

The Development and Implementation of Admission Criteria for Career and Technical Education Programs

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Abstract

The purpose of this white paper is to provide information on the establishment of admission requirements for Career and Technical Education (CTE) programs at the secondary level in order to aid administrators and instructors in better managing student enrollment. This paper discusses the advantages of an admissions procedure, how such a procedure will help students master industry standards so that they may gain credentials in the area, and the legal requirements CTE programs must keep in mind when developing eligibility criteria. Requiring students to apply to CTE programs in which their academic and technical standards are evaluated, and also requiring students to complete prerequisite courses before enrollment in a CTE program, will better enable CTE programs to teach enrolled students the skills necessary to compete in America's highly skilled workforce.

I. Introduction

In 2003, the number of students enrolled in CTE programs throughout the country rose to 15.1 million – up from 9.6 million reported in 1999-2000.¹ Data suggests that school enrollment will continue to increase² and that a growing number of students are focusing on programs that will land them a job after high school as opposed to more academic studies.³ The once industrialized American economy has changed into a world of technological powerhouses, igniting concern among public and government leaders that young people will not graduate from high school with the necessary skills to promote growth in the American economy.⁴ As a result, CTE programs have an even greater responsibility to ensure that their students are ready to take on the changing workplace of the 21st century.⁵

This greater responsibility is requiring CTE instructors to teach more difficult material to an increasing number of students, consequently limiting the individualized attention that instructors may have been able to previously afford. As enrollments in CTE programs continue to rise, schools must find a way to effectively teach those enrolled to ensure that students are ready for further education or employment in a high wage, high skill, high demand occupation. A possible solution would be to add more CTE instructors, but with many school districts already facing financial burdens, and a continuous shortage of CTE teachers, this does not seem a viable option.

To ensure that students are mastering industry standards and to preserve the value of CTE programs, there must be a way to manage student enrollment. The development and implementation of admission criteria for CTE programs will help manage the number of students enrolled without devaluing or sacrificing CTE program objectives or agency budgets. An application process for CTE programs, comprised of specific program criteria and academic prerequisites that a student must meet before admission to the program, is an effective way to prepare students for the 21st century American workforce.

II. The Problem: More Students, Demanding Standards, and Less Time

Traditionally, CTE, once coined “vocational education,” had the reputation of being the option students chose when they could not make it in the “academic” field.⁶ Current reality proves that CTE programs are quite the opposite, requiring students to weave together their academic and technical skills to be a successful program completer. The days of routine, repetitive skills⁷ that were sufficient to prepare students for work in woodworking or factories have disappeared. Now, CTE programs must combine and teach students problem solving and communication skills, academics, and related technical skills so that they may enter the workforce prepared to be decisive and independent.⁸

CTE instructors have long had the task of ensuring that their students' skills align with those required by the industry, but increasing demands and student enrollment leave less time for individual attention to ensure student mastery of industry standards. Student performance and attainment of these standards is reported to the

state annually as required by the Carl D. Perkins Career and Technical Education Improvement Act of 2006, which governs federal funding for CTE programs. These “core indicators of performance” include, but are not limited to: student achievement of challenging academic standards, such as in math and science, as well as technical skills that are aligned with industry standards; student attainment rates of a high school diploma, student graduation rates and placement in postsecondary education or advanced training; and student completion of CTE programs.⁹ The state aggregates this data and submits a report to the United States Department of Education. Should a state not meet the required levels of performance, further funding for CTE programs may be withheld.

CTE enrollment and industry demands continue to increase. Moreover, the availability of well qualified CTE instructors remains unchanged. These two circumstances may mean that student attainment of challenging industry standards may decrease. Instructors, time, and resources ensure that students are mastering the skills of the industry. With more students and fewer instructors, a decrease in student achievement of industry standards may occur which poses a compliance problem with the Perkins legislation, and could result in less funding for CTE programs, or no funding at all. Therefore, it is critically important to the success and continuance of CTE programs that admissions standards are established. As a result, CTE instructors will be able to effectively teach those students who are qualified to enroll and are prepared to handle the demands of the CTE curriculum; thereby preserving the goal of CTE: to prepare students for employment in high wage, high skill, high demand occupations.

