Mr. Chuang,

Enclosed, please find Center for Law and Education’s (“CLE”) comments to the Massachusetts Department of Elementary and Secondary Education’s (the “Department”) 603 C.M.R. § 4.00: Vocational Technical Education Regulations – Including May 7, 2019 Draft of Proposed Revisions for Discussion and Stakeholder Feedback (the “Department’s Draft Changes”). CLE is a non-profit resource, advocacy and support organization that specializes in education law, policy and research on behalf of students from low-income families. Rooted in both civil rights and school reform, CLE focuses on bringing the two together to challenge systemic barriers that impede low-income students, who are disproportionately students of color, English learners, and students with disabilities, from learning to high standards and remaining in school to learn. CLE appreciates this opportunity to provide initial feedback to the Department at this early stage.

In the 1980s, CLE began advocating for vocational reforms which would help end, rather than exacerbate, tracking of some students into programs with lower academic content and limited career potential. These efforts culminated in a completely redirected Perkins Vocational Education Act in 1990 (and the extension of those reforms in 1998) and the School-to-Work Opportunities Act in 1994. At the same time, our Vocational Opportunity for Community and Educational Development project worked in communities across the country to help create programs that are high quality, equitably serve all students, engage the community in program development, and engage students and teachers in community development. As the primary subcontractor for the Department of Education’s New Urban High School initiative, CLE also worked with several urban schools uniting school-to-career principles with schoolwide high school reform. A key element of our various high school detracking efforts was to replace an outmoded industrial model of narrow job training with deep, active, and critical exploration of all aspects of a broad field of human endeavor. CLE has continued to play an influential role in informing career and technical education policy decisions at the federal level and worked heavily with Congress during the two most recent reauthorizations of the Perkins Act in 2006 and 2018.

CLE looks forward to opening a dialogue with the Department about how 603 C.M.R. § 4.00 et seq. can best ensure students participating in career and technical education are taught to the same challenging and rigorous academic skills as all students, learning all aspects of an industry in order to successfully participate in further education and careers in current or emerging high-skill, high-wage professions. In that spirit, some of our comments articulate specific principles without specific regulatory language, while others do include initial proposed regulatory language with the understanding that dialogue may result in better final outcomes.
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I. Admission of Students

a. 603 C.M.R. § 4.03(6)(a)(1)

1. Criteria for selecting students and process for application and admission.

We strongly urge the Department not to withdraw the “ability to benefit” language. Rather than having become irrelevant, it is actually the single most important provision for ensuring admission policies that are fair, provide equal educational opportunity, and comply with the law; and it becomes all the more important when applications exceed the available seats. In addition to retaining the language, the Department needs to devote attention, both through additional language in the regulations and through other activities, to making sure its meaning is understood and properly implemented. (In contrast, for the same reasons discussed below concerning ability to benefit, we do support the proposed deletion of the word “selective” in this section.)

The provision in current regulations provides: “Each selective vocational technical secondary school in Massachusetts shall use a combination of selection criteria to determine which applicants have an ability to benefit, and therefore be admitted to the school unless the school opts to use first come-first served or a lottery for admissions. The criteria used shall include academic grades, attendance record, discipline/conduct record, recommendations from the sending-school school counselor, and may include a student interview, provided however, that no one criterion exceeds 50% of the total. Resident students who meet the minimum requirements for admission shall be admitted prior to acceptance of any non-resident students seeking the same course of study. Schools shall condition admission on a student having been promoted to the grade that they have been admitted to enter. Schools may condition admission on a student having passed courses in English Language Arts or its equivalent and mathematics for the school year immediately preceding their enrollment in a selective vocational technical school or program.” [Emphasis added.]

It is clear from this language that any criteria used must be for the one purpose of determining which applicants have an ability to benefit. That and only that is the purpose of the criteria – to determine which students have the ability to benefit and which, if any, do not – and not as the basis for ranking the students who do have ability benefit and disfavoring some students.

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1 As the regulation indicates, the school can in effect decide that any students who have been promoted to the relevant grade level have the ability to benefit and are thus eligible and will be selected on a first-come first-served or lottery basis. We believe that there are strong factual, policy, and legal reasons for doing so. But in any event, any criteria a school chooses to use beyond that must be tailored to the determination of whether a student has ability to benefit.

2 This understanding is reinforced by the sentence in (6)(a)1. that follows the quoted portion above: “Resident students who meet the minimum requirements for admission . . .” – i.e., that the criteria are for the purpose of
This is a question of basic fairness in public schools, equal educational opportunity, and civil rights, as described below. But beyond that, it is simply not in the long-term interests of the Commonwealth to provide students who have struggled in school with less opportunity than others to participate in high-quality career and technical education. That would be true in any case, but all the more so when that opportunity may be more critical for many of these students than for other, heretofore more successful students in determining whether or not they will not only benefit but thrive in high school, access higher education and career opportunities, and contribute to the life of their communities.

Federal civil rights laws impose affirmative obligations upon the Massachusetts Department of Education and all local and regional institutions and education agencies receiving any federal funds to:

(a) Ensure that policies and practices do not have a disparate impact upon students on the basis of race or national origin, disability, or sex, unless they are demonstrated to meet a high standard of educational necessity and unless that necessity cannot be effectively addressed through other policies or practices that do not have the same disparate impact; and

(b) Ensure that actions are undertaken to identify and remove barriers to access and successful participation of students, including accommodations and the provision of various of assistance to students with particular educational needs.

Massachusetts law and regulations concerning equal educational opportunity impose related obligations (and extend those protections to students on the basis of gender identity, sexual orientation, and religion).

The Carl D. Perkins Career and Technical Education Act contains a similar set of state and local/regional equity obligations, applicable to programs receiving Perkins funding, to ensure (1) that students who are members of special populations are (a) not discriminated against, (b) have equal access, and (c) are provided with assistance needed for successful participation, and (2) that barriers resulting in unequal rates of access or of success be identified and addressed.

“Special populations” defined, in terms that go beyond the categories identified in the civil rights laws, to include students from economically disadvantaged families, as well as individuals with disabilities, English learners, homeless individuals, youth who are in or have aged out of the foster care system, single parents (including single pregnant women), individuals preparing for non-traditional fields, youth with a parent who is an active-duty armed forces member, and out-of-workforce individuals.

In applying these requirements from the various laws, most directly and explicitly on point is language, found in the federal guidelines for eliminating discrimination and denial of services on

established a set of minimum requirements for admission based on ability to benefit, not a sliding scale of points that are used to rank and select the highest scoring students.

3 For example, Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act, the Individuals with Disabilities Education Act, and Title IX of the 1972 Education Amendments – along with their accompanying regulations.
the basis of race, color, national origin, sex, or disability, specifically addressing the use of admissions criteria to evaluate individual applicants:

“Recipients may not judge candidates for admission to vocational education programs on the basis of criteria that have the effect of disproportionately excluding persons of a particular race, color, national origin, sex, or handicap. However, if a recipient can demonstrate that such criteria have been validated as essential to participation in a given program and that alternative equally valid criteria that do not have such a disproportionate adverse effect are unavailable, the criteria will be judged nondiscriminatory. Examples of admissions criteria that must meet this test are past academic performance, record of disciplinary infractions, counselors' approval, teachers' recommendations, interest inventories, high school diplomas and standardized tests, such as the Test of Adult Basic Education (TABE).”

This language flows directly from the more general civil rights standards discussed for addressing disparate impact, and it is consistent with the ability to benefit provision in the current regulations, whereby various admissions criteria are to be crafted and used only for the purpose of identifying whether students actually have the ability to benefit from the programs.

This provision (along with others in the federal guidelines, the civil rights statutes and regulations, the Perkins Act, and Massachusetts statutes and regulations related to equal educational opportunity), in turn provides a key basis for many of our recommendations regarding the admissions portion of the CVTE regulations -- given the significant and widespread disparities in grades, disciplinary incidence, and the other criteria contained in the existing and proposed regulations, in terms of race, national origin, disability, English learners, students from economically disadvantaged families, and other population groups identified in those laws. At the same time, our recommendations also are based on the broader point we made earlier – that, consistent with the existing regulations as written, but not necessarily as implemented, admissions criteria should not be used as the basis for screening out any students (regardless of population group) who have the ability to benefit from vocational technical education despite having lower grades or lower scores on other criteria.

