and, therefore, an increase in college participation.

Tuition **costs** influence college participation as well, but perhaps not as much as might be anticipated. Average college tuition increased by about 150 percent between 1980 and 2000, according to the College Board. It seems reasonable that higher tuition would put college out of reach for more families and deter enrollment because of a lower **return on investment**, but higher tuition costs can be offset by more **borrowing**. Castex found that increased tuition costs reduced the overall college participation rate by only 3 percent (7 percent for students with low ability).

College is a risky, irreversible investment, which makes some students hesitant to commit. Two terms that define risk associated with college are **failure risk**

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and earnings risk. Failure risk refers to the possibility that a student will not complete college. Earnings risk refers to the possibility that a college graduate may not find a job or may not find a job with the level of expected earnings.

Failure Risk

According to a 2009 study by economists John Bound, Michael Lovenheim, and Sarah Turner, college failure rates are close to 50 percent at four-year public colleges. In addition, as the rate of college enrollment has increased, completion rates have decreased. Generally, students who drop out of college tend to do so after two years, and the costs of failure can be very high. With the two years of tuition expenses and forgone earnings, college dropouts may see no return on their investment. Also, many dropouts fail to earn any skill premium because most specialized learning takes place in the later years of college. Therefore, failure risk warrants consideration and may be a prime reason many students choose not to attend college.

Earnings Risk

Even with a college degree, there is no guarantee regarding future earnings or employment. Attending college may or may not pay off as planned. A May 2011 *New York Times* article by Catherine Rampell reported that in 2009 slightly over half of college graduates under the age of 25 held jobs requiring a college degree. Moreover, 22 percent of this same group was not working at all, and the remaining 22 percent was **underemployed**, meaning they held jobs below their skill level.

Even though this recent underemployment may be largely due to the state of the economy, some college graduates still do not earn the skill premium they expected—and invested in—because of factors such as their school performance, degree choice, or quality of life issues (e. g., purposefully taking a lower-paying, less-stressful job).

It is possible for relatively young college graduates to immediately earn less than they expected. Because earnings tend to grow over a lifetime, starting with lower-than-expected earnings can potentially reduce one's lifetime earnings, making earnings risk worthy of consideration as well.

Impact of the Recession

Traditionally, economic slowdowns have not been associated with declining college enrollment

rates. In bad economic times, with fewer good jobs available, many people choose to go to college instead of work. During the most recent **recession**, however, college enrollment rates declined. The housing crash and financial crisis may be largely to blame, making college unaffordable for some families. In addition, many college endowments lost significant value, likely resulting in fewer scholarships. And additional money was hard to come by—the financial crisis made it more difficult for households to borrow.

College graduates felt the effects of a tight economy as well. The often-feared earnings risk became a reality for many, as the New York Times article indicated. Since the start of the recession, the unemployment rate for college graduates has more than doubled, from under 2 percent in 2007 to a peak of 5 percent at the end of 2010, and roughly one-quarter of recent graduates remain underemployed. Although the recession ended, the economy has experienced a "jobless recovery": Job growth has not kept pace with economic growth. The unemployment rate remains elevated. Although the skill premium seems to have increased during the recession, the unemployment and underemployment of college graduates gives credence to concerns about earnings risk—investing in college can be risky. Poor outcomes for college graduates may be another factor explaining the slow growth in college enrollment rates and elevated college dropout rates.

Conclusion

Even though a college degree can bring significant, long-term benefits, many avoid college altogether or fail to complete their degrees. Factors that influence people's choices regarding college include higher tuition costs and changes in the availability of financial aid. The main factors holding down college enrollment rates, however, appear to be fear of failure and earnings risk. The recent recession and financial crisis added credence to these fears, with many college graduates left underemployed or unemployed. Yet, even though earning a college degree entails risk, all but a very few college graduates will earn substantially more earnings over their lifetimes than those with only a high school diploma.

