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# The Value of a College Degree: What Price is Society Willing to Pay?

## **Abstract**

The economic value that accrues from those who earn four-year university degrees and graduate degrees will be the focus of this paper. Higher education influences economic well-being in other ways as well. The economic impacts of expenditures by institutions, their employees and their students already have been well documented by others. The benefits of knowledge creation - research and development- at universities will be examined and compared.

Education provides a variety of benefits to students including enhanced social skills, greater awareness of human achievement and an appreciation for cultural diversity. IN this time period that we live in, education is increasingly viewed as an economic investment. Education provides a student with skills that are valued by employers and increases lifetime earnings capacity.

The primary point of this paper is what value do we, as a society, put towards attaining a degree and at what cost? Presenting both sides of this important argument is essential to making a fair assessment of where we stand as a society. It would be fair to state that although the cost can be higher for some than others, the collective agreement is as follows: The benefits of going to college, aside from getting a job, that are intangible include unique accomplishments like finding a marriage partner, making life-long friends, making good contacts, networking with classmates and professors, the college life itself, exposing yourself to a broader scope of education, developing analytical and critical thinking skills, and the list goes on and on.

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THE VALUE OF A COLLEGE DEGREE: WHAT PRICE IS SOCIETY WILLING TO PAY?

BY

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With Honors in Management

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# **THE VALUE OF A COLLEGE DEGREE: WHAT PRICE IS SOCIETY WILLING TO PAY?**

## **ABSTRACT**

The economic value that accrues from those who earn four-year university degrees and graduate degrees will be the focus of this paper. Higher education influences economic well-being in other ways as well. The economic impacts of expenditures by institutions, their employees and their students already have been well documented by others. The benefits of knowledge creation – research and development – at universities will be examined and compared.

Education provides a variety of benefits to students including enhanced social skills, greater awareness of human achievement and an appreciation for cultural diversity. IN this time period that we live in, education is increasingly viewed as an economic investment. Education provides a student with skills that are valued by employers and increases lifetime earnings capacity.

The primary point of this paper is what value do we, as a society, put towards attaining a degree and at what cost? Presenting both sides of this important argument is essential to making a fair assessment of where we stand as a society. It would be fair to state that although the cost can be higher for some than others, the collective agreement is as follows: The benefits of going to college, aside from getting a job, that are intangible include unique accomplishments like finding a marriage partner, making life-long friends, making good contacts, networking with classmates and professors, the college life itself, exposing yourself to a broader scope of education, developing analytical and critical thinking skills, and the list goes on and on.

The escalating cost of higher education is causing many to question the value of continuing education beyond high school. During this eight year economic downturn, especially during recessions, many wonder whether the high cost of tuition, the opportunity cost of choosing college over full-time employment, and the accumulation of thousands of dollars of debt is, in the long run, worth the investment. The risk is especially large for low-income families who have a difficult time making ends meet without the additional burden of college tuition and fees.

In order to determine whether higher education is worth the investment, it is useful for us to examine what is known about the value of higher education and the rates of return on investment to both the individual and to society. It is with this target in mind that I will look at the economic value that accrues from those who earn four-year university degrees and graduate degrees; this will be the focus of this paper.

Higher education influences economic well-being in many other ways as well. The economic impacts of expenditures by institutions, their employees and their students already have been well documented by others. The benefits of knowledge creation - research and development - at universities I will examine and compare.

Education provides a variety of benefits to students including enhanced social skills, greater awareness of human achievement and an appreciation for cultural diversity. In this time period that we live in, education is increasingly viewed as an economic investment. Education provides a student with skills that are valued by employers and increases lifetime earnings capacity.

Below is a typical conversation that is discussed within the walls of any campus of academia. This is a hypothetical casual conversation (interview) that I taped having with myself. Please enjoy!!

**Olu:** And so what will give here? If getting an education costs more than students are able to pay and what they are able to pay is putting them deeply into debt, this is obviously seen as something of a national crisis, then how and where do we reach equilibrium on this?

**Me:** I think we have a two-part crisis. The biggest piece of it is students who go to school, spend a lot of money, borrow a lot of money, use federal grants, and then don't complete their degree because they do not have a lot to show for that investment, right? We've also got the problem of students who spend a lot, who borrow a lot, complete a degree but then can't make anything useful with it. For the vast majority of students who actually finish their degree, the return on investment is pretty good. That means dealing with why students do not graduate which I think the biggest problem is inadequate preparation. We send too many kids to college who are not really ready to be in college. Then we are teaching

them remedial material at some colleges, at college costs; that is a ridiculous thing to do.

**Olu:** What are going to do exactly about that?

**Me:** I think we are going to have to use technology to attack that problem.

**Olu:** Is it possible that from a policy perspective, we could send fewer students to college?

**Me:** We might. Maybe we should be sending fewer students at least to four-year colleges. We should be sending more, of the "shaky" category of students to community colleges. And by the way, we should make sure they finish their two-year degree. I mean, the community colleges struggle with getting students through. Too many unprepared students and there is data out there that shows that financial stress and the cost of paying for college is one of the major reasons students drop out. So we need to address this issue and I'm hopeful technology can be part of that.

**Olu:** But before I ask you about how technology could be part of it, have we as a country guilted people into thinking that they need a college degree to succeed where they might not necessarily need one, like in a trade type job?

**Me:** You know, I think you don't necessarily need one, but if I were a young person going out to the workforce expecting to work for the next 40, 45, maybe 50 years of my life, because realistically I think that's what retirement ages will look like 20, 30, 40 years from now, is there great value in a college education when you're going to have multiple careers over that period of time? Probably. And in terms of -- in a time of great economic uncertainty, which is probably what's going to be in the future rather than the certainty we've had, then a college education is more valuable. There will be fewer; you will not be able to get the kind of jobs that will provide the quality of life that most Americans hope for without a college education.

**Olu:** And speaking broadly, given the increasing trend towards vocational training in colleges, are we, in fact, giving -- are students, in fact, getting what you and I would consider to be a university education if their training is primarily vocational?

**Me:** Some institutions have abandoned the notion of a liberal arts education. I think increasingly it is being abandoned, and we have majors which in my mind sound like they belong in the local community college of the two-year program. My expectation out of a four-year degree program is you're going to get something that's going to provide value 20, 30, 40 years, and that's critical thinking, it's learning to read well, to write, to speak well, all those kinds of cores, to operate in the kind of diverse environment that we find ourselves in.

**Olu:** And what percentage of U.S. college graduates do you think are getting that kind of education?

**Me:** I think the majority are still getting that kind of education, but there's clearly been a shift. Look at what the largest major in the country is; it's "business."

**Olu:** I didn't know that.

**Me:** Yes, it's business administration. I'm not so sure business administration should be an undergraduate program; and if it is, there are those out there that say that it should be cast in the context of a liberal arts education because as an example, spending four years learning how to do accounting is not what you really want to be doing unless you love numbers crunching.

**Olu:** So, what's an example of how we can use technology to improve teaching?

**Me:** At the end of the semester, schools have students filling out the critique form of their professor so I stay behind after to talk to her. My professor teaches a large lecture course. She states that there is not a lot of feedback. There is not a lot of interaction. It is a very technical course. Most of the information flow is from her as the instructor to the students. It is not a very productive learning environment, and it is not very much fun. She states, "I want to try something different. I am going to record my videos ahead of time then I am going to ask the students to watch the videos. Then I am going to take that classroom time and meet with the students in groups of 15 and talk about careers, talk about their big classroom project for the year. This will have a much more interactive engaged environment." One could call it the so-called flipped classroom model that we now allude to.

Now back to reality!

The primary question therefore is does a degree still matter? Stories abound daily in news coverage of college graduates working at Starbucks, living at home feeding of mom and dad and facing an uncertain economic future. Many of these stories have led to increased questioning of the value of a college degree. Consequently, many have taken to surveying those who have graduated from college and the results are surprising. Despite the current economic hardships faced by people at all levels of education, the value of a college degree remains strong. The unemployment rate for recent four-year college graduates is 6.8 percent, higher than the rate for all four-year graduates of 4.5 percent. The 6.8 percent is much better than the 24 percent rate for recent high school graduates. These figures, and a series of others, appear in "The College Advantage: Weathering The Economic Storm," from the Center on Education and the Workforce at Georgetown University – ([http://cew.georgetown.edu/collegeadvantage/.](http://cew.georgetown.edu/collegeadvantage/))

As the name of this report suggests, the report does not claim that college graduates have been immune from the recession. The report's summary begins with this sentence: "When it rains hard enough and long enough, everyone gets a little wet" ([http://cew.georgetown.edu/collegeadvantage/.](http://cew.georgetown.edu/collegeadvantage/)) But the report seeks to distinguish between reports of the real difficulties facing recent graduates and the idea that these hardships mean that their degrees lack genuine economic value.

Many will ask, "What about all those college grads working at Starbucks?" The report uses various databases to say that there is indeed an underemployment problem and that the underemployment rate for new college graduates is 8.4 percent. This is less than half of the underemployment rate for recent high school graduates of 17.3 percent.

What is promising in this report is that in terms of jobs that have been created in recent years, college graduates enjoy a strong advantage in gaining them. More than half of the jobs created during what economists call the recovery from the recession have gone to college graduates, who make up only one third of the labor force. This is extremely important given that some in the Republican Party who are running for the presidency (2012) are shouting at the top of their lungs that not all workers necessarily need a college degree. This report's data clearly shows that in the traditional "blue collar industries," those with degrees fared much better than those without. In manufacturing, employment dropped by 19 percent for workers with a high school diploma or less, but only 9 percent for workers with a bachelor's degrees or better. In construction, employment dropped by 4 percent for workers with a bachelor's degrees or better and 24 percent for those with a high school diplomas or less – ([http://cew.georgetown.edu/collegeadvantage/.](http://cew.georgetown.edu/collegeadvantage/))

What was surprising to me was the impact on men. The report suggests to me that these statistics may be acting as a "wake-up call" for men, who in the years prior to the recession were becoming less likely than women to enroll in college. Citing data from the National Center for Education Statistics, the report says that, since the recession, the rate of increase in male enrollment has topped that of females. "The Great Recession has produced an economic reckoning for men who stopped their education at high school or before" – ([http://cew.georgetown.edu/collegeadvantage/.](http://cew.georgetown.edu/collegeadvantage/)) Men, who in recent decades have lagged behind women in gaining post-secondary education, have been hit harder in the recession and, in response, are now growing faster than women in post-secondary enrollment. Men are now realizing that they need more than a high school diploma to get a job and that they should not limit themselves to fields dominated by men. They have been enrolling in colleges at greater rates and moving into fields usually dominated by women such as nursing; these fields are more 'recession proof' and less likely to be sent overseas. Therefore, the main point of my argument is as follows: Higher education provides considerable value to individuals, to the economies where educated individuals live and work,



and society in general. Economies that have experienced substantial investment in either private or public institutions of higher learning have realized considerable growth and prosperity.

While researching, I noticed that there is considerable support for this notion that states: "the rate of return on investment in higher education is high enough to warrant the financial burden associated with pursuing a college degree." Though the earnings differential between college and high school graduates varies over time, college graduates, on average, earn more than high school graduates. According to the Census Bureau, over an adult's working life, high school graduates earn an average of \$1.2 million; associate's degree holders earn about \$1.6 million; and bachelor's degree holders earn about \$2.1 million (Day and Newburger, 2002.)

This sizeable difference in lifetime earnings puts the costs of college study in a realistic perspective. Most students today, about 80 percent of all students, enroll either in public 4-year colleges or in public 2-year colleges. According to the U.S. Department of Education report, "Think College Early," a full-time student at a public 4-year college pays an average of \$8,655 for in-state tuition, room and board (U.S. Dept. of Education, 2002). A full-time student in a public 2-year college pays an average of \$1,359 per year in tuition (U.S. Dept. of Education, 2002.)

These statistics support the contention that, though the cost of higher education is significant, given the earnings disparity that exists between those who earn a bachelor's degree and those who do not, the individual rate of return on investment in higher education is sufficiently high enough to warrant the cost.

Higher education influences economic well-being in three ways. First, the direct expenditures by the institutions, their employees, and their students impact the local economy. This spending multiplies through the local economy until the monies are used to purchase goods and services from outside the local area. Such economic impacts have been estimated at many institutions of higher education.

Second, higher education provides financial and non-financial benefits to the individual who pursues an advanced education and to society in general. The average earnings of individuals are closely related to their educational attainment. In particular, those with a bachelor's degree earn substantially more than even those with some college education. Relative to those with a bachelor's degree, a postgraduate degree provides nearly as large a boost in earnings. In addition, society benefits from an educated populace. The average wage - even for those workers who do not possess much educational attainment - is higher in communities with a substantial proportion of highly educated workers. Various other benefits to society also are realized from enhanced educational attainment, such as a lower crime rate. In my paper, I will provide a detailed analysis of the

impacts of enhanced educational attainment.

Third, institutions of higher education are increasingly focused on knowledge creation. Thus, universities are sources of key research and development innovations that simultaneously can be beneficial to society and conducive to economic growth.

