

PUBLIC PERCEPTION OF CAREER AND TECHNICAL EDUCATION IN MISSISSIPPI

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INTRODUCTION

Career and Technical Education and the U.S. Economy

It's hard to argue that career and technical education (CTE) is an important source of skilled workers, but the field could be doing a better job of reaching more students and better training them once reached. Too many programs nationwide are lacking rigor, and they are failing to fully prepare their students for college and career. President Obama and other top American officials recognize this problem and released a blueprint for CTE transformation across the country in April of this year. With this transformation, designed to make all CTE programs more rigorous, relevant, and results driven, more students will have access to high-quality CTE programs. According to U.S. Secretary of Education Arne Duncan, "[CTE] can no longer be about earning a diploma and landing a job after high school. The goal of CTE should be that students earn an industry certification and postsecondary certificate or degree—and land a job that leads to a successful career."¹ The current administration sees a renewed American economy on the horizon, one that is built on American-made goods and skilled American workers, and to become less dependent on foreign alternatives, we must have a renewed commitment to this important facet of education. With many of the fastest growing jobs in the country requiring at least some college or postsecondary training, CTE is a realistic way to ensure our young people are academically prepared and technically trained for their future jobs.

The Stigma of CTE

An approach to education that has undergone a number of changes over the years, CTE conjures up an array of pseudonyms, including "vo-tech," "shop class," and "technical school." Accompanying these terms are public perceptions that CTE is only for students who are not college bound or who cannot afford college. These perceptions are not completely off base. CTE provides a valuable option for students who might otherwise fail to complete high school. In fact, **a 2005 report found that a ratio of one CTE class for every two academic classes lowers the dropout risk** of students.² But 21st-century CTE also plays a significant role in early preparation for college-bound students. With courses in polymer science, health sciences, robotics, computer programming, education, and graphic design, CTE now educates future automotive workers just as much as future engineers and teachers. No longer just about so-called blue-collar trades, CTE is a viable option for all students that brings relevance to their education, helping them connect school to a career.

Despite the variety of career tracks available in CTE programs, the narrow perception of the field seems to hinder parents from encouraging their children to take CTE courses or to pursue CTE at the postsecondary level. With other nations placing their children in career-focused, challenging coursework earlier and earlier,³ the U.S. must address this limited view. With the opportunity to graduate from high school or college with industry-recognized credentials and real-world experience, CTE students have a better chance to fast-track their careers, helping the nation improve its global competitiveness.

Although a number of education leaders and agencies acknowledge the nation's limited view of CTE, few statistically valid studies have been conducted.⁴ Beyond anecdotal evidence and a small sample of state and district studies, very little empirical evidence of public perception exists.

PURPOSE OF STUDY


An agency with over 30 years in education, the Mississippi State University Research and Curriculum Unit is deeply committed to the success of CTE, particularly in the state of Mississippi. Two core beliefs about CTE prompted this exploratory study:

1. **CTE improves economic development by filling middle-skills job gaps.** Because in CTE programs students simultaneously gain academic and job-ready skills, CTE readies students more quickly for job placement and ensures they require less on-the-job training when hired.
2. **CTE improves education by helping students connect the relevancy of their coursework to future careers.** Whether students plan to pursue a 4-year degree, 2-year degree, or national certification, CTE helps them connect their experiences in the classroom to the workplace.

Middle-Skills Opportunities

Middle-skills jobs, those requiring more than a high school diploma but less than a 4-year degree, make up the majority of the job market in our state. In 2008, over half of all jobs in Mississippi were middle-skills jobs, while less than a quarter required a 4-year degree. The projection for 2018 is the same.⁵ Middle-skills jobs in Mississippi are in a wide range of career fields, including automotive, health care, computer technology, and manufacturing. Over the next 6 years, 38% of all jobs in the state will be in the fields of business management and administration; hospitality and tourism; and marketing, sales, and services—all CTE fields with middle-skills job options—and by 2018, about 136,000 jobs in these and other fields will be available to those with certifications.⁶ Training more students in these career areas is important because so much of our technologically advanced world depends on this type of work and expertise. In 2009, 54% of Mississippians were in middle-skills jobs, but less than half of those had appropriate training, and projections through 2025 show the shortage of qualified middle-skills workers continuing.⁷

