**AP LANGUAGE AND COMPOSITION**

**DEBATE TOPIC 3: SOURCES**

**Source A**

(*The New York Times*, May 15, 2010)

**Plan B: Skip College**

by Jacques Steinberg

WHAT’S the key to success in the United States?

Short of becoming a reality TV star, the answer is rote and, some would argue, rather knee-jerk: Earn a college degree.

The idea that four years of higher education will translate into a better job, higher earnings and a happier life — a refrain sure to be repeated this month at graduation ceremonies across the country — has been pounded into the heads of schoolchildren, parents and educators. But there’s an underside to that conventional wisdom. Perhaps no more than half of those who began a four-year bachelor’s degree program in the fall of 2006 will get that degree within six years, according to the latest projections from the Department of Education. (The figures don’t include transfer students, who aren’t tracked.)

For college students who ranked among the bottom quarter of their high school classes, the numbers are even more stark: 80 percent will probably never get a bachelor’s degree or even a two-year associate’s degree.

That can be a lot of tuition to pay, without a degree to show for it.

A small but influential group of economists and educators is pushing another pathway: for some students, no college at all. It’s time, they say, to develop credible alternatives for students unlikely to be successful pursuing a higher degree, or who may not be ready to do so.

Whether everyone in college needs to be there is not a new question; the subject has been hashed out in books and dissertations for years. But the economic crisis has sharpened that focus, as financially struggling states cut aid to higher education.

Among those calling for such alternatives are the economists Richard K. Vedder of Ohio University and Robert I. Lerman of American University, the political scientist Charles Murray, and James E. Rosenbaum, an education professor at Northwestern. They would steer some students toward intensive, short-term vocational and career training, through expanded high school programs and corporate apprenticeships.

“It is true that we need more nanosurgeons than we did 10 to 15 years ago,” said Professor Vedder, founder of the [Center for College Affordability and Productivity](http://www.centerforcollegeaffordability.org/pages/page.asp?page_id=44973), a research nonprofit in Washington. “But the numbers are still relatively small compared to the numbers of nurses’ aides we’re going to need. We will need hundreds of thousands of them over the next decade.”

And much of their training, he added, might be feasible outside the college setting.

College degrees are simply not necessary for many jobs. Of the 30 jobs projected to grow at the fastest rate over the next decade in the United States, only seven typically require a bachelor’s degree, according to the [Bureau of Labor Statistics](http://topics.nytimes.com/top/reference/timestopics/organizations/b/bureau_of_labor_statistics/index.html?inline=nyt-org).

Among the top 10 growing job categories, two require college degrees: accounting (a bachelor’s) and postsecondary teachers (a doctorate). But this growth is expected to be dwarfed by the need for registered nurses, home health aides, customer service representatives and store clerks. None of those jobs require a bachelor’s degree.

Professor Vedder likes to ask why 15 percent of mail carriers have bachelor’s degrees, according to a 1999 federal study.

“Some of them could have bought a house for what they spent on their education,” he said.

Professor Lerman, the American University economist, said some high school graduates would be better served by being taught how to behave and communicate in the workplace.

Such skills are ranked among the most desired — even ahead of educational attainment — in many surveys of employers. In one 2008 survey of more than 2,000 businesses in Washington State, employers said entry-level workers appeared to be most deficient in being able to “solve problems and make decisions,” “resolve conflict and negotiate,” “cooperate with others” and “listen actively.”

Yet despite the need, vocational programs, which might teach such skills, have been one casualty in the push for national education standards, which has been focused on preparing students for college.

While some educators propose a radical renovation of the community college system to teach work readiness, Professor Lerman advocates a significant national investment by government and employers in on-the-job apprenticeship training. He spoke with admiration, for example, about a program in the CVS pharmacy chain in which aspiring pharmacists’ assistants work as apprentices in hundreds of stores, with many going on to study to become full-fledged pharmacists themselves.

“The health field is an obvious case where the manpower situation is less than ideal,” he said. “I would try to work with some of the major employers to develop these kinds of programs to yield mastery in jobs that do demand high expertise.”

