Report and Recommendations Regarding

Postsecondary Credit Opportunities in Career-Technical Education

Submitted to the Governor and the General Assembly by the Chancellor and the Superintendent of Public Instruction

June 2014
**GENERAL ASSEMBLY’S CHARGE**

What are the implications of incorporating articulation agreements under Chapter 3365 as revised; and what recommendations would the Chancellor and Superintendent of Public Instruction make to the General Assembly regarding “how such career-technical programs of study might be included under Chapter 3365 of the Revised Code and the implications of including them?”

**BRIEF ANSWER**

The College Credit Plus program (CCP), established in Ohio Revised Code Chapter 3365, governs Ohio’s system of dual enrollment. Per the code, the CCP program is exclusively limited to arrangements in which a college-ready student enrolls in a college¹ and, upon successful completion of the college-level course, receives transcripted credit from the college, which is reflected on the student’s official college record.

While there are circumstances in which a secondary student engaged in Career-Technical Education (CTE) programming can receive transcripted college credit by successfully completing coursework through CCP, the majority of the opportunities available to secondary students who wish to earn career-technical college credit are configured as articulated postsecondary credit. An articulated postsecondary credit opportunity is not

¹Whenever used in this document, the term “college” refers to both a four-year university and a two-year community college.
recognized on a student’s college transcript unless that student subsequently enrolls in a college that is authorized to confer the particular credit.

In studying the history, current practices and statewide initiatives under way regarding the awarding of postsecondary credit for the completion of technical coursework offered through state-approved career-technical programs, we conclude that the mechanisms for awarding articulated credit to career-technical students through these programs should remain separate and distinct from CCP. We further conclude that the current option for career-technical students to engage in coursework under the CCP program and receive transcripted credit should remain available to career-technical students.

The General Assembly’s charge to review mechanisms for awarding postsecondary credit through Ohio’s career-technical programs has uncovered a number of barriers that hamper the efficiency, transparency, and consistency of the credit-awarding process. This report gives a brief overview of the state’s goal to maximize CTE students’ opportunity to earn postsecondary credit while in high school, and describes the current mechanisms by which students can receive such credit. Barriers that are working to limit (CTE) student opportunities to accumulate credit are identified as well as legislative recommendations, policy considerations, and inter-agency collaborations to support further advancement of postsecondary opportunities for CTE students.
BACKGROUND AND CONTEXT

Today’s economy demands a highly trained workforce. High-quality CTE programs engage a wide range of students through hands-on, technical training and prepare them for in-demand career fields beyond a traditional high school program. Although students are as academically proficient as their peers, those who graduate from a CTE program also possess the job-specific and employability skills essential in meeting a state’s immediate workforce demands. Students who enroll in CTE programs while in high school and as early as middle school are prepared for advanced training options within varying levels of education, including industry-recognized credentials and postsecondary certificates and degrees.

Nationally, the data show CTE students are more likely than their peers to earn a high school diploma, enroll in a two-year college as a full-time student or in a bachelor’s degree program, and complete.²

In Ohio, support for career-technical education has remained a top priority as it is recognized as a critical component of the state’s integrated strategies to enhance students’ college and career readiness and postsecondary success. In February 2014, Governor John Kasich signed a resolution officially launching the state’s participation in National Career-Technical Education Month, and in his State of the State address the Governor announced the extension of CTE programs into middle school, recognizing that CTE in Ohio is on the cutting edge of innovation and economic prosperity. To date, Ohio has dedicated considerable strategy and resources toward creating the robust system that results in CTE students’ postsecondary credit attainment.

Today, at the secondary level, the state Department of Education manages CTE programs offered through 91 Career-Technical Planning Districts, which are composed of joint vocational districts, comprehensive districts, and compacts. Ohio’s CTE programs exist within 16 career fields.³ Career-Technical Education is provided at the post-secondary level through the Ohio Board of Regents, University System of Ohio. Twenty-three community colleges and 53 Ohio Technical Centers deliver career-technical programs that reflect insights on workforce needs from Ohio businesses and in cooperation with secondary districts. In FY13, Ohio’s secondary and post-secondary institutions combined provided CTE programming for more than 240,000 students, from high school through adult learners.