A school or local or regional education agency must limit admission criteria to the determination of whether a student has the ability to benefit from the program; it must be limited to criteria: (a) that it demonstrates have been validated as essential for participation; and (b) that could not be met while the student is participating in the program or with the provision of the individual assistance, including the accommodations, supports, and other assistance that should be provided

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4 34 CFR Part 100, Appendix B — Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex, and Handicap in Vocational Education Programs. In Title 34 of the Code of Federal Regulations (CFR), Parts 100-106 contain the regulations that effectuate the civil rights provisions of Title VI (regarding race, color, and national origin), Title IX (regarding sex), and Section 504 (regarding disability). These guidelines apply to all three laws.

5 34 CFR Part 100, Appendix B, Section IV.K., “Eligibility Based on Evaluation of Each Applicant Under Admissions Criteria.”
under applicable programs and laws (e.g., Perkins, Title I, 504 and IDEA, programs and requirements for serving English learners, and state programs and laws). Any such criteria should not be used if equally valid criteria would have less disproportionate impact on any of the population groups identified in relevant federal and state law noted above. The following must also be made clear in the regulations:

- The purpose of these criteria is to validly determine ability to benefit from the program, as the basis for eligibility to participate. They may not be used as the basis to rank order and reject students who meet that minimum requirement.

- When there are more eligible applicants than available slots, schools should select from among them on a random or other basis that does not result in disadvantaging students who are members of the special populations recognized under Perkins or students of color.

- Validation involves demonstration that:
  - The criteria really are essential for participation – what is the factual basis for assumptions that something is essential? Are there counter-examples that indicate otherwise? (Much of the history of progress in civil rights and equal opportunity has been based on challenging and ultimately rejecting long-held, but inadequately examined assumptions of this kind.)
  - The methods for determining/assessing whether a student meets the essential criteria are valid and reliable for the full range of students.
    - In other words, does the information being collected actually and accurately tell us whether an essential criterion has or has not been met?
    - And if it does generally, are there some students for which it does not? For students in some population groups, certain measures may not provide sufficiently valid and reliable information about their ability to benefit, and adjustments, modifications, accommodations, etc. may be necessary in order to produce valid and reliable information.
  - It is important to (a) identify each of the various assumptions or inferences that are being made in deciding that certain criteria are essential for participation and that the methods chosen for determining whether those criteria are being met are valid and reliable; and (b) carefully examining the validity of each of those assumptions.

- The ultimate question is whether the process being used results in valid and reliable decisions about a student does or does not have the ability to benefit from the program (with needed assistance).

- Where more than one criterion is being used, does the method for combining them into that single judgment result in an accurate determination of whether the student has the ability to benefit and minimize the risk of an erroneous judgment that he or she does not?

- For the same reason, where only a single criterion is being used, or where there is more than one criterion, any one of which can disqualify a student, the method (such as cut score or point on a rubric) that is used to make the binary decision about
whether a student is or is not qualified needs to result in a valid and reliable decision that minimizes the risk of students erroneously being disqualified.

- In selecting the methods of assessing whether a student has met an essential criterion, it is important to recognize that:
  - The higher the stakes for individual students (such as decisions that will affect the education programs that a student can enter), the less the room for error and the higher the degree of validity and reliability that is required; and
  - At the same time, the standard measure of error for any assessment becomes much greater for the results of individuals than for aggregate results.
  - For these reasons, the use of multiple valid methods and sources of information regarding that criterion -- in order to reduce erroneous determination that a student does not have the ability to benefit and cannot participate even with assistance -- becomes important.

- For any criteria that are demonstrated to be necessary in those terms, including pre-requisites, the school system;
  - Ensures that there is full, equal and non-discriminatory, effective access to the means of meeting those criteria; and
  - Seeks to provide all students with the means to meet those criteria.

- The school must regularly examine all of its programs to identify and remove barriers resulting in unequal rates of participation or unequal rates of success in those programs for students by race or national origin, income, disability, limited English proficiency, gender, family status, or prior achievement;
  - These reviews should be conducted with the full participation of representatives of members of the enumerated populations.

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6 We have framed this requirement as a responsibility of the “school system” because we realize that the high school is not responsible for the educational opportunities and assistance provided to students before they arrive. However:
(A) These are obligations of the school system and the state educational system of which the school is a part (whether this is a CVTE program within a comprehensive high school or a CVTE high school that is part of a local education agency; in the case of a regional CVTE school governed by a regional educational agency whose committee are from the sending towns and which is funded by those towns, it is unacceptable to have a situation where the regional school has admission criteria which the sending local education agencies fail to provide students with the means of meeting on the terms above. (B) This does become a part of the CVTE school’s responsibility as well when applied to admission to particular CVTE programs after a student has enrolled in the CVTE school. (C) To the extent that some students seeking to apply may not have had equal, effective access to meeting those criteria (whether because of student characteristics, differences in opportunities among sending schools, or for other reasons), it is particularly important to avoid basing eligibility on those factors unless clearly necessary on the terms above and there are no other alternatives to determine ability to benefit. And it becomes particularly incumbent upon the school system and the state to remedy that unequal access – both in the sending schools and in services and assistance for the affected students in the CVTE program to enable them to participate -- rather than allow it to become the basis for ineligibility.
2. “First-come first-served”.

We have strong concerns about using this as the basis for admission decisions. There are a number of factors that can pose barriers and put students covered under the provisions of the civil rights acts and the special populations provisions of Perkins at a severe disadvantaged in getting their applications in ahead of others – including, for example, the literacy level, English language skills, or disabilities of those students and their parents; experience in successfully dealing with similar application processes, along with ease and skills in dealing with administrators and others; possible understaffing, relative to student needs, in the schools they attend in comparison with schools serving less disadvantaged students; etc. Under the laws discussed earlier, the state needs to ensure that these and other factors do not result in disparate impact upon these populations, in terms of completing applications more quickly than others, before allowing it to be the basis for selection of students.

3. The specific criteria identified in the current regulations and the changes the Department is proposing to them.

A. Standards for each of these criteria. First and foremost, we reiterate the need to ensure that the specific school policies for using any of these criteria must be properly aimed at identifying whether students have the ability to benefit from, or stated differently, the criteria essential for participation in vocational technical programs as the current regulations state, and as various laws, as discussed above, require. Thus, the regulations need to clarify that:

   i. Each of these individual criteria – such as grades or recommendations – if they are to be used, must be shaped to answer that question, not which students, from among those who meet that basic qualification demonstrated to be essential to participation or ability to benefit, are to be preferred over others; and

   ii. In the face of disparities in these particular areas among categories of students identified in the civil rights and equity provisions of the laws and regulations discussed above, the choice of any of these particular criteria and the particular methods for applying each must be justified and shaped to meet that standard, in the manner discussed above for meeting the legal tests for criteria that are essential in order to participate/have the ability to benefit.

B. Grades. Setting a standard for minimum grades is more in the form that is needed, as discussed above, in contrast to giving preference to students with higher grades. BUT, if grades are to be used, whatever standard for prior minimum grades a school adopts needs to ensure, in the manner discussed above, that it truly meets the requirement for something essential for ability to benefit or participate. And to meet that standard, there must be sufficient evidence justify the conclusion that students whose past grades are below that level do not have the ability to benefit from the program, even if given the supports and attention called for under the various programs and laws discussed above. In examining that question, the participation of students whose grades may have been below that level in schools and programs that are not oversubscribed and admitted such students, may be instructive. In addition to the overall need to tailor the standard carefully and narrowly to the ability to benefit, there may be other factors that affect students’ grades -- for example the lack of adequate supports in the home school of certain
students, or the relatively newly arrived immigrant status of other students – that may undercut the assumption that the past grades demonstrate inability to benefit. Equally important, in thinking about ability to benefit and standards for identifying and demonstrating criteria essential for participation, it is important to take into account (1) that all these students will have been promoted into the grade to which they are applying, (2) that they will be enrolled in a public school program in any event, (3) that the difference between a high-quality CTE program and programs that more resemble the classes they’ve previously been in may have a significant impact on their ability (and motivation) to succeed in courses.

C. Attendance. In addition a closer look at other factors that can affect attendance (including failure to adequately to students’ learning needs, as well as disruptive external events in students’ lives), those same three factors noted just above for grades should be considered in determining whether and how to include attendance in a way that meets the overall standards for criteria that validly determine whether a student: (1) that all these students will have been promoted into the grade to which they are applying, (2) that they will be enrolled in a public school program in any event, (3) that the difference between a high-quality CTE program and the programs that more resemble the classes they’ve previously been in may have a significant impact on their ability (and motivation) to succeed in courses.