Additional benefits that college graduates also enjoy beyond the obvious of increased income I will state below. A 1998 report published by the Institute for Higher Education Policy reviews the individual benefits that college graduates enjoy, including higher levels of saving, increased personal and professional mobility, improved quality of life for their offspring, better consumer decision making, and more hobbies and leisure activities (Institute for Higher Education Policy, 1998.) According to a report published by the Carnegie Foundation, non-monetary individual benefits of higher education include the tendency for postsecondary students to become more open-minded, more cultured, more rational, more consistent and less authoritarian; these benefits are also passed along to succeeding generations (Rowley and Hurtado, 2002.) Additionally, college attendance has been shown to decrease individual prejudices, enhance knowledge of world affairs and enhance social status while increasing economic and job security for those who earn bachelor's degrees; we all benefit from a more worldly involved society.

Research has also consistently shown a positive correlation between completion of higher education and good health, not only for oneself, but also for one's children. As stated by Cohn and Geske, "parental schooling levels (after controlling for differences in earnings) are positively correlated with the health status of their children" and "increased schooling (and higher relative income) are correlated with lower mortality rates for given age brackets" (Cohn and Geske, 1992).

A number of studies have also shown a high correlation between higher education and cultural and family values, and economic growth. According to Elchanan Cohn and Terry Geske (1992), there is the tendency for more highly educated women to spend more time with their children; these women tend to use this time to better prepare their children for the future. Cohn and Geske (1992) also report that "college graduates appear to have a more optimistic view of their past and future personal progress."

The public benefits of attending college include increased tax revenues, greater workplace productivity, increased consumption, increased workforce flexibility, and decreased reliance on government financial support (Institute for Higher Education Policy, 1998).

As we stand today, the most crucial problem to address first and foremost is the most obvious; currently, state funding for education is in decline. One of the

biggest challenges for colleges and universities is attempting to be more cost efficient and adopting technology while delivering high quality education at the same or lower cost. The second major challenge facing all education is what is known as the completion rate: this is when “some” and not “all” students who enroll into higher education programs start the program and never complete the program. With the ever decreasing completion rates, these programs are coming under greater levels of scrutiny.

In the report, *College for All? Is There Too Much Emphasis on Getting a 4-Year College Degree?*, Boesel and Fredland estimate that around 600,000 students leave 4-year colleges annually without graduating. These non-completers earn less than college graduates because they receive fewer years of education. More surprising, they tend to earn less than or the same amount as 2-year college students who have as much education. Furthermore, 2-year college students show about the same gains in tested cognitive skills for each year of attendance as 4-year college students. Students at 4-year colleges also pay more in tuition and are more likely to have student loan debts than 2-year students (Boesel and Fredland, 1999, p. viii). The authors also conclude that high school graduates of modest ability or uncertain motivation-factors that increase their chances of leaving college before graduation-would be well-advised to consider attending 2-year, instead of 4-year, colleges. If they did, they would probably realize the same earnings and cognitive skill gains at lower cost and with less debt. In order to maximize the return on their time and monetary investment, students who do choose to enroll in 4-year colleges should do everything in their power to graduate. (Boesel and Fredland, 1999, p.ix).

A cost efficient solution that is inexpensive to implement is the usage of the current facilities more effectively. Let us consider the drop off over the summer; it is fair to presume that many students are working full time and part time during this time period. If they are working, are they not capable to doing two things at once? Going to school full time while working? The need to either reduce or hold down costs becomes paramount.

Another issue that is present but never addressed is the length of time attending college to attain that college degree. There are those who would state that the time frame is too long. This can be addressed by expanding tuition rebate programs so if there are students who are capable of handling the course load, there should be incentives encouraging them to do that. These incentives could include expanding tuition rebate programs so colleges reward students who finish programs faster. Universities should look into adopting competency based programs; I will go out on a limb in defending this point vigorously by stating that in all my research, I could not find any evidence that a student needs 15 weeks to master a subject. There are those who are intellectually gifted that may be able to master the material much faster. If they can master it faster, then they should be able to move on to the next “challenging chapter” in their accelerated lives.

Then there is the difficult question, the 800 lb gorilla in the room; is there a need for an education at all?

The answer to this statement is easy and I will voice my own opinion on this. First of all, universities are not training the next generation just for work. They are training the next generation to be good citizens, to be ethical and to be effective in a global culture.

There has been a lot of talk, both among college graduates and in the press, about the unemployment rate of college graduates; the AP reported 53.6% of college graduates under 25 were unemployed or underemployed – (<http://www.theatlantic.com/business/archive/2012/04/53-of-recent-college-grads-are-jobless-or-underemployed-how/256237/>.) I think the core issue with the unemployment rate is that society has conditioned everyone in believing that if you want a good job, the key to that solution would be attaining a college degree. What we see is a huge disconnect between what the employers are looking for and what colleges are offering or providing to students. For instance, the less practical degrees are not held in as high of regard or esteem for employers. This, therefore, provides an opportunity to proving what you know and why you have been bestowed with those credentials and what those credentials brings to the table that will benefit the employer.

In today's society, there are many who question whether a four year degree is worth the financial sacrifice of old. Let me state that individual earnings are directly related to educational attainment. Those with a high school diploma earn more than those who did not graduate from high school; those who received some college credits earn more than those whose education ended with a high school diploma; those with a bachelor's degree earn more than those with some college credits; and those with a graduate degree earn more than those with a bachelor's degree as their highest level of attainment. In particular, those with a bachelor's degree earn substantially more than those with some college credits. A postgraduate degree provides an additional boost in earnings.

This is where the delicate topic of future earnings is now placed front and center in this discussion. Earnings vary widely with educational attainment. For example, the 2000 census data revealed that average annual earnings of individuals with a bachelor's degree was from 74 to 87 percent higher (depending on age) than the earnings of individuals whose maximum educational attainment was a high school diploma (U.S. Department of Commerce, Census Bureau, 2000 Census. Retrieved August 2005.) Over a career, an individual with a bachelor's degree earns on average in excess of \$1 million more than a counterpart with only a high school diploma. Based on a cost-benefit analysis over a person's working life, the expected net return from an individual's payment of tuition and fees and foregone income while obtaining a bachelor's degree is in excess of 11 percent, a rate that compares favorably with real returns on most

financial assets.

The differential in earnings based on educational attainment has increased over time. For example, for full-time male workers between the ages of 35 and 44, the earnings differential between those having a bachelor's degree and those with a high school diploma has risen from 38 percent in the 1980-84 period to 94 percent in 2000-03 (Card, "Estimating the Return to Schooling.") This rising differential constitutes the principal evidence for the emerging "knowledge economy."

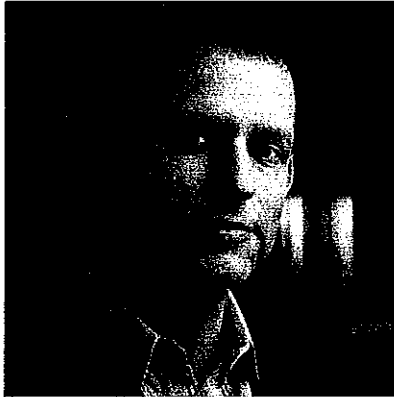
The benefits to an individual from a university education vary with the quality of the institution attended. In studies of universities, quality is defined by measures such as average faculty salaries and average test scores of entering freshmen. These studies generally find that the quality of the institution has a significant effect on the earnings of graduates later in life. Those who graduate from elite institutions earn substantially more than those who graduate from lower-quality institutions. Some evidence also exists that the value of a college education is higher for those who attend graduate degree-granting research institutions (Ashenfelter and Card.)

A long-standing concern of researchers has been that individuals who are successful in school tend to have high cognitive and non-cognitive abilities and these abilities would have provided them with greater earnings capacity whether or not they chose to become highly educated or not. While controlling for innate ability when studying the effects of education on earnings is difficult, the consensus view of labor market researchers is that the effects of "ability bias" are small in data comparing educational attainment to earnings. The true benefit of educational attainment is not much below the estimate observed in a simple cross-tabulation of earnings and education (D. Card, "Estimating the Return to Schooling.")

Despite the very high return on investment for the time and money spent on attaining a college degree, only one-quarter of the U.S. adult population (28 percent of those 25 to 34 years old) has at least a bachelor's degree. Three barriers - financial, ability, and information - limit the number of individuals who attain a university degree.

The available evidence suggests that no more than 8 percent of the youth population fail to complete college simply because of a lack of financial resources, undoubtedly due in large part to government programs that help to ease financing burdens. A review of the literature reveals that the academic ability of the individual, which is shaped throughout his/her life by a variety of family and environmental factors, and the values and goals of the individual, which are strongly influenced by the education of his/her parents, are the main determinants of educational attainment. A lack of information on the costs and benefits of higher education may underlie these factors (Carniero and Heckman,

“The Evidence on Credit Constraints in Post-Secondary Schooling.)



Peter Thiel

Seeing that the lack of funds is a primary reason for many not completing their education, a radical answer may have been provided for a privileged few. For those who have seen the movie called “The Social Network,” one might have caught a passing glimpse of a controversial billionaire called Peter Thiel. A little background of Peter Thiel is hereby warranted.

Peter Thiel was the first outside investor in Facebook, investing \$500,000 to finance the social site's original expansion back in 2004. In the film's version of events, he connives with Sean Parker, the founder of Napster, to deprive Mark Zuckerberg's friend, Eduardo Saverin, of his 30 percent stake in the company. Though the character based on Peter Thiel appears on-screen only briefly, Aaron Sorkin's screenplay demolishes the German-born venture-capitalist in a single line: "We're in the offices of a guy whose hero is Gordon Gekko."

While he clearly enjoys playing Richie Rich - various profiles I researched commented on his Ferrari Spyder, his \$500,000 McLaren Supercar, an apartment in the San Francisco Four Seasons, and a white-jacketed butler – Peter Thiel “fancies” himself more than other self-indulgent tech billionaires. He has a big vision and has lately been spending some of the millions he has made on PayPal, Facebook (before they went public), and a hedge fund called Clarium trying to advance his beliefs. Peter Thiel's philosophy demands attention not because it is original or interesting in any way—it's infused with futurist fantasy—but because it epitomizes an ugly side of Silicon Valley's politics.

To describe Peter Thiel as simply a libertarian wildly understates the case. His belief system is based on unapologetic selfishness and economic Darwinism. His most famous and well known quote - borrowed from Vince Lombardi – goes as follows, "Show me a good loser and I'll show you a loser." In a personal statement produced last year for the Cato Institute, Peter Thiel announced: "I no longer believe that freedom and democracy are compatible" – (<http://www.cato->

[unbound.org/2009/04/13/peter-thiel/the-education-of-a-libertarian/.](http://www.cato-unbound.org/2009/04/13/peter-thiel/the-education-of-a-libertarian/)) The public, he says, doesn't support unregulated, winner-take-all capitalism and so he does not support the public making decisions. This anti-democratic proclamation comes with some curious historical analysis. What is so different in his thinking is that he says that the "Roaring 20's" were the last period when it was possible for supporters of freedom like him to be optimistic about politics. His thinking also backs up to the 1920's where he states that, "Since 1920, the vast increase in welfare beneficiaries and the extension of the franchise to women—two constituencies that are notoriously tough for libertarians—have rendered the notion of 'capitalist democracy' into an oxymoron" – ([http://www.cato-unbound.org/2009/04/13/peter-thiel/the-education-of-a-libertarian/.](http://www.cato-unbound.org/2009/04/13/peter-thiel/the-education-of-a-libertarian/))

As open-minded as I am, I had a hard time coming to a logical conclusion on the following statements that he made: "If you want to go around saying that giving women the vote wrecked the country and still be taken seriously, it helps to be handing out \$100 bills" – ([http://www.cato-unbound.org/2009/04/13/peter-thiel/the-education-of-a-libertarian/.](http://www.cato-unbound.org/2009/04/13/peter-thiel/the-education-of-a-libertarian/)) I would go out on a limb to state that what probably differentiates Peter Thiel's Silicon Valley style of philanthropic libertarianism from let's say Glenn Beck's delivery format which includes screaming, raving and weeping variety can be looked at as a laissez-faire attitude toward personal behavior and the lack of any demagogic instinct. Peter Thiel has now decided to focus his efforts on new technologies that may create a new space for freedom. Both his entrepreneurial and philanthropic endeavors have been animated by techno-utopianism. In founding PayPal, which made his first fortune when he sold it to eBay for \$1.5 billion in 2002, Peter Thiel sought to create a global currency beyond the reach of taxation or central bank policy. He likewise sees Facebook as a way to form voluntary supra-national communities.

Peter Thiel's latest venture is alarming at it's very core. The Thiel Fellowship that he founded will pay would-be entrepreneurs under the age of twenty \$100,000 in cash to drop out of school. Yes, you read that correctly; he will pay the next generation to drop out of school. When Peter Thiel made this announcement, he made it clear his contempt for American universities which, like governments, he believes, cost more than they are worth and hinder what really matters in life, namely starting technology companies. In his words, "these scholarships are meant as an escape hatch from these insufficiently capitalist institutions of higher learning" – ([http://www.cato-unbound.org/2009/04/13/peter-thiel/the-education-of-a-libertarian/.](http://www.cato-unbound.org/2009/04/13/peter-thiel/the-education-of-a-libertarian/))

I am not even sure where to start with this unique idea. A basic feature of the venture capitalist's worldview is its narcissism, and with that comes the desire to clone oneself; perhaps literally in Peter Thiel's case. Thus Peter Thiel "fellows" will have the opportunity to emulate their sponsor by halting their intellectual development around the onset of adulthood, maintaining a narrow-minded focus on getting rich as young as possible, and thereby avoid the siren lure of helping others or contributing to the advances in basic science that have made the great

tech fortunes possible. Peter Thiel's program is premised on the idea that America suffers from a deficiency of entrepreneurship. In fact, we may be on the verge of the opposite, a world in which too many weak ideas find funding and every human can and will dream of being the next Steve Jobs. This threatens to turn the risk-taking startup model into a "white's only" version of the NBA, diverting a generation of young people from the love of knowledge for its own sake and respect for middle-class values. This is not the future that we all look forward to but the past that many would rather forget.

