

Career Technical Education: A Perfectly Valid Alternative

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ABSTRACT

There is a pervasive stigma against career technical education in American society. Societal norms would make it seem that college education is superior to, and distinctly separate from, career technical education. Career technical education is seen as a last resort for students that were not able to attend college education, but the documented benefits that come from students attending career technical education are eye-opening. Students that attend career technical education in high school are shown to be more likely to graduate high school on time, as well as even more likely to attend post-secondary education, like two-year colleges, which is totally at odds with the perceptions created by the societal stigma against career technical education. Particularly for students with disabilities, career technical education can be a very empowering education pathway that will increase their employability, wages, hours, as well as employment benefits. The societal stigma surrounding career technical education ought to be broken down through arguments such as the one, in order for awareness to spread regarding the positive effects of career technical education.

Introduction

Anyone who has attended high school in California, or even attended high school in the greater United States, knows and remembers the immense pressure that put on them by society to one: graduate high school, and two, most importantly: go to college. From the family friends high schools students see at barbecues, to the teachers that lecture students during school hours, to the students' very own parents who vicariously live their own academic dreams, attending college is pushed heavily onto high school students. But, in order for society to collectively push high school students towards college education, another education pathway has been neglected and has even been made out to be the inferior, last resort scenario for high school students who cannot make it into college: career technical education. For those unfamiliar with career technical education, it is simply a program that teaches students the necessary skills to excel at specific career fields, such as an auto mechanic program, a welding program, a woodworking program, or even a nursing program.

With this necessary background in mind, this paper aims to prove that despite the social stigma against career technical education, high school career technical education is indeed just as effective, if not more effective than general education courses at providing benefits to students during high school as well as after high school. In order to properly support the overarching, umbrella claim that career technical education should not be seen as a last resort for high school students and instead should be seen as a perfectly valid alternative to a typical high school experience, this paper will also argue three smaller subclaims that will build a logical foundation that will ultimately lead readers to this paper's main conclusions. This paper will first bring to light the existence of a social stigma against career technical education in this country, then this paper will provide the scientific research that actually proves the benefits of attending high school career technical education. Following that, a further exploration of these benefits will be done regarding career technical education's particular benefit to high school students with disabilities. And all throughout this paper, there will be specific attention to the benefits of career technical education both while in high school, as well as after high school, in order to illustrate the all-encompassing, positive outcomes that career technical education has to offer students and the rest of society, as a whole.

In order to achieve the goals, set in this paper, research-based evidence will be utilized as the backbone and foundation for which this paper's findings are based on, in the form of peer-reviewed, scholarly research articles that are published by world-renowned journals. The reason why this work is important has a lot to do with freedom of choice, and even perhaps, the betterment of society as a whole. In a country where personal freedoms are proclaimed as its strong suit, and in a country where the so-called 'American Dream' is still alive and well, why cannot students have equitable and unstigmatized access to an education pathway that has proven benefits both during and after high school? It is the choice and should be the choice of the high school student to decide the type of education they wish to pursue. This is a fundamental decision for young people to make, and societal pressure as well as stereotypes should stay out of it, especially considering the lasting consequences that come from living the choices others made for you, rather than living the choices you wanted to make.

The Stigma Against Career Technical Education

As mentioned before, the whole reason why this argument must be made to defend the validity of career technical education is because there is a present and current societal stigma against career technical education, meaning that society views career technical education and college education as separate pathways that cannot, and should not, cross paths. This is due to the collective assumption society makes about people that attend career technical education and people that attend traditional pathways of general education into college education. That being that people who take the perceived college route are bound to be, and perhaps even meant to be, more financially successful and more intelligent; whereas people who take the exclusively career technical education route are bound to be less financially successful and less intelligent. Thankfully, there is in fact scholarly research dedicated to understanding this stigma against career technical education and there are researchers who have outlined how the stigma actually works to undermine the positive effects of career technical education.