While no country has a perfect model for such programs, Professor Lerman pointed to a modest study of a German effort done last summer by an intern from that country. She found that of those who passed the Abitur, the exam that allows some Germans to attend college for almost no tuition, 40 percent chose to go into apprenticeships in trades, accounting, sales management, and computers.

“Some of the people coming out of those apprenticeships are in more demand than college graduates,” he said, “because they’ve actually managed things in the workplace.”

Still, by urging that some students be directed away from four-year colleges, academics like Professor Lerman are touching a third rail of the education system. At the very least, they could be accused of lowering expectations for some students. Some critics go further, suggesting that the approach amounts to educational redlining, since many of the students who drop out of college are black or non-white Hispanics.

Peggy Williams, a counselor at a high school in suburban New York City with a student body that is mostly black or Hispanic, understands the argument for erring on the side of pushing more students toward college.

“If we’re telling kids, ‘You can’t cut the mustard, you shouldn’t go to college or university,’ then we’re shortchanging them from experiencing an environment in which they might grow,” she said.

But Ms. Williams said she would be more willing to counsel some students away from the precollege track if her school, Mount Vernon High School, had a better vocational education alternative. Over the last decade, she said, courses in culinary arts, nursing, dentistry and heating and ventilation system repair were eliminated. Perhaps 1 percent of this year’s graduates will complete a concentration in vocational courses, she said, compared with 40 percent a decade ago.

There is another rejoinder to the case against college: People with college and graduate degrees generally earn more than those without them, and face lower risks of unemployment, according to figures from the Bureau of Labor Statistics.

Even those who experience a few years of college earn more money, on average, with less risk of unemployment, than those who merely graduate from high school, said Morton Schapiro, an economist who is the president of [Northwestern University](http://topics.nytimes.com/top/reference/timestopics/organizations/n/northwestern_university/index.html?inline=nyt-org).

“You get some return even if you don’t get the sheepskin,” Mr. Schapiro said.

He warned against overlooking the intangible benefits of a college experience — even an incomplete experience — for those who might not apply what they learned directly to their chosen work.

“It’s not just about the economic return,” he said. “Some college, whether you complete it or not, contributes to aesthetic appreciation, better health and better voting behavior.”

Nonetheless, Professor Rosenbaum said, high school counselors and teachers are not doing enough to alert students unlikely to earn a college degree to the perilous road ahead.

“I’m not saying don’t get the B.A,” he said. “I’m saying, let’s get them some intervening credentials, some intervening milestones. Then, if they want to go further in their education, they can.”

*This article has been revised to reflect the following correction:*

***Correction: May 23, 2010***

*Because of an editing error, an article last Sunday exploring whether college is the right path for everyone misspelled, at one point, the surname of the president of Northwestern University, who said that a few years of college can be valuable, even if no degree is earned. As the article noted elsewhere, he is Morton Schapiro, not Shapiro.*

**Source B**

(New York Times, Nov. 30, 2012)

**Saying No to College**

by Alex Williams

BENJAMIN GOERING does not look like Facebook’s Mark Zuckerberg, talk like him or inspire the same controversy. But he does apparently think like him.

Two years ago, Mr. Goering was a sophomore at the University of Kansas, studying computer science and philosophy and feeling frustrated in crowded lecture halls where the professors did not even know his name.

“I wanted to make Web experiences,” said Mr. Goering, now 22, and create “tools that make the lives of others better.”

So in the spring of 2010, Mr. Goering took the same leap as Mr. Zuckerberg: he dropped out of college and moved to San Francisco to make his mark. He got a job as a software engineer at a social-software company, [Livefyre](http://www.livefyre.com/), run by a college dropout, where the chief technology officer at the time and a lead engineer were also dropouts. None were sheepish about their lack of a diploma. Rather, they were proud of their real-life lessons on the job.

“Education isn’t a four-year program,” Mr. Goering said. “It’s a mind-set.”

The idea that a college diploma is an all-but-mandatory ticket to a successful career is showing fissures. Feeling squeezed by a sagging job market and mounting student debt, a groundswell of university-age heretics are pledging allegiance to new groups like UnCollege, dedicated to “hacking” higher education. Inspired by billionaire role models, and empowered by online college courses, they consider themselves a D.I.Y. vanguard, committed to changing the perception of dropping out from a personal failure to a sensible option, at least for a certain breed of risk-embracing maverick.