I would further digress to this point; if dropping out of college is favored by the few wealthy, why are so many businesses borne out of the universities here in the U.S.? Permit me to elaborate further by stating the following: the value of this education, which many are disrespecting, has not been fully realized. Not many are aware of this one subliminal fact; many people go to college to become good future employees. The ironic truth is college presents a phenomenal opportunity to start a business of your own. Being a student here at Eastern Michigan University grants me the unique perspective to notice the amazing opportunities in front of me. The following thoughts below are the core reasons why I think businesses are started early in one's young college life; irrespective of the fact that a college degree is not being granted the respect that it so richly deserves.

- **Minimal Responsibilities**

Entrepreneurship is notoriously risky. Luckily, the typical college student has few crucial responsibilities: many have no family to support and no full time career to worry about. In other words, you have little to lose! If your first business fails and you end up with the net worth of a cashew nut, no problem! That is probably how you started out anyway.

- **Youth**

The typical college student also has plenty of time ahead of himself/herself. This has benefits in the case of success as well as failure. If you build a successful business, you will have plenty of time to expand it and leverage your resources and knowledge to build other successful businesses. Or if retirement looks wonderful, one could cash out at 30 and joyfully retire. On the other hand, in the event that your business fails, you have plenty of time to try again. This will only make you become smarter the next time around. Youth also means a fresher and riskier perspective than previous generations. You are more familiar with current technologies and what is hot and trendy. You are not as bound by traditional preconceptions of how things "should" be done.

- **Abundant, Inexpensive Labor**

College students are known to be hard-strapped for cash. If you are



looking to hire inexpensive, decently skilled labor, college campuses are a great source. Another advantage exists if you're attending that stated college, you will know exactly where to advertise for your desired skill sets.

- **Access to Knowledge**

I'm not sure how many tens or hundreds of Ph.D professors are members of Eastern Michigan Universities faculty but I think it would be fair to state that I could find an expert on virtually any topic. Whether I wanted to learn about emerging scientific research or I wanted some help with a business plan, it would not be too hard to locate the right professor with the experience and the talent. All major universities share this abundance of brilliance within their respective faculties. Might I also state that although not all professors would be sympathetic, many will be extremely helpful once they recognized that you are a student trying to do something extraordinary. (Advantage - Honor's College!!) In addition to professors, students have access to one, if not many comprehensive libraries, both on and off campus and online databases.

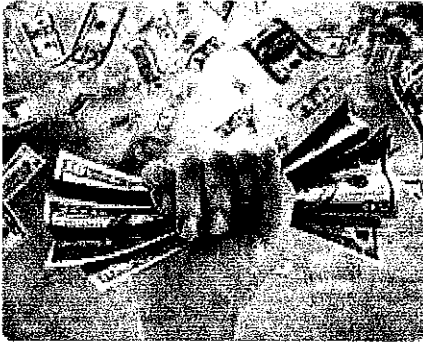
- **Access to Software**

Chances are if you are starting a new business, you could benefit from the incredible capabilities of modern software. In the traditional enterprise or might I say "normal" world, advanced applications range in price from hundreds to tens of thousands of dollars. Luckily, universities provide an amazing array of software to their students. During my inquiries, I was informed that Eastern Michigan University provides access to: Microsoft Office (enterprise suite utility), Final Cut Pro (film editing), Adobe Design Premium CS3 (graphic design), Maya (3D animation), ERwin (data modeling), SQL Server (database management), and many more.

- **Access to Equipment**

Permit me while I use Eastern Michigan University as an example: there exists large format printers, 3D printers, laser etchers, machine shops, film editing bays, film studios, camera equipment, computer labs, meeting rooms, scientific equipment and much more inventory. Major universities offer professional equipment to their students. Usually students in relevant degree programs get preference, but it is there nonetheless.

- **Financial Support**



Many universities desire and encourage their students to build businesses, this includes Eastern Michigan Universities entrepreneurial department. Why, one might ask? The only reason that makes logical sense is the pride that inherently comes with a graduate of a school becoming a successful businessman/businesswoman; perhaps for marketing or to encourage future multi-million dollar donations? Irrespective, alumni will, like clockwork, donate grants for those financially sound business plans. From my observations, this can amount to \$5,000-\$20,000 of loan-free funds.

When it comes to starting a business, college students have several unique advantages. Apparently, there are other paths to success but I doubt that anyone told these “billionaire college dropouts” below about starting a business while they were in college.



**Sir Richard Branson** - Estimated net worth: \$8.6 billion. Sir Richard Branson left school when he was only 16. Ironically, his first successful business was publishing a magazine called “Student.” Today, Sir Richard Branson is known for his brand “Virgin” which includes Virgin Records, Virgin Atlantic Airways, and over 300 other companies. Adding to his grandeur, Sir Richard Branson bought his own 79-acre Caribbean island (Necker Island) when he was just 24 and he was knighted in 1999.



**Dean Kamen** - Estimated net worth: Unclear, but thought to be in the billions \$\$.

Dean Kamen, a prolific and ingenious inventor, dropped out of Worcester Polytechnic Institute before graduating. Although best known for the Segway PT, Dean Kamen holds more than 80 US patents and has created many products such as the AutoSyringe and iBOT robotic wheelchair. When Dean Kamen travels to work, he has to decide which of his two helicopters to take. For longer trips, he pilots his own private jet. He also owns a small island near Connecticut that generates its own electricity from wind.

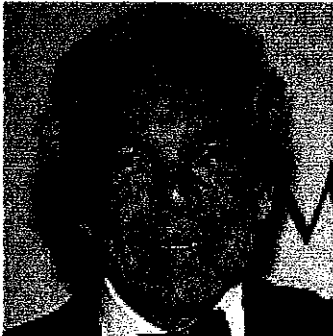


**Bill Gates** - Estimated net worth: \$58 billion.

Bill Gates has topped the Forbes list of "The World's Richest People" continually since 1995. Bill Gates took an interest in programming while attending preparatory school in Seattle. To earn time on early shared computers, Bill Gates and his classmates offered to debug corporate software. When he was 14, Bill Gates earned \$20,000 from his first programming venture. After scoring a near-perfect 1590 on his SAT's, Bill Gates enrolled at Harvard but left, without a degree to co-found Microsoft. Today, one of Bill Gates' homes in the state of Washington has an annual property tax of about \$1 million. In 2006, Bill Gates claimed that he wished he was not the world's richest man because he disliked the attention it brought.



**Paul Allen** - Estimated net worth: \$18.0 billion. Paul Allen befriended Bill Gates while they were both attending a private school in Seattle. Paul Allen went on to attend Washington State University but dropped out after two years. He was also the one who convinced Bill Gates to drop out of Harvard in order to start Microsoft. The two co-founded Microsoft in 1975; Paul Allen has distanced himself from the company since then. In addition to more than 100 million shares of Microsoft, Paul Allen owns 12 professional sports teams, an extraordinary amount of real estate and has stakes in dozens of technology and media companies such as Dreamworks Studios.



**Ralph Lauren** - Estimated net worth: \$3.6 billion. In high school, Ralph Lauren was known to sell suit ties to his fellow peers. In his yearbook, he stated that he wanted to be a millionaire. He studied business for two years at Baruch College but never graduated. Nonetheless, he has far surpassed his goal of becoming a millionaire. In 2006, "Polo Ralph Lauren" had net income of \$300 million.



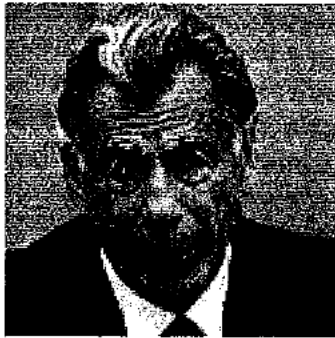
**Steve Jobs** - Estimated net worth: \$7 billion. In addition to being the late CEO of Apple Inc., Steve Jobs became the largest individual shareholder of the Walt Disney Company after selling Pixar Animation Studios in 2006. In 2007, he was chosen as Fortune Magazine's most powerful businessman. That's quite an honor for someone who dropped out of college after just one semester. Although his yearly salary is officially just \$1, Steve Jobs has received "executive gifts" including a \$46 million jet and nearly 30 million shares of restricted stock. Because capital gains are taxed at a lower rate than salary income, this is also a tax minimization strategy.



**Larry Ellison** - Estimated net worth: \$18.4 billion. In 1977, Larry Ellison raised \$2,000 to start what would become Oracle Corporation, the world's second-largest software company. Larry Ellison briefly attended the University of Illinois as well as the University of Chicago, but received a degree from neither. Today he is known for his extravagant lifestyle. He owns a 450 ft \$200 million yacht, exotic cars including a McLaren F1, over a dozen multi-million dollar estates in California and several jets which he is licensed to pilot himself.



**Michael Dell** - Estimated net worth: \$17.2 billion. Michael Dell started a computer company called "PCs Limited" while attending the University of Texas at Austin. It became successful enough that Michael Dell dropped out of school to operate it, and the company eventually became Dell Inc., with revenues of \$57.4 billion in 2007. In 2006, Dell and his wife gave a \$50 million grant to the University of Texas which he attended but never graduated from.



**Kirk Kerkorian** - Estimated net worth: \$18.0 billion. Kirk Kerkorian dropped out of school in the 8th grade. His first venture was an airline that flew from Los Angeles to Las Vegas. In 1962, he bought 80 acres of land along the Las Vegas strip for just under \$1 million and he continues to make his fortune from buying and developing properties on the strip in Las Vegas. Currently, Kirk Kerkorian has a large stake in all of the following hotels: Bellagio, Excaliber, Luxor, Mandalay Bay, MGM Grand, New York-New York, Circus Circus, The Mirage, and a few more.

(Source – all the above info was researched from both Forbes and Fortune magazines. Online versions: [www.fortune.com](http://www.fortune.com) and [www.forbes.com](http://www.forbes.com).)

When all is said and done, the depressing fact is what Generation Y has to look forward to; that which is the rhetoric being "preached" by the newly minted self made billionaires of yesteryears. Author Michael Ellsberg, who wanted to prove a point that education was no longer a necessity spent two years interviewing

business titans who did just that for his book, "The Education of Millionaires" (Penguin Group, 2011.) What is so sad is the atrocious advice that is being preached to Generation Y. Below are a few statements gleaned from four billionaires who learned from life experience, not lecture halls. Might I interject by stating that I categorically do not agree with any one of these billionaires. Inherently, there is an obvious trace of truth to what they are saying; fundamentally and morally, they are outliers compared to their peers.

❖ **Sean Parker - Facebook - Net worth: \$2.1 billion**

*SKIP COLLEGE; GOOGLE YOUR EDUCATION.* "When these incredible tools of knowledge and learning are available to the whole world, formal education becomes less and less important. We should expect to see the emergence of a new kind of entrepreneur who has acquired most of their knowledge through self-exploration."

❖ **Dustin Moskovitz - Facebook - Net worth: \$3.5 billion**

*YOU CAN ALWAYS GO BACK.* If Facebook hadn't worked out after he left college to join Mark Zuckerberg, he said, "I could have gone back to Harvard anytime. My friends might not be there anymore. I might have to start over socially. That was a risk. But it was a pretty small risk compared to the opportunity at the time."

❖ **Phil Ruffini - Treasure Island Casinos - Net worth: \$2.4 billion**

*LOOK OUT FOR NO. 1.* Ruffin's last duty as someone else's employee was to repossess a monkey. He quit and founded a chain of stores, and later, hotels and casinos. "The advice I would give to young people? Quit your job. Don't work for anybody. You really can't make any money working for someone else."

❖ **John Paul DeJoria - Paul Mitchell Systems; Patron Tequila - Net worth: \$4.0 billion**

*GET THICK-SKINNED.* This Navy vet slept in an ancient Rolls Royce on Sunset Strip as he sold shampoo door-to-door before making it big with Paul Mitchell. "I learned sales and marketing from knocking on a hundred doors a day. You quickly discover that you'll get 99 slammed in your face before you make a sale."

**Societal Benefits of Enhanced Educational Attainment**

With the above individuals either not graduating or only completing one semester of college, can one therefore definitively state that value does not exist in an education or in a degree? Please allow me to elaborate a little.

In regions with a highly educated labor force, all workers - not just those with advanced educational achievements - receive higher wages than their counterparts in regions with lesser educational attainment. These monetary benefits have been measured using widely varying techniques, such as by examining the economic performance of regions with different shares of college graduates in the labor force.

