

**Attending College:  
Pros, Cons, and Alternative Paths to Employment**

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## **Introduction**

The value of a college degree in securing employment seems more and more prevalent, yet few question whether this is borne out of necessity. In other words, in an ideal world, does having a majority of the working population holding associates or bachelor degrees really benefit employers, society, and the individual on both a financial and emotional level? Since I recently had to return to school to finish my bachelor degree, I decided to investigate this topic.

I have been contributing to the workforce for over a quarter century, in two different countries, mostly in white-collar industries. I've worked in the shipping room at an office, worked the floor in retail, and even done some bartending. I've also worked in customer service, human resources, worked at an environmental company, taught English as a second language, consulted for a number of major advertising and automobile firms for various projects, co-founded a charter school, and now, work for the continuing education and workforce development division at a small community college. I often joke that I've held more jobs than anyone in my office combined. I got all these jobs based on my reputation, which I like to think is based on my work ethic, my creativity, my relationship building ability, and probably other traits and skills which have gotten me 'ahead'. Self-analysis probably wouldn't be one of those traits, but regardless, over the years, my lack of a degree became less and less of an issue. Until it was. Now, based on new City University of New York statutes, everyone who works within this system, the largest urban system in the U.S., has to hold at least an associates degree in order to remain employed. Thank you for the past six years, Alex.

Working at the division has also given me a unique perspective on the employment situations for non-degree holders. This population includes people who may have earned a degree overseas which is not recognized in this country, people whose college aspirations may

have been cut short for a whole myriad of reasons, or who never really had a shot to begin with, often based on socio-economic reasons beyond their control. I hope to present an evidence-based argument on the pros and cons to earning a degree, and what other options are out there should you choose not to, or are otherwise unable to. But first a little history...

## **A brief history of the working model,**

### **or How the Industrial Revolution Probably Ruined Everything**

For millennia, the human labor model for most non-agrarian areas of the world was based on the system of passing knowledge down from older skilled workers, often one's own family members, to younger generations. With the onset of the industrial revolution, when goods which were previously produced by specialized shops and workers were replaced on a mass-produced scale, this apprenticeship model of labor began a slow decline up until the present day. More mass production led to more factories. More factories led to more jobs in cities. More jobs in cities led to the majority of populations in most countries moving into cities, a complete reversal of the population demographics of just a couple hundred years ago. With industrialization and mass production (and the most recent permutation, robotics) able to create cheaper approximations of what specialists could do, the need for skilled, hands-on training all but disappeared along with that labor force. More factory floor jobs were replaced with an unequal ratio yet ever-growing number of desk jobs. The more desk jobs, the more academically trained\* a workforce needs to be (\*some would say "educated," but I'll quibble with that later).

Let's take a look at some examples. Take a barrel, a staple storage item for many countries worldwide for perhaps 1500 years, give or take. Sure, there are various permutations

but we all know what a barrel looks like. There probably isn't a historical colonial village or civil war reenactment without at least one around. For most of humanity, an item like this and the knowledge it took to make one was the work of craftsmen passed down generationally. Very few of these craftsmen were literate, much less educated.

And it took them “forever” to make one, by today's standards. The heating of the wood to achieve the curvature, ensuring that it was leak proof, treating the insides, hammering in those circular metal fasteners—today such an item would probably be made of sturdy plastic, and poured into a mould. The scope of work which a worker had to learn became much narrower as well. And a team of craftsmen were no longer necessary.

Now, think of all the goods produced pre-industrial era; textiles, wheeled carts, building construction, the list goes on. The entire manufacturing industry, the maintenance of the machines, and the transportation and infrastructure to support it; all of it employed millions. Cities grew exponentially as the country shifted away from its agrarian roots. Fast-forward to today, and the majority of the population is concentrated in cities. For most of us, this economic model seems like it will continue ad infinitum. This paper proposes that it will not.