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Lifetime Earnings: A Good Reason to Go to College

main reason students enter college is the college skill premium—the ability to make more money over their lifetimes than high school graduates. Although circumstances vary, reasonable estimates indicate that by their mid-30s college graduates fully funding their college education with student loans will surpass the lifetime earnings of high school graduates (Figure 3). For example, assuming the average cost of attending college (including room and board) is approximately \$26,500 per year (\$16,000 for **public college** and \$37,000 for **private college**), a student who completely finances four years of college with loans will accumulate just over \$100,000 in **debt**. Assuming the student pays off that debt (with **interest**) and earns a skill premium of 74 percent after graduation, by age 34 he or she will surpass the lifetime earnings of a high school graduate.

The Role of Risk

Fear of dropping out of college (failure risk) or not being able to find a high-paying job after graduation (earnings risk) are real concerns for many. Assuming the same yearly college costs noted above, a student who drops out of college after two years will accumulate just over \$50,000 in debt and enter the **labor force** with a much lower skill premium. The student will be saddled with student loan debt (plus interest) but earn only 15 percent more than a high school graduate. As a result, his or her lifetime earnings will remain below those of a high school graduate well beyond retirement (Figure 4).

Earnings risk is slightly more complicated because of the many different scenarios that could affect potential earnings. Comparison of data, however, show that in the majority of cases the lifetime earnings of a college graduate will outpace those of a high school graduate (Figure 5): By age 27, the earnings of a college graduate will surpass those of a high school graduate. To match the lifetime earnings of a college graduate at the lowest end of the earnings spectrum, a high school graduate will have to work into his or her 60s.

FIGURE 3

Lifetime Earnings: High School vs. College \$1,600 • \$1,400 PRESENT VALUE, THOUSANDS HIGH SCHOOL GRADUATE \$1,200 COLLEGE GRADUATE \$1,000 \$800 \$400 \$200 30 38 50 22 26 42 54 AGE

FIGURE 4

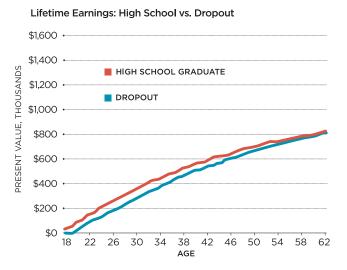
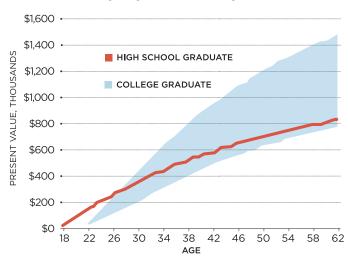


FIGURE 5





NOTE: The shaded band shows the present value of lifetime earnings of a college graduate earning a skill premium between 125 percent (\$73,125 per year; top of the band) and 25 percent (\$40,625 per year, bottom of the band). All calculations assume a 5 percent interest rate on student loan debt and a 3 percent discount rate.

SOURCE: College Board Advocacy and Policy Center. "Trends in College Pricing." 2010, p. 15, Figure 1.



Glossary

- **Borrowing** Taking money with a promise to repay the money in the future.
- **Costs** Things unfavorable to a decisionmaker.
- **Debt** Money owed in exchange for loans or for goods or services purchased with credit.
- **Demand** The quantity of a good or service that buyers are willing and able to buy at all possible prices during a certain time period.
- **Earnings** Money or income received in exchange for labor or services.
- **Earnings risk** The possibility that a college graduate may not find a job or may not find a job with the level of expected earnings.
- **Failure risk** The possibility that a student will not complete college.
- **Graduation rate** The percentage of students who complete a given course of study (e.g., high school or college) relative to the total number of students enrolled over a given period.
- **Grants** Money that does not have to be repaid that is given by the government to a recipient based on specific criteria and a designated purpose. Some college grants must be repaid if the student fails to maintain college eligibility.
- Income The payment people receive for providing resources in the marketplace. When people work, they provide human resources (labor) and in exchange they receive income in the form of wages or salaries. People also earn income in the forms of rent, profit, and interest.
- **Interest** The price of using credit; the price of using someone else's money.
- **Labor force** The total number of workers, including both the employed and the unemployed.
- **Private (or nonpublic) college** A college owned and operated by an individual, religious institution, partnership, or a corporation other than the state, a subdivision of the state, or the Federal government and that is supported primarily with nonpublic funds.
- **Public college** A college that receives monetary support from public funds.
- **Quartile** One part of a set of data divided into four equal parts.