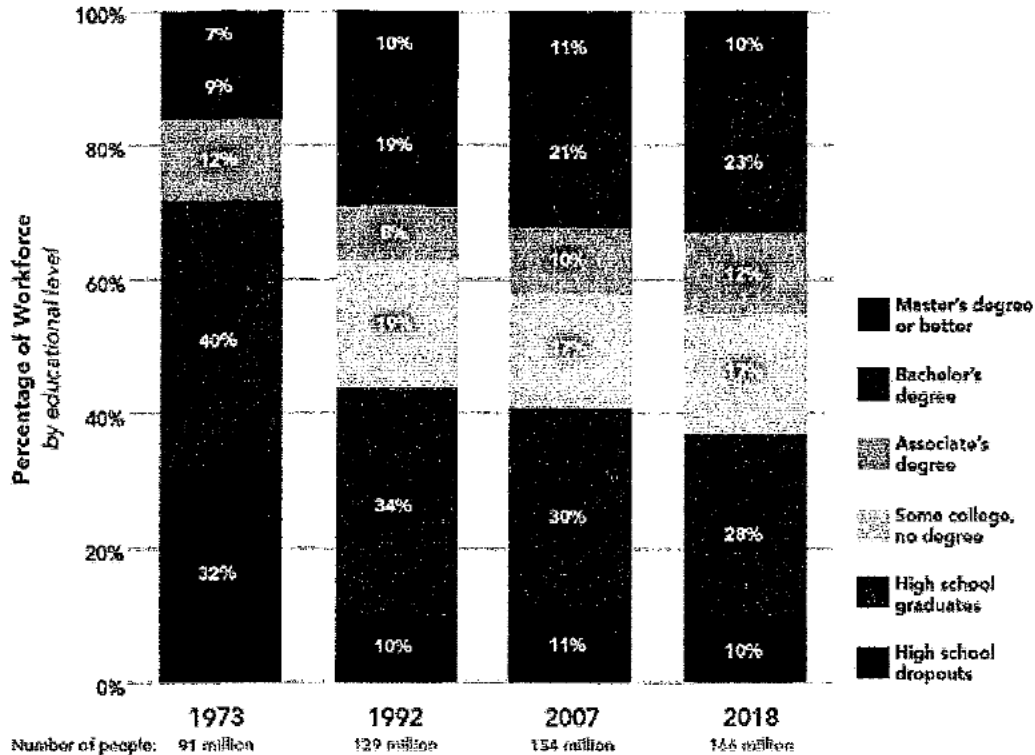
Recent research (taken in 2004) indicates that significantly higher wages are present in regions with greater shares of college graduates in the labor force. An extensive econometric analysis found that after controlling for other factors, a 1 percentage point increase in the labor force share of college graduates in a metropolitan area yields a 1.9 percent increase in the wages for high school dropouts, a 1.6 percent gain in the wages of high school graduates, and a 0.4 percent rise in the wages of the graduates themselves, over and above the average wage differential between individuals with college degrees and those with less education. One explanation for these higher wages in areas with higher educational attainment is the enhancement of productivity that comes with a workforce with more education and skills (R. Ehrenberg, "Econometric Studies of Higher Education.")

Societies desire and demand for the educated versus the non-educated has become increasingly primal. There is an inherent value that is being placed on those who attain a degree versus those who do not attain that stated degree. Those jobs, blue-collar work that is repetitive or "robotic," are being sourced overseas while those which require cognitive and complex thinking are being sought by the educated and employers are willing to pay for their problem solving abilities.



Between 1973 and 2018, our projections show that jobs available for workers with postsecondary education are projected to increase from 28 percent to 63 percent of all occupations.

Source: Authors' analysis of March CPS data, various years; Center on Education and the Workforce forecast of educational demand to 2018.



Source: Chart courtesy of Georgetown University Center on Education and the Workforce (<http://cew.georgetown.edu>)

Tony Carnevale, an economist, who put together this study states that "skills that used to be reserved for senior technical people or managers are more and more required of everyone. It's less a matter of standing in front of a machine and doing the same thing over and over again and more about exploiting the machine, interacting with customers and interacting with your co-workers." He could not have said this any better because employers who are looking for workers across a range of diverse occupations will need them to be better communicators and problem-solvers than ever before; these are skills that they will be required to have to succeed in this global economy.

Tony Carnevale also states that another fundamental skill that people learn in college is how to interact with other educated people. This skill, in my opinion, is underrated in that if one looks at society and the way society interacts, there is strong anecdotal evidence that people who go to college, especially well regarded colleges, tend to come out with a certain amount of polish and understanding about how the world works. I would even go as far as stating that this kind of knowledge is valuable in the workplace and especially in life.

One of the more interesting questions that I seemed to encounter during my

research from those I asked questions of was this, "people who go to college but never finish degrees, is there any advantage or advantages they get from the time they do spend in school?" Many "mentors" that I spoke to urged me to pursue this issue as well. The information I found on this was limited and I present it to all below.

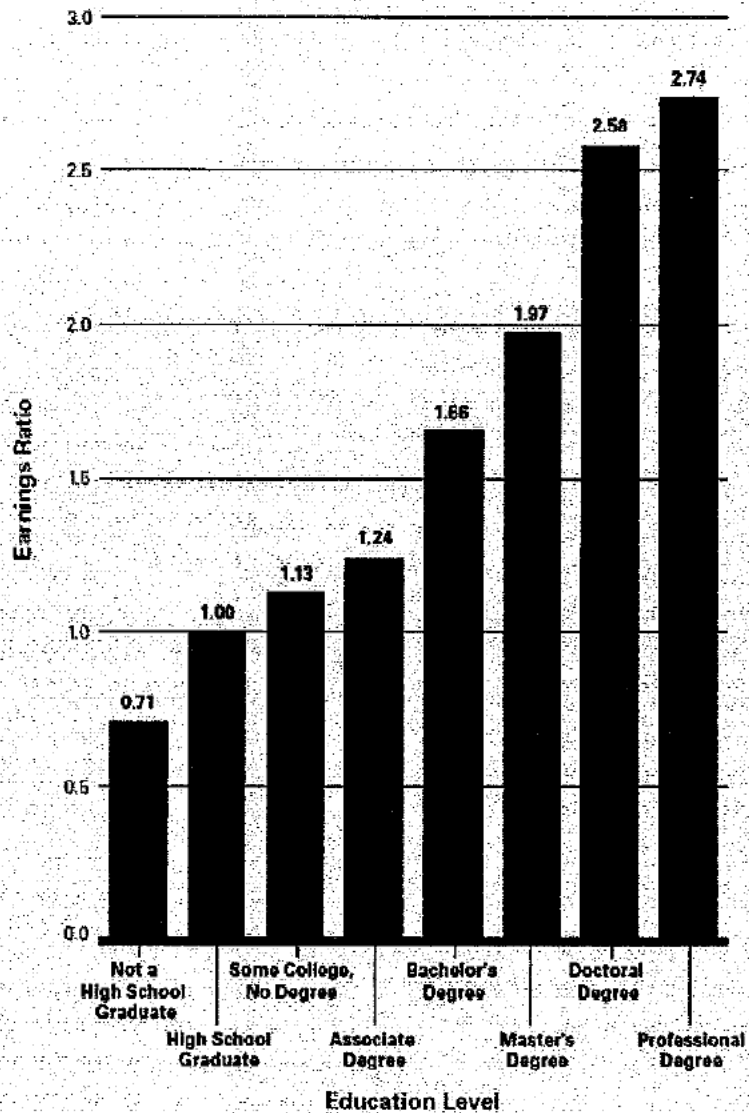
The data that supports the findings I came across are summarized in a report put out every three years by the College Board called Education Pays - [http://trends.collegeboard.org/education\\_pays](http://trends.collegeboard.org/education_pays). One of the authors of that report, economist Sandy Baum, says there is substantial evidence that going to college causes people to do better in life. In other words, it's not just that people who go to college are better off or more talented to begin with. She goes on to say that, "there's been a lot of testing done, lots of sophisticated statistical analyses and they all show that going to college changes you in ways that change the way you behave, the choices that you make. And you become, as a result of that college education, a more productive and better-paid member of the labor force."

The chart below shows that one is better off with some college than no college at all; disclaimer: as long as you don't go into too much debt. The bar graph demonstrates that people with some college tend to earn more money than people who have just high school diplomas. The earnings data suggests that people get something from college that gives them a leg-up in the job market even if they never get the "official" credentials. Evidence does also suggest that credentials are also clearly important, as the graph below shows.

**Expected Lifetime Earnings Relative to High School Graduates, by Education Level**

Note: Based on the sum of median 2008 earnings for full-time year-round workers at each age from 25 to 64 for each education level. No allowance is made for the shorter work life resulting from time spent in college or out of the labor force for other reasons. Future earnings are discounted at a 3% annual rate to account for the reality that, because of forgone interest, dollars received in the future are not worth as much as those received today. This represents real interest, as all earnings are in 2008 dollars. Discounting does not have a large impact on the lifetime earnings ratios.

Sources: U.S. Census Bureau, 2009; calculations by the authors.



Source: Education Pays - [http://trends.collegeboard.org/education\\_pays](http://trends.collegeboard.org/education_pays)

It would appear that on average, earnings increase for every degree someone gets, and the jumps are particularly large when people attain graduate degrees. A person with a professional degree tends to make nearly twice as much as someone with just a bachelor's degree.

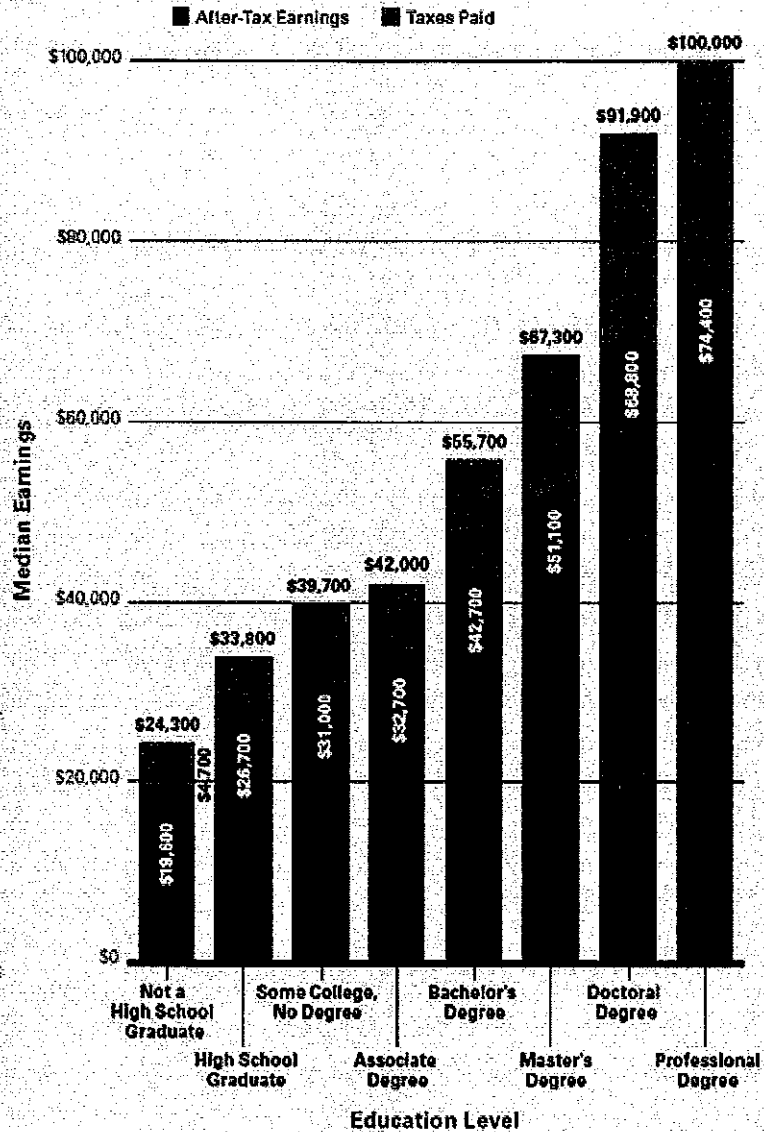
The next graph below, courtesy of Education Pays - [http://trends.collegeboard.org/education\\_pays](http://trends.collegeboard.org/education_pays), shows the financial benefits government attains when the workforce is educated and degreed.

**Median Earnings and Tax Payments of Full-Time Year-Round Workers Ages 25 and Older, by Education Level, 2008**

The bars in this graph show median earnings at each education level. The lighter segments represent the estimated average federal, state, and local taxes paid at these income levels. The darker segments show after-tax earnings.

Note: Taxes paid include federal income, Social Security, Medicare, state and local income, sales, and property taxes.

Sources: U.S. Census Bureau, 2005; Internal Revenue Service, 2008; Davis et al., 2009; calculations by the authors.



Source: Education Pays - [http://trends.collegeboard.org/education\\_pays](http://trends.collegeboard.org/education_pays)

The fact that there is such a big payoff for degrees is why there should be so much at stake in regards to getting students to finish college, and especially encouraging those who dropout to return. There is evidence showing that other countries are now doing a better job getting people to go to college and graduate. Keep in mind that in an increasingly competitive global economy where education matters more than ever, America is quickly falling behind.

Geography plays a huge role in the distribution of the University-Educated Population. To dismiss this glaring fact would be irresponsible for one trying to justify the accuracy of the analysis. For a region to realize the benefits from a highly educated populace, it must be able to either achieve an adequate number of college graduates at its local institutions of higher education or attract such

individuals from other regions. National data reveal considerable labor force migration of college graduates. Thus, the number of university graduates from local institutions of higher education is not necessarily highly related to the number of college graduates living in a community.