Let's look at the historical conditions which got us here, and how its underpinnings may be coming loose. We'll also look at the socio-economic ramifications which follow, and offer possible solutions. The focus will be on the U.S., although examples from other countries will be brought in. The goal is to put forward new theories on training the workforce of the future, in order to match the new ways of employing them.

**An “educated” workforce**

The stigma against blue-collar or agrarian work has existed since the dawn of civilization, but it wasn't until recently that an individual born into that class could even dream of rising out of it. The ticket to greater economic prosperity was a college education. The post-war period saw a shift in American attitudes towards secondary education brought on by a variety of societal influences. With the economy booming, there was a proliferation of white collar jobs centered in urban areas. Gone were the days of inheriting your father's trade. For returning soldiers and young parents, a college degree was a ticket towards getting away from the factory job, the bakery, or car repair shop, and getting a piece of America's new found wealth. Coming on the heels of the Great Depression, when many small businesses and factories were shuttered, it's no wonder that this was the pervading sentiment at the time. The safest job was a desk job. The social beliefs and government policies around education which resulted from the depression may have been appropriate for their era, but are past due for reevaluation.

Often, the bangers of the American-return-to-prosperity drum harken back to the 1950's as the high water mark of American innovation and achievement. Yet the number of employed college graduates in the 50's and 60's were a fraction of what they are today, not tipping 40% of the population until the 1980's (Valletta, 2016). On the surface, the societal push towards "college degrees for all" seems like a good idea, and indeed it was initiated with good intentions—after all, why wouldn't we want as educated a workforce as possible? As a student or parent of a student, why wouldn't you try to pursue the highest income jobs as a result of your education? But in following these lines of logic just a few layers down, we uncover a number of issues.

Firstly are individual's basic personalities. As we know through our own experiences or through the latest research, most students will only excel in subjects that they are interested in.

Some students simply have difficulty excelling in school as a whole. It is difficult to coax the poor performing math student, for example, into a high performing math student, and that mathematical “deficiency” will probably follow that individual for life (the theory of applying different methods of teaching a student to be better at any given academic area is a subject for another research paper). As in the “square peg, round hole” analogy, forcing high school students to achieve some level of efficiency in academics for use throughout adulthood may be arguable (at best, but again, subject for another paper), but then forcing that student to undergo another two to four years of higher education will probably garner the same results (what’s that quote about repeatedly making the same mistake, falsely attributed to Einstein?).

Another alternative to college which has been less talked about are trade or vocational training schools. Historically associated with hands-on, blue-collar work, societally these schools or programs carry the stigma of being reserved for those of low intelligence (with a tinge of racist association, to boot). As a result, “shop class” was phased out of all primary school curriculums, and all students were expected to take a standardized test for admission into college (Wyman, 2015). However, the model of the two-track system in which high school graduates choose between attending college or vocational school has been a successful model in many European countries for years (Timsit, 2018).

Secondly, statistics on the correlation between college graduates and their ability to get jobs which match their education level are near negligible. Consider these facts: Nationally, 68% of high school students attend college (Wyman, 2015). The corollary is that the remaining 32% either do or don’t graduate secondary school with both a lack of academic skills or vocational skills. Of those 68% who do attend college, only 60% complete, meaning the remainder have incurred debt, lost time, wasted money, or some combination of the three. Of the 60% who earn

a degree, only 37% are working in jobs for which a college degree is required (Bureau of Labor Statistics 2016). As Wyman (2015) points out, although degree holders do earn more over a lifetime than non-degree holders, that statistic is skewed upward as it is heavily degree-type and school dependent, meaning a business degree holder from an Ivy league school, for example, will earn more than a philosophy degree holder from a non-private college. In addition, according to Abel and Deitz (2014), the returns on earning any degree for the average person are still better than not earning one—not because an individual hones their cognitive abilities—but solely because the earning power for non-degree holders has fallen precipitously in the past decades, in parallel with that of degree holders.