Risky? Perhaps. But it worked for the founders of Twitter, Tumblr and a little company known as Apple.

When Mr. Goering was wrestling with his decision, he woke up every morning to a ringtone mash-up that blended electronic tones with snippets of Steve Jobs’s 2005 commencement address at Stanford University, in which he advised, “love what you do,” “don’t settle.” Mr. Goering took that as a sign.

“It’s inspiring that his dropping out basically had no effect, positive or negative, on the work and company and values he could create,” he said of the late Apple co-founder.

In that oft-quoted address, Mr. Jobs called his decision to drop out of Reed College “one of the best decisions I ever made.” Mr. Jobs’s “think different” approach to education (backpacking through India, dining with Hare Krishnas) is portrayed in countless hagiographies as evidence of his iconoclastic genius.

Indeed, ambitious young people who consider dropping out of college a smart option have a different set of role models from those in the 1960s, who were basically stuck with the acid-guru Timothy Leary and his “turn on, tune in, drop out” ramblings. Nowadays, popular culture is portraying dropouts as self-made zillionaires whose decision to spurn the “safe” route (academic conformity) is akin to lighting out for the territories to strike gold.

Bill Gates dropped out of college. So did Michael Dell. So did Mr. Zuckerberg, who made the Forbes billionaires list at 23.

Mr. Zuckerberg’s story is familiar to anyone who has seen the 2010 film “The Social Network,” in which Harvard seems little more than a glorified networking party for him. While the other Phi Beta Kappas are trudging through their Aristophanes, his character is hitting the parties, making contacts and making history. The dropout-mogul-as-rock-star meme will get a further boost with coming Steve Jobs biopics, including “Jobs,” starring Ashton Kutcher, and another one in the works written by Aaron Sorkin, who wrote the screenplay for “The Social Network.”

Such attitudes are trickling down to the small screen, too. In a recent episode of the Fox sitcom “The Mindy Project,” Mindy Kaling’s character, a doctor, grills a teenager about his plans for college. “I’m not going to college,” he tells her. “Why should I load up on debt just to binge drink for four years when I could just create an app that nets me all the money I’ll ever need?” Such tales play well in the eyes of millennials, a generation hailed for their entrepreneurial acumen and financial pragmatism. Why pay money if you can make money?

No wonder the swashbuckling Web subculture is suddenly percolating with whiz-kid programmers thinking like “one and done” college hoopsters, who stick around campus only long enough to showcase their skills (and meet National Basketball Association draft requirements) before bolting for pro riches. Tech-start-ups have their own versions of Carmelo Anthony: folks like Jack Dorsey and Evan Williams of Twitter, and Kevin Rose of Digg. (Meanwhile, David Karp of Tumblr dropped out of high school.)

“Here in Silicon Valley, it’s almost a badge of honor,” said Mick Hagen, 28, who dropped out of Princeton in 2006 and moved to San Francisco, where he started [Undrip](http://undrip.com/), a mobile app. He is now recruiting from the undergraduate ranks, he said, which is becoming a trend among other tech companies, too. In his view, dropouts are freethinkers, risk-takers. They have not been tainted by groupthink.

“College puts a lot of constraints, a lot of limitations around what you can and can’t do,” Mr. Hagen said. “Some people, they want to stretch their arms, get out and create more, do more.”

Even the staunchest critics of college concede that a diploma is still necessary for many professions — law and medicine, clearly, and in many cases, for a Fortune 500 executive, too. But that’s the point: how many more lawyers and middle managers do we need?

“College is training for managerial work, and the economy doesn’t need that many managers,” said Michael Ellsberg, the author of “The Education of Millionaires: Everything You Won’t Learn In College About How to Be Successful.”

Mr. Ellsberg, 35, graduated from Brown University and spent years trying to translate his expertise in post-colonial critical theory into a paying career. So his book tries to impart real-world skills, like salesmanship and networking, which he argues are crucial as white-collar jobs are being downsized or shipped to Bangalore. The future, he added, belongs to job creators, even if the only job they create is their own.