According to the work by Thomas Gauthier, this research has been prompted by “[s]ociety [who] has recently started to question the validity of earning a higher education in response to the rising student loan debt” as well as perceived decreases in particular skills among college graduates of “various degree programs” (Gauthier, 870). So, as society begins to reexamine the validity of the aforementioned college education route, researchers have begun to also reexamine the validity of the aforementioned career technical education (CTE) route. According to researchers, “[c]areer and technical stigma draws upon a body of literature that discusses the purpose of higher education in society,” specifically perceiving “[p]eople who enroll in CTE...do not have the academic intellect to conceptualize the civic purpose of higher education” (Gauthier, 870). If society believes that students of career technical education are not intellectually capable of understanding the consequences of higher education, that would suggest that people who take career technical education are simply less than people who go to college and university.

Furthermore, this stigma has a very real impact on the students who take career technical education and must endure the negative mental health effects that come from being perceived and most likely treated like an intellectual inferior. Drawing from the work on community college career technical education, “many of the students who enroll in community college CTE programs already suffer from a negative self-concept,” so “the public stigma associated with these programs compounds the students’ negative self-concept and hinders their engagement in their studies” (Gauthier, 871). From this research, hopefully, society can begin to realize the very real negative effects that come from stigmatizing an entire education pathway that ultimately leads to numerous career clusters across healthcare, energy, transportation, hospitality, and even communications technologies. But, in the meantime, this “[s]tigma is a sentiment of dishonor” and “if left to flourish, creates a social stereotype and those people who are affected by this stereotype tend to experience an altered social identity” (Gauthier, 872). That altered social identity manifesting itself into an “internalized stigma, [which is characterized by a] reduction of self-worth” or manifesting itself into a “felt stigma, [which is the] experience or anticipation of stigma” (Gauthier, 871).

The theoretical framework of how this stigmatization against career technical education works also has empirical evidence from studies to support its existence. According to the same case study, the first major finding of their

results was that “[p]arents and guardians encourage their children to apply to a university first with the community college as a fallback, and high school guidance counselors tend to direct the academically challenged to CTE programs” (Gauthier, 880). The second major finding of their case study, which interviewed 12 college students who take career technical education and 12 education administrators who have career technical education oversight responsibilities, was that “CTE continuously receives less funding from the college’s general funds” compared to general education courses (Gauthier, 880), which would support the claim that society generally cares less about career technical education and those who take career technical education. This stigma against career technical education has penetrated itself so deep into our society that it has also intersected and compounded with preexisting racial stigmas and institutional discrimination.

According to the work by Hamilton et al., which examined the enrollment of different racial groups in career technical education programs, “[d]isparities existed in the overall population representation versus the enrollment representation for Asians, Black, and Hispanic students in particular” (Hamilton et al., 44). Put simply, the same way white students were overrepresented in public high school before the forceful integration of high school desegregation decades ago, is the same exact way “[w]hite students were [and still are] overrepresented in every career cluster area” of career technical education (Hamilton et al., 44). Racial discrimination has once again found itself in the American public education system in the way that ethnic minority high school students consistently enroll less in career technical education compared to white high school students. This is a serious problem because it does not allow ethnic minority high school students to experience the significant short-term and long-term benefits of career technical education that white high school students are currently experiencing. That would indicate that career technical education classes are intentionally gatekept by those in charge of offering these courses, so there is much more institutional racism to be tackled in the American public education system.

From the elaboration of this pervasive stigma against career technical education and the students that take CTE, it is clear to see the very real need for correction by those charged with the responsibility to provide education: policymakers and school officials. It is important for the general public to know that their collective opinion on career technical education is detrimental to the educational pathway itself in the way of receiving less funding and attention compared to general education programs and is detrimental to the mental health of students who undertake this underappreciated, scrutinized education pathway in hopes that society will begin to correct itself. This is what prompts this paper’s existence in the first place: there is a systemic problem that produces negative opinions of career technical education and produces negative outcomes for the students that take career technical education, but there is still hope for a society that accepts and embraces career technical education. It is the argument of this paper that it is the responsibility of policymakers in California and the school districts of California to provide equitable, quality career technical education during high school, for the betterment of social justice, both in racial inequality terms as well as socioeconomic class divide terms.