III. The Solution: Application, Admission Criteria, and Academic Prerequisites

A. Application

The increased number of students, limited number of CTE instructors, and increased industry demands necessitate an application process for all interested students in order to ensure fair access to CTE programs and preserve the value of CTE programs. This application process should take place before the student’s junior year, preferably sometime in the 10th grade, to ensure that the student is well prepared to begin a two year CTE program. Admission criteria needs to be made available to students, parents, counselors, and teachers well before a student is required to apply so that students are able to prepare for and plan their academic career. CTE program descriptions and admission requirements should be published with a school’s notice of opportunities in CTE, which is required to be distributed to the public annually.

Application to a CTE program should include the identification of the basic skills necessary for program completion and the student’s level of understanding in those areas. An admissions committee composed of school faculty and staff, as well as the appropriate CTE instructor,

should determine the criteria to be included on the application, the level of performance needed for the program, and how best to measure the applicant’s qualifications. For instance, if the student is applying for a building trades program in which the ability to calculate fractions is necessary, then the application should inquire about the student’s level of proficiency in the area. An application may also focus on which courses the student has completed and take into consideration how the student performed. The academic instructor can help determine what level of performance indicates a mastery of the skill necessary for a CTE program and help determine if a student’s performance was adequate enough to prepare him/her for the CTE program. Applications should only measure the skills that need to be mastered prior to beginning the CTE program and that are absolutely necessary for program completion.

Applications must be reviewed on a non-discriminatory basis and should involve a committee of unbiased educators. Federal law mandates that applications cannot inquire about whether a student has a handicap or needs program accommodations to ensure that the student will be evaluated without regard to his/her disability.¹⁰ Such inquiries concerning a student’s handicap and/or program accommodations can only happen after the student has been admitted to the program. CTE programs violate anti-discrimination laws when admission criteria on an application disproportionately screen out those students with disabilities; assign those students to separate facilities; create schools for only one sex; deny English Language Learners an equal right to participate; or assign students, faculty or staff to a CTE program based on race, sex, handicap, or national

origin.¹¹ If there are more eligible applications for a CTE program than available space, there must be a fair and unbiased selection of students from the pool of all qualified applicants.

B. Admission Criteria

When implementing admissions criteria or “technical standards,” the nonacademic criteria that are essential to admission and participation in, or licensing requirement of, a CTE program¹², administrators need to be sure the criteria chosen do not conflict with any non-discrimination legislation. The Americans with Disabilities Act (ADA) and the Individuals with Disabilities Education Amendments of 1997 (IDEA) mandate that no qualified individual will be denied admission to a program based on a disability.¹³ IDEA extends this prohibition as established under Section 504 of the Rehabilitation Act of 1973 and applies to all programs, even those not funded by federal monies. Civil rights law also prohibits discrimination on the basis of race, color, nation origin, sex, or handicap.¹⁴

Keeping in mind the legal guidelines for admission criteria, it must be determined which technical standards and academic qualifications are absolutely necessary for each individual CTE program. The nature or purpose of the CTE program and the relationship between technical standards and “functional elements” of a program are factors to consider when establishing technical standards. If a health science program requires students to provide evidence of current immunizations, including hepatitis B, in order to participate in the clinical rotations of the program, this criterion should be included on the application as a requirement for that program. CTE programs may also establish guidelines for credit attainment prior to CTE eligibility to ensure that the student completes the CTE program and graduates from high school in a timely fashion. During this process, it is important to remember that each CTE program is different, requiring different technical standards.¹⁵ In addition, technical standards need to describe a skill or ability, not a disqualifying medical or disability condition.¹⁶

Some technical standards, such as the physical requirement of lifting a certain weight, may have the effect of screening out students of protected populations. Technical standards such as this, however, are in compliance and non-discriminatory if they are necessary for the safe operation of a program.¹⁷ Another example would be a CTE program requiring students to have a driver’s license for safe operation of a vehicle.¹⁸ Rules such as these seem to have the disproportionate effect of screening out students with disabilities and other protected populations, but are not discriminatory because the rules are essential to the safety of the student, instructor, and other individuals in the program. Other acceptable admission criteria that must also meet the “essential to participation” test include: past academic performance and/or disciplinary proceedings; teachers’ recommendation and counselors’ approval; interest inventories; and performance on standardized texts.¹⁹