“I’m not saying you have to be Mark Zuckerberg or Steve Jobs,” Mr. Ellsberg said. “I know people with dog-walking businesses who make six figures.”

Mr. Ellsberg joined a growing chorus of academic dissenters, who have made it fashionable to question the value of a college degree. Last year, an anonymous academic who called himself Professor X, published “In the Basement of the Ivory Tower,” which argued that future police officers and nurses need not be force-fed Shakespeare.

Nikhil Goyal, a 17-year-old high school student in Long Island, published “One Size Does Not Fit All: A Student’s Assessment of School,” contending that some students are better served by ditching lecture halls and treating the world as their classroom. The debate has inspired articles in [The Huffington Post](http://www.huffingtonpost.com/2012/08/10/peter-thiel-fellows-one-y_n_1763597.html) and [New York magazine.](http://nymag.com/news/features/college-education-2011-5/)

Perhaps most famously, Peter A. Thiel, the billionaire co-founder of PayPal, in 2010 started his Thiel Fellowship program, which pays students under 20 years old $100,000 apiece to bag college and pursue their own ventures. “People are being conned into thinking that this credential is the one thing you need to do better in life,” he said on “60 Minutes” last spring, adding, “they typically are worse off, because they have amassed all this debt.”

For such critics, the explosion in student debt is the next subprime crisis. There is now $1 trillion in outstanding student debt, with $117 billion tacked on last year alone, according to calculations by the Consumer Financial Protection Bureau. Tuition levels have quadrupled since the early ’80s, according to the Student Body Scholarship Association.

These figures rankle [James Altucher](http://www.jamesaltucher.com/), a prominent investor, entrepreneur and pundit who self-published a book called “40 Alternatives to College.” “College presidents now just arbitrarily think they can raise tuitions,” he said. “So what is happening is, rich people can still afford college, but poor people are borrowing this money and sacrificing their future for a lifetime of debt.”

Such opinions have met considerable headwind. [Jacob Weisberg](http://www.slate.com/articles/news_and_politics/politics/2010/10/turn_on_start_up_drop_out.html) of Slate pounded Mr. Thiel over his “nasty” idea, which he argued is “diverting a generation of young people from the love of knowledge for its own sake and respect for middle-class values.”

Indeed, many educators dismiss the college-is-overrated debate as a dangerous fringe idea, and say the real challenge is that only 56 percent of students who enter a four-year institution finish within six years, according to a [recent Harvard study](http://www.gse.harvard.edu/news_events/features/2011/Pathways_to_Prosperity_Feb2011.pdf). To them, the statistic represents a crisis, not a sign of progress.

“The reality is, there is not a declining demand for college and university,” said Richard Arum, a New York University sociology professor who co-wrote “Academically Adrift: Limited Learning on College Campuses.” “There is an increasing demand, and that is not just true for America, but for all the world. Increasingly, you need a diploma to compete for the jobs that are out there.”

The Ivory Tower apostates are undeterred. “I think kids with a five-year head start on equally ambitious peers will be ahead in both education and income,” said Mr. Altucher, who regrets graduating from Cornell. “They could go to a library, read a book a day, take courses online. There are thousands of ways.”

Natalie Warne found one of them. A poised 22-year-old from Chicago, she stepped off the college track after high school to “hack” her education, which to her meant traveling the country to protest atrocities in war-torn Uganda.

It started with a gap-year internship after high school with a charity called Invisible Children, where she acquired experience in public speaking, event coordinating and film editing (she eventually appeared on “Oprah”). Finding satisfaction, she stretched her gap year into two, and two became three. While speaking at a TED conference, she met Dale J. Stephens, the founder of a group called [UnCollege](http://www.uncollege.org/) that champions “more meaningful” alternatives to college. Her plans for college are off for now.

“Experience has proved to be a far better teacher in my life than any book, classroom or educator,” she said.

UnCollege advocates a D.I.Y. approach to higher education and spreads the message through informational “hackademic camps.” “Hacking,” in the group’s parlance, can involve any manner of self-directed learning: travel, volunteer work, organizing collaborative learning groups with friends. Students who want to avoid $200,000 in student-loan debt might consider enrolling in a technology boot camp, where you can learn to write code in 8 to 10 weeks for about $10,000, Mr. Stephens said.

