ECT 6661 – Trends and Issues in Career and Technical Education

Literature Review of Current CTE Issues

Simone Brookins

University of South Florida
Introduction

There are numerous issues in Career and Technical Education (CTE) that could have a long term and negative impact on the field. Those issues include the perception of CTE, curriculum and lesson models, student achievement gaps, and teacher shortages. Each of these issues in some way impair effective implementation of CTE programs or serve as a hindrance to CTE programs being accepted. The critical issues of CTE are the perception of CTE, curriculum and learning models in CTE, the student achievement gap, and teacher shortages. This literature review will address these issues, what makes these issues critical, and recommendations to correct these issues.

Critical CTE Issue: The Perception of Career and Technical Education

Society for the most part still views Career and Technical Education (CTE) programs as preparation for those seeking entry-level positions for specific careers or as an educational solution for lower performing students. In a journal article written by Sabrina Kidwai (2011) and in Howard Gordon’s *The History and Growth of Career and Technical Education in America*, both cite the history of CTE as being the root of its perception in today’s society. Kidwai (2011) discusses how vocational education programs of the 20th century prepared students for entry-level jobs and offered a limited amount of subject areas such as agriculture, business but primarily clerical, automotive, construction, food services, and cosmetology.

In spite of the numerous positive changes that have been made to CTE, the perception of entry-level preparation has carried over to societal views of today. These perceptions are solidified by television ads and marketing for career academies. These television ads are shown during timeslots between 9:30am and 2:30pm and premier on
stations that contact edgy content such as talk shows, court shows, and cable channels such as MTV and VH1. The assumption is that individuals viewing the content on these television stations are unemployed and possibly have no future career goals. In addition, these institutions are marketed as a “quick” way to get a career instead of a means of building meaningful skillset for professionals who are equipped to accept jobs that are high in demand. Kadwai (2011) states that “The stigma of CTE as the domain for students not going onto a four-year degree program still exists in the United States.” High school counselors would tell a student that he or she is not college material with an undertone that the student would not “good enough” nor would he or she achieve career success. As a result, that student no longer has a positive perception of him or herself and would settle for jobs that did not capture the totality of his or her skillset and abilities.

What Makes This Issue Critical

In school, students are taught to have big dreams and to not put limits on themselves. This type of encouragement is very necessary for students and it pushes them to strive for academic success. However, this idea of pushing students to dream big prevents them from entertaining a variety of career choices that are in high demand such as construction, plumbing, or electrician because these are not considered to be “dream jobs”. As a result, these critical jobs go unfulfilled because of the lack of skilled workers to fill them. In addition, students are not made aware of the numerous career responsibilities that do not require a four-year degree because they are being taught to be in pursuit of college. Then, when they fall behind in reaching that goal by performing below average, they feel inferior or inadequate. As a result, they drop out of high school, having never obtained their high school diploma or a General Equivalency Diploma.
Because students become disenchanted with school and their experience, pursuing CTE is not an option to them.

Perception of CTE limits opportunities available for students because of what people “think” CTE is composed of, not because of what CTE actually is. Viewpoints such as these may serve as a barrier to CTE graduates obtaining jobs to launch their career. For example, if a CTE student is applying for a position as an LPN versus a student from a community college applying for that same position, perception may lead that hiring manager to accept the community college student instead of the student who comes from a CTE institution. Education Secretary Arne Duncan states “Far too long, CTE has been the neglected stepchild of education reform. That has to stop...CTE has an enormous if often overlooked impact on students, school systems and our ability to prosper a nation” (Kidwai, 2011). This is the attitude that must be adopted in order to take the first steps in changing the perception of CTE.

**Recommendations to Change CTE Perception**

In order to create an appreciation for all that CTE has to offer, it is necessary for the perception to change. One vital way to change the perception of CTE is through strategic marketing. Marketing CTE schools and programs as a “quick fix” jeopardizes the integrity of CTE and creates an unfavorable image to society as a whole. If the marketing of CTE does not change, it will have an impact on the future trends of CTE programs such as decreased funding to CTE or decreased enrollment in CTE programs. Kidwai (2011) suggests “in order to change the perception of CTE, CTE educators, students and the business community need to collaborate and launch a local and national public awareness campaign.” She further discusses how it is necessary to involve the
media, policymakers and parents in this campaign in order for the campaign to be effective. Gordon (2008) also recommends reeducating guidance counselors, establishing constant communication with parents. Lastly, Gordon (2008) suggests collaboration with business and industry to ensure a highly trained workforce, which can elevate the image of CTE.