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2 Education Commission of the States, Career and Technical Education CTE Dual Enrollment: A Strategy for College Completion and Workforce Investment By Jennifer Dounay Zinth, March 2014

Report and Recommendations Regarding Postsecondary Credit Opportunities in Career-Technical Education
THE GROWTH OF ARTICULATED COLLEGE CREDIT OPPORTUNITIES FOR CAREER-TECHNICAL EDUCATION STUDENTS

BILATERAL AGREEMENTS
In 1991, Ohio launched “Tech Prep,” an advanced standing CTE program that emerged out of the federal Perkins II/Carl D. Perkins Vocational and Technical Education Act. Tech Prep was designed to create a seamless high school-to-college program that blends accelerated academics with advanced CTE through hands-on instruction and experience for students. To effectuate this seamless high school-to-college program, Tech Prep necessitated that secondary career-technical instructors and college faculty come together and discuss curriculum and learning outcomes. The objective was to create seamless continuation of career-technical learning. As a result of this secondary and postsecondary communication, CTE content was identified as being taught at the secondary level and qualifying as postsecondary learning within particular career fields. This identified content was documented and agreements were formed between the partnering secondary and postsecondary schools. The agreements allowed students who successfully completed the identified content to earn college credit from that specific institution of higher education, if the student eventually enrolled in that college. These agreements became known in Ohio as “Bilateral Articulation Agreements.” These Bilateral Articulation Agreements (Bilateral Agreements) identified and documented the high school career-technical program content and its correlation with college-level learning to afford CTE students the opportunity to earn articulated college credits while in high school.4

Tech Prep, with its education standards and policy of coordinated articulation between secondary and postsecondary, advanced the state’s interest to afford students the opportunity to begin their postsecondary-level education before they completed high school. The program was so successful that in its Perkins IV State Plan,5 the Ohio Department of Education pledged to transition all high school CTE programs to Tech Prep standards by June 2013.6 As a result of Ohio’s commitment to having seamless transition from secondary CTE to postsecondary CTE, there has been a statewide boom in the number of postsecondary Bilateral Agreements because all CTE programs in Ohio now meet the Tech Prep standard of offering all CTE students at least one opportunity to earn college credit while they are still in high school. It is estimated that there are currently more than 2,000 Bilateral Agreements throughout the state.

4 Articulated agreements are to provide students with a non-duplicative sequence of progressive achievement leading to technical skill proficiency, a credential, a certificate, or a degree; and linked through credit transfer agreements between the secondary institution and a postsecondary educational institution, Higher Learning Commission, https://www.ncahlc.org/Criteria-Eligibility-and-Candidacy/criteria-and-core-components.html?highlight=WyJhcnRpY3VsYXRlZCJd
5 Perkins IV State Plan http://www2.ed.gov/about/offices/list/ovae/pi/memoperkinsiv.html
6 Ohio’s Quality Program Standards for Career-Technical Education Programs are highlighted in APPENDIX 2 of this Report.
STATEWIDE ARTICULATION AND TRANSFER AGREEMENTS

Ohio enjoys one of the most respected and comprehensive systems of articulation and transfer in the United States. Through the development of standardized statewide transfer guarantees, the system allows thousands of students each year to seamlessly transfer between institutions within the University System of Ohio (USO). One of the core strengths of the system is the collaboration between institutions in the development of the transfer guarantees. The almost universal participation among USO institutions in the review of coursework content, which precedes the development of the guarantees, is key to getting the statewide buy-in and recognition of the statewide agreements. Generally, any student taking a class that has been identified as part of a statewide transfer agreement is guaranteed the ability to transfer that class - with all credits accepted - to any institution in the University System of Ohio.

The initial work of the state’s postsecondary articulation and transfer efforts focused exclusively on developing statewide articulation for “General Education” coursework. Subsequent work focused the articulation of coursework across specific academic disciplines.

In 2007, the Ohio General Assembly expanded the state’s postsecondary credit transfer requirements to include CTE Career Field content, which matched career-technical coursework taught at the postsecondary level. The mandate from the General Assembly specifically required the Ohio Board of Regents to consult with secondary institutions and adult career centers that taught career-technical content in the development of CTE transfer requirements. This newly developed system of matching CTE content with postsecondary coursework further expanded postsecondary credit opportunities for students through the statewide articulation of CTE credit transfer guarantees. As with the development of other transfer guarantees, a rigorous alignment process involving faculty from postsecondary and secondary institutions was established to identify the course content that would be included in the CTE transfer guarantee. Progress in identifying aligned course content was steady but very deliberate. By 2010, 27 Career-Technical Assurance Guides with CTE courses had been developed and had become part of the CTE transfer statewide guarantee.

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7 Ohio Revised Code