THEY can also nourish their minds from a growing menu of Internet classrooms, including the [massive open online courses,](http://www.nytimes.com/2012/11/20/education/colleges-turn-to-crowd-sourcing-courses.html?pagewanted=all&_r=0) or MOOCs, which stream classes from elite universities like Princeton. This guerrilla approach hits home with young people who came of age seeking out valuable content free on Napster and BitTorrent.

Mr. Stephens, a dropout from Hendrix College in Arkansas (he later earned a Thiel Fellowship), started UnCollege less than two years ago, and already its Web site attracts 20,000 unique visitors a month. “I get on scale of 10 to 15 e-mails a day from people who say something along lines of, ‘I thought I was the only one out there who thought about education like this, I don’t feel crazy anymore,’ ” he said.

There are other groups, too, like [Enstitute](http://www.enstituteu.com/), which offers two-year apprenticeships with entrepreneurs in lieu of college, and [Zero Tuition College](http://www.ztcollege.com/), an online support network for students looking for alternatives.

The goal is not to foment for a mass exodus from the ivy halls, Mr. Stephens said, but to open people’s minds to a different set of opportunities.

Sounds nice. But it is not an easy decision for students whose future is on the line. Jean Fan, a high school senior in San Mateo, Calif., is an editor for UnCollege, where she hopes to help inspire students to evolve “from passive to active learners.”

Even so, she is busy applying to elite universities right now. She recognizes the irony.

“In terms of grades and test scores, I’m one of the top students at school,” said Ms. Fan, 17. “College seemed like the obvious next step.”

She added, “Common sense, of course, is highly overrated.”

**Source C**

Bureau of Labor and Statistics

**Occupations with the Largest Job Growth**

| **Table 1.4: Occupations with the most job growth, 2010 and projected 2020(Numbers in thousands)** |
| --- |
| **2010 National Employment Matrix title and code** | **Employment** | **Change, 2010-20** | **Median annual wage, 2010**  |
| **2010** | **2020** | **Number** | **Percent** |
| **00-0000** | **Total, All Occupations** | 143,068.2 | 163,537.1 | 20,468.9 | 14.3 | $33,840 |
| **29-1111** | Registered Nurses | 2,737.4 | 3,449.3 | 711.9 | 26.0 | 64,690 |
| **41-2031** | Retail Salespersons | 4,261.6 | 4,968.4 | 706.8 | 16.6 | 20,670 |
| **31-1011** | Home Health Aides | 1,017.7 | 1,723.9 | 706.3 | 69.4 | 20,560 |
| **39-9021** | Personal Care Aides | 861.0 | 1,468.0 | 607.0 | 70.5 | 19,640 |
| **43-9061** | Office Clerks, General | 2,950.7 | 3,440.2 | 489.5 | 16.6 | 26,610 |
| **35-3021** | Combined Food Preparation and Serving Workers, Including Fast Food | 2,682.1 | 3,080.1 | 398.0 | 14.8 | 17,950 |
| **43-4051** | Customer Service Representatives | 2,187.3 | 2,525.6 | 338.4 | 15.5 | 30,460 |
| **53-3032** | Heavy and Tractor-Trailer Truck Drivers | 1,604.8 | 1,934.9 | 330.1 | 20.6 | 37,770 |
| **53-7062** | Laborers and Freight, Stock, and Material Movers, Hand | 2,068.2 | 2,387.3 | 319.1 | 15.4 | 23,460 |
| **25-1000** | Postsecondary Teachers | 1,756.0 | 2,061.7 | 305.7 | 17.4 | 45,690 |
| **31-1012** | Nursing Aides, Orderlies, and Attendants | 1,505.3 | 1,807.2 | 302.0 | 20.1 | 24,010 |
| **39-9011** | Childcare Workers | 1,282.3 | 1,544.3 | 262.0 | 20.4 | 19,300 |
| **43-3031** | Bookkeeping, Accounting, and Auditing Clerks | 1,898.3 | 2,157.4 | 259.0 | 13.6 | 34,030 |
| **41-2011** | Cashiers | 3,362.6 | 3,612.8 | 250.2 | 7.4 | 18,500 |
| **25-2021** | Elementary School Teachers, Except Special Education | 1,476.5 | 1,725.3 | 248.8 | 16.8 | 51,660 |
| **43-4171** | Receptionists and Information Clerks | 1,048.5 | 1,297.0 | 248.5 | 23.7 | 25,240 |
| **37-2011** | Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 2,310.4 | 2,556.8 | 246.4 | 10.7 | 22,210 |
| **37-3011** | Landscaping and Groundskeeping Workers | 1,151.5 | 1,392.3 | 240.8 | 20.9 | 23,400 |
| **41-4012** | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products | 1,430.0 | 1,653.4 | 223.4 | 15.6 | 52,440 |
| **47-2061** | Construction Laborers | 998.8 | 1,211.2 | 212.4 | 21.3 | 29,280 |
| **43-6013** | Medical Secretaries | 508.7 | 718.9 | 210.2 | 41.3 | 30,530 |
| **43-1011** | First-Line Supervisors of Office and Administrative Support Workers | 1,424.4 | 1,627.8 | 203.4 | 14.3 | 47,460 |
| **47-2031** | Carpenters | 1,001.7 | 1,197.6 | 196.0 | 19.6 | 39,530 |
| **35-3031** | Waiters and Waitresses | 2,260.3 | 2,456.2 | 195.9 | 8.7 | 18,330 |
| **33-9032** | Security Guards | 1,035.7 | 1,230.7 | 195.0 | 18.8 | 23,920 |
| **25-9041** | Teacher Assistants | 1,288.3 | 1,479.3 | 191.1 | 14.8 | 23,220 |
| **13-2011** | Accountants and Auditors | 1,216.9 | 1,407.6 | 190.7 | 15.7 | 61,690 |
| **29-2061** | Licensed Practical and Licensed Vocational Nurses | 752.3 | 920.8 | 168.5 | 22.4 | 40,380 |
| **29-1060** | Physicians and Surgeons | 691.0 | 859.3 | 168.3 | 24.4 | 111,570 |
| **31-9092** | Medical Assistants | 527.6 | 690.4 | 162.9 | 30.9 | 28,860 |
| **Source: Employment Projections program, U.S. Department of Labor, U.S. Bureau of Labor Statistics** |