The retention of locally educated individuals and the attraction of highly educated people from other regions are heavily dependent on the availability of job opportunities appropriate for those with college degrees. Urban and natural amenities also are important to the attraction and retention of college graduates. Business climates that attract businesses with quality opportunities that require the skills of an educated workforce are obviously a key determinant.

National studies indicate that a statistically significant relationship exists between the number of new college graduates in a state and average educational attainment in the state's adult population. But the strength of this relationship appears modest. Studies find that if an additional 100 college-bound students choose to attend college in a given state, the long-run effect of raising the college-educated workforce in that state will be only 5 to 10 workers. Nationally, it is college attendance per se, not where students choose to attend, that is the crucial determinant of educational attainment in a given workforce. Educated workers migrate in search of occupations that align with their skill sets (J. Monks, "The Returns to Individual and College Characteristics: Evidence from the National Longitudinal Survey of Youth," *Economics of Education Review*, June 2000.)

It is therefore fair to conclude that college education yields high rewards that accrue to individuals and to the communities where they ultimately find employment. Policies that eliminate barriers (informational, ability, or financial) and result in tangible increases in the number of degree holders are interventions that should be pursued. Considerable effort has already been undertaken to alleviate financial barriers and these efforts have brought results. Effective policies aimed at increasing both enrollment and degree completion rates simultaneously could be equally rewarding.

The barriers pose significant challenges and debate over the efficacy and cost of alternative policy options will occur, but in the end the potential rewards are very high. Empirical estimates capturing the magnitude of these rewards I will detail in this paper including significant monetary returns as well as a long list of non-monetary returns that continue to yield benefits over generations.

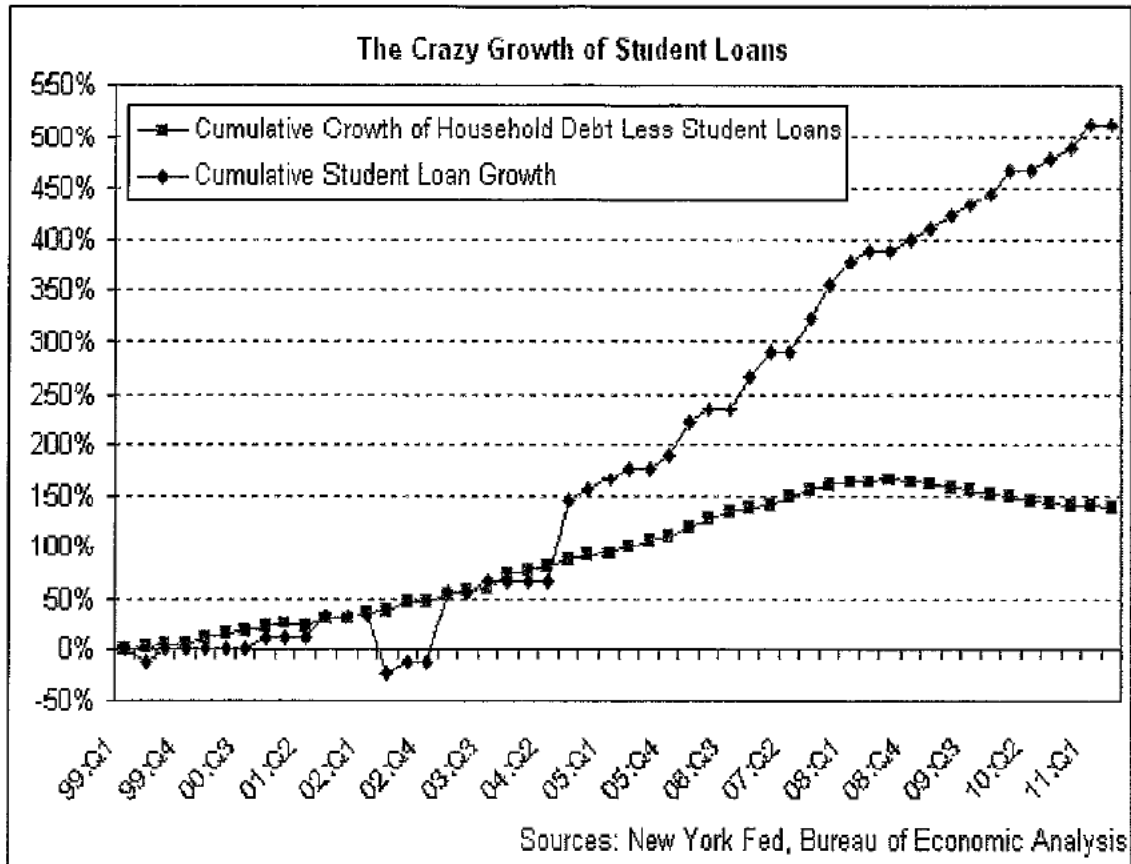
The availability of local institutions (both public and private) can be encouraged to help meet the local demands exerted by the explosive growth in the college population. National data suggest that more expenditure (both public and private) is being devoted toward the production of college graduates in states all over the country. Public and/or private investments that lead to tangible increases in degree attainment stand to deliver significant returns to the students that earn the

degrees and to the economies where they ultimately live and work. And increases in the quality of the education can lead to greater contributions to individual and societal prosperity. (please refer to chart on page 25.)

While local production is an important component, a narrow policy agenda exclusively focused on producing more college graduates locally is not likely to be sufficient in attaining the ultimate goal of increasing the proportion of productive, highly skilled workers in the labor force. Interventions that encourage quality job opportunities, amenities that attract businesses that offer quality opportunities, and a business climate that nurtures entrepreneurship and innovation are important ingredients. Furthermore, high quality local universities can play a key role in crafting this climate. Also, broad public policy initiatives that support a high quality transportation, energy/water, communication, and education infrastructure will help nurture a business climate that provides gainful employment opportunities needed to retain the graduates that are produced locally. Those opportunities also can serve as a magnet for the mobile set of educated people that are produced each year across the nation.

Unfortunately, for all of this “goodness” to take place, the nation’s prayers must be answered. But are they? Let us contemplate this thought for one second; did we view the housing bubble as an enormous catastrophe? Welcome to the nightmare of 2012: meet the education bubble. Allow me to include some startling statistics that will help to make this analysis a little more tangible. The growth in student loans over the past decade has been truly staggering.

Below is a chart based on New York Federal Reserve data for household debt – (<http://data.newyorkfed.org/creditconditions/>.) The red line shows the cumulative growth in student loans since 1999. The blue line shows the growth of all other household debt except for student loans over the same period.



Source: New York Fed, Bureau of Economic Analysis - <http://www.newyorkfed.org/index.html>

To the observant eye, this chart might look like a mistake, but it actually is correct. Student loan debt has grown by 511% over this period. In the first quarter of 1999, just \$90 billion in student loans were outstanding. As of the second quarter of 2011, that balance had ballooned to \$550 billion.

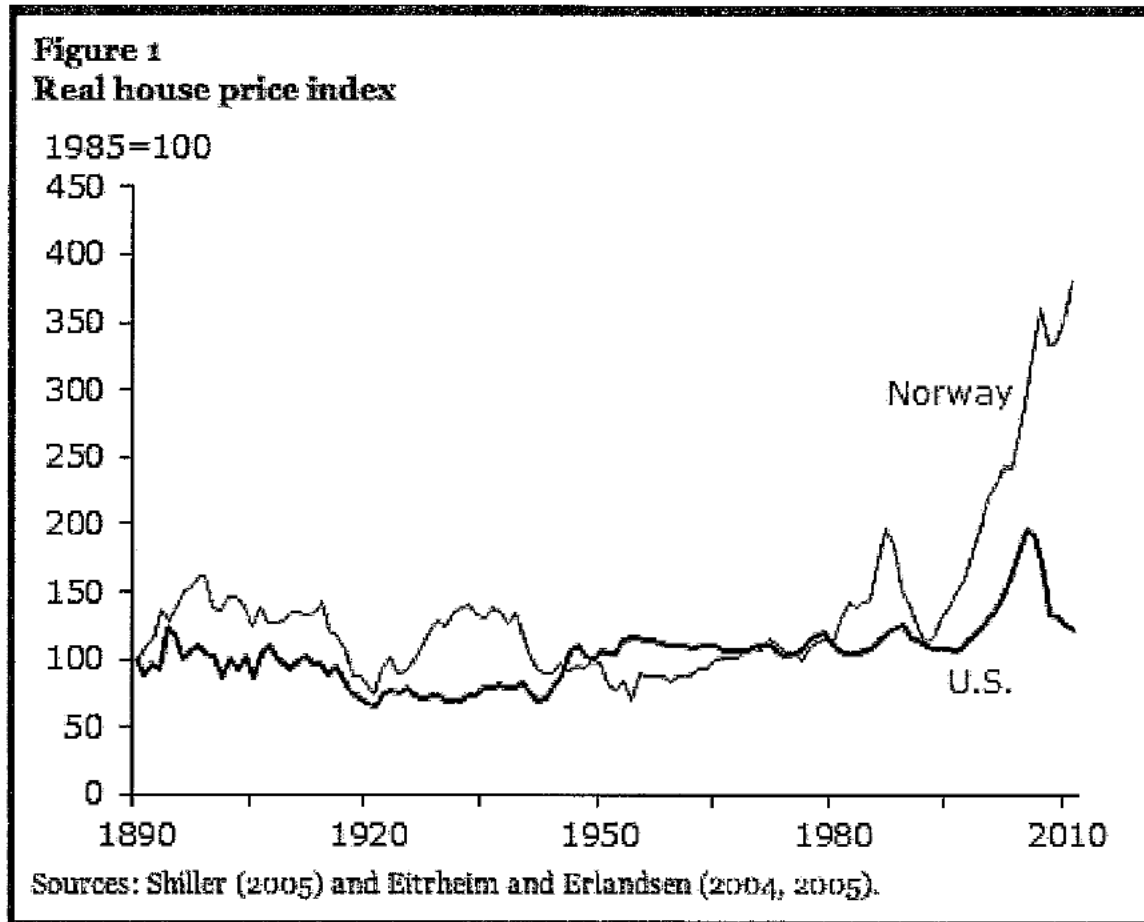
The chart above is striking for another reason. If you pay attention to the blue line, the indication is that this was not just any average period in history for household debt. This period included the inflation of a housing bubble so gigantic that it caused the financial sector to collapse and led to the worst recession since the Great Depression. And the end result of the second leg of this unspoken "other debt growth?" This 800lb gorilla would be known as what is called "the student loan debt."

The next important question to ask is how does the housing bubble debt compare? If you add together mortgages and revolving home equity, then from the first quarter of 1999 to when housing-related debt peaked in the third quarter of 2008, the sum increased from \$3.28 trillion to \$9.98 trillion. Over this period, housing-related debt had increased threefold. Meanwhile, over the entire period shown on the chart, the balance of student loans grew by more than six times. The growth of student loans has been twice as steep - and it's showing no signs

of slowing.

The irony in all this is that everything is a bubble in today's world. How many words a picture is worth? Take a look at this chart from the San Francisco Fed comparing housing prices in the U.S. and Norway over the past century – (<http://www.frbsf.org/publications/economics/letter/2012/el2012-19.html>.)

This chart is priceless in the message it is projecting.



(Note: Housing prices are inflation-adjusted and indexed to 100 from their 1985 levels.)

Looking at a disastrous example, Norway has actually had two housing bubbles over the past two decades. The first bubble looks relatively gentle but that is only because the second has been so gigantic. Norway's late-1980s bubble saw prices double in the span of a few years - roughly the same size as our own burst bubble. But that looks downright Lilliputian compared to what has happened in Norway over the past 15 years. Housing has quadrupled and that is after inflation.



Is this time different? In my opinion, of course not. It never is. How does relate to what is happening with the topic of this paper? Please allow me to explain.

Two powerful stories explain Norway's runaway housing prices; the first is the country's safe haven status. Foreign capital continuously pours into Norway during uncertain economic times - which pretty much describes the entire past five years - because it controls its own currency and its oil-based economic fundamentals are strong. That, in essence, sounds great, but it's not so great if it makes their currency so expensive that exports become uncompetitive. And that creates a catch-22 for Norway's central bank. If they raise interest rates, more foreign currency will pour in - higher interest rates would be quite enticing in a world with precious little yield – while it would cripple their non-oil export economy. Norway, giving credit where credit is due, has kept interest rates low- and that has helped push housing prices into the stratosphere.

Norway's other problem is that it is like California. There are only so many places you can build houses in Norway. Constrained supply is the other half of the recent rapid run-up in prices which deflates a bit of the concern over bubbly prices; but only a bit. Of course, none of this means that Norwegian housing will come crashing down anytime soon. Prices can keep defying gravity as long as foreign investors want to invest their money in Norway. Still, the 70 percent of Norwegians who expect housing prices to keep gaining might be in for a nasty surprise sooner rather than later.

What goes up usually comes down. It is obvious that the student population did not grow by 511 percent. So why are education loans growing so rapidly? One reason could be availability. It is apparent that with the government's backing, credit seems to flow very freely towards students. Universities, quietly, are raising tuition aggressively since students are willing to pay more through those loans.

With Wall Street and the financial industry pondering a quiet nightmare which may resemble that of the depressed housing industry, one can only surmise that they must be anticipating another disaster because it would be fair to state that this student loan growth looks unsustainable. What is not hard to imagine is how this bubble's inevitable pop might look; ultimately, it might look more like a balloon slowly deflating, if a large portion of college graduates decide to strategically default on their debt over a period of time.