According to the Bureau of Labor Statistics Occupational Employment Projection (2015), of the 15 highest growth occupations, only 4 will (“typically”) require a bachelor’s degree. Of these 15 occupations, 11 will have wages higher than the national median (2015). The data indicates that the return on investment for going to college are still worthwhile, but not in an obvious way. Although current wage growth is on the upswing (according to the Labor Department, Fall, 2018), since the economic downturn of 2008, after adjusting for inflation, the majority of Americans have the same purchasing power as they did in the late 1970’s (Desilver, 2018). Of course, those without a college degree experience the same market forces, meaning lower income individuals fall into the poverty bracket. The outliers to this trend are those with college degrees in one of the high growth/high pay industries related to either technology, engineering or healthcare.

This disparity between the actual earning power of an individual and their employment status may be peculiar only to this era, from a historical perspective. Easier to comprehend are periods where job opportunities dry up, unemployment surges, and therefore people have less

money. Recently however, we see unemployment hit lows not seen in decades, yet Americans are still struggling to pay the bills.

One of the biggest drivers of the premise that academic success is linked to economic prosperity is the fact that other skills, such as vocational or technical skills, as well as communication and work ethic, do not have nearly an equivocal amount of research behind them. Stasz (2001) believes the lack of studies on non-academic characteristics as linked to achievement is due to three issues: first is that the interrelation between wages and academics is widely held to be linear, and has garnered little critical assessment as a result. Second, societally we have come to believe that academic ability is directly translatable to real-world situations. If, let's say, an individual excels at English, there is an expectation that that person will also be able to communicate effectively. Similarly, an individual with aptitude in mathematics is expected to be technologically proficient. Again however, there has been no research as to whether this holds true in the workplace. Lastly, is that the study of, for example, "problem-solving skills," is beset by any number of variables. Similarly there is no comprehensive research on any of the "soft skills." Since every individual is made up of a broad range of characteristics, from one's academic level, attitude towards work, or communication ability with customers, such a comprehensive study would be years in the making.

In short, is there a correlation between academic achievement and real-life workplace success? Nobody has the data. Partially because there is no agreed upon formula or outcome to an individual's life which can be deemed objectively "successful." But also since the defining traits for those who are generally held to be successful people are also traits with which those who are academically successful share, namely: motivation, tenacity, trustworthiness, self-discipline, reliability, and persistence (Heckman & Rubinstein, 2001). Therefore, parents and

role-models should continue to nurture these traits in young people, but continuing to push them towards academic achievement as a necessary path to success is incongruous to their growth as an individual.

What we also have, is experiential knowledge. Although formal education level may or may not be a negligible indicator of an individual's work performance (Stasz, 2001), it is linked with higher wages. Many workers can attest to the "incompetent supervisor/manager" experience, and these situations are at least partially attributable to those with higher academic credentials being promoted based solely on their academic ability and aptitude at standardized tests, rather than their actual worksite abilities.

In addition to experiential knowledge, we have anecdotal knowledge to draw from. Isabel Sawhill (2018) spent the past two years travelling the country interviewing what she has labelled "The Forgotten Americans," defined by individuals who fall in the bottom half of the income bracket, and who don't hold a college degree. Second on her interviewees list of national policy ideas was education for non-degree holders (first was national service, either military or civilian), specifically for career training and technology. They lamented the poor preparation they received in high school to enter the job market and lack of personal determinism available to them if they couldn't afford college. Even those who attended college complained that what they learned was not geared towards the job market. This matches the main complaint heard from the manufacturing sector: a "skills gap," meaning an abundance of job vacancies, and a dearth of people trained to do them (Timsit, 2018).

In assessing the skills which employers are looking for in potential hires, the overvaluing of college degrees becomes even more ironic. Nowadays, the requirement of a BA seems more of a means for Human Resource departments to arbitrarily dismiss a percentage of job applicants

rather than sift through hundreds of resumes. The irony lies in the fact that supervisors would prefer a number of other factors and attributes for new hires to have over a college degree (Stasz, 2001), including the personality traits listed above. According to the National Center on Educational Quality of the Workforce (1994), employers rank the nearest academic related attribute sixth (Industry-based credentials), behind other potential new-hire traits such as work attitude, communication skill, work experience, and recommendations from employers both past and present.