In addition, districts may not establish attendance areas or boundaries for a CTE center that disproportionately discriminates on the basis of residence.²⁰ If a school establishes a CTE center that is close to another school system with minority or nonminority students in a greater proportion, then the CTE center is unlawfully established.²¹ A CTE center also cannot establish admission criteria based on equal percentages from sending schools if such criteria discriminate on the basis of race, sex, handicap, or national origin.²² For example: a school district has six high schools and 25 percent of the school district’s high school students are from a minority population, most of whom are enrolled in one high school. The remaining 75 percent are nonminority students enrolled in the remaining five high schools. If a CTE program was to determine eligibility based on equal percentages of students from each sending school, then the criteria disproportionately discriminates on the basis of race and is illegal.²³

C. Prerequisites

In addition to admissions criteria, academic prerequisites are another avenue for CTE programs seeking to manage student enrollment and help assure student success. Prerequisites, in addition to admission criteria, help to ensure that students are academically and technically qualified and ready for learning in the CTE program. Prerequisites should be based on academic skills that students must master *before* enrolling in a CTE program. For instance, to excel in CTE industrial programs such as building trades and construction, a student must be proficient in math, especially fractions. If a student enters the program without adequate skills in this academic

area, he/she will most likely have a difficult time keeping pace with the coursework. As a student falls further behind in a CTE program, his/her chance for successful program completion diminishes and his/her prospect for postsecondary employment in a high wage, high skill, high demand occupation lessens as well. This outcome undermines the purpose of CTE programs and the Perkins legislation, but can be avoided by requiring students to meet eligibility criteria that assure they are prepared with essential skills before admittance to a CTE program.

Prerequisites come with many of the same anti-discrimination mandates as admission criteria and are valuable in determining a student's level of preparedness. CTE programs must not impose prerequisites that discriminate on the basis of race, color, sex, handicap, or national origin. To be a prerequisite for a CTE program, the course or skill must be demonstrated as essential to participation in the program, available to all students, and "has been and is available without regard to race, color, national origin, sex, and handicap."²⁴ Prerequisites must be applied to, and measured equally for, all students seeking admission to a CTE program.

CTE programs build on the knowledge students have when they enter the program and these building blocks need to be reflected in the established admission criteria. For example, a student in a health occupations program will be talking college level anatomy and physiology as a part of their CTE program. In order to be successful, the concepts taught in biology are required, and proficiency in biology needs to be established as prerequisite for application to this program.

In determining eligibility requirements and prerequisite courses for CTE programs, it is important to keep the goals of CTE programs in mind.²⁵ CTE programs are designed to prepare students for employment in high wage, high skill, high demand occupations – not for remediation or to teach students specific academic skills taught in their home schools. For instance, there may be agreement between CTE and academic instructors that a student needs to be proficient in algebra and geometry to be successful in an advanced manufacturing program.²⁶ There is less agreement, however, on whether the CTE instructor should be required to teach a student those skills,²⁷ or whether the student should be required to enter to program already proficient in algebra and geometry. CTE instructors generally are not prepared to teach students the academic skills needed to enter the program; they are prepared to build upon those skills, teaching the student how to apply them in the CTE area. As such, the student needs to enter the program ready to relate their academic skills to those of the trade and this needs be reflected in prerequisite courses and eligibility criteria.

IV. Conclusion

The purpose of CTE programs is to prepare students for postsecondary programs or employment in high wage, high skill, high demand occupations. As the American workforce becomes more skilled and technical, the value of CTE programs proves immeasurable for students seeking to gain an edge on their competition. CTE programs provide a link for students from the classroom to the real world that cannot be replicated in other academic programs.

Nevertheless, growing student enrollment, increased industry demands, and a limited availability of CTE instructors leave many programs stretched thin, unable to provide attention that many students may need to master industry standards. Student enrollment needs to be managed to ensure that the purpose of CTE programs is preserved and that students learn the program material. By developing and implementing an application process for CTE programs, requiring eligibility criteria, and establishing prerequisites, students are given the best opportunity to excel in the program because they are equipped to meet the challenges before beginning the program. Eligibility requirements must not be discriminatory, must apply equally to all students, and must align with the technical skills that are absolutely necessary to the safe and successful implementation of the CTE program.