- **Recession** A period of declining real income and rising unemployment; significant decline in general economic activity extending over a period of time.
- **Return on investment** A performance measure of the effectiveness of an investment. It is calculated as the net gain (gain from investment minus cost of investment) divided by the cost of the investment.
- **Scholarships** Financial assistance given to support a student's education, awarded on the basis of academic or other achievement.
- **Skill premium** The difference between the average earnings of those with a four-year college degree and those without.
- **Supply** The quantity of a good or service that producers are willing and able to sell at all possible prices during a certain time period.
- **Underemployed** Wanting a full-time job but having only a part-time job; being overqualified for a job and receiving less pay than would be earned at a job requiring a higher skill level.
- **Unemployment** A condition where people at least 16 years old are without jobs and actively seeking work.
- **Unemployment rate** The percentage of the labor force that is willing and able to work, does not currently have a job, and is actively looking for employment.

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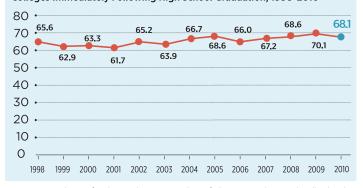


Education by the Numbers

1. According to the graph below, how has the percentage of high school graduates who enroll in college changed recently?

From 1998 to 2010, the percentage of high school graduates who enrolled in college increased slightly. (This is a continuation of a long-run trend.)

Percentage of High School Graduates Enrolled in Two- or Four-Year Colleges Immediately Following High School Graduation, 1998-2010



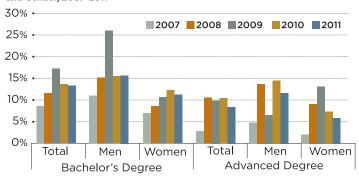
SOURCE: National Center for Educational Statistics, Condition of Education, 2012. http://media.collegeboard.com/digitalServices/pdf/advocacy/cca/r2b-6368_CCAProgressReport_WR.pdf.

NOTE: High school completers refer to those who received a high school diploma or equivalency certificate. This indicator provides data on high school completers age 16 to 24, who account for about 98 percent of all high school completers in a given year.

2. According to the graph below, what is the unemployment rate of recent college graduates by level of degree and gender?

From 2007 to 2011, the unemployment rate for those with a bachelor's degree was higher than for those with an advanced degree. In both categories, women had lower unemployment rates than men (except for women with an advanced degree in 2009).

Unemployment Rates of Recent College Graduates Ages 20 to 29 by Degree and Gender, 2007-2011



 $SOURCE: U.S.\ Bureau\ of\ Labor\ Statistics.\ http://www.bls.gov/opub/ted/2013/ted_20130405.htm$

Current Economic Data

	Q4-'12	Q1-'13	Q2-'13	Q3-'13*
Growth Rate Real GDP	0.1%	1.1%	2.5%	NA*
Inflation Rate Consumer Price Index	2.2%	1.4%	-0.0%	NA
Civilian Unemployment Rate	7.8%	7.7%	7.6%	NA

^{*}Advance estimates were not available because of the October government shutdown. Please see the online version for updates.

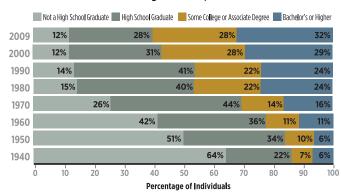
SOURCE: GDP, Bureau of Economic Analysis; www.bea.gov;

Unemployment rate and consumer price index, Bureau of Labor Statistics; www.bls.gov.