**Source D**

Bureau of Labor and Statistics

**Highest Paying Occupations**

**Highest paying occupations:** 20 occupations with the highest median annual pay in 2010.

*Click on an occupation name to see the full occupational profile.*

| **OCCUPATION** | **2010 MEDIAN PAY**  |
| --- | --- |
| [**Oral and Maxillofacial Surgeons**](http://www.bls.gov/ooh/healthcare/dentists.htm) | $line_item_noteThis wage is equal to or greater than $166,400 per year. |
| [**Physicians and Surgeons**](http://www.bls.gov/ooh/healthcare/physicians-and-surgeons.htm) | $line_item_noteThis wage is equal to or greater than $166,400 per year. |
| [**Orthodontists**](http://www.bls.gov/ooh/healthcare/dentists.htm) | $line_item_noteThis wage is equal to or greater than $166,400 per year. |
| [**Chief Executives**](http://www.bls.gov/ooh/management/top-executives.htm) | $line_item_note$165,080 per year. |
| [**Dentists, All Other Specialists**](http://www.bls.gov/ooh/healthcare/dentists.htm) | $line_item_note$161,020 per year. |
| [**Dentists, General**](http://www.bls.gov/ooh/healthcare/dentists.htm) | $line_item_note$141,040 per year. |
| [**Judges, Magistrate Judges, and Magistrates**](http://www.bls.gov/ooh/legal/judges-mediators-and-hearing-officers.htm) | $line_item_note$119,270 per year. |
| [**Architectural and Engineering Managers**](http://www.bls.gov/ooh/management/architectural-and-engineering-managers.htm) | $line_item_note$119,260 per year. |
| [**Prosthodontists**](http://www.bls.gov/ooh/healthcare/dentists.htm) | $line_item_note$118,400 per year. |
| [**Podiatrists**](http://www.bls.gov/ooh/healthcare/podiatrists.htm) | $line_item_note$118,030 per year. |
| [**Natural Sciences Managers**](http://www.bls.gov/ooh/management/natural-sciences-managers.htm) | $line_item_note$116,020 per year. |
| [**Computer and Information Systems Managers**](http://www.bls.gov/ooh/management/computer-and-information-systems-managers.htm) | $line_item_note$115,780 per year. |
| [**Petroleum Engineers**](http://www.bls.gov/ooh/architecture-and-engineering/petroleum-engineers.htm) | $line_item_note$114,080 per year. |
| [**Marketing Managers**](http://www.bls.gov/ooh/management/advertising-promotions-and-marketing-managers.htm) | $line_item_note$112,800 per year. |
| [**Lawyers**](http://www.bls.gov/ooh/legal/lawyers.htm) | $line_item_note$112,760 per year. |
| [**Pharmacists**](http://www.bls.gov/ooh/healthcare/pharmacists.htm) | $line_item_note$111,570 per year. |
| [**Air Traffic Controllers**](http://www.bls.gov/ooh/transportation-and-material-moving/air-traffic-controllers.htm) | $line_item_note$108,040 per year. |
| [**Political Scientists**](http://www.bls.gov/ooh/life-physical-and-social-science/political-scientists.htm) | $line_item_note$107,420 per year. |
| [**Physicists**](http://www.bls.gov/ooh/life-physical-and-social-science/physicists-and-astronomers.htm) | $line_item_note$106,370 per year. |
| [**Financial Managers**](http://www.bls.gov/ooh/management/financial-managers.htm) | $line_item_note$103,910 per year. |