By using admission requirements, CTE programs will be able to manage student enrollment, ensuring that CTE instructors are able to effectively teach those students qualified for the program and that students enrolled master the standards set forth by the industry. Eligibility criteria promote the purpose and value of CTE programs by allowing a manageable number of students to take full advantage of the program and instructor's knowledge, guidance, and support. It is an effective way for CTE programs to adequately prepare students for the 21st century workforce and give students the best possible instruction in a highly competitive arena.

¹ *More Students Focus Schooling on Skills to Land Job.*(CTE News)(Brief article), 82.7 TECHNIQUES 58(1), (Oct 2007), available at <http://0-find.galegroup.com.elibrary.mel.org:80/itx/start.do?prodId=PROF> [hereinafter *Schooling*].

² Camp, William G. and Betty Heath-Camp. *The Status of CTE Teacher Education Today: The Old Models for CTE Teacher Preparation are No Longer Producing Adequate Numbers of Well-Prepared Teachers as They Once Did (Preparing the new teacher)*(Career and Technical Education), 82.6 TECHNIQUES 164(4), (Sept. 2007), available at <http://www.mel.org/SPT-BrowseResources.php?ParentId=176> (follow “Educators Reference Complete” database; then basic search “status of CTE”).

³ *Schooling*, *supra* note 1.

⁴ White, Roberta. *The Role of CTE in Developing the Next Generation of Leaders. (The Last Word)*(Great Oaks Institute of Technology and Career Development). 83.1 TECHNIQUES 61(1), (Jan 2008), available at <http://www.mel.org/SPT--BrowseResources.php?ParentId=176> (follow “Educators Reference Complete” database; then basic search “role of CTE”).

⁵ *Id.*

⁶ Cutshall, Sandy. *The Core Connection: CTE and Academics: a Perfect Fit. (Career and Technical Education)*, 78.6 TECHNIQUES 18(4), (Sept 2003), available at <http://www.mel.org/SPT--BrowseResources.php?ParentId=176> (follow “Educators Reference Complete” database; then basic search “core connection”).

⁷ Bottoms, Gene, and Ione Philips. *How to Design Challenging Vocational Courses*, 73.n4 TECHNIQUES 27(3), (April 1998), available at <http://www.mel.org/SPT--BrowseResources.php?ParentId=176> (follow “Educators Reference Complete” database; then basic search “design challenging vocational courses”).

⁸ *Id.*

⁹ Carl D. Perkins Career and Technical Education Improvement Act of 2006, 20 U.S.C. § 2301 (2006).

¹⁰ Section 504 of the Rehabilitation Act of 1973, 34 CFR 104.42(b)(4).

¹¹ Vocational Education Programs Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex and Handicap, 44 Fed. Reg. 17162, 17163 (March 21, 1979) (to be codified at 45 CFR 100, Part B) [hereinafter *Vocational*].

¹² Tim Sell, Attorney, U.S. Dep’t of Educ. Off. of Civ. Rts., OCR Issue Presentation at the 2006 MOA Coordinators’ Training Conference: Recruitment, Admissions, Technical Standards (May 17, 2006) [hereinafter *Presentation*].

¹³ American with Disabilities Act, 28 CFR 35.101 (1991); Individuals with Disabilities Education Act Amendments of 1997, Pub. L. No. 105-17, § 601(d), (1997).

¹⁴ *Vocational*, 44 Fed. Reg. 17165.

¹⁵ *Presentation*, *supra* note 12.

¹⁶ *Presentation*, *supra* note 12.

¹⁷ *Vocational*, 44 Fed. Reg. 17165.

¹⁸ *Vocational*, 44 Red. Reg. 17165.

¹⁹ *Vocational*, 44 Red. Reg. 17166.

²⁰ *Vocational*, 44 Red. Reg. 17165.

²¹ *Vocational*, 44 Red. Reg. 17165.

²² *Vocational*, 44 Red. Reg. 17166.

²³ *Vocational*, 44 Red. Reg. 17166.

²⁴ *Vocational*, 44 Red. Reg. 17166.

²⁵ Hoachlander, Gar., *Make a Tool of the Rules.* 75.2 TECHNIQUES S1, (Feb 2000), available at <http://www.mel.org/SPT--BrowseResources.php?ParentId=176> (follow “Educators Reference Complete” database; then basic search “tool of the rules”).

²⁶ *Id.*

²⁷ *Id.*