D. Staff recommendations. Given the need to refocus the overall process on validly determining whether the student has the ability to benefit / meets criteria that have been validated as essential to participation, with the features discussed above, the role and shape of recommendations needs to be shaped toward that end, rather than providing the basis for favoring some students who meet the basic minimum standard over others. Further thought on how to do so is warranted. For instance, information and perspective from staff member could clarify and or run counter to some of the other data that could otherwise be treated as evidence of inability to benefit. If used in that way, the proposal to expand the number of staff who can submit recommendations would be helpful. Indeed, if that the framework, as it should be, there is some reason to not only given schools the option to include such recommendations but also to allow their submission, particularly on request of the student or family, regardless. In contrast, it would be to protected students’ disadvantage to allow other students’ greater ability to solicit more staff recommendations in a competitive ranking framework. Additionally, under the overall needed, it is important to ensure that the views of staff are contributing to the validity of the judgments about the student’s ability to benefit.

E. Discipline data. We support the Department’s plan to limit offenses that can be considered to records of offenses under G.L. c. 71, Section 37H and 37H1/2. Given the philosophical shift of Massachusetts discipline law in the wake of Chapter 222 of the Acts of 2012, An Act Relative to Student Access to Educational Services and Exclusion from School (“Chapter 222”), that schools should use suspension/exclusionary discipline as a last resort, the character of discipline that vocational technical school and comprehensive schools consider in their respective admissions processes should be limited to the most “serious” offenses: G.L. c. 71, §§ 37H and 37H1/2. We would oppose any expansion to include offenses under Section 37H3/4 (for offenses not covered under 37H and 37H1/2). We are also concerned that students could be denied admission for
alleged offenses of which the student has never been convicted and without appropriate due process.\textsuperscript{7}

Beyond that, even offenses under 37H and 37H1/2 should not become the basis of denial of admission without examining whether, after the student’s having served any suspension or expulsion, and the student is entitled to resume his or her public education, the offense constitutes an ongoing inability to benefit/failure to meet validated essential criteria for participation, under the terms describe earlier.

F. \textbf{Student interview.} We are inclined to believe that students who are concerned that other criteria under consideration may result in a determination that they do not have the ability to benefit (or meet criteria validated as essential for participation) should have the opportunity for an interview to speak on their behalf, as well as submit any other information, even if those are not automatically part of the process for all applicants.

G. \textbf{Making all enumerated criteria optional.} In general, we are supportive of this proposal, provided that students, as well as school staff on their behalf, who are concerned that they may be found not to have ability to benefit under the one or more criteria that are being concerned, are permitted to appear for an interview, submit staff recommendations, or submit any other information relevant to their ability to benefit but not included in the criterion or criteria the school has chosen to use.

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\textbf{Background: Selected Equity Obligations from Two Federal Sources}

We are including some of the state’s obligations (as well as local obligations) under these laws because they have clear implications for what the state must ensure happens at the local level and thus for what the regulations should address (for example the provision in the federal civil rights guidelines that the state may not approve any discrimination or denial of services on the basis of race, color, national origin, sex, or disability in establishment of requirements for admission.)

\textsuperscript{7} While G.L. c. 71 § 37H1/2 encompasses by its language “serious” offenses (a felony charge/conviction or felony delinquency complaint/adjudication), DESE should consider the unique nature of the statute and the fact that most, if not all, vocational technical schools and comprehensive schools that are selective in terms of admission are public schools when deciding whether to mandate such schools consider this subset of disciplinary infractions in regard to admissions. G.L. c. 71, § 37H1/2 is a specific exception that allows a school principal, provided specific conditions therein are met, to discipline a student for out of school conduct. See G.L. c. 71, § 37H1/2 (“Notwithstanding the provisions of section eighty-four and sections sixteen and seventeen of chapter seventy-six”); G.L. c. 71, § 84 (“No student shall be suspended, expelled, or otherwise disciplined…for conduct which is not connected with any school-sponsored activities”). The fact that conduct un-related to school may have a detrimental effect on a student’s application to a public school within the Commonwealth is in direct conflict with the intent and purpose of public schools. Furthermore, the fact that the first prong of the G.L. c. 71, § 37H1/2(1) inquiry is whether a student has been charged with a felony or felony delinquency complaint presents two additional complications. First, a charge is not an adjudication that the student committed the underlying allegations; it is the Commonwealth’s assessment that probable cause exists supporting the underlying allegations. Second, it may not be in the best interest of the student to offer information, exculpatory or not, of the alleged misconduct at a school disciplinary hearing while a charge is pending because that information could later be used in a criminal or delinquency proceeding against the student. Accordingly, a student that a school suspends under G.L. c. 71, § 37H1/2(1) may not have (a) committed the underlying offense and/or (b) had a meaningful opportunity to present his/her side of the story.
Federal Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex, and Disability in Vocational Education Programs.  

In addition to the overall requirements under federal civil rights laws for non-discrimination in education, there are also specific provisions in an appendix to the civil rights regulations on eliminating discrimination and denial of services on the basis of race, color, national origin, sex, and disability in career and technical education programs. These provisions, like the civil rights acts themselves, apply to the full scope of activities of the Department and local and regional educational agencies receiving federal education funds, not just to the specific programs receiving Perkins or other federal funds. The guidelines cover a wide range of issues beyond the ones identified here.

The guidelines delineate responsibilities of state education agencies, including the Massachusetts Department of Education. Among those Department responsibilities, those relevant to the issues here include:

- The Department may not approve of any discrimination or denial of services on the basis of race, color, national origin, sex, or disability in:
  - Establishment of requirements for admission to or requirements for the administration of vocational education programs;  
  - Approval of action by local entities providing vocational education.

- The Department must adopt a compliance program to prevent, identify and remedy discrimination on the basis of race, color, national origin, sex or disability by subrecipients. The compliance program must include:
  - Collecting and analyzing civil rights related data and information that subrecipients compile for their own purposes or that are submitted to State and Federal officials under existing authorities;
  - Conducting periodic compliance reviews of selected subrecipients (i.e., an investigation of a subrecipient to determine whether it engages in unlawful discrimination in any aspect of its program); upon finding unlawful discrimination, notifying the subrecipient of steps it must take to attain compliance and attempting to obtain voluntary compliance;
  - Providing technical assistance upon request to subrecipients. This will include assisting subrecipients to identify unlawful discrimination and instructing them in remedies for and prevention of such discrimination;
  - Periodically reporting its activities and findings under the foregoing paragraphs, including findings of unlawful discrimination under paragraph 2, immediately above, to the Office for Civil Rights.

Among the obligations of local/regional recipients of federal funds:

- Concerning eligibility based on evaluation of each applicant under admissions criteria:
  - Recipients may not judge candidates for admission to vocational education programs on the basis of criteria that have the effect of disproportionately
excluding persons of a particular race, color, national origin, sex, or disability. However, if a recipient can demonstrate that such criteria have been validated as essential to participation in a given program and that alternative equally valid criteria that do not have such a disproportionate adverse effect are unavailable, the criteria will be judged nondiscriminatory. Examples of admissions criteria that must meet this test are past academic performance, record of disciplinary infractions, counselors' approval, teachers' recommendations, interest inventories, high school diplomas and standardized tests, such as the Test of Adult Basic Education (TABE).

- An introductory, preliminary, or exploratory course may not be established as a prerequisite for admission to a program unless the course has been and is available without regard to race, color, national origin, sex, and disability. However, a course that was formerly only available on a discriminatory basis may be made a prerequisite for admission to a program if the recipient can demonstrate that: (a) the course is essential to participation in the program; and (b) the course is presently available to those seeking enrollment for the first time and to those formerly excluded.

- Concerning eligibility for admission based on numerical limits imposed on sending schools:
  - A recipient may not adopt or maintain a system for admission to a secondary vocational education center or program that limits admission to a fixed number of students from each sending school included in the center's service area if such a system disproportionately excludes students from the center on the basis of race, sex, national origin or disability. (Example: Assume 25 percent of a school district's high school students are black and that most of those black students are enrolled in one high school; the white students, 75 percent of the district's total enrollment, are generally enrolled in the five remaining high schools. This paragraph prohibits a system of admission to the secondary vocational education center that limits eligibility to a fixed and equal number of students from each of the district's six high schools.)