**Publish Date:** Thursday, March 29, 2012

**Source E**

(The New York Times, Jan. 9, 2013)

**Benefits of a College Degree in a Recession are Outlined**

by Richard Perez-Pena

Young adults have long faced a rough job market, but in the last recession and its aftermath, college graduates did not lose nearly as much ground as their less-educated peers, according to a new study.

The [study](http://www.pewstates.org/news-room/press-releases/pew-report-finds-recent-college-graduates-well-protected-against-worst-effects-of-recession-85899440518), published on Wednesday by the Pew Charitable Trusts, shows that among Americans age 21 to 24, the drop in employment and income was much steeper among people who lacked a college degree.

The findings come as many published articles and books have told the stories of young college graduates unable to find work, and questioned the conventional wisdom that a college education is a worthwhile investment and the key to opportunity and social mobility. The study did not take into account the cost of going to college.

“This shows that any amount of post-secondary education does improve the labor market outcomes for those recent graduates,” said Diana Elliott, the research manager for Pew’s Economic Mobility Project. “This is not necessarily to discredit those individual stories.”

In fact, the study documents a serious decline in the job picture for young people.

Using data from the [Census Bureau’s Current Population Survey](http://www.census.gov/cps/), Pew looked at employment, either full time or part time, among 21- to 24-year-olds, in the roughly two and a half years before the 2007-2009 recession, during it, and in the two and a half years after it.

Among those whose highest degree was a high school diploma, only 55 percent had jobs even before the downturn, and that fell to 47 percent after it. For young people with an associate’s degree, the employment rate fell from 64 percent to 57 percent.

But those with a bachelor’s degree started off in the strongest position and weathered the downturn best, with employment slipping from 69 percent to 65 percent. (The federal Bureau of Labor Statistics recorded a similar decline, about four percentage points, among all people over 20, at any education level.)

Similarly, in all three groups of young adults, wages fell for those who had work, but the decline was spread unevenly.

People with four-year college degrees saw a 5 percent drop in wages, compared with a 12 percent decrease for their peers with associate’s degrees, and a 10 percent decline for high school graduates.

One surprise in the data, Ms. Elliott said, had to do with “the prevailing speculation that people who couldn’t find work were returning to school, enhancing their training.” In fact, college enrollment over all rose sharply for several years, driven primarily by older students, before leveling off in 2011.

But Pew’s study found that among people age 21 to 24, the rate of college enrollment actually declined slightly, during and after the recession.