The totality of all this college debt could put the U.S. on a slower growth path in the years to come. As young Americans grapple with high student loan payments for the first few decades of their adult lives, they will have less money to spend and invest. All that money flowing into colleges and universities is being funneled away from other industries where it would have been spent in future years. Of course, this would be a rather unfortunate irony: higher education is supposed to enhance a nation's growth, but with such an enormous debt burden, graduates might not be able to spend and invest enough to allow that growth to occur –

(<http://www.theatlantic.com/business>.)

I will now unite all three stated topics that I made: the escalating cost of higher education is causing many to question the value of continuing education beyond high school. Many are wondering whether the high cost of tuition, the opportunity cost of choosing college over full-time employment, and the accumulation of thousands of dollars of student debt is, in the long run, worth the investment. The risk is especially large for low-income families who have a difficult time making ends meet without the additional burden of college tuition and fees. In order to determine whether higher education is worth the investment, it is useful to examine what is known about the value of higher education and the rates of return on investment to both the individual and to society.

### **THE ECONOMIC VALUE OF HIGHER EDUCATION**

As I mentioned earlier in my research, there is considerable support for the notion that the rate of return on investment in higher education is high enough to warrant the financial burden associated with pursuing a college degree. Though the earnings differential between college and high school graduates varies over time, college graduates, on average, earn more than high school graduates. According to the Census Bureau, over an adult's working life, high school graduates earn an average of \$1.2 million; associate's degree holders earn about \$1.6 million; and bachelor's degree holders earn about \$2.1 million (Day and Newburger, 2002.)

These sizeable differences in lifetime earnings put the costs of college study in a realistic perspective. Most students today - about 80 percent of all students - enroll either in public 4-year colleges or in public 2-year colleges. According to the U.S. Department of Education report, Think College Early, a full-time student at a public 4-year college pays an average of \$8,655 for in-state tuition, room and board (U.S. Dept. of Education, 2002.) A full-time student in a public 2-year college pays an average of \$1,359 per year in tuition (U.S. Dept. of Education, 2002.)

These statistics support the contention that though the cost of higher education is significant, given the earnings disparity that exists between those who earn a bachelor's degree and those who do not, the individual rate of return on investment in higher education is sufficiently high to warrant the cost.

The other side of this theory goes as follows: Money problems, not bad grades, are the reason cited by most college students who have considered dropping out. The Associated Press-Viacom conducted a poll and the results of the poll are below which I summarized.

- Almost 6 in 10 students rely on loans to help with college costs, and nearly half confirm that they are uncomfortable with the debt. A majority of

students at four-year colleges say they routinely feel at least a little worried about having enough money to make it through the week.

- As we have all been through a college or two, “scrimping” has long been part of the college experience but tough times in the real world mean even tighter money on campus. Recession-battered parents have less money to spend on their children’s tuition; jobs that used to be available, upon graduation, no longer exist. This availability has all been consumed by the nation’s 8.2% unemployment rate - <http://www.bls.gov/cps/>. As college prices continue to rise, states continue to struggle with over-the-top budget deficits. Average tuition, room and board rose to about \$16,000 at in-state public schools this year and \$37,000 at private schools.
- Most college students, 84%, need more than one source of income to keep up.
- About two-thirds say they work part time or more to help pay for college. That’s supplemented by another popular source of funds: Mom and Dad. Six in ten get help from parents. That same number also relies on scholarships for part of the bill.

Going further into the poll, several students were interviewed and their opinions and statements I have both quoted and summarized their responses and stories.

“For a while, I couldn’t find a job, and it was like, ‘How am I going to eat? And how am I going to get to school if I don’t have gas?’” said Allyson Bure, 20, a nursing student who works two part-time jobs, as a clerk at a Fashion Bug store and as a hotel housekeeper.

Like 57 percent of college students surveyed, Bure depends on student loans. Including debt she racked up at another school, she expects to owe about \$52,000 by the time she finishes her associate’s degree at Trocaire College in East Aurora, N.Y. then hopes to transfer to a 4 year university. Many students are uneasy about borrowing, with good reason. The United States Department of Education says 7 percent of borrowers default within two years of beginning repayment on loans that can stretch for a decade or more; the average student loan debt tops out to \$23,000 – (<http://www.ed.gov/>.)

Bure’s confident that she’ll earn enough to pay off her loans. She is studying to become a nurse anesthetist, a job that can pay well over \$100,000 per year. “I’ll be secure,” she predicts.

Despite the rising costs, 85 percent of students and recent grads say college is worth the time and money. In overwhelming numbers, they express satisfaction with the education they’ve received. And they have wide expectations for that education. Most say it’s very or extremely important that colleges broaden

students' knowledge and expand their minds, help them gain life skills, expose them to new experiences and train them for a career. Nine out of ten expect to find a job in their field and for most, that's the bottom line. 55 percent say an education that focuses on success in the working world is more valuable than one focused on general knowledge and critical thinking.

With that pragmatic attitude, many treat education like a commodity to be shaped to fit their needs and budgets. Most college students say cost was a big factor in determining where they applied and which school they ended up attending. A large majority, 86 percent, say it's worthwhile to switch programs if you are not getting exactly what you want from a school. A third say they added another major to increase their options after graduation. Three-fourths say it is more important to take the time to get exactly what they want from their education than to finish within the traditional four years, and a quarter who finished took extra time.

On the other hand, lots of students are racing to the finish in order to save money. About 4 in 10 college students hope to graduate in less than four years. To get a jump start, 58 percent of students took college-credit courses in high school. And about half earned credits at a community college before moving on to a more expensive bachelor's degree program.

This is what Falma Habbaba is doing. Once she has completed two years at Cuyamaca College, she plans to transfer to nearby San Diego State University. Half of the college students surveyed, including Habbaba, hope to continue their educations beyond a four-year degree. In her case, it's law school that beckons.

Habbaba, 18, has been relying on grants and a part-time job as a restaurant hostess to pay her way, and she worries about finding enough money to finish her schooling. But she's optimistic that she'll achieve career happiness. So are 94 percent of the college students surveyed. For half of college students, money was a big factor in choosing what career to pursue. But more than one-fourth say that didn't enter into their thinking at all.

"If you do what you love, you'll be all right in life," Habbaba said.

(The AP-Viacom telephone survey of 1,104 adults ages 18-24 was conducted Feb. 18-March 6 by GfK Roper Public Affairs & Corporate Communications. The margin of sampling error is plus or minus 3.5 percentage points) (Courtesy of AP Poll - <http://usatoday30.usatoday.com/money/perfi/college/2011-04-23-college-students-money-poll.htm>.)

With such a high percentage of students on the cusp of surviving on the barest minimum financially, starting one's business has become the best hedge on an economy that might require more time than most desire for it to recover. An education is the most "win-proof" method to a hopeful path to success.

In every sense of the word, colleges are starting to become startup incubators by offering a variety of classes and programs in order to help students pursue their entrepreneurial ambitions. This is good news for students because employers feel that they should gain entrepreneurship experience before graduation. Many professors, in the assorted business schools, are current or former entrepreneurs who act as mentors to students and teach them critical marketing, sales, and operation skills. The Kaufman Foundation estimates that more than 2,000 colleges and universities in the US, two thirds of the total, offer a course in entrepreneurship – (<http://www.kauffman.org>.) There are now approximately 5,000 courses on entrepreneurship, up from 250 back in 1985 – (<http://www.kauffman.org>.) There are a few famous college dropouts, including Facebook's Mark Zuckerberg, that didn't need a business curriculum to start their companies, and a few lucky students who were selected as part of Peter Thiel's "Thiel Fellowship" program, but these are the outliers – (<http://www.thiefellowship.org>.) Mark Zuckerberg was in the right place at the right time and most students do not and will not get into Peter Thiel's program. What is a fact is that many students could use the education, network and support of an entrepreneurial institution. This theme of "acquiring an education" is predominantly becoming the backbone of future success.

One then could ask why are colleges creating these classes, programs and centers? An obvious answer goes as follows: many students are passionate about entrepreneurship over full-time employment, the barriers to entry are lower to starting a business now because of the internet and young people believe that entrepreneurs create jobs which are good for the economy. An organization known as The Global Entrepreneurship Monitor (GEM) presented by Babson College (ranked #1 for entrepreneurship education) shows that there are 165 million early-stage young entrepreneurs age 18 to 25 – (<http://www.babson.edu/News-Events/babson-news/Pages/1-19-12globalgem2011release.aspx>.) A positive trend from this is that more and more students are starting their businesses in college and graduating into full-time entrepreneurs. How does one place a monetary value on this education?

One way colleges stimulate entrepreneurship, innovation, and gain publicity is by holding business plan competitions, where students present to a panel of judges in hopes to win a prize or get funding for their ventures. Examples of colleges and universities participating are as follows: Bentley University has been holding the "Bentley Business Bowl" for fifteen years – (<http://www.youtube.com/watch?v=RPRBOyy19tg>.) Another school is NYU's Stern School of Business. At Stern School of Business, there are two separate Entrepreneur Challenges open to students and alumni – traditional ventures and ideas that address social programs. The winners of both can get up to \$75,000 of funding – (<http://www.stern.nyu.edu/experience-stern/about/departments-centers-initiatives/centers-of-research/berkley-center/programs/venture-competitions/about/index.htm>.) Another school is Columbia University; they

reward students for outrageous business plans in the form of elevator pitches – (<http://www4.gsb.columbia.edu/entrepreneurship/affiliates/getinvolved/outrageous>.) And of course, Eastern Michigan University College of Business, which annually hosts its own small business competition for both college students and high school students.

Closer to home, entrepreneurship class offerings at the University of Michigan offer three types of classes: 1) engagement classes where students are made aware of the importance of entrepreneurship 2) skill-building classes 3) practicum classes in which companies and projects are launched. In total, they have 2,500 students in entrepreneurship classes each year. Thomas H. Zurbuchen, the Associate Dean for Entrepreneurship Programs, says that they try and hire entrepreneurs as teachers but in some classes they do not have a current entrepreneur involved. What is unique is that at the University of Chicago's Booth School of Business, students are taken beyond the classroom, allowing them to actually test their ideas in real-world situations – (<http://www.chicagobooth.edu/entrepreneurship/curriculum/>.) Tracey Keller, an Associate Director of the Polsky Center for Entrepreneurship, says that students not only take courses, but participate in competitions and labs, which further gives them practical tools to help start, finance and manage their own businesses – (<http://www.chicagobooth.edu/entrepreneurship/>.) At Boston University, Peter R. Russo, the Director of Entrepreneurship Programs, stated that all of their professors have been entrepreneurs – (<http://gcec2011.com/Boston%20University%202011.pdf>.) The evidence continues to mount on the importance and the value of a college degree; unfortunately on the other end of the spectrum, there lie the naysayers who would disagree.

Students who take entrepreneurship classes do not always have their own business. They are mainly taking these programs and classes to learn how to start one successfully. The University of Michigan estimates that only 10 percent of students own their own company prior to taking entrepreneurial classes. William Baumol, the Academic Director of the Berkley Center for Entrepreneurship & Innovation at NYU's Stern School, says that about one third have their own business. He elaborates by further stating that about 10 percent of undergrads, 20 percent of MBA's and an additional 20+ percent of students have family operated businesses – (<http://www.stern.nyu.edu/experience-stern/about/departments-centers-initiatives/centers-of-research/berkley-center/index.htm>.)

Seeing that there is a skeptical and academia-fatigued public, how are universities able to justify any entrepreneurship program within their curriculums? The justification would go as follows: If you don't have a business idea in mind but are interested in eventually starting one, it might make sense to enlist in an entrepreneurship program. If you already have a business and it's not doing well, then further education can help you improve on the bottom line. Whereas, if your

startup is extremely successful, then the need for further education might be a necessity. William Baumol, from NYU, admits that many successful entrepreneurs don't have an advanced degree but that it can help a student's subsequent work and provide some improvements. This statement I strongly agree with. He further stated that "college courses are not enough to create entrepreneurship." It would be fair to state that the overall consensus is that students gain more than classroom content – they learn how to work in a team and establish a network. A college education is not necessary to be successful but it can greatly improve your chances. My theory goes as follows: The college degree, being a safety net if your business were to fail, still gives the individual a chance to say that I have a degree and an expanded network on which to build my future career on. No one anticipates or looks forward to such a negative scenario but a degree gives one that edge of comfort and security.

### **ADDITIONAL BENEFITS OF HIGHER EDUCATION**

Today's college graduate also enjoys benefits beyond increased income. A 1998 report published by the Institute for Higher Education Policy reviewed the individual benefits that college graduates enjoy, including higher levels of saving, increased personal/professional mobility, improved quality of life for their offspring, better consumer decision making, and more hobbies and leisure activities (Institute for Higher Education Policy, 1998). According to a report published by the Carnegie Foundation, non-monetary individual benefits of higher education include the tendency for post-secondary students to become more open-minded, more cultured, more rational, more consistent and less authoritarian; these benefits are also passed along to succeeding generations (Rowley and Hurtado, 2002). Additionally, college attendance has been shown to "decrease prejudice, enhance knowledge of world affairs and enhance social status" while increasing economic and job security for those who earn bachelor's degrees.