The Universal Benefits of Attending High School Career Technical Education

Now that it is clear that there is indeed a stigma against career technical education, it is time for this paper to shift its focus to providing the benefits of attending career technical education despite the societal stigma involved in taking CTE. The same policymakers and school officials addressed in the previous section of this paper are still being addressed in this section of the paper. It is important for policymakers and school officials to be made aware of the positive impacts of high school career technical education because it can ultimately align with their own personal agendas. It is in the interest of policymakers and school districts to provide quality career technical education to every high school student as it will help achieve their political and economic goals. Policymakers want as many students as possible under their representation to graduate high school on time, and even more policymakers want to create favorable labor markets in their jurisdictions by having more skilled, technical workers. Both end results help a politician’s bottom line: being competitive in upcoming elections and securing or expanding their current power while in office. School districts, like any governmental identity, want more access to federal grants which will increase their

prestige and financial capabilities, so it is privy for school districts to display the great benefits that come from their district's career technical education programs in hopes that the federal government will reward them. In all of this in mind, it is time now to explore the various benefits of career technical education on high school students.

Beginning while they are still in high school, career technical education helps increase a student's likelihood of graduating on time. According to the work by Dougherty et al., which was the metanalysis of data from K-12, higher education, and the department of labor across three different graduation cohorts, "students who took more CTE courses were more likely to graduate from high school in 4 years" due to career technical education providing an "applied pathway that helps improve student engagement and attainment in high school" (Dougherty et al., 435,440). Put in a different way, according to the work by Michael Gottfried and Jay Plasman, which examined longitudinal data following cohorts of students from the 10th grade until completion of and transition out of high school collected by the U.S. Department of Education, "taking a greater number of CTE units across Grades 9 through 12 was associated with a lower chance of dropping out" (Gottfried & Plasman, 343). This is once again due to the increased student engagement or hands-on experience that comes from attending career technical education. All in all, career technical education courses taking in high school is indeed linked to higher rates of on-time high school graduation and is associated with lower rates of high school dropouts.

Specifically, some of the mechanisms that contribute to students dropping out of high school can be counteracted by the full involvement in career technical education. Researchers have identified that "students in families with alternative parental arrangements...were more likely to drop out" (Gottfried & Plasman, 348), meaning that students who do not live with both of their parents are at higher risk of dropping out of high school. In addition to the family structure of a high school student affecting dropout chances, the "household income and parental education were associated with odds of dropout" as well (Gottfried & Plasman, 348), which highlights once again just how impactful students' environment can be on their own success. But this is where career technical education can be essential to the students that are experiencing the aforementioned risk factors for dropping out. Despite how lower household incomes and lower parental education increase the chance of dropping out, researchers have ultimately found that a student's "academic history and attitudes significantly predicted differential odds of dropping out" (Gottfried & Plasman, 348). As discussed previously in this paper, the mental perceptions that a student has on the world around them and themselves have very real impacts on the future of the student. Researchers specifically cite that "[h]igher postsecondary expectations, increased academic unit completion, and perceptions of parental involvement were associated with lower probabilities of high school dropout" (Gottfried & Plasman, 348); all of which career technical education can help with. So, the presence of these risk factors can be minimized and even counteracted by the sheer determination and academic confidence of high school students, which can be made easier for students enrolled in career technical education. This positive impact of decreasing high school dropouts and increasing on-time graduation is once again tied to increased student engagement and post-high school planning, which are fundamental strengths of career technical education, so it only makes sense increase career technical education availability to at-risk high school students.

Now, it is time for this paper to explore the benefits associated with career technical education after high school ends and the transition into post-secondary employment or education begins. A major benefit of career technical education is it helps increase a student's likelihood of attending a post-secondary school. As discussed in the beginning of this paper, society views career technical education as less than college education and very much different from college education, meaning that they do not intertwine with each other. But, according to the same researchers who confirmed that career technical education helps increase a student's chances of graduating high school on time, "[s]tudents who took more CTE courses were more likely to ever graduate from high school and were more likely to enroll in college" (Dougherty et al., 436). Researchers argue that "the link between CTE course taking and enrollment in college suggests to some degree that these courses may help to strengthen the school-to-college pipeline for many students" (Dougherty et al., 440), which effectively debunks the societal stigma that career technical education and college education are incompatible. Simply put, the findings of Dougherty et al. "dispel conventional wisdom that CTE participants in high school may be less likely to attend college" (Dougherty et al., 440). Career technical education is seen as separate to college education, not as a steppingstone to college, so it is time society reframes how they

view career technical education, especially since it could be a useful tool for students who want to attend college. All in all, career technical education course taking in high school increases the chances of post-secondary education attendance, including four-year colleges or universities, which is totally at odds with what Americans are socialized to believe about career technical education: that it is a last resort, totally different and unrelated to college or university. Finally, it is time to reframe this stigma to proudly declare that career technical education can even increase your chances of going to college.