**Source F**

(*The Atlantic*, April 23, 2012)

**53% of Recent College Grads are Jobless or Underemployed—How?**

*Reuters*

More than half of America's recent college graduates are either unemployed or working in a job that doesn't require a bachelor's degree, the Associated Press [reported](http://www.cleveland.com/business/index.ssf/2012/04/half_of_recent_college_grads_u.html) this weekend. The story would seem to be more evidence that, regardless of your education, the wake of the Great Recession has been a terrible time to be young and hunting for work.

But are we really becoming another [Greece or Spain](http://www.theatlantic.com/business/archive/2011/12/why-is-unemployment-in-spain-so-unbelievably-high/249300/), a wasteland of opportunity for anybody under the age of 25? Not quite. What the new statistics really tell us about is the changing nature, and value, of higher education.

First, here's the nut of the AP's findings, which it derived with the help of researchers from Northeastern University, Drexel University, and the Economic Policy Institute, based on data from the Census Bureau's [Current Population Survey](http://www.census.gov/hhes/socdemo/education/) and the U.S. Department of Labor:

About 1.5 million, or 53.6 percent, of bachelor's degree-holders under the age of 25 last year were jobless or underemployed, the highest share in at least 11 years. In 2000, the share was at a low of 41 percent, before the dot-com bust erased job gains for college graduates in the telecommunications and IT fields.

Out of the 1.5 million who languished in the job market, about half were underemployed, an increase from the previous year.

These numbers are hard to fathom, and the more you compare them to other measures of unemployment, the more bizarre they seem. Unfortunately, I don't have all of the data the AP was working with. But their analysis implies that about a quarter of the post-collegiate population is outright unemployed. By comparison, in December 2011, [only a fifth](http://bls.gov/news.release/empsit.t02.htm) of 16 to 19-year-old Americans couldn't get work. Meanwhile, according to the OECD, just [18.4 percent](http://www.oecd-ilibrary.org/employment/youth-unemployment-rate_20752342-table2) of all Americans under the age of 25 were unemployed in 2010. By those measures, college grads are actually faring worse in the job market than the overall youth population. They're also suffering terribly compared to the older college-educated populace, which has an unemployment rate of 4.2 percent.

It's hard to imagine why any of this might be, other than that some recent grads may simply not be willing to take the low level jobs available to them.

On the other hand, many obviously are. As the AP notes, recent graduates are now more likely to work as "waiters, waitresses, bartenders and food-service helpers than as engineers, physicists, chemists and mathematicians combined." This is a problem for any number of reasons, but here are two big ones: First, a degree is more expensive than ever, and students are piling on debt to finance their educations. It's much harder to pay back loans while working for tips at Buffalo Wild Wings than when you have a decent office job. Second, when college graduates take a low-paid, low-skill job, they're probably displacing a less educated worker, For every underemployed college degree holder, there's a decent chance someone with just a high school diploma is out of work entirely.

So is a college education simply less valuable than in the past? In some respects, yes. According to the Census, the [number of Americans](http://www.census.gov/hhes/socdemo/education/data/cps/2011/tables.html) under the age of 25 with at least a bachelor's degree has grown 38 percent since [2000](http://www.census.gov/hhes/socdemo/education/data/cps/2000/tab01.pdf). Not nearly enough jobs have been created to accommodate them, which has resulted in falling wages for young college graduates [in the past decade](http://www.theatlantic.com/business/archive/2012/03/a-lost-decade-for-young-workers/254222/), as well as the employment problems we're now seeing.

That said, not all degrees are created equal. The AP reports that students who graduated out of the sciences or other technical fields, such as accounting, were much less likely to be jobless or underemployed than humanities and arts graduates. You know that old saw about how college is just about getting a fancy piece of paper? Not true. For an education to be worth anything these days, it needs to impart skills.

When there were fewer graduates, a generic college degree used to be a valuable credential. Now that the market is flooded, diplomas count less, and specific skills count more. This means that, in many instances, associates and technical degrees may be more financially valuable than a liberal arts degree. After all, some of the fastest growing job categories are expected to be in so-called "middle-skill" positions such as nursing, which do not require a full, four-year education. It's one more sign that, for people seeking to fix America's employment picture, "college for all" is the wrong mantra. We need to be talking about "skills for all" instead.

**Source G**

**The Broader Societal Benefits of Higher Education**

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