Research has also consistently shown a positive correlation between completion of higher education and good health, not only for oneself, but also for one's children. In fact, "parental schooling levels (after controlling for differences in earnings) are positively correlated with the health status of their children" and "increased schooling (and higher relative income) are correlated with lower mortality rates for given age brackets" (Cohn and Geske, 1992). The value of a college degree grows stronger with each point stated.

### **THE SOCIAL VALUE OF HIGHER EDUCATION**

A number of studies have shown a high correlation between higher education and cultural and family values, and economic growth. According to Elchanan Cohn and Terry Geske (1992), there is the tendency for more highly educated women to spend more time with their children; these women tend to use this time to better prepare their children for the future. Cohn and Geske (1992) report that

"college graduates appear to have a more optimistic view of their past and future personal progress."

Public benefits of attending college include increased tax revenues, greater workplace productivity, increased consumption, increased workforce flexibility, and decreased reliance on government financial support (Institute for Higher Education Policy, 1998).

## **COLLEGE ATTENDANCE VERSUS COLLEGE COMPLETION**

In their report, "College for All? Is There Too Much Emphasis on Getting a 4-Year College Degree?" Boesel and Fredland estimate that around 600,000 students leave 4-year colleges annually without graduating. These non-completers earn less than college graduates because they get fewer years of education. More surprising, they tend to earn less than or the same amount as 2-year college students who have as much education. Furthermore, 2-year college students show about the same gains in tested cognitive skills for each year of attendance as 4-year college students. Students at 4-year colleges also pay more in tuition and are more likely to have student loan debts than 2-year students (Boesel and Fredland, 1999, p. viii). The authors conclude that high school graduates of modest ability or uncertain motivation-factors that increase their chances of leaving college before graduation-would be well-advised to consider attending 2-year, instead of 4-year, colleges. If they did, they would probably realize the same earnings and cognitive skill gains at lower cost and with less debt. In order to maximize the return on their time and monetary investment, students who do choose to enroll in 4-year colleges should do everything in their power to graduate. (Boesel and Fredland, 1999, p.ix).

Let us examine how society, when confronted with an important issue that is or has reached critical mass, deals with this issue. Society has been conditioned and is told when an issue attains critical mass status when comics like late-night comedian Jimmy Fallon's "Slow Jam the News" picks it up and President Obama shows up to help.

The subject of the slow jam? On July 1, the interest rate for some new federal student loans are scheduled to increase to 6.8 percent from 3.4 percent. This legislation should be voted on very soon. President Obama is proposing to extend the lower rate for another year; whereas, Republicans in Congress say they support the extension but disagree with the president's plan to pay for it.

Today, many graduates are struggling with unaffordable loan payments so the mere suggestion that loans will become more expensive is worrisome to a majority of college students. Unfortunately, a lot of information that has been circulated about the pending rate increase is misleading, if not downright wrong. If you have student loans, or plan to borrow, here are the facts:



- The increase would only affect interest rates for subsidized Stafford loans for undergrad students issued after July 1, 2012.
- Interest rates for existing loans won't change.  
[http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college\\_costs.htm](http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college_costs.htm)

What is known within the academia world is about a third of undergraduate students have subsidized Stafford loans, which are awarded based on economic need. The College Cost Reduction and Access Act of 2007 gradually reduced the rates for subsidized loans for undergraduate students from 6.8 percent to 3.4 percent through 2012-13. The rates borrowed are fixed for the life of the loan. For example, the rate for Subsidized Stafford loans issued for academic year 2010-11 is 4.5 percent. That rate will not change on July 1, no matter what happens in Congress - [http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college\\_costs.htm](http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college_costs.htm).

An interest-rate rate increase for Subsidized Stafford loans would affect more than 7 million undergraduate students, according to the Department of Education - [http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college\\_costs.htm](http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college_costs.htm). The administration estimates that doubling loan rates would increase their interest costs by more than \$5,000 over the life of the loan - [http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college\\_costs.htm](http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college_costs.htm). That estimate is based on a borrower with \$23,000 in Subsidized Stafford loans, the maximum allowed for undergraduate dependent students. A borrower with an \$11,329 loan would pay an extra \$2,265 in interest, or about \$22 a month, based on a 10-year repayment term - <http://www.finaid.org/>.

- Rates for Unsubsidized Stafford loans won't change. The College Cost Reduction and Access Act didn't affect rates for Unsubsidized Stafford loans, which are available to all full-time college students, regardless of financial need. Unsubsidized Stafford loans issued since July 1, 2006, have a fixed rate of 6.8 percent. Likewise, rates for subsidized loans for graduate and professional students will remain at 6.8 percent.
- Even if rates rise on July 1, Subsidized Stafford loans are generally less costly than private student loans.

However, some private lenders are advertising student loan rates as low as 3 percent, which makes them look like an attractive alternative to Stafford loans with a 6.8 percent rate. What most lenders are not aware of is that private loan rates are usually variable, which means they could rise higher if overall rates increase. To qualify for the lowest rates, most borrowers will need a co-signer, which puts that individual - usually a parent - as a "fall back system" for the payments if the borrower falls behind.

If you qualify for a Subsidized Stafford loan, the government will pay the interest

on the loan while you are in school. Interest on private student loans and Unsubsidized Stafford loans accrues while you are in school. If you do not make interest payments, and some private lenders require that you do, the interest is capitalized and added to your loan balance.

In addition, both subsidized and unsubsidized federal student loans offer repayment options that typically are not available to borrowers with private loans. If you lose your job, for example, you automatically qualify for deferral of loan payments for up to three years. Borrowers who cannot afford their monthly payments may be eligible for the income-based repayment program, which reduces payments based on discretionary income. After 25 years of qualifying payments, the balance of the loan will be forgiven. This, might I say, is every student's dream. The federal government also offers loan forgiveness programs for borrowers who pursue careers in public service. Some private lenders provide forbearance or interest-only payments for borrowers who are experiencing hard times, but that's voluntary.

The critical question to be answered is this: Is the debt which will be acquired worth anything in the future as in a better life versus not acquiring that debt? What is clear is this; investment in a college degree, especially for those students in the lowest income bracket, is a financial burden. The positive in this is that the long-term benefits to individuals as well as to society at large, appear to far outweigh the costs. The bigger picture must be put into proper perspective to be able to grasp the full benefit.

## **BENEFITS TO INDIVIDUALS OF ENHANCED EDUCATIONAL ATTAINMENT**

- Individual earnings are strongly related to educational attainment. People who have completed high school earn more than those who have not; people with a bachelor's degree earn more than those with only a high school diploma; and those with a graduate education earn more than those with only an undergraduate education. (J. Pencavel, "Higher Education Productivity and Earning: 1991.)
- Average annual earnings of individuals with a bachelor's degree are more than 75 percent higher than the earnings of individuals whose maximum educational attainment is a high school diploma. Over a lifetime career, an individual with a bachelor's degree earns on average in excess of \$1 million more than a counterpart with only a high school diploma. (S. Hoenick, "Higher Education and Economic Growth," 1994.)
- The differential in earnings based on educational attainment has increased over time. For example, for full-time male workers between the ages of 35 and 44, the earnings premium associated with having a bachelor's degree versus a high school diploma has risen from 38 percent

in the 1980-84 period to 94 percent in 2000-03. (U. S. Department of Commerce, Bureau of Economic Analysis, Retrieved August 2005, from <http://www.bea.gov/>.)

- The benefits to an individual from a university education vary with the quality of the institution attended. Those who graduate from an elite university earn substantially more than those who graduate from a lower-quality institution.
- To properly assess the economic value of a college education, the benefits realized in terms of higher future earnings must be discounted to adjust for the time value of money. The discounted earnings must then be weighed against the full costs of acquiring a college education including not only the tuition paid by the student, but the earnings foregone while the student is in college and the appropriations of state and local governments. When these calculations are made, the benefits of a college education are seen to be more than three times as large as the costs. (credit – Econ 201 with Prof Vogt, Eastern Michigan University.)
- If the value of a college education is expressed on the same basis as the return on a financial investment, the net return is on the order of 12 percent per year, over and above inflation. This compares favorably with annual returns on stocks that historically have averaged 7 percent. (credit - FIN 352 with Dr. Newell, Eastern Michigan University.)
- Despite the very high return on investment for the time and money spent on attaining a college degree, only one-quarter of the U.S. adult population has at least a bachelor's degree. Academic ability and information barriers limit the number of individuals who attain a university degree. (U.S. Department of Commerce, Census Bureau, 2000 Census. Retrieved August 2005, from <http://www.census.gov/main/www/cen200.html>.)
- Financial barriers to the completion of a bachelor's degree exist but government programs that promote access have been effective.
- The academic ability of the individual - which is shaped throughout his/her life by a variety of family and environmental factors - and the values and goals of the individual - which are strongly influenced by the education of his/her parents - are the main determinants of educational attainment.

To determine the economic value of a college education, benefits must be weighed against the full costs of obtaining that education. These costs include the tuition payments made by the college attendee, the opportunity costs associated with earnings foregone while in college, and in the case of a public university, the appropriations of state and local governments. The return on

investment calculated using full costs is a more useful guide for public policy than one calculated using only the costs incurred by the student. College may represent a good personal investment for an individual if that education is highly subsidized by the government. But college is shown to represent a wise use of society's resources when the value of the enhanced skills the individual receives, as measured by increased earnings capacity, exceeds the full resource costs of providing that education.

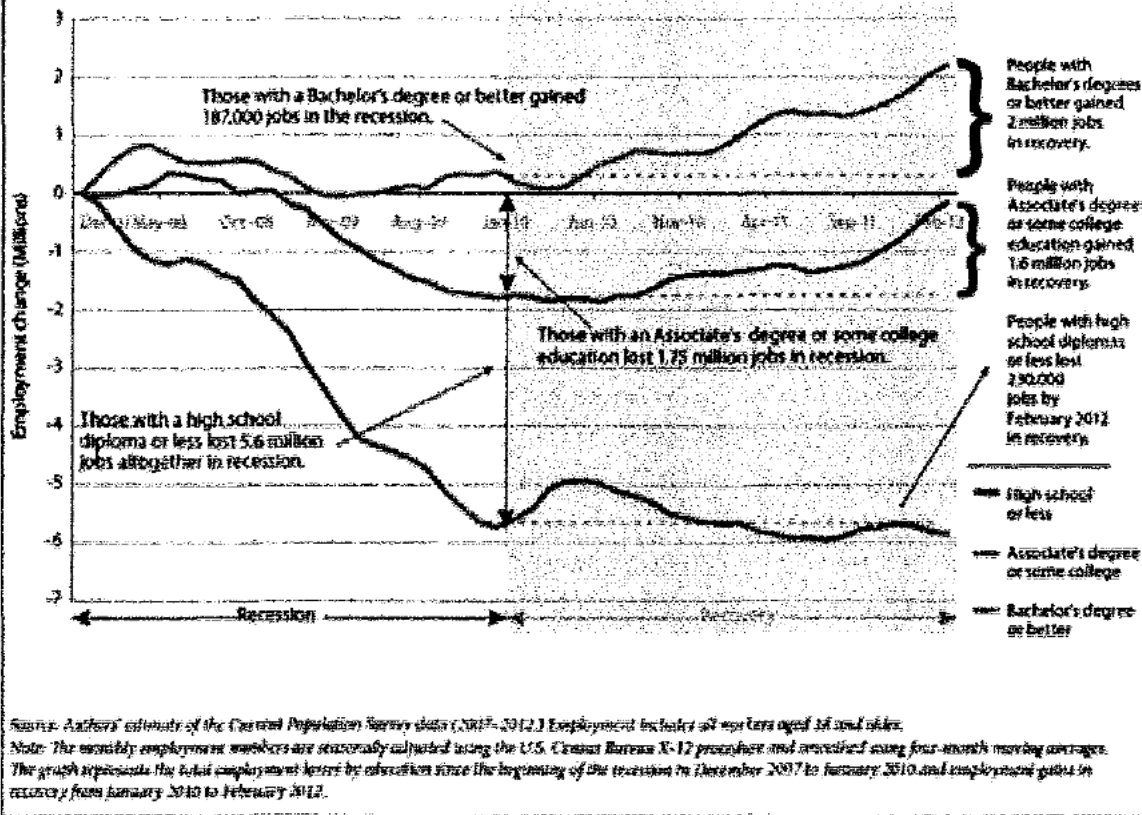
With the cruel hand that has been dealt to college graduates who now have incurred a sizeable debt of loans from their respective colleges and universities, how do they justify the fact that there are fewer jobs available to the graduating senior? What would normally have been considered trivial news in a growing and prospering economy is now a threat in today's flailing economy. First, we may be going through a technological shift in employment not unlike that of the Industrial Revolution. In 1850 the largest group of workers in the United States were on farms. By the 1900's, the largest group were domestic workers. (Data suggest that Great Britain had twice as many domestic workers per household as the US in 1900, and Germany some 50 percent more.) The number of people in paid domestic work increased dramatically throughout the late 19th century in most European countries. The United States experienced a similar situation, which continued into the early 1900's and was largely due to the growing number of middle-and-upper-class families that wanted and could afford household help. The arrival of a great many unskilled immigrants who could find no other form of employment contributed this growth" -

(<http://www.britannica.com/EBchecked/topic/616563/United-States>.) By 1870, one in five Chicago households employed domestic workers, who accounted for 60 percent of the city's wage-earning women. Over the next half century, domestic service represented the leading occupation of women in Chicago and the nation.