Critical CTE Issue: Curriculum and Learning Models in CTE

Curriculum is one of the main drivers in the student learning process. Most curriculum is not structured to accommodate the most common learning styles of the student learner. Many course are still formatted to where the teach provide lecture-style instruction rather than facilitating student learning by providing key pieces of information and serving as an instructional leader as the students investigate solutions presented in their academic courses. Students often complain about their classes being “boring” when in actuality it is their way of articulating that they are not comprehending the material. I have experienced first hand the impact that curriculum and learning models have on a student and therefore, this is identified as a critical issue that is critical to CTE.

What Makes This Issue Critical

Curriculum and learning models are a critical issue in CTE for several reasons. For one, a curriculum or learning model can determine the student’s success in a CTE program. If the curriculum is not structured in a way to where the material is easy to comprehend and the learning model is not conducive to the student’s learning style, it is not likely that the student will be successful. In addition, if that student’s learning style is not accommodated, he or she will not continue with the program, thus providing another
situation where an individual is not being equipped with skills necessary to fill jobs that are currently in the demand.

After further review of other pieces of literature, the evidence from the Environment as an Integrating Context for learning (EIC) has shown great success and further illustrates this as being a critical issue to CTE (Lieberman & Hoody, 1998). EIC provides more of a kinesthetic learning style that facilitates content retention, especially among students of low socio-economic backgrounds. According to Lieberman and Hoody (1998), EIC is defines a framework for interdisciplinary, collaborative, student-centered, hands-on, and engaged learning. In doing their research, Lieberman and Hoody (1998) found evidence that students learn more effectively within an environment-based context as opposed to a traditional education framework.

**Recommendations for Curriculum and Learning Models**

It is necessary to develop curriculum that is engaging where CTE students will be excited to learn. Their course content should ignite passion within them rather than spark boredom and resentment. EIC is an illustration of a best practice as well as how curriculum can be implemented and made to be relevant to the student. By making the curriculum relevant, CTE students will be able to make connections to the content that is being delivered. Researchers should continue to measure student progress and comprehension to determine if adopting a EIC model is most effective.

**Critical CTE Issue: The Achievement Gap**

The achievement gap is an issue that still plagues our education system. Unfortunately, this gap has been widened due to the implementation of No Child Left Behind (NCLB) and the standards that each state put into place as a result of NCLB.
Moreover, the achievement gap is a critical issue that significantly impacts CTE. Within the past 10 years, our country has experienced greater increases in the number of high school students who are not demonstrating proficiency in reading. This fact is clearly illustrated in the State of Florida based on the results of the Florida Comprehensive Assessment Test (FCAT). According to the Florida Department of Education, only 50% of high school students in grades 10 through 12 passed the 10th Grade FCAT with a score of Level 3 or higher. This is an indicator that only half of these students are proficient in reading as well as reading comprehension.

According to The Florida Council on the Social Status of Black Men and Boys (2011), black high school males are even more susceptible to the achievement gap and its detrimental results. In 2011, only 18% of 10th, 11th, and 12th grade black high school students passed the FCAT reading assessment with a score of Level 3 or higher. Many of these students are unable to participate in CTE programs because they lack the basic comprehension skills necessary to be successful in these programs. In addition, teenage black males have admitted to selling drugs, participating in burglaries and grand theft simply because they felt academically inferior and did not think that they would not be able to advance beyond what they saw in their neighborhoods. However, if these young men had been exposed to CTE courses in middle school and high school, they would have seen the numerous career opportunities that are available to them. Moreover, it would have provided them with the hope that they needed to refrain from engaging in negative and illegal activities.
Causes of the Achievement Gap

The achievement gap that is most critical to students and CTE programs here in the US is the domestic achievement gap. Gordon (2008) defines this achievement gap as “the disparity in learning among American students correlated to racial and economic status” (Gordon, 2008). Gordon (2008) further elaborates on this issue by introducing additional data from the National Center for Education Statistics, which states that there is a negative correlation between poverty and school achievement. Families of a lower socio-economic background do not have as much access to resources that can enhance their child’s education experience. In addition, they have a low percentage of disposable income which makes it impossible for them to afford additional interventions such as hiring a private tutor or enrolling their child in a tutoring or learning center. Moreover, parents and students of low socio-economic backgrounds are not aware of resources offered by nonprofit organizations that are no cost to them such as tutoring programs or mentoring programs that would serve as key element in decreasing the existing achievement gap.