- Among many other topics are:
  - Eligibility of national origin minority persons with limited English skills;
  - Equal access and accommodations in the instructional setting for students with disabilities;
  - Counseling, student recruitment, and promotional activities.
The state’s Perkins plan must include descriptions of:

- The state’s criteria for assessing the extent to which local applications will expand access to CTE for special populations;\(^{20}\)
- How the state will:
  - make information on approved programs of study and career pathways (including career exploration, work-based learning opportunities, early college high schools, and dual or concurrent enrollment program opportunities) and guidance and advisement resources, available to students (and parents, as appropriate), representatives of secondary and postsecondary education, and special populations, and to the extent practicable, provide that information and those resources in a language students, parents, and educators can understand;\(^ {21}\)
  - ensure equal access to approved career and technical education programs of study and activities assisted under this Act for special populations;\(^ {22}\)
  - improve outcomes and reduce performance gaps for CTE concentrators, including those who are members of special populations;\(^ {23}\)
- The state’s program strategies program strategies for special populations, including a description of how individuals who are members of special populations—
  - will be provided with equal access to activities assisted under this Act;
  - will not be discriminated against on the basis of status as a member of a special population;
  - will be provided with programs designed to enable individuals who are members of special populations to meet or exceed State determined levels of performance described in section 113, and prepare special populations for further learning and for high-skill, high-wage, or in-demand industry sectors or occupations;
  - will be provided with appropriate accommodations; and
  - will be provided instruction and work-based learning opportunities in integrated settings that support competitive, integrated employment.\(^ {24}\)

The state must also provide local educational agencies, area career and technical education schools, and eligible institutions in the State with technical assistance, including technical assistance on how to close gaps in student participation and performance in career and technical education programs.\(^ {25}\)

Local Perkins applications must include descriptions of:

\(^{19}\) 20 U.S.C. § 2301 et seq.

\(^{20}\) Perkins Sec. 122(d)(4)(B)(ii). As indicted previously, “special populations” are defined as students from economically disadvantaged families, individuals with disabilities, English learners, homeless individuals, youth who are in or have aged out of the foster care system, single parents (including single pregnant women), individuals preparing for non-traditional fields, youth with a parent who is an active-duty armed forces member, and out-of-workforce individuals. Sec. 3(48).

\(^{21}\) Perkins Section 122(d)(4)(C)(i).

\(^{22}\) Section 122(d)(4)(C)(iv).

\(^{23}\) Section 122(d)(4)(C)(vii).

\(^{24}\) Section 122(d)(9).

\(^{25}\) Section 122(d)(13).
• how students, including students who are members of special populations, will learn about their school’s career and technical education course offerings and whether each course is part of a career and technical education program of study;26

• how the eligible recipient will—
  o provide activities to prepare special populations for high-skill, high-wage, or in-demand industry sectors or occupations that will lead to self-sufficiency;
  o prepare CTE participants for non-traditional fields;
  o provide equal access for special populations to career and technical education courses, programs, and programs of study; and
  o ensure that members of special populations will not be discriminated against on the basis of their status as members of special populations;27

• how career and technical education programs offered by the eligible recipient are sufficient in size, scope, and quality to meet the needs of all students served by the eligible recipient;28

• Progress toward implementation of equal access to high-quality career and technical education courses and programs of study for all students, including—
  o strategies to overcome barriers that result in lower rates of access to, or performance gaps in, the courses and programs for special populations;
  o providing programs that are designed to enable special populations to meet the local levels of performance; and
  o providing activities to prepare special populations for high-skill, high-wage, or in-demand industry sectors or occupations in competitive, integrated settings that will lead to self-sufficiency.29

States and local recipients of Perkins funds are also responsible for assessing, disseminating, improving, and addressing gaps in the performance of special populations, and of the subgroups of students described under Title I,30 on performance measures required under the accountability section of Perkins;31 required improvement plans.32

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26 Section 134(b)(2)(C).
27 Section 134(b)(5).
28 Section 134(c)(2)(B)(i). This is part of the required comprehensive local needs assessment, which must then be addressed in the local plan.
29 Section 134(c)(2)(E). Also part of the required comprehensive local needs assessment, which must then be addressed in the local plan.
30 This includes each major racial and ethnic group, economically disadvantaged students as compared to students who are not economically disadvantaged, students with disabilities as compared to students without disabilities, English proficiency status, gender, migrant status, homeless status, and status as a student with a parent in the Armed Forces on active duty. 20 U.S.C. § 1111(h)(1)(C)(ii).
31 Perkins section 113. See also section 124(a)(2).
32 Section 123.
b. **603 C.M.R. § 4.03(6)(a)(3)**

1. The criteria and process to be used in selecting students for admission to particular vocational technical education programs.

The regulations require that schools include this in their admission policy submitted to the State for approval. But there are no standards for approval.33 (The state Guidelines for Admission Policies similarly call a full description of the selection criteria and process for admission to particular but with no standards for approval.) This is a very important area of decision-making. For students who decide to start 9th grade in a vocational technical education high school rather than their home school because of particular interest in one career area, discovering part-way through the year that they will not be able to study that career area is no small thing.

The same equity provisions of law that we describe above for admission to schools, including their limitation on the use of criteria that have disparate on various protected categories of students and the required rigorous analysis of their necessity in terms of being necessary for participation, the elements of that analysis, and requirements for services and supports to enable students to participate successfully all apply in full force to particular programs, not merely to admission to the school. The regulations need to spell them out in the same way for particular programs and provide similar missing guidance in how to apply them.

This does not mean that particular criteria and processes for program admission must necessarily be the same as those for school admission, but they must meet the same rigorous standards as articulated above. And the two sample policies in the Department’s guidelines, both of which rank students on various factors and then admit them to their desired programs in rank order starting with the students who have the highest score, to the degree that they disproportionately screen out students in those protected categories who can successfully participate in those programs, appear to depart from those standards.

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33 The lack of guidance in this area has led to CTE programs developing vastly different standards – both in criteria assessed and assigned weight – for admitting students into career majors. Tri-County Regional Vocational Technical High School (overall exploratory average, exploratory teacher recommendation, and space available); Shawsheen Valley Technical High School (overall exploratory average consisting of grades in (maximum 10 points each) ability to follow instructions—written and verbal; completes assignments as directed and in a timely manner; shop behavior—attitude, cooperation with peers and teachers; respect for tools and equipment and safety; quality and completeness of work; ability to grasp concepts; completeness of class assignments and homework; class behavior; interest in vocational-technical area; performance on weekly tests; and space available); Greater Lowell Technical High School (overall exploratory average consisting (variable maximum points) of Employability Skills/Conduct, Performance Assessment, Coursework/Project Completion, Safety/Equipment/Tools/Supplies; exploratory grades and attendance as tiebreakers when space is an issue); and Cape Cod Regional Technical High School (extensive three phase assessment process encompassing, to varying degrees and weights, grades, attendance, discipline, and submission deadlines).
c. Other Issues Affecting Who Applies to CVTE Schools and Programs

1. 603 C.M.R. § 4.03(6)(a) – Incorporating Affirmative Obligations to Address Pre-Application Inequity.

The focus above has been entirely on the criteria and processes for assessing and selecting applicants for admission for schools and for programs within schools. Other issues, however, can arise at an earlier point, in terms of affecting whether students submit applications for a CVTE school or particular CVTE program. Certainly all disparities in which students apply to particular schools or programs are not attributable to the actions or inaction of schools and agencies. But there are obligations under some of these same laws for identifying and addressing when various parts of the system are not as accessible or effective in reaching and serving students and their families in particular population groups (again as identified in the various federal and state laws and regulations). These can range from disparities in how well information reaches them about programs and the processes for applying; how understandable that information is; and how available, accessible, and effective are sources for providing needed assistance in those processes; to variations in how accessible, welcoming, and effective particular programs or schools are for particular groups of students, including the environment within those schools or programs and their effectiveness in meeting the particular educational needs, assistance; and supports for students from particular groups, and the impact of that reputation on which students and families apply. There is discussion of some aspects of this issue in the Department’s regulations and admission guidelines, but we believe it should get fuller and more systematic attention in both, including the affirmative obligation to identify and remedy any such disparities and barriers under Perkins, the federal civil rights acts, regulations, and guidelines, and state law and regulation.

A. Informed Choices

Students and families must have access to enough information to make informed choices as to whether the student in question has an ability to benefit from the CVTE options the school offers. At a minimum, consistent with the accessibility and dissemination principles discussed below, schools offering CVTE options must make available to students and parents information regarding the application process (admissions policy, application for admission, etc.), expectations (mission of the school, student handbook, etc.), program quality (programs of study, curriculum, preliminarily v. professionally licensed CVTE instructors, etc.), and student outcomes (graduation rate, post-secondary placement, etc.). In addition, a CVTE program should consider how any such materials address how accessible, welcoming, and effective particular programs or schools are for particular groups of students, including the environment within those schools or programs and their effectiveness in meeting the particular educational needs, assistance; supports for students from particular groups; and the impact of that reputation on which students and families apply. Without knowledge of the above contours of the program, students and families will not be able to make informed choices as to whether the student in question has an ability to benefit from the CVTE options the school offers.
B. Accessibility of Materials and Assistance with the Admissions Process

Any information a school provides about its CVTE must accessible, both in medium and content, by all students and parents within the school community.\textsuperscript{34, 35, 36} A school should provide such

\textsuperscript{34} 34 C.F.R. Pt. 100, App. B(V)(C) (“[CTE programs] must conduct their student recruitment activities so as not to exclude or limit opportunities on the basis of race, color, national origin, sex, or handicap.”); 34 C.F.R. Pt. 100, App. B(V)(E) (“If a recipient’s service area contains a community of national origin minority persons with limited English language skills, promotional literature must be distributed to that community in its language.”); 34 C.F.R. Pt. 100, App. B(IV)(N) (“[CTE programs] may not deny handicapped students access to vocational education programs or courses because…of the need for related aids and services or auxiliary aids.”).