3. According to the chart below, how has the education level of individuals changed since 1940?

From 1940 to 2009, the percentage of the population ages 25 to 34 with a bachelor's degree or higher increased from 6 percent to 32 percent, while the percentage of high school dropouts decreased from 64 percent to 12 percent.

Education Level of Individuals Ages 25 to 34, 1940-2009



SOURCE: U.S. Census Bureau and

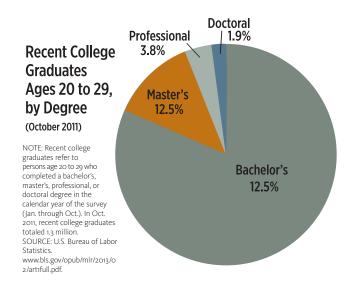
http://trends.collegeboard.org/education-pays/figures-tables/educational-attainment-over-time-1940-2009.

research.stlouisfed.org/fred2/

Education by the Numbers, cont.

4. According to the chart below, what is the breakdown of degrees earned by recent college graduates?

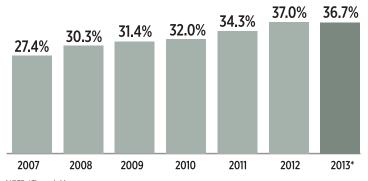
Almost 82 percent of recent college graduates earned a bachelor's degree. The remainder earned an advanced degree.



5. According to the chart below, what is the trend for college graduates working in jobs that do not require a degree?

Since 2007, the percentage of college graduates working in jobs that do not require a degree increased roughly 10 percent. However, for 2013 a slight 0.3 percent decrease is projected.

Recent Graduates with Jobs That Do Not Require a Degree



NOTE: *Through May.
SOURCE: Center for Labor Market Studies at Northeastern University

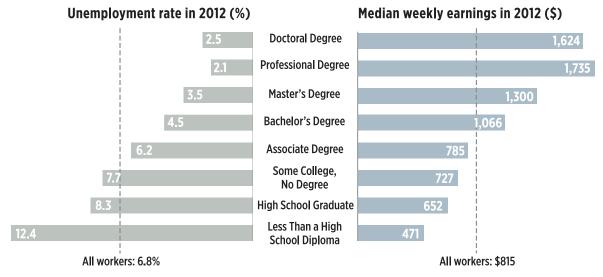
http://www.northeastern.edu/news/in-the-news/recent-college-grads-face-36-mal-employment-rate/.

6. According to the chart below, what is the correlation between (i) education and unemployment and (ii) education and earnings?

There is a positive correlation between educational attainment and median weekly earnings. There is a negative correlation between educational attainment and the unemployment rate.

Earnings and Unemployment Rates by Educational Attainment

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SOURCE: Bureau of Labor Statistics, Current Population Survey

College and Careers

1. Are there alternatives to college for achieving financial prosperity?

Yes. The Council of Economic Advisers has concluded that the fastest job growth is likely among occupations requiring an associate degree or a post-secondary vocational certificate. It is projected that nearly half of future job openings will be filled by those with an associate degree or occupational certificate. Some of these "middle-skill" occupations (e.g., electrician, construction manager, dental hygienist, paralegal, and police officer) will pay more than some jobs requiring a bachelor's degree. In fact, 27 percent of people with post-secondary licenses or certificates—credentials short of an associate's degree—earn more than the average bachelor's degree recipient.

 $SOURCE: http://www.gse.harvard.edu/search/index.html?cx=o164466o36971636o8362%3Aurqj_p1s5to&q=Pathways+to+Prosperity&cof=FORID%3A11&siteurl=www.gse. harvard.edu%2Fcontact. \\$

2. What advice do recent college graduates offer?

According to the Heldrich Center for Workforce Development *Work Trends* report published in March 2012, 62 percent of the college graduates surveyed believe they will need more college in addition to a four-year degree to be successful in their careers. When asked what they would do differently if they could, 48 percent responded they would select a major more carefully or choose a different major, while 4 percent responded they would not go to college.