Moreover, after high school, career technical education continues to give more benefits to students that are willing and able to attend CTE courses in the way of increased rates of employment as well as wages. As evidenced by the work of Dougherty et al., researchers have begun to “see positive relationships between CTE course taking with employment and wages,” (Dougherty et al., 440), which would indicate that career technical education will get more post-secondary school graduates into the labor force faster, compared to general education courses. Researchers were able to identify that “students who took more CTE courses were more likely to be employed and had higher wages” (Dougherty et al., 436), which could more than likely be driven by the increased attention to employment preparation in career technical education, compared to general education courses. Career technical education has a distinctive focus on career readiness and gives students hands-on experience with skills that will be utilized on the job in post-secondary school employment, which is something that general education courses simply do not aim to do. In other words, general education courses are “often taught in silos where concepts often remain abstract...with little attention paid to the practicality of the concept” (Gottfried & Plasman, 354), while career technical education courses are taught with a particular attention to how practical the skills taught in-class are to employment opportunities after the completion of career technical education.

The positive impacts to the labor market that come from increased career technical education will ultimately align with the goals of policymakers once again, building a stronger argument to expand career technical education to more high school students. Research has found that high school students who take career technical education “enroll in two-year colleges...[and] are also employed, which may suggest a role in policymaking related to ensuring that students engaging in both employment and college coursework are properly supported” (Dougherty et al. 440). Simply put, it is the responsibility of policymakers to aid career technical education graduates as they are juggling and undertaking meaningful employment at the same time they are pursuing further education, which can be difficult for anyone to manage. As discussed earlier in this paper, it is the responsibility of policymakers to correct the racial discrimination seen in career technical education enrollment, but it is also in policymakers’ interest to defend and expand career technical education as supplies “the increased demand for...college-level training to promote employment and economic opportunities” (Dougherty et al., 440). In fact, the expectations for America’s future labor market have increased, as “labor market is projected to increasingly favor those with post-secondary training” (Dougherty et al., 441), which is something high school career technical education can help with as it is now clear that career technical education can even increase post-secondary education enrollment, including college. When policymakers embrace the positive impacts that come from career technical education, expanding its availability and quality will offer a policy lever to achieve one or more common goals of policymakers. If incumbent policymakers or prospective policymakers have high rates of dropouts in their representative jurisdiction, collaborating with school districts to expand or enrich high school career technical education will result in less dropouts and more on-time graduation over time, which will ultimately lead to more voters for proponent policymakers during election cycles. If incumbent policymakers or prospective policymakers seek to create favorable labor markets in their representative jurisdiction, which is characterized by the “demand for workers in “middle-skill” jobs, i.e., those requiring more than secondary school but less than a bachelor’s degree” (Dougherty et al., 423,424), collaborating with school districts to expand or enrich high school career technical education will “engage and incentivize students into college” (Dougherty et al., 441). Proponents of policy that result in the expansion of career technical education and the strengthening of domestic markets will find broad support in their voter base as both American political parties can agree that higher rates of on-time high school graduation and that expansion of the skilled labor force are beneficial for the health of the United States.

Particular Benefits of Career Technical Education on Students with Disabilities

As the world continues to bring acknowledgment to the inequalities and injustices that exist in our society, it is important that this argument too makes sure to include those who are consistently underserved and overlooked: students with disabilities. The universal benefits that can be applied to any high school student that takes career technical education are particularly beneficial to students with disabilities both during high school and after high school as well. For example, career technical education helps students with disabilities increase their market wages, likelihood to work full-time, and employment benefits after high school. According to the work by Wagner et al., which examined a national data set that follows the transition period between high school and early adulthood of students with disabilities, “taking a concentration of [career technical education] conferred benefits in the early post-high school years, thereby setting youth with [disabilities] on a path toward obtaining full-time competitive employment and the higher wages and employer-paid benefits that can accompany it” (Wagner et al., 139). Due to the research suggesting that students with disabilities should be pursuing a concentration of career technical education as early on as possible in high school, it emphasizes the importance of the student’s parents, teachers, counselors, and aids in setting up plans that are in the interest of the student. The increased attention and student engagement that occurs when students with disabilities are making employment plans for the future while taking a concentration of career technical education allows them to succeed in high school. As a result, every high school student should be given every opportunity to be exposed to career technical education as early as possible to see if an interest can be organically established to help potential students with any of these previously discussed challenges (see figure 1). Career technical education also helps students with disabilities have more assistance during high school because it encourages the parents, teachers, as well as councilors to work together for the betterment of the student. The same researchers that explored benefits of career technical education for students with disabilities found that “outcomes of several kinds...have been linked to parents’ involvement in, and support for, their children’s educations at school and at home” (Wagner et al., 135), which highlights the need for parents’ awareness of these benefits as well as the determinantal effects of not actively supporting their child’s education.

This paper’s call for more awareness is the steppingstone for breaking down this societal stigma against career technical education. When stigmas take hold, factual and constructive conversations become taboo and less frequent, which only deepens the divide between societal perceptions and reality; so this is why it is essential to have arguments like this, which seek to bring inequalities to the forefront of society’s consciousness in hopes that productive, corrective change can occur.

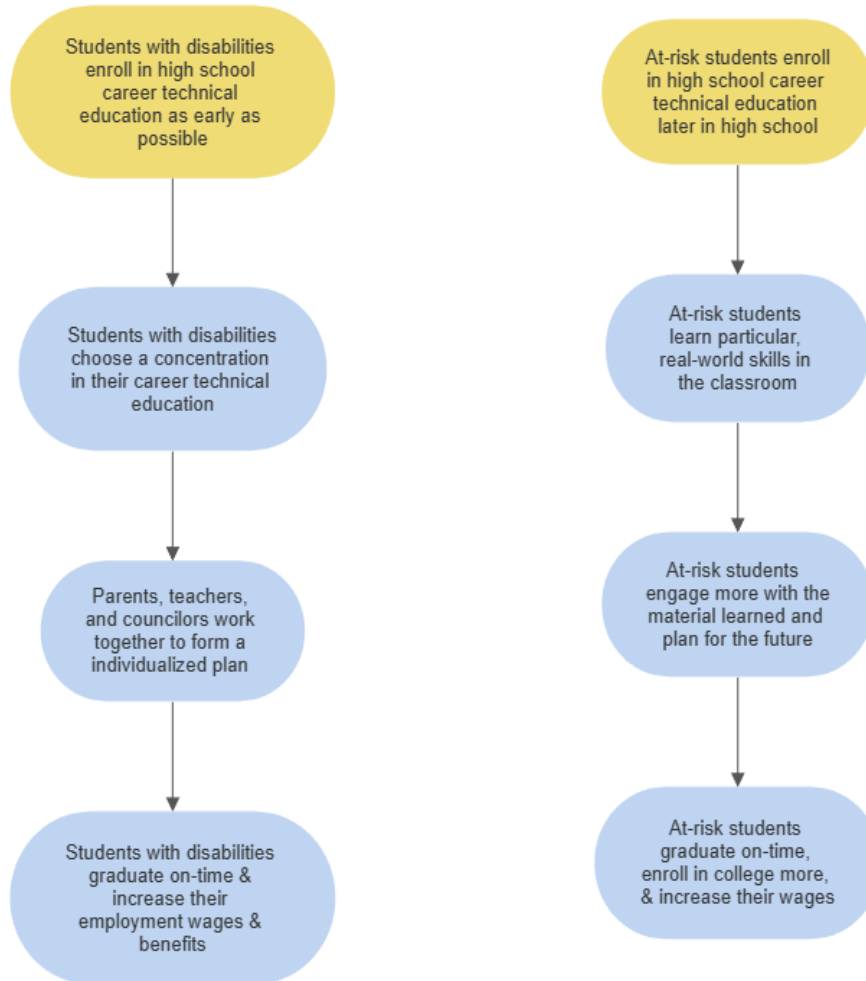


Figure 1: Common Success Pathways of High School Career Technical Education. Two particular groups of high school students benefit from enrolling in career technical education: students with disabilities (Wagner et al., 139), and at-risk students of dropping out (Gottfried & Plasman, 348).

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