What caused the shift from farming? It was partly technology-driven. Farming became far more productive with the introduction and improvement of the McCormick reaper, new plough designs, etc., along with the spread of railroads to bring the increased bounty to cities quickly and cheaply. As the prices of agricultural goods dropped, smaller farms became less profitable and labor moved from the country to the city. Men generally became laborers, and women migrated to domestic work. In 1900, there were few labor-saving devices. Food had to be prepared from scratch daily. Doing the cooking, cleaning, laundry, sewing, child care, etc. made for a very full day. The growing middle class in Europe and the U.S employed domestic help.

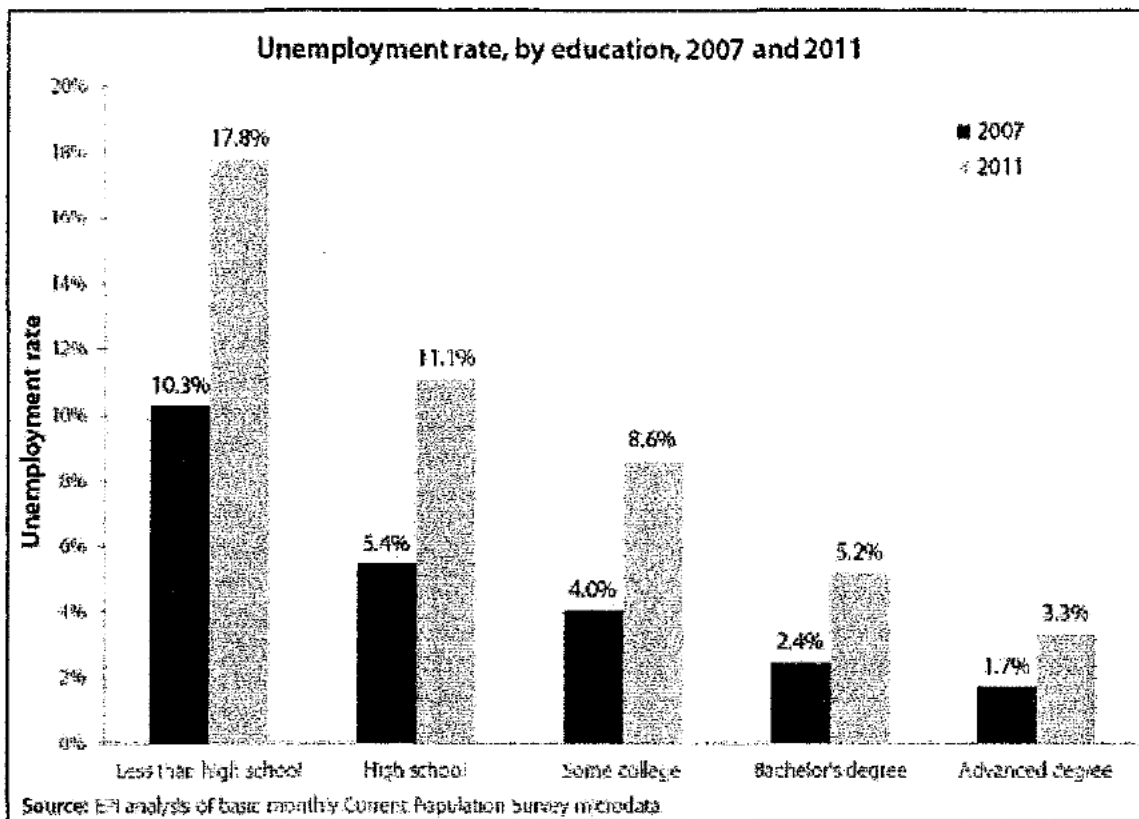
To gain an advantage over one's peer on securing that job opening, a college degree became a "must have!" A person with a college education clearly has an advantage over those with only a high school diploma or less, but it is no guarantee of security. The Georgetown Center on Education and the Workforce published a study highlighting the problems. Please refer to the chart below.

**FIGURE 1: Workers with a high school diploma or less bore the brunt of the recession's job losses. Job gains in the recovery are confined to those with education beyond high school.**



Source: <http://static2.businessinsider.com/image/5039339f69bedd0c53000009-960/mauldin.jpg>

After closer examination of the above chart, I noticed that this graph only tells part of the story. The report, whether intentional or not, encompasses together bachelor's degree holders with workers who have a master's, doctorate, or professional degree. According to their data, which is between 2007 and 2011, 98.3 percent of the job gains in that combined group went to the advanced degree holders. It would appear that we are really in a graduate school economy. The next chart below clearly highlights this point graphically.



Source: <http://static2.businessinsider.com/image/5039339f69bedd0c53000009-960/mauldin.jpg>

The chart above indicates that 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. Broken down by occupation, young college graduates were heavily represented in jobs that require a high school diploma or less.

In the last year, they were more likely to be employed as waiters, waitresses, bartenders and food-service helpers than as engineers, physicists, chemists and mathematicians combined (100,000 versus 90,000). More students were working in office-related jobs such as receptionist or payroll clerk than in all computer professional jobs (163,000 versus 100,000). More students were also employed as cashiers, retail clerks and customer representatives than engineers (125,000 versus 80,000). According to government projections released last month, only three of the 30 occupations with the largest projected number of job openings by 2020 will require a bachelor's degree or higher to fill the position; teachers, college professors and accountants –

(<http://www.bls.gov/news.release/ecopro.nr0.htm>.) Most job openings are in professions such as retail sales, fast food and truck driving. These are jobs which are not easily replaced by computers.

The primary point of this paper is what value do we, as a society, put towards attaining a degree and at what cost? Presenting both sides of this important argument is essential to one making a fair assessment of where we stand as a society. I think it would be fair to state that although the cost can be higher for some than others, the overall and collective agreement is as follows: The benefits of going to college, aside from getting a job, that are intangible include unique accomplishments like finding a marriage partner, making life long friends, making good contacts, networking with classmates and professors, the college life itself, exposing yourself to a broader scope of education, developing analytical and critical thinking skills, and the list goes on and on.

While it is clear that investment in a college degree, especially for those students in the lowest income brackets, is a financial burden, the long-term benefits to individuals as well as to society at large, appear to far outweigh the costs. If you are spending tens of thousands of dollars on an education, the logical line of thought is to get the most out of it because after all, it is an investment on your future. According to the rules of society, **having a college degree does and will open a lot of doors; that is just the way it is!!**

## **REFERENCES**

Day, J.C., & Newburger, E.C. (2002). The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings. (Current Population Reports, Special Studies, P23-210). Washington, DC: Commerce Dept., Economics and Statistics Administration, Census Bureau. [On-Line]. Available: <http://www.census.gov/prod/2002pubs/p23-210.pdf>

U.S. Dept. of Education, 2002

Institute for Higher Education Policy (1998). Reaping the Benefits: Defining the Public and Private Value of Going to College. The New Millennium Project on Higher Education Costs, Pricing, and Productivity. Washington, DC: Author.

Rowley, L.L., & Hurtado, S. (2002). The Non-Monetary Benefits of an Undergraduate Education. University of Michigan: Center for the Study of Higher and Postsecondary Education.

Cohn, E., & Geske, T.G. (1992). Private Nonmonetary Returns to Investment in Higher Education. In Becker, W. & Lewis, D. The Economics of American Higher Education. Boston, MA: Kluwer Academic Publishers.

Boesel, D., & Fredland, E. (1999). College for all? Is there too much emphasis on getting a 4-year college degree? Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Library of Education.

U.S. Department of Education (2001). Digest of Education Statistics 2001. [On-Line]. Available: <http://nces.ed.gov/pubs2002/digest2001/tables/PDF/table170.pdf>

U.S. Department of Education (2000). Think College Early: Average College Costs. [On-Line]. Available: [http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college\\_costs.htm](http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college_costs.htm)

Ellsberg, M. (2011). The Education Of Millionaires: It's Not What You Think And It's Not Too Late. New York: Portfolio/Penguin. U.S. Department of Commerce, Census Bureau, 2000 Census. Retrieved August 2005, from <http://www.census.gov/main/www/cen200.html>

Carnevale, A. P., Strohl, J., & Melton, M. (2011). What's it worth?: The economic value of college majors. Washington D.C.: Georgetown University Center on Education and the Workforce.

Education Pays - [http://trends.collegeboard.org/education\\_pays](http://trends.collegeboard.org/education_pays)

United States Department of Labor; Bureau of Labor Statistics, <http://www.bls.gov/cps/>. Associated Press - Viacom Poll; <http://usatoday30.usatoday.com/money/perfi/college/2011-04-23-college-students-money-poll.htm>.

D. Black and J. Smith, "How Robust is the Evidence on the Effects of College Quality?"



- Evidence from Matching," *Journal of Econometrics*, July/August 2004, pp. 99-124.
- D. Card, "The Causal Effect of Education on Earnings," *Handbook of Labor Economics*, Ed. O. Ashenfelter and D. Card, Vol. 3A, North-Holland, 1999, pp. 1801-1863.
- D. Card, "Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems," *Econometrica*, September 2001, pp. 1127-60.
- D. Card, "Education Matters: Commentary," *The Milken Institute Review*, Fourth Quarter 2002, pp. 73-77.
- P. Carneiro and J. Heckman, "The Evidence on Credit Constraints in Post-Secondary Schooling," *The Economic Journal*, October 2002, pp. 705-734.
- R. Ehrenberg, "Econometric Studies of Higher Education," *Journal of Econometrics*, July/August 2004, pp. 19-37.
- J. Monks, "The Returns to Individual and College Characteristics: Evidence from the National Longitudinal Survey of Youth," *Economics of Education Review*, June 2000, pp. 279-289.
- G. Cameron and J. Heckman, "The dynamics of Educational Attainment for Black, Hispanic, and White Males," *Journal of Political Economy*, Vol. 109, No. 3, June 2001, pp. 455-499
- Boesel, D., & Fredland, E. (1999). *College for all? Is there too much emphasis on getting a 4-year college degree?* Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Library of Education.
- Cohn, E., & Geske, T.G. (1992). *Private Nonmonetary Returns to Investment in Higher Education*. In Becker, W. & Lewis, D. *The Economics of American Higher Education*. Boston, MA: Kluwer Academic Publishers.
- Day, J.C., & Newburger, E.C. (2002). *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings*. (Current Population Reports, Special Studies, P23-210). Washington, DC: Commerce Dept., Economics and Statistics Administration, Census Bureau. [On-Line]. Available: <http://www.census.gov/prod/2002pubs/p23-210.pdf>
- The College Board. (2001). *Trends in Student Aid 2001*. New York: The College Board. Institute for Higher Education Policy (1998). *Reaping the Benefits: Defining the Public and Private Value of Going to College*. The New Millennium Project on Higher Education Costs, Pricing, and Productivity. Washington, DC: Author.
- Rowley, L.L., & Hurtado, S. (2002). *The Non-Monetary Benefits of an Undergraduate Education*. University of Michigan: Center for the Study of Higher and Postsecondary Education.
- Schultz, T.W. (1961). *Investment in Human Capital*. *American Economic Review*, 51: 1-17.

U.S. Department of Education (2001). Digest of Education Statistics 2001. [On-Line]. Available: <http://nces.ed.gov/pubs2002/digest2001/tables/PDF/table170.pdf>

U.S. Department of Education (2000). Think College Early: Average College Costs. [On-Line]. Available: [http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college\\_costs.htm](http://www.ed.gov/offices/OPE/thinkcollege/early/parents/college_costs.htm)

Wolfe, B.L. (1994). External Benefits of Education. International Encyclopedia of Education. Oxford; New York: Pergamon Press.

E. Glaeser and D. Mare, "Cities and Skills," *Journal of Labor Economics*, April 2000. P. Gotlieb and M. Fogarty, "Educational Attainment and Metropolitan Growth," *Economic*

J. Pencavel, "Higher Education Productivity and Earning: A Review." *Journal of Economic Education*, Vol. 22, No. 4, 1991, pp 331-359.

S. Hoenick, "Higher Education and Economic Growth," *Higher Education and Economic Growth*, ed. William E. Becker and Darrel R. Lewis, Kluwer Publications, 1994.

B. Wolfe and R. Haveman, "Accounting for the Social and Non-Market Benefits of Education," *The Contributions of Human and Social Capital to Sustained Economic Growth and Well-Being*, ed. J. Helliwell, International Symposium Report, OECD and HRDC, pp. 221-250, 2002.

U.S. Department of Commerce, Census Bureau, 2000 Census. Retrieved August 2005, from <http://www.census.gov/main/www/cen200.html>

National Center for Education Statistics, IPEDS Peer Analysis System, Retrieved August 2005, from <http://nces.ed.gov/ipeds/pas/firstTime.asp>.

W. J. Howe, "Effects of Higher Education on Unemployment Rates," *Higher Education and Economic Growth*, ed. William E. Becker and Darrel R. Lewis, Kluwer Publications, 1994.

U. S. Department of Commerce, Bureau of Economic Analysis, Retrieved August 2005, from <http://www.bea.gov/>.

State Higher Education Executive Officers, *State Higher Education Finance FY 2009* (Boulder, CO: SHEEO, 2010)

New York Fed, Bureau of Economic Analysis - <http://www.newyorkfed.org/index.html>