SOURCE: http://www.slideshare.net/heldrichcenter/career-development-course-presentation-march-2012.

3. What is the trend in the wage premium for college graduates with (i) a four-year degree and (ii) an advanced degree?

The wage premium for college graduates with a four-year degree is approximately 60 percent but has remained basically flat over the past decade. Since 2000, the growth in the value of an advanced degree accounts for most of the growth in the wage premium for college graduates.

SOURCE: http://www.clevelandfed.org/research/commentary/2012/2012-10.cfm.

4. Are all college majors equal?

No. All fields of study are not equal in terms of employment opportunities and earnings. Specific majors and higher technical skills can and often do offer lower unemployment and higher earnings. The college major chosen has a potentially large effect on the value of a four-year degree. For example, by mid-career, those with engineering and economics degrees will typically earn almost twice as much those with social work and education degrees.

SOURCE: http://centerforcollegeaffordability.org/research/studies/underemployment-of-college-graduates.

5. Which career choices have the lowest unemployment rates? The highest?

Generally, unemployment rates are higher for non-technical majors, such as the arts or law and public policy—9.8% and 9.2%, respectively. Unemployment rates are relatively lower for those with education, engineering, or health and sciences degrees—5.0%, 7.0%, and 4.8%, respectively.

SOURCE: http://cew.georgetown.edu/unemployment2013/.

6. How has the total number of college graduates changed in recent years relative to the demand for highly skilled jobs?

From 1970 to today, the percentage of the U.S. population 25 years of age or older with a college degree has grown from 10 percent to 30 percent. The proportion of college graduates, however, has grown faster than the demand for highly skilled jobs. It is projected that by 2020 the number of Americans with a bachelor's degree will increase by 19 million, while the number of jobs requiring a bachelor's degree will increase by less than 7 million.

SOURCE: http://centerforcollegeaffordability.org/research/studies/underemployment-of-college-graduates.

7. Where can I find information to help me make a career choice?

Read the Occupational Outlook Handbook for the United States (available at http://www.bls.gov/ooh/). This resource features hundreds of occupations and provides job descriptions along with the education required, projected earnings, and employment projections.

8. How have increases in college costs differed according to the type of institution?

While tuition has continued to climb, the average annual percentage increase is smaller for private four-year institutions than in the previous two decades. Increases at public institutions (both two-year and four-year) have been larger.

SOURCE: http://media.collegeboard.com/digitalServices/pdf/advocacy/cca/12b-6368_CCAProgressReport_WR.pdf.

LITTLE ROCK

Conversation with the Chairman for Educators: The History of the Fed (K-12)

November 13, 2013 | 4 p.m. - 7:30 p.m. CST

University of Arkansas Global Campus Rogers, AR

Registration: http://www.stlouisfed.org/newsroom/events/?trk=o&rid=490

Federal Reserve Bank of St. Louis— Little Rock Branch

Registration: http://www.stlouisfed.org/newsroom/

events/index.cfm?id=491

LOUISVILLE

Conversation with the Chairman for Educators: The History of the Fed (K-12)

November 13, 2013 | 5 p.m. - 8:30 p.m. EST

Federal Reserve Bank of St. Louis—

Louisville Branch

Registration: http://www.stlouisfed.org/newsroom/

events/?trk=o&rid=492

MEMPHIS

Conversation with the Chairman for Educators: The History of the Fed (K-12)

November 13, 2013 | 4 p.m. - 7:30 p.m. CST

Federal Reserve Bank of St. Louis—

Memphis Branch

Registration: http://www.stlouisfed.org/newsroom/

events/?trk=o&rid=493

Getting to the CORE: Count on Reading and Economics (K-8)

December 7, 2013 | 8:30 a.m. – 3:30 p.m. CST

Mississippi Valley State University

Itta Bena, MS

Registration: e-mail Jeannette.n.bennett@stls.frb.org

Personal Finance Training for Secondary Teachers

January 9-10, 2014 | 8:30 a.m. - 3:30 p.m. CT

Middle Tennessee State University

Murfreesboro

Registration: http://www.frbatlanta.org/forms/

register_140109_nsh.cfm

ST. LOUIS

Conversation with the Chairman for Educators: The History of the Fed (K-12)