Calls for reform of the education system to keep America competitive seem to make their rounds on the news media every few months or so, always accompanied by a whiff of the existential threat, but always skewed towards raising the academic achievement level. One such recent trend compares the standardized test scores of Chinese students to their admittedly low scoring American counterparts (Bidwell, 2013) (Tucker, 2016) (Heim, 2016). Back in the 1980's, (and in an interesting parallel with the elimination of "shop" class from most high school curriculums) it was the Japanese students (Nakai, 2012). Although it (arguably) remains to be seen how this will effect China's long-term wages, Japan has experienced negligible growth in the decades since (Takeo, 2018) (Hiramoto, 2018) (Trivedi, 2016). Obviously, the high test scores of Japanese students were meaningless when viewed without taking into account broader socio-economic issues. Yet, the expectation that academic achievement leads to broad national economic prosperity persists.

## **Vocational-workforce development**

The field of education under the umbrella term “workforce development” continues to gain momentum as a viable supplement and/or alternative route towards employment, and in many cases higher education. The stigma associated with educational courses geared towards certificates or licensure, most of which are obtained after passing a nationally recognized exam, has lessened slightly in recent years, although it still lags behind many European countries. This trend was highlighted by President Obama when he announced the formation of a committee to research the feasibility of creating a national free community college plan in 2015, which would allow not only degree pursuers to earn their associates tuition-free, but those pursuing technical and vocational careers as well.

High school students in Norway and Finland, for example, have a choice upon graduating, either continue on to college, or pursue a technical or vocational track (Phillips, 2012). Here in the U.S., such a choice would be unthinkable to most parents. Historically, blue-collar jobs not only mean less pay, but also of needing less intelligence to perform. This bias is flawed at best, and punitive and detrimental to an individual’s growth at worst. Flawed, in that an increasing number of blue collar and vocational workers return to school years after being in the workforce—and not just necessarily to pursue college degrees to improve their careers—but to earn certifications or licensures in Continuing Education and workforce development programs (Wyman, 2015). Punitive and detrimental, in that non-success in academics is telling young individuals that they’re not smart enough to get a “good” job (i.e. office job), and a professional tailor, or an electrician, or beautician, are occupations which one will never make good money or reach fulfillment. As for the college educated employee seeking upward mobility, the option is a master’s degree, and thus another 2-4 years commitment of time and resources.

And who really believes that most office work is so cognitively demanding anyway? As lampooned perfectly in the 1999 movie “Office Space,” almost every position in the white-collar world requires workers to spend at least some percentage of their time completing repetitive, menial, mind-numbing tasks. Anecdotally, a great many of these college educated employees spend 100% of their time at these tasks. Often, today’s modern office workplace resembles the assembly lines of the post-industrial revolution, much more than some confluence of educated minds coming together to drive innovation.

Dr. Matthew Crawford, author of “Shop Class as Soulcraft,” agrees. According to Crawford, who moonlights at his motorcycle repair shop, manual work requires more cognitive ability than knowledge work. As he says,

“This [kind of work] does take some real skill and judgment and sort of adaptability and improvisation--and these are all of the kind of features that all of us are looking for in work... the work of a plumber, an electrician, or a mechanic can never be procedural. The circumstances to do those jobs changes too much to be reduced to rule following... Sometimes we romanticize white-collar work by presuming it has more intellectual content than it really does. Lots of genuine ‘knowledge work’ gets concentrated in an ever-smaller elite, leaving the rest of us to be clerks. Or it gets installed in some kind of automated process.” (Strauss, 2009).