\textsuperscript{35} 20 U.S.C. § 2342(c)(1)(A) (Perkins state plan “must be developed in consultation: . . . (ii) interested community representatives, including parents, students, and community organizations; . . . (iv) members and representatives of special populations; . . . (viii) individuals with disabilities”); 20 U.S.C. § 2342(d)(4)(C)(i) (Perkins state plan, “in describing career and technical education programs or programs of study that will be supported, developed, or improved at the State level, must include descriptions of how the state will make information on approved programs of study and career pathways (including career exploration, work-based learning opportunities, early college high schools, and dual or concurrent enrollment program opportunities) and guidance and advisement resources, available to students (and parents, as appropriate), representatives of secondary and postsecondary education, and special populations, and to the extent practicable, provide that information and those resources in a language students, parents, and educators can understand.”); 20 U.S.C. § 2354(b)(2)(C) (local application must include a description of “how students, including students who are members of special populations, will learn about their school’s career and technical education course offerings and whether each course is part of a career and technical education program of study”).

\textsuperscript{36} Additional obligations regarding information must be met by local education agencies and schools receiving federal funds under Title I of the Elementary and Secondary Education Act.: 20 U.S.C. § 6318(a)(1) (“A local education agency may receive funds under this part only if such agency conducts outreach to all parents and family members and implements programs, activities, and procedures for the involvement of parents and family members in programs assisted under this part consistent with this section. Such programs, activities, and procedures shall be implemented with meaningful consultation with parents of participating children.”); 20 U.S.C. § 6318(c)(4)(A)-(C) (“Each school served under this part shall…provide parents of participating children…timely information under this part[,] a description and explanation of the curriculum in use at the school, the forms of academic assessment used to measure student progress, and the achievement levels of the challenging State academic standards[,] and if requested by parents, opportunities for regular meetings to formulate suggestions and to participate, as appropriate, in decisions relating to the education of their children, and respond to any suggestions as soon as practicably possible.”); 20 U.S.C. § 6318(e)(1) (“To ensure effective involvement of parents and to support a partnership among the school involved, parents, and the community to improve student academic achievement, each school and local educational agency assisted under this part…shall provide assistance to parents of children served by the school or local educational agency, as appropriate, in understanding such topics as the challenging State academic standards, State and local academic assessments, the requirements of this part, and how to monitor a child’s progress and work with educators to improve the achievement of their children.”); 20 U.S.C. § 6318(e)(5) (“To ensure effective involvement of parents and to support a partnership among the school involved, parents, and the community to improve student academic achievement, each school and local educational agency assisted under this part…shall ensure that information related to school and parent programs, meetings, and other activities is sent to the parents of participating children in a format and, to the extent practicable, in a language the parents can understand.”); 20 U.S.C. § 6311 of this title in a format and, to the extent practicable, in a language such parents understand.”). Of particular importance, how each of these and other school requirements for parent and family engagement will be carried out must be spelled out in the school’s parent and family engagement policy, which must be jointly developed with, and agreed upon by, and distributed the parents and family members of Title I-participating

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information in the native languages spoken by students and parents and in a form accessible by (a) students and parents with limited literacy; (b) students and parents with disabilities; and (c) all other students and parents with modifications as necessary. All materials should be available in physical and electronic formats and otherwise as necessary. Relatedly, a school offering CVTE options must make available accessible and effective sources for providing needed assistance to all students and families in the admissions process.

C. Dissemination of Information

A school offering CVTE options must disseminate the information about those options to relevant parties far enough prior to the application process that students and their parents have a meaningful opportunity to review the information and make informed choices. Dissemination to relevant parties would first and foremost include providing physical and electronic copies of information about CVTE options directly to students and parents; in the case of a regional or other comprehensive high school that draws from multiple elementary/middle school locations, dissemination would require providing those “sending” schools with physical and electronic copies of the requisite information; a school offering CVTE options would be expected to maintain electronic and physical copies of the relevant information on location.

2. 603 C.M.R. § 4.03(6)(b) – Who qualifies for the exploratory exception.

Comments: 603 C.M.R. §§ 4.03(6)(b) and 4.03(6)(b)(1) appear to be in conflict. 4.03(6)(b) provides a broad grant that “Students who reside in cities and towns not maintaining approved vocational technical education programs in the vocational technical program area sought by the student may apply for admission to a school of another city, town or district offering the desired instruction as set forth in G.L. c. 71, § 7.” By the terms of § 4.03(6)(b), if a student resided in a district that did not offer a Chapter 74 approved Building and Property Maintenance career major within the Construct cluster then that student can apply to an out-of-district school that offers such a program. However, § 4.03(6)(b)(1) seems equally clear that if the student’s home district offers an exploratory program then the student cannot apply out-of-district regardless of whether the student’s home district offers the type of Chapter 74 approved program sought by the student.37 Accordingly, § 4.03(6)(b)(1)’s prescription that “[n]inth grade students who reside in cities and towns that offer an approved exploratory program shall attend the exploratory program provided by the district of residence” appears to be in direct conflict with § 4.03(6)(b)’s broad grant that “[s]tudents who reside in cities and towns not maintaining approved vocational technical education programs in the vocational technical program area sought by the student may...
apply for admission to a school of another city, town or district offering the desired instruction….”

3. **Expansion of out-of-district exploratory exception.**

Comments: CLE supports the Department’s proposal to expand the exploratory exception to include program concentrations under specialized agriculture and natural resources programs. CLE also supports expanding access to both career majors and program concentrations unavailable within a student’s district of residence as consistent with the plain language of G.L. c. 74, § 7 (“Residents of towns in the commonwealth not maintaining approved independent distributive occupations, industrial, agricultural, vocational home economics and allied health occupations training schools offering the type of education desired…may…be admitted to a school in another town.”) (emphasis added).

4. **Limitations on ability to report an exploratory program.**

Comments: CLE supports the Department’s proposal to disallow districts with fewer than 5 programs from reporting a Chapter 74 exploratory program (with the exception of the agricultural schools), where such districts had previously been able to deny students the ability to explore out-of-district. Consistent with providing students equal access to education and careers in current or emerging high skills, high wage professions, CLE supports a school offering students the ability to explore out of district. For a full discussion of issues related to out-of-district exploration.

5. **Gathering waitlist data**

Comments: CLE supports the Department gathering waitlist data. In developing guidance with the “field,” the Department should consult not only teachers, administrators, institutions of higher education, and members of industry but also the broader education community including, but not limited to, students and their parents/guardians, community groups/organizations, and advocacy groups/organizations.

II. **Program Quality**

a. **603 C.M.R. § 4.02**

1. **Definition of Vocational Technical Education Framework**

Proposed Change: Amend the definition of Vocational Technical Education Framework in 603 C.M.R. § 4.02 as follows: “Framework approved by the Commissioner, consisting of six strands representing all aspects of the industry that students in the vocational technical education program are preparing to enter.”

Comments: CLE’s proposed changes removing the reference to “six strands” will allow the Department to more broadly and deeply conceptualize and institutionalize all aspects of the industry (“AAI”). Consistent with G.L. c. 69, § 1F, the strong policy reasons for embracing a comprehensive vision of AAI, and Commissioner Riley’s commitment to facilitating deeper
learning for all, CLE encourages the Department to revisit the VTE Framework and strands, and in particular how it constructs all aspects of the industry (“AAI”). Such a reconstruction should focus on academic-technical integration, authentic learning and achievement, and the VTE Framework providing students with strong experience in, and a comprehensive understanding of, all aspects of an industry (including planning, management, finance, technical and production skills, underlying principles of technology, labor and community issues, and health, safety, and environmental issues).