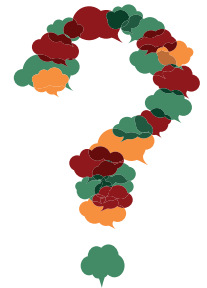
Educational Opportunities



Nearly half of students who drop out of high school cite uninteresting classes as their reason.⁸ The ability to complete algebra problems, to write a coherent essay, and to perform a chemistry experiment are important; however, students often fail to connect the relevancy of these and other academic skills to the outside world. But when students use the concepts learned in their geometry classes to build something, as CTE students in Wayne County did this year when they built a commercial-grade kitchen for their culinary peers, they begin to see just how important those skills are. Likewise, when students see the need for analytical and writing concepts learned in their English courses in order to craft effective promotional writing in their marketing class, their interest is piqued. The age-old question “When am I ever going to use this again?” will persist unless more students start connecting their classroom lessons to real work and careers. By helping students see the relevancy of their coursework to their future careers, CTE instructors make class more interesting to students, which can prevent them from dropping out. **In 2008, the nationwide graduation rate was 75%, but students in a CTE program graduated at a 90% rate.**⁹ Following this national model, Mississippi’s state-reported graduation rate of 74% could see dramatic improvements if more students were enrolled in CTE programs.

Essential Question

This study was important because research suggests that higher participation rates in CTE at the secondary and postsecondary levels could improve Mississippi’s graduation rates and better support economic development in the state. Although we believe in the value of CTE, we are well aware of the barriers created by limited public perception of the programs.



Thus this exploratory study of public perception of CTE was centered on answering one question: **How can we better inform policy makers and the Mississippi Department of Education on strategies to increase participation in CTE?**

SURVEY DESIGN

The Survey Research Laboratory at Mississippi State University conducted telephone interviews with adult Mississippians from late-May through early-July 2012. A total of 418 interviews with adults aged 18 or older and residing in the state of Mississippi were secured. Fifteen cases were excluded from the final data set due to incomplete responses, leaving a final data set of 403 completed interviews.

In order to provide a probability-based sample representative of all households in the state, a dual-frame random-digit-dialing (RDD) sampling methodology was employed, whereby both landline and cellular telephone numbers were used to contact eligible adults. Telephone numbers were dialed up to eight times before being retired. The table below provides a brief summary of the sampling design for the study. The RDD Universe includes both assigned and unassigned telephone numbers available in the geographic area being surveyed. The Sample represents the total number of telephone numbers purchased for this study.

Frame, Sample, and Respondent Composition by Sampling Strata

Frame	RDD Universe	Sample	Respondents
Landline	2,527,200	8,000	291
Cellular	4,238,000	3,000	127
Totals:	6,765,200	11,000	418

FINDINGS

Year after year, Mississippi ranks last or near last nationally in student performance on state tests,¹¹ but 71% of Mississippians surveyed believe that the quality of public education in our state is either Excellent, Good, or Average. Further, **58% believe we are Better or About the Same as other states at preparing students for today’s workforce.** With Mississippi near the bottom in rankings nationwide, the public has an inaccurate perception of general education in the state, and our survey found that many Mississippians are misinformed about CTE as well.

Perception: CTE Programs

Although 89% of respondents believe a 2-year degree or certificate in CTE is important, 45% were unable to name a CTE program offered by a school in their area. This inability to name local programs could be due to a lack of understanding of the local school’s and community college’s offerings or a lack of understanding of what programs are considered CTE. Although many respondents were unable to name local CTE

programs, they were capable of naming CTE programs at large. Unfortunately, many of the programs they named were “vo-tech” holdovers. The most common responses were related to manual labor, such as welding, automobile repair, and carpentry. While these fields are a part of CTE, they are by no means the only career options available. Hence, the survey responses indicate that the public does not understand the whole CTE picture and is failing to connect certain fields, such as engineering, marketing, drafting, and management, to CTE.