Dr. Crawford continues,

“The tragedy is that someone who is kind of a mediocre student who goes on to be a C student in college ends up working as a telemarketer. That same guy might have become a crack electrician, more engaged in what he is doing, and probably making more money. But that course isn’t really presented as an option.” (Strauss, 2009).

Often, rather than wondering if he or she may not have benefited from higher education at all to begin with, we blame the individual themselves for not having gotten higher grades, gone to a better college, and therefore found “better” employment.

For academically inclined students, attending post-secondary school is an obvious progression in their careers. And for those with a passion for knowledge and learning, by all

means, they should pursue their education to its limits. However, as Diane Ravitch, author of “The Death and Life of the Great American School System,” puts it, “So, yes, go to college if you want to learn more. Take a degree in ancient Greek or philosophy or archaeology or sociology or whatever interests you. Don’t go to college to get a job. Go to college to learn.” (Ravitch, 2012).

### **Apprenticeship Models**

Both policy makers and business owners need to shift more resources to the apprenticeship model as a path to employment and alternative to college. There are currently millions of job openings within the fields of construction, manufacturing, the healthcare sector, and technology for both hardware and software which do not require a college degree. Current public sentiment is fixated on improving the school system and making college more affordable, to the exclusion of apprenticeships; the oldest and most time-tested model of employment in history.

Apprenticeships which lead to industry credentials are the most guaranteed way to find sustainable work in the current economy, with 90% employment rates and an average salary of just over \$60,000 (Coons 2018). However, employers in industries who haven’t traditionally had an apprenticeship path to employment are reticent to invest. It is indeed unfortunate that more businesses haven’t gone this route, as it could directly address the issues of the skills gap which both the employer and unemployed complain about, while returning approximately \$23 for every dollar spent on an apprentice (Coons, 2018).

Besides the potential monetary gains a company can reap while taking on apprentices, there are many other tangible benefits, among them increased employee retention, increased attractiveness to potential new hires, and outlining a path to career advancement for new hires. With companies taking an average loss of \$550 for every employee who quits (Craig, 2018), an apprenticeship model can directly decrease the probability of this occurring, while increasing the odds the employee stays on. In many circles, I believe that is called “win-win.”

### **The IT industry and New-Collar Jobs**

In what will likely be the greatest economic shift in employment not seen since the industrial revolution, all fields related to computer technology have a plethora of job openings, and not enough trained people to do them. Passing certification exams in CompTIA or Cisco Networking will all but guarantee you a job with a starting rate of \$40,000 or greater with that figure easily doubling within 4-7 years based on experience, and continuing to stack certifications (Bureau of Labor Statistics, 2016).

With technology courses within the affordability range, and without the lengthy time commitment of college, this industry is a sure-bet in terms of employability and wage growth, and is one of the few employment sectors where salaries are commensurate with, and sometimes exceeding those with higher education backgrounds, even for those without degrees. To employers in these fields, the fact that an individual possesses one of the many certifications for various IT specialties, or can present a digital portfolio of their work, be it in database building, coding/programming, or one of the creative applications, renders a college degree non-essential.

## **Conclusion**

This research paper is not intended as an attack on the higher education system per se, but rather addressing the need to reevaluate and re-prioritize what is important both to the economy, as well as to an individual's own feeling of achievement. If there were to be a treatise or lesson to be taken away from this paper, it would be that if you want to draw a higher salary, then pursue a college degree or higher, and go into the medical, engineering, or computer technology fields. Otherwise, save your time and money. Similarly, those unable to pursue a college degree should seek training in a vocational/trade skill, technology or healthcare field. There was arguably a period when the balance of the workforce was centered in such a way as to have an equilibrium between an academically educated workforce, and a trained workforce skilled in various vocational occupations. That equilibrium has presently skewed too far towards the academic side, leaving new graduates underemployed, or employed in occupations which don't need a college degree anyway. On the flip side, the prejudice against vocational work has left this critical segment of the workforce stigmatized, underpaid, and subsequently with a lack of trained individuals to actually do the work.

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