A. Authentic Instruction and Assessment – Deeper Learning

The section of the Commissioner’s Report on deeper learning refers to seminal research done by Fred Newmann and others. This substantial body of research shows that dramatic gains in academic mastery are produced when teachers systematically engage students in “authentic learning” that requires them to (1) use disciplined inquiry to (2) construct knowledge that (3) has value beyond school. AAI implemented as a whole-school curricular approach provides students with abundant opportunities to engage in authentic learning and with authentic assessment. CLE has continually made use of this research and framework in our policy and implementation work, both for career and technical education and for broader school reform.

B. Academic-Technical Integration


39 G.L. c. 69, § 1F (“The board shall give particular emphasis for setting standards for the integration of academic and vocational education and to the progress in educating students for all aspects of a chosen industry”); see also Paul Weckstein, “A Lever for Reform,” Leadership Insider (National School Boards Association, from which much of the commentary that follows has been adapted; Paul Weckstein, “Chapter 26: Teaching Workplace Competencies and All Aspects of an Industry” in Successful Strategies: Building a School-to-Careers System (American Vocational Association).

40 As currently written, the strands do not address a wide enough subject matter to enable students to gain strong experience in, and a comprehensive understanding of, all aspects of the industry they are preparing to enter. For example, labor and community issues and environmental issues are only tangentially touched upon in Strand 5 §§ 5.C and 5.E; planning, management, and finance are truncated into a single strand; and Strand 6 addresses only one subset of underlying principles of technology by focusing solely on technology literacy knowledge and skills. But beyond that, we believe that there are both needs and opportunities to more intensively weave AAI into the framework, in tandem with academic-technical integration for deeper learning.

41 More specifically:

1. In carrying out "disciplined inquiry," students use facts, principles, and methods built by others to dig deeper into things and to test and explain their own ideas. They explore central ideas and connections within and among disciplines, using the knowledge and methods of inquiry of those disciplines to build understanding. They use "elaborated" communication, in which ideas are explained, analyzed, and justified-not simply stated as opinions.

2. In the process, students actually "construct knowledge." They don't simply echo back what they are taught; they use disciplined inquiry to discover things for themselves and put together information and ideas to arrive at new meanings and understandings. They explore, manipulate, interpret, and analyze ideas and information.

3. Their work has "value beyond school" and report cards. It deals with issues and problems that have real meaning outside of school -- whether the meaning is social, personal, scientific, or aesthetic -- and, ideally, is shared with people outside the classroom.
AAI provides a rich context for integrating academic and career/vocational/technical education and ensuring all students learn to the same challenging academic standards. Limiting academic integration to the knowledge needed for one specific job comes at the expense of mastering the full range of knowledge and skills that the state has said, through its academic standards, that all students should learn.

**Deeper learning through AAI, as a framework for uniting authentic achievement and academic-technical integration**

**Building Bridges.** Here's a three-part exercise to illustrate authentic achievement and CVTE and how they connect through AAI. Suppose students are asked to build a bridge.

Part 1: Imagine how a traditional vocational education class in welding or carpentry would approach this project. What would the students do? What would the teacher be looking for? How would the work be discussed, evaluated, and graded? Now look at our three criteria for authentic learning. How would you rate this project in terms of the three criteria [using disciplined inquiry to create new knowledge that has real-world meaning]? What level of academic achievement would the project help students develop in reading, writing, science, mathematics, and social studies?

Part 2: Next, compare the task of designing a bridge as described by leading researchers on authentic learning [Newmann and his colleagues]. They note that to design a bridge that is functional, safe, enduring, and aesthetically pleasing, an adult must draw on engineering, architecture, the natural sciences, and mathematics – and produce new knowledge to deal such factors as stress points and natural conditions that might threaten the bridge. How would an academic high school focused on high achievement approach this kind of lesson? How would this exercise compare with the vocational class, in terms of the three qualities of authentic learning and achievement? What level of academic skills would it require in comparison with the vocational class?

Part 3: Now consider how a career and technical education program would approach this exercise if it were trying to meet the Perkins requirements for integrating academic and career and technical education by giving students "strong experience in and comprehensive understanding in all aspects of an industry."

A transportation or construction program with an AAI approach uses and expands on these disciplines and others to identify and address the issues in Parts 1 and 2 and more. For example, students might explore such matters as overall transportation patterns and needs in the area and the potential impact of changing those patterns; finance and regulatory issues; management of the design and construction process; organization of the design and construction work, including labor, health and safety issues; and environmental impacts both during and after construction.

How does this approach rate in terms of authentic learning and academic mastery? With an AAI approach CVTE suddenly jumps from being intellectually less rigorous than the more academically oriented classes to something that is richer, more challenging, and more "real world."
C. Transferability of Knowledge and Skills

Rapid economic, technological, and social changes in the labor market, in the skill and knowledge required for jobs, and in young peoples’ career goals make obsolete the notion of finding a “permanent, perfect match” between students and jobs. AAI gives students knowledge and experience that are more transferable over time, both within an industry and across industries. AAI immerses students in the concrete setting of a particular industry or cluster of industries as the basis for providing transferable skills. Students get the benefits of hands-on, contextual learning without the risk of being locked into an obsolete set of skills. Students studying and working on all the basic issues facing an industry are equipped to (a) stay with an occupation whose specific skills requirements change, (b) move to a different job within that industry, or (c) work in an entirely different industry, which faces analogous issues. These skills are particularly valuable in industries moving in the direction of high-performance work organizations, which depend on broader worker discretion, flexibility and understanding.

D. Avoiding Unequal Futures

AAI forms the platform to ensure that young teenagers who may be interested in, for example, health and biomedicine are not sorted so that some are trained to become hospital aides while different courses prepare others for college and potentially medical school. An AAI program focuses on the health industry as a whole, with all students actively exploring the industry’s many aspects (in-depth physiology, biomedical research, health care clinics, epidemiological study of their community, examination of health care policy, etc.). The richness of AAI as the basis for academic-technical integration assures students and their parents that they are not limiting their academic horizons, including their postsecondary education options.

E. Encouraging Community Economic Development

An AAI approach can help create economic opportunities. The aspects are precisely the skills needed for community economic development and entrepreneurship, starting new enterprises to address unmet community needs. This is especially important for students and communities in areas where not enough good jobs are available.

F. High School Restructuring

AAI is an aid to high-school restructuring. To increase personalization, student engagement, and academic coherence, many high schools are creating smaller learning communities or academies, often built around discrete themes. One challenge is to make these smaller units real, rather than mere labels for different parts of a building. Using AAI to define the program and build the curriculum can provide the thematic integrity for sub-schools built around a broad but coherent industry theme, such as transportation, law and government, or healthcare. Students can also learn all aspects of an industry through entrepreneurship and community development projects. This is one way to develop skills that are needed in communities where the existing job market does not adequately support its residents.

In sum, there are good reasons why the Massachusetts legislature singled out AAI along with academic-technical integration for particular attention. By making more intensive and
pervasive use of them (and revisiting and revising the Framework in order to do so), CTVE can make a major contribution to the Department’s efforts to foster deeper learning for all. In this context, AAI should be seen not only as about content, including the important eight aspects of an industry cited above, but also as an inquiry approach to teaching and learning that encourages teachers and students to keep going deeper, engaging and developing both their imagination and their powers of analysis to grapple with the full range of issues found in an industry and how they interrelate. As such, it directly addresses the lead quote from Martin Luther King, Jr. with which the Commissioner begins his On the Way Forward report the Board: “The function of education is to teach one to think intensively and to think critically.”

b. 603 C.M.R. § 4.03(4)(a)

1. Program Approval Criteria – All Aspects of an Industry

Proposed Changes: Add 603 C.M.R. § 4.03(4)(a)(1) to read as follows: “(a) The program of study shall: 1. be based on the applicable Vocational Technical Education Framework and the Massachusetts Curriculum Frameworks and provide students with strong experience in, and comprehensive understanding of, all aspects of the industry including but not limited to planning, management, finances, technical and production skills, underlying principles of technology, labor and community issues, health and safety, and environmental issues related to that industry.”

Comments: See comments above to “603 C.M.R. § 4.02”.

2. Program Approval Criteria – Academic/Technical Integration

Proposed Changes: Amend 603 C.M.R. § 4.03(4)(a)(3) to read as follows: “(a) The program of study shall: …(3) integrate academic and technical instruction through the efforts of technical and academic teachers and administrators who share responsibility for the development, implementation, and oversight of an educational program designed to provide students with strong experience in, and a comprehensive understanding of, an industry and prepare students for further education and careers in current or emerging high skills, high wage professions of the knowledge and skills of their students;”

“The board shall set standards for vocational-technical education and programs for school-to-work transition. The board shall give particular emphasis for setting standards for the integration of academic and vocational education and to the progress in educating students for all aspects of a chosen industry.