Perception: CTE Students

For the 2010-2011 school year in Mississippi, roughly a third of the secondary student population and a combined total of nearly 155,000 students from secondary and postsecondary programs in the state took CTE courses.¹² When asked their perception of CTE, 62% of the respondents made positive comments with only 13% of those qualifying the positive aspects as relating to

a particular, mostly disadvantaged, group of people. However, when asked what type of students would most benefit from CTE, an overwhelming 44% described students who were disadvantaged in one way or another. The type of students most commonly described were those who were not college bound, closely followed by students in poverty or who were not excelling in their schoolwork. Others described included those with special needs and those who are more apt to work with their hands than their minds. The aim of CTE is to prepare students for careers, yet only 8% of respondents made that connection when describing students who would benefit from the programs. A few respondents mentioned students interested in nursing, technology, and other CTE fields, but the vast majority described characteristics of students’ intellectual abilities and socioeconomic statuses rather than their career aspirations. Certainly CTE can and does provide education to all types of students, but the notion that CTE is mostly for disadvantaged students or that the programs most benefit students lacking mental capacity is misinformed.

Perception: CTE and College

Only 45% of respondents believe CTE students can receive college-preparatory diplomas. Although most respondents claimed that any and all forms of education carry some merit for all students, the general consensus was that CTE is more valuable to students who are not college bound: When asked if CTE is highly valuable for students not going to college, 61% of respondents said yes, but when asked the same question about those who are college bound, only 48% agreed. The fact is, CTE students can and do take college-prep academic classes. Students in a rigorous CTE program that links academic course relevance to their future careers are often better prepared for postsecondary work than their non-CTE peers.

Perception: CTE and Industry

By design, CTE is closely tied to industry. Students take courses that are related to a particular career field or even a specific job, and by learning how to complete real tasks that they would do on a real job in real time, students see the relevancy of their coursework to the real world. Respondents recognized the importance of CTE connections to industry as well: 98% said it is Very Important or Important for CTE instructors to work closely with local businesses when developing their programs. When considering responses to other questions,

however, we notice a disconnect in the public’s perception of CTE. If 98% believe CTE instructors should work closely with industry when developing curricula, why did only 8% describe students pursuing particular jobs or a particular industry as those who would most benefit from CTE? A surface-level recognition that CTE helps prepare students for the working world exists, but a deeper, more troubling belief that CTE is only for a certain type of student lingers.

CONCLUSION

When asked directly if CTE benefits all students, respondents said yes, but when asked to describe the types of students CTE benefits, respondents described students who lack academic capability, who are poor, or who are not college bound. Over and over again, respondents described students who were disadvantaged in one way or another as the target population, revealing their underlying assumption that the CTE approach is most suitable for students with no other options. Again, while CTE can provide viable options for students who may not otherwise pursue postsecondary education, these are not the only students who can benefit from the programs. Almost all students enroll in at least one CTE course on their paths to 2- and 4-year colleges and national certification programs alike.

Respondents’ emphasis on the place of CTE in the lives of the poor leads us to conclude that many Mississippians share the national opinion that CTE prepares students for low-wage, low-skill jobs, an opinion no longer based in fact. Although research shows that taking CTE courses can help students outperform their peers and earn more money in a job,¹³ as well as prevent dropping out of high school, the general public still sees CTE programs as most related to low-paying jobs and undesirable for mainstream Mississippi students. This narrow perception exists in the minds of many law and policy makers as well. If CTE is to survive budget cuts and maintain its relevance in American education, we must improve perception at all levels.

RECOMMENDATIONS FOR MOVING CAREER AND TECHNICAL EDUCATION FORWARD

Changing Perceptions

In order to broaden public perception, stakeholders must promote 21st-century facts about CTE—that students are better prepared for college and careers, that coursework is relevant, that students from all socioeconomic backgrounds and academic ability levels benefit from the classes. When asked the preferred media outlet for learning about CTE,



respondents’ top three choices were newspaper, television, and social media. Other suggestions included personal appearances, brochures/booklets distributed at school, word of mouth, and school tours. An increase in media coverage for local programs, such as public service announcements and news stories, could increase the visibility of a particular CTE program in the local community and perhaps prompt student and parent interest. Likewise, increased coverage throughout Mississippi could prompt interest statewide. Districts and educational agencies can increase the awareness of CTE and its benefits by promoting certain characteristics, including flexibility, fast track to careers, and high-skill and higher wage job opportunities. Many schools’ best and

brightest students take CTE courses, and the public needs to know about their success. As more people become aware of the benefits of CTE and as the narrow view is broadened, more students will likely enroll in the programs, improving the state's graduation rate and economic opportunities.