November 13, 2013 | 4 p.m. - 7:30 p.m. CST

Federal Reserve Bank of St. Louis

Registration: http://www.stlouisfed.org/newsroom/

events/index.cfm?id=488

Webinar: New Education Resources (K-12)

November 14, 2013 | 2 sessions 2:30 p.m. – 3:30 p.m. CST

3:30 p.m. - 4:30 p.m. CST

Registration: http://www.stlouisfed.org/newsroom/

events/index.cfm?id=505

NCSS Pre-Conference Clinic

Engaging Online Programs and More from the St. Louis Fed (Secondary)*

November 21, 2013 | 12:30 p.m. – 4:30 p.m. CST

Federal Reserve Bank of St. Louis

Registration: http://www.socialstudies.org/

conference

*The clinic is free but registration is required through the NCSS Annual Conference.

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New for Fall



In Plain English eBook Now Available!

In Plain English: Making Sense of the Federal Reserve has been a popular video, online program, and print book for years. Now, enjoy it as an eBook. Students can download *In Plain English* from the iTunes Store. The eBook contains all the same information as the other formats, helping students understand this complex, yet effective, organization.

New from the *Economic Lowdown* Video Series

CIRCULAR FLOW

Households and businesses interact in the economy through the markets for resources and for goods and services. This video on this somewhat dry subject is just engaging enough to make learning about the important circular flow model interesting and fun. The story thoroughly covers the concept, with entertaining graphics and clear explanations.

EXTERNALITIES

This episode in our EconLowdown video series explains ways in which we can discourage those nasty negative externalities, such as pollution, while encouraging those externalities that benefit us all, such as those that arise from a well-educated population.

New from No Frills Money Skills

UNDERSTANDING BONDS

The latest episode in the *No Frills Money Skills* series is a spy thriller with our video host using high-tech tools to stop Miss Information and her plot to misguide, mislead, and misadvise. Students learn about government bonds, corporate bonds, coupon and no-coupon bonds, and the potential risks and return of investments.

New Short Courses Online

OPPORTUNITY COST ONLINE COURSE

Pressed for time? Do we have to ask? In fewer than 12 minutes, your students can complete this online course, which points to an important concept in economics—every choice we make has a cost—an opportunity cost. Some costs are small and relatively short term. Others are significant. Recognizing the opportunity costs of your decisions can help you make more-informed choices. This short course is designed to help students apply the idea of opportunity cost to the decisions they make.

PAYING AND RECEIVING INTEREST

This short, online interactive course is the perfect complement to your instruction on interest. In 15 minutes, your students will learn what interest is, will view interest from the borrower's and the lender's points of view, will recognize opportunity cost as the basis for interest charges, and will engage in a practical exercise deciding whether to spend savings or take out a loan to buy a car.

New Economic and Personal Finance Vocabulary Tool: Glossary Flash Cards

The terms in our glossary can now be printed as double-sided flash cards. You simply check the terms you wish to include in your deck, print the cards, and cut apart. Or better yet, let your students know about this useful new tool and they can assemble their own decks to prep for tests and competitions.

New Economics Lessons

BARBIE® IN THE LABOR FORCE

Since 1920, women have more than doubled their share of the labor force. More women are working, but has the type of work they do advanced similarly? What were the top occupations for women 20, 60, and 100 years ago, and how do those occupations compare with women's choices today? In this lesson, students use primary source documents to review historical trends in women's share of the labor force and chosen occupations. Using Barbie careers as a timeline, they speculate as to why Barbie represented certain careers for girls at different points in time since 1959. They choose which career Barbie might represent next year and explain that choice in a one-page essay.