“The board shall assess progress in the areas of integration of academic and vocational education, and education for all aspects of an industry by assessing curriculum plans, staffing patterns, and other factors the board deems pertinent to said assessment.”

43 Implicit in many of the above factors and examples is the benefits of and need for weaving AAI into the framework and structure of entire CTVE programs, rather than only in particular lesson plans.

44 Alternatively, make the added language 603 C.M.R. § 4.03(4)(a)(2) and renumber subsequent paragraphs accordingly.

45 These are clearly significant aspects of an industry and have been widely recognized as such in many states, much of the writing on AAI, and in prior versions of the Perkins Act (which has gone through periods of greater and lesser elaboration). They are not intended to be exclusive but provide a useful set of criteria in structuring programs and ensuring and determining that students are gaining strong experience in and comprehensive understanding of all aspects of an industry.
Comments: CLE’s proposed changes reflect the reality and challenge of implementing an integrated academic and technical curriculum that is designed to provide students with strong experience in, and a comprehensive understanding of, all aspects of an industry. As a “whole school” curricular model, effective design and implementation of deep academic-technical integration and AAI necessitates coordinated and systematic efforts between academic instructors, technical instructors, and administrators. In addition, effective administration is also important to a CTE program building relationships with outside organizations both within the business and broader school communities. CLE encourages the Department to explicitly recognize the many roles that members of a CTE program’s administration play in implementing an integrated academic and technical curriculum that is designed to provide students with strong experience in, and a comprehensive understanding of, all aspects of an industry.

3. Program Approval Criteria – Related Instruction

Comments: 603 C.M.R. § 4.03(4)(a)(8) calls for related instruction “that shall be primarily taught by licensed vocational technical teachers in the specific program area. Academic teachers may assist in the delivery of related instruction components when their particular expertise will enhance the instruction.”

(1) We think the Department should consider this provision in conjunction with the provisions on qualifications with the provisions on teacher qualifications and academics, particularly in those VT areas where VT teachers are required to have educational background than in other areas under § 4.07(2)(b). Under that provision, preliminary vocational technical teacher licenses – which are issued for five years and may be renewed another five – a limited number of areas vocational technical requires a bachelor’s degree, others require an associate’s degree, which may vary in the range and depth academic subject learning and integration, while the remainder must have a high-school degree. This suggests giving more thought to the need and potential for more collaboration with the academic teacher in the process of planning and delivery related instruction in a way that integrates a range academic skills at a high level. See also our comment on the latter section, below.

(2) We suggest that here or elsewhere that related instruction include exploration of all aspects of an industry as a vehicle for integrating academic knowledge skills into vocational technical education at a deep and challenging level.

4. Minimum level of technical instruction.

The Department has proposed adding a requirement that programs must be of sufficient scope and include a sequence of courses building on past knowledge and skills across grade level and identifies a minimum level of technical instruction (e.g. 900 hours) necessary to address the VTE Frameworks. Includes a Commissioner-waiver provision for special circumstances. Depending on how “technical skills” are defined, including how broadly, we are concerned that 900 hours may be too high a minimum. We believe this warrants discussion. Any instruction in aforementioned “technical skills” must provide students with strong experience in, and comprehensive understanding of, all aspects of the industry (planning, management, finances, technical and production skills, underlying principles of technology, labor and community issues,
health and safety, and environmental issues) that students in the vocational technical education program are preparing to enter.

c. **603 C.M.R. § 4.03(4)(e)**

1. *Exploratory Programs and Curriculum Frameworks*

**Proposed Changes:** Amend 603 C.M.R. § 4.03(4)(e) to read as follows: “School districts that offer five or more approved vocational technical education programs shall provide a minimum of a one half year exploratory program approved by the Department for all incoming ninth graders. The programs shall meet the standards in the guidelines for exploratory programs included in the "Guidelines for Vocational Technical Education Programs and Educator Licensure." The programs shall be based on the applicable Vocational Technical Education Framework and Massachusetts Curriculum Framework.”

**Comments:** Consistent with state law and the Department’s goals issued on May 7, 2019 for Proposed Revisions to 603 C.M.R. § 4.00, exploratory programs must be fully aligned with the applicable Vocational Technical Education Framework and Massachusetts Curriculum Framework.

d. **603 C.M.R. § 4.04(1)**

1. *Program Approval Procedures and Policies – evidence of student and labor market demand*

**Comments:** We believe that other factors should be considered as well – including factors related to good careers, such as high-wage, high-skill work; potential of the program for integrating and developing academic skills at a high and challenging level; among others. Labor market demand is not necessarily enough if it is for lower skill, lower wage jobs. Also worth considering is evidence of the likely durability of the demand. Query: how is the relevant labor market defined, in geographic or other terms?

2. *Pilot programs aligned with labor market demand.*

**Comments:** As with our comments on existing regulation § 4.04(1) concerning labor market demands, we believe that other factors should be considered as well – including factors related to good careers, such as high-wage, high-skill work; potential of the program for integrating and developing academic skills at a high and challenging level; among others. Labor market demand is not necessarily enough if it is for lower skill, lower wage jobs. Also worth considering is evidence of the likely durability of the demand. Query: how is the relevant labor market defined, in geographic or other terms?

e. **603 C.M.R. § 4.05**

1. *Program outcomes*

**Comments:** CLE encourages the Department to revisit the program outcomes under 603 C.M.R. § 4.05. We also note that M.G.L. Chapter 69, Section 1F requires the board, (a) in setting standards to give particular emphasis for setting standards for the integration of academic and vocational education and to the progress in educating students for all aspects of a chosen
industry, and (b) to assess progress in the areas of integration of academic and vocational education, and education for all aspects of an industry by assessing curriculum plans, staffing patterns, and other factors the board deems pertinent to said assessment. In light of our earlier comments above on program quality, deeper learning, all aspects of the industry and academic-technical integration, we believe that new attention is warranted to those two tasks under Section 1F, setting standards for, and assessing progress on education in all aspects of the industry along with academic-technical integration. At this point, we are not necessarily saying that they should be addressed here in § 4.05. And we believe that both standards and assessments for these two areas need to be thought through very carefully in order to fully accomplish those goals and promote good educational practice in these two areas rather than narrow it. We look to further dialogue and collaboration on how to do so.

III. Governance

a. 603 C.M.R. § 4.03(1)(c)

1. Program Advisory Committee

Proposed Changes: Amend 603 C.M.R. § 4.03(1)(c)(1) as follows: “Each school committee shall appoint a Program Advisory Committee for each program area under its control. The Program Advisory Committee shall consist of representatives of local business and industry related to the program, organized labor, postsecondary institutions, parents/guardians, students and representatives from registered apprenticeship programs if the program area has such registered programs, students and representatives from each member town or district that has a relationship with the program, community groups/organizations, and advocacy groups/organizations; provided however, that no member of the school committee, or other school official or school personnel shall serve on the committee….”

Comments: To ensure that students and parents retain the ability to meaningfully contribute to the advisory committees, and that all member towns or districts are represented, CLE proposes adding students, parents, and representatives from each member town or district that has a relationship with the programs as required members of the Program Advisory Committee.

2. General Advisory Committee

Proposed Changes: Amend 603 C.M.R. § 4.03(1)(c)(2) to read as follows: “Each school committee shall appoint a General Advisory Committee for all vocational technical education programs under its control. The General Advisory Committee shall include, but not be limited to, chairpersons of the program advisory committees and students, parents, and representatives from community groups and advocacy organizations in each member town or district that has a relationship with the programs. Every effort shall be made to ensure that membership on the General Advisory Committee….”

Comments: The only guaranteed members of the General Advisory Committee are “chairpersons of the program advisory committees.” While students and parents, as proposed by CLE’s changes, participate in the Program Advisory Committee there is no guarantee that either group will be elected a chairperson. Accordingly, to ensure that students and parents retain the ability to meaningfully contribute to the advisory committees, and that all member towns or districts are represented, CLE proposes adding students, parents, and representatives from each
member town or district that has a relationship with the programs as required members of the General Advisory Committee.

IV. Instructional Staff

a. 603 C.M.R. § 4.03(5)

1. Waivers of licensed CVTE personnel.

Comments: 603 C.M.R. § 4.03(5)(c) allows the Commissioner to “exempt a school district for any one school year from the requirement to employ individual vocational technical education personnel licensed under 603 CMR 4.00 upon the request of a superintendent for a waiver and demonstration to the Commissioner that the district has made a good-faith effort to hire licensed personnel” and contains a further requirement that “[p]ersons employed under waivers must demonstrate that they are making continuous progress toward meeting the requirements for licensure in the field in which they are employed.” To ensure that all students in CTE programs have access to appropriately licensed teachers, the Department may want to consider promulgating more specific regulations laying out both what constitutes a “good-faith effort” and what constitutes “making continuous progress”.