Further Research Efforts

Additional research is needed to determine if this misinformed, narrow public perception exists in other groups in Mississippi, particularly educators and students. Parents, teachers, and students are the three main influencers in a student's educational goals, and an understanding of their perceptions of CTE would help identify consistent and disparate beliefs among groups, which would inform future promotional efforts and policy related to CTE.

The field would benefit from more research to support two conclusions: 1) An improved perception of CTE will result in more students enrolling in the courses, and 2) Higher enrollment will result in improvements to education and economic development statewide.

REFERENCES

- ¹U.S. Department of Education. (2012, April 19). U.S. Department of Education releases blueprint to transform career and technical education [press release]. Retrieved from <http://www.ed.gov/news/press-releases/us-department-education-releases-blueprint-transform-career-and-technical-education>
- ²Plank, S., DeLuca, S., & Estacionet, A. (2005). Dropping out of high school and the place of career and technical education. Retrieved from <http://www.nrccte.org/sites/default/files/publication-files/droppingout-plank.pdf>
- ³Cohen, M., & Besharov, D. J. (2002). *The role of career and technical education: Implications for the federal government*. Washington, DC: Office of Vocational and Adult Education.
- ⁴Cohen, M., & Besharov, D. J. (2002). *The role of career and technical education: Implications for the federal government*. Washington, DC: Office of Vocational and Adult Education.
- Herian, M. N. (2010). *Examining the perceptions of career and technical education in Nebraska*. University of Nebraska Public Policy Center. Retrieved from http://ppc.unl.edu/userfiles/file/Documents/projects/CTE/NDE-CTE_Report_Draft-FINAL_2-10.pdf.
- Wright, M. D., Washer, B. A., Watkins, L., & Scott, D. G. (2008). Have we made progress? Stakeholder perceptions of technology education in public secondary education in the United States. *Journal of Technology Education*, 20(1), 78-93.
- ⁵National Skills Coalition. (n.d.). Middle-skill jobs state by state: Mississippi. Retrieved from http://www.nationalskillscoalition.org/resources/fact-sheets/state-fact-sheets/middle-skill/nsc_middleskillfs_mississippi.pdf
- ⁶National Association of State Directors of Career Technical. (2012). Retrieved from <http://www.careertech.org/resources/statesnapshots.html>
- ⁷National Skills Coalition. (2011). Driving innovation from the middle: Middle-skill jobs in the American south's economy. Retrieved from http://www.nationalskillscoalition.org/assets/reports-/nsc_sga_middleskillsbrief_2011-08.pdf
- ⁸Association for Career and Technical Education. (2007). Career and technical education's role in dropout prevention and recovery. Retrieved from https://www.acteonline.org/uploadedFiles/Publications_and_Online_Media/files/Dropouts.pdf
- ⁹National Association of State Directors of Career Technical Education Consortium. (2012). CTE enrollment. Retrieved from <http://www.careertech.org>
- ¹⁰Mississippi Department of Education. (2012, August 29). State test scores released: Graduation rate, MCT2 results on the rise [Media release]. Retrieved from <http://home.mde.k12.ms.us/mde-news/2012/08/29/2012-state-test-scores-released-graduation-rate-mct2-results-on-the-rise>
- ¹¹The Annie E. Case Foundation. (2012). Data across states. Retrieved from <http://datacenter.kidscount.org/data/acrossstates/Default.aspx>
- ¹²Association for Career and Technical Education. (2012). State profiles: Mississippi. Retrieved from <https://www.acteonline.org/stateprofiles/state/mississippi/default.aspx>
- ¹³Brand, B. (2008). Supporting high quality career and technical education through federal and state policy. *American Youth Policy Forum*. Retrieved from <http://www.aypf.org/documents/CTEMeetingPaper.pdf>
- ¹⁴Plank, S., DeLuca, S., & Estacionet, A. (2005). Dropping out of high school and the place of career and technical education. Retrieved from <http://www.nrccte.org/sites/default/files/publication-files/droppingout-plank.pdf>

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