SKY BOYS: HOW THEY BUILT THE EMPIRE STATE BUILDING

In this lesson, students learn about human resources, productivity, human capital, and physical capital. They participate in three rounds of a reasoning activity. From round to round they receive training and tools to help them improve their reasoning ability and thus increase their productivity. Students will then listen to the story by Deborah Hopkinson about how the Empire State Building was built and identify examples of key concepts mentioned or shown in the book.

WORTH!

In this lesson, students participate in a banking role play in which they portray roles based on characters in the book *Worth!* by A. LaFaye. The students learn about banking,

New for Fall

profit, risk, and reward. Students discuss some of the factors that affect loan interest rates and the availability of credit. Students apply their knowledge of the content by writing a fictional applicant a letter of acceptance or rejection.

Professional Development: Click, Learn, and Teach

Earn one hour of graduate credit and/or a certificate for select topics (currently GDP, unemployment, and inflation)—all from that comfy chair in front of your computer. Choose a topic, complete the activities, supervise students' completion of an interactive EconLowdown program, and submit your assessment items. For full details, go to http://www.stlouisfed.org/education_resources/teacher-professional-development/.

Video Series Now with Q & A

The following video series now feature online questions to check student understanding: *Economic LowDown*, *No Frills Money Skills*, *In Plain English*, and the new **FEDucation**, which explains the Fed's roles and responsibilities. Enroll your students through our new and improved Instructor Management Panel.

Personal Finance Chats

While the topics remain timely, our chat format has changed—the following *new* chats are brief videos:

FAFSA 101: Walks through every screen of the online Free Application for Federal Student Aid.

College Choice 101: Outlines a systematic way to compare college costs and make a decision about where to go.

Financial Aid 101: Clarifies and defines financial-aid options and requirements.

New Online Courses

FISCAL POLICY

Inflation, unemployment, recession, economic growth—these economic concepts affect people in very real ways. In two thought-provoking, interactive lessons, learn about fiscal policy, the avenue by which Congress and the president attempt to influence the economy.

MONETARY POLICY

In this course containing three interactive, thoughtprovoking lessons, learn about monetary policy, the avenue by which the Federal Reserve System influences the economy in order to meet the Fed's dual mandate of stable prices and full employment.

COLLEGE 101 INFOGRAPHIC

Be educated and informed. Forecast your financial aid with the FAFSA4caster calculator. Find out what percentage of students received federal financial aid in 2012 and see the results of an April 2013 salary survey. Use the calculator to estimate the size of your monthly loan payment and the annual salary required to manage that payment. Learn about the top 75 college destinations with a link to the College Destination Index. Identify some of the reasons students select particular colleges...and more.

The Invisible Paw: Economics Through Timeless Berenstain Bear Books

You likely read these stories to your students or have them on a shelf for your students to read. Here's a great way to include some economics and personal finance instruction while reading an old favorite. We have developed three new lessons to help you do just that.

THE BERENSTAIN BEARS GET THE GIMMIES

The little cubs learn that they must make choices because they cannot have everything they want. Students follow along with the story by completing an activity listing all of the goods that will satisfy the cubs' wants. The students then construct a word web and graphic organizer (table) to identify goods that will satisfy a want. They identify the problem of scarcity, make a choice, and identify their opportunity cost.

THE BERENSTAIN BEARS: OLD HAT NEW HAT

Students make a choice about what they want to eat for dinner, but then they are asked to trade with a partner and discuss whether they like their new dinner better. Based on this discussion, they learn about preferences. Then they hear a story about a little bear who looks at many hats to see if he can find a new one he likes. Students will relate key concepts from the lesson to the story and create a hat to discuss their own choices and preferences with the class.

THE BERENSTAIN BEARS' TROUBLE WITH MONEY

Mama and Papa Bear use several figures of speech relating to money. Students draw a picture of a bank and write a caption explaining their illustration. Students follow along with the story by listening for additional figures of speech and how they relate to the concepts of banks and interest. The students also construct a story map of an event in the story relating to why people choose to keep their money in banks.

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