2. Waivers for critical shortage of teachers.

Comments: Similar to CLE’s comments above concerning 603 C.M.R. § 4.03(5)(c), the Department may want to consider promulgating more specific regulations laying out what constitutes a “good-faith effort” as that phrase is used in 603 C.M.R. § 4.03(5)(d).

3. Persons with “special expertise”.

Proposed Changes: Amend 603 C.M.R. § 4.03(5)(e) to read as follows: “Persons with special expertise related to the vocational technical area of instruction who can strengthen the vocational technical education program may be employed without a vocational technical teacher license. Such persons shall work in concert with, and under the direct supervision of, an appropriately licensed vocational technical teacher at all times. Such persons shall consult with vocational technical and academic teachers about subject-matter depth, effective teaching methods (including authentic pedagogy), and how to provide effective instruction to students with particular needs in their classrooms.”

Comments: CLE recognizes the role that persons with special expertise related to the vocational technical area of instruction can play in the academic and technical environments. However, such persons may enter the academic and technical environments with an advanced understanding of technical skill and subject matter depth related to that technical skill but little experience with or understanding of other related academic and technical subject matter and/or principles of effective pedagogy. CLE’s proposed changes are aimed at ensuring such persons have the skills necessary to convey their special expertise in an effective and meaningful manner to a wide range of students with diverse needs.
b. 603 C.M.R. §§ 4.07(2)(b), 4.07(2)(f), and 4.07(4)

1. Qualifications for preliminary and professional licensure

**Comments:** See comments in Section 4.03(4)(a), concerning the relationship of these varying education requirements to the planning and delivery of related instruction. CLE is concerned that the Department has established differential requirements in regard to education and employment experience for receiving the preliminary and professional vocational technical teacher licenses. Focusing on quality of degree and time worked in the field seems to be a proxy the Department is using for educational and technical knowledge needed to effectively teach in the subject area; however, CLE is concerned that these areas of focus do not validly and reliably determine who is qualified to provide such academic and technical instruction (e.g., obtaining a bachelor’s degree does not necessarily mean that an instructor understands how to develop and implement effective interventions and individual assistance when students are having difficulty mastering particular learning goals; conversely, the lack of a bachelor’s degree does not necessarily demonstrate a lack of that same knowledge).

Accordingly, rather than focusing solely on education and employment experience, CLE encourages the Department to explicitly identify in 603 C.M.R. §§ 4.07(2)(b) and 4.07(2)(f) the underlying pedagogical skills that level of education and employment experience operate as a proxy for. Those qualifications should include, at a minimum, appropriate credentials – e.g., state certification, completion of NCATE-accredited programs, majors and concentrations, performance on assessments, meeting professional standards – actual knowledge and skills including substantive knowledge and skills, knowledge and skills regarding the instructional program, knowledge and skills regarding diversity, and capacity for growth and improvement.

In regard to substantive knowledge and skills, instructors should possess an in-depth understanding of the field or discipline which they are teaching including its content area; its methods of investigation, analysis, and discourse; its relationship to other fields and disciplines; and its practical implications for the lives of their students and communities.

Knowledge and skills regarding the instructional program should include the knowledge and skills necessary to understand and participate in the development and implementation of: high standards and school learning goals for what all children are expected to do; curriculum and teaching methods which best enable students to meet those learning goals, including was to engage students in disciplined inquiry to construct knowledge that has value beyond school and combine experiential, hands-on learning with theory, including active exploration of all aspects of a broad area of human endeavor; effective intervention and individual assistance when students are having difficulty mastering particular learning goals; high-quality assessments of student mastery of those learning goals, including various means of teacher-generated, classroom-based assessment; effective use of such assessments to improve teaching and learning; and effective ways of working with families to improve the educational program of their children, including families with backgrounds which may be different from the teachers’.

Knowledge and skills regarding diversity should enable the instructor to work with students with diverse backgrounds and diverse learning needs in order to assist them in achieving at high levels. Such knowledge and skills should include ways to treat that diversity as an asset both for the student’s learning and for the school as a whole; overcoming the barriers which various disabilities pose to mastery of the same, challenging skills and knowledge which all children are expected to master, including in the development and implementation of individualized
education programs designed to overcome those barriers for each student with disabilities; overcoming the language barriers faced by students with limited English proficiency in mastering and demonstrating the same challenging skills and knowledge expected for all children; and methods for providing accelerated and enriched curriculum and instruction to enable students currently achieving at low levels to reach the same standards expected for all children.

Finally, the requirements for licensure should address a professional’s capacity for growth and improvement. In other words, their capacity as professionals to continue to learn about new developments in their field or discipline and research findings about effective classroom practices and to apply those developments and findings to their classroom.

CLE encourages the Department to explore, consistent with the principles outlined above, explicitly identifying and incorporation in 603 C.M.R. §§ 4.07(2)(b), 4.07(2)(f) and 4.07(4) the underlying pedagogical skills necessary for instructors to qualify for preliminary and professional vocational technical teacher licenses.

c. 603 C.M.R. § 4.10

1. Professional standards for CVTE instructors and administrators

Comments: CLE encourages the Department to consider expanding the professional standards for vocational technical teachers and vocational technical administrators in four key areas: instructional methods, instructional materials and resources, instructional staff, and staff development and assistance.

603 C.M.R. § 4.10 should emphasize instructional methods that are effective in terms of authenticity, differentiation, related dimensions of effectiveness, and student achievement. Instructors and administrators should work to plan curricula and instruction that engages students in construction of knowledge through disciplined inquiry to address real-world matters. Differentiation is critical to address the range of learning modes, interests, background skills and prior knowledge, in enabling all students to reach the shared learning goals/standards. The regulations do address differentiation to an extent in 603 C.M.R. §§ 4.10(1)(b)(1)(g)–(k). However, CLE is concerned that 603 C.M.R. § 4.10(1)(b)(1)(m) is too limiting, encouraging instructors to “[p]lan the pedagogy appropriate to the specific discipline and to the age, cognitive level, and learning styles of the students in the classroom and laboratory.” (emphasis added). To the extent differentiation aligns with cognitive level, said instruction must still be aligned to challenging and rigorous state academic and technical standards. Instructional methods should: build on prior knowledge, establish the right level of challenge, make appropriate and effective use of practice and homework, teach students strategies for generating and investigating questions and hypotheses, teach students strategies for organizing, summarizing, and integrating new information, cooperative learning strategies for enabling students to learn from each other, and classroom structure and management.

The professional standards should also encourage the development and implementation of instructional materials and resources for all students that are adequate and appropriate to achieving challenging and rigorous academic and technical standards and the school’s shared learning goals. Such instructional materials and resources should include: texts and other instructional materials and supplies appropriate to the curriculum; equipment, including assistive
technology devices; design and condition of classrooms and other instructional spaces; computer, internet, and library access and adequacy.

CLE has addressed qualifications for instructional staff above in our comments to 603 C.M.R. §§ 4.07(2)(b) and 4.07(2)(f).

Finally, the professional standards provide staff development and activities that are well designed to help teachers strengthen the capacities discussed above in CLE’s comments to 603 C.M.R. §§ 4.07(2)(b) and 4.07(2)(f). Such staff development should incorporate authentic learning methods and include such topic areas as staff development as program and curriculum development, discourse about student work, and staff defining their own staff development needs. The activities should be well focused on the topic areas identified in CLE’s comments to 603 C.M.R. §§ 4.07(2)(b) and 4.07(2)(f) and there should be cross-training of “regular” teachers on providing effective instruction to students with particular needs in their classrooms and “special” personnel on subject-matter depth and effective teaching methods (including effective pedagogy). Finally, a CTE program should take into account scheduling and structure (sufficient time built into the school day and the year to afford teachers adequate opportunity for staff development) and its relationship to various types of staff development, including: common planning time, release time, teacher learning networks, staff development personnel (including master teachers), co-teaching, and other learning opportunities for staff.

2. Community Involvement

Proposed Changes: Amend 603 C.M.R. § 4.10(2)(b)(4)(b) to read as follows: “Makes appropriate use of the general advisory committee to continually improve vocational and technical education programs and incorporate current academic and technical workplace skills necessary to participate and succeed in current or emerging high skill, high wage professions.”

Comments: Consistent with the Perkins Act, administrators should engage the community not to incorporate “current” workplace skills, but academic and technical skills necessary to participate and succeed in current or emerging high skills, high wage professions.