What Makes This Issue Critical

This issue is critical to CTE for several reasons. According to the 2010 U.S. Census, more than 39 million adults ages 16 and older lacked high school diploma or a GED. For individuals who lack reading proficiency, reading fluency as well as reading comprehension skills, it is difficult to obtain a high school diploma or successfully pass the GED exam. This, in turn, prevents these individuals from entering into a CTE program that will sharpen their skills and prepare them for the workforce. Because of this, there will be numerous jobs in the workforce that cannot be filled because of
unskilled workers. With fewer people in the workforce, that means that there are fewer taxpayers, which can impact the city as well as the state where these individuals live. This in turn would decrease available resources that are used with tax dollars.

**Recommendations to Decrease the Achievement Gap**

It is necessary to implement policies and strategies that will improve the achievement gap that impacts CTE. One effective way to decrease the achievement gap and increase learning and retention for students is to use the EIC. As stated earlier, EIC is a framework for interdisciplinary, collaborative, student-centered, hands-on, and engaged learning. Because of the evidence of students learning more effectively within an environment-based context as opposed to a traditional education framework, this form of instruction would be extremely helpful in a Title I school because students who attend Title I schools typically have limited exposure to places and ideas that span outside of their neighborhoods. It is difficult for these students to comprehend concepts in their content areas therefore, providing them with examples and academic scenarios that reflect their neighborhoods would be more impactful and increase their likelihood of comprehending content and retaining pertinent information.

**Critical CTE Issue: Teacher Shortages**

Teacher populations have been fluctuating for years for numerous reasons. Some school districts, such as the Hillsborough County School District, have even reached critical teacher shortages and have had to implement extensive recruitment strategies in order to fill these shortages. According to Ingersoll and Smith (2003), two trends that are contributing to the teacher shortage are increasing student enrollments and the increasing
number of teachers who are reaching retirement age. This is an issue that is very critical to CTE and could possibly negatively impact CTE programs.

**What Makes this Issue Critical**

As the baby boomer generation reaches retirement age, more teaching positions are opening, especially in CTE (Ingersoll & Smith, 2003). Ingersoll and Smith (2003) further elaborate on how policymakers attempt to alleviate this problem by trying to increase the supply of teachers. These policymakers implement an array of initiatives to recruit new teachers and offer incentives for potential teachers to leave their current career and become a teacher (Ingersoll & Smith, 2003). According to Bremer and Ruhland (2002), the need for professional development has been prompted by the growing teacher shortage.

In addition, with a shortage of CTE teachers, courses cannot be offered to students at the secondary education level and post secondary education level. It is imperative to have highly qualified CTE teacher who are not just well-versed in their content area, but who are also capable in providing quality instruction. With the shortage of CTE teachers, the delivery of quality instruction becomes jeopardized.

To further illustrate how critical this issue is, Ingersoll and Smith (2003) cite the National Center for Education Statistics to determine why there is such a huge issue with teacher retention. Of the beginning teachers surveyed, 39 percent left to pursue a better job or another career while 29 percent stated that they were dissatisfied with teaching (Ingersoll & Smith, 2003). Of the 29 percent who were surveyed, their top reason for their dissatisfaction was poor salary while student discipline problems, and poor
administrative support were the second and third most reasons respectively (Ingersoll & Smith, 2003).

**Recommendations to Address Teacher Shortages**

Ingersoll and Smith (2003) feel that in order to reduce the teacher shortage, the sole focus cannot be to just recruit teachers; there should also be an emphasis on retaining teachers. They further elaborate that data supports that raising teacher salaries offers one way to retain teachers but it is an expensive strategy (Ingersoll & Smith, 2003).

**Conclusion**

The perception of CTE, curriculum and learning models, the achievement gap, and teacher shortages are all critical issues in CTE. If these issues are addressed effectively, they have the capacity to grow and propel CTE to new heights where it will be a universally acceptable form of education and not just a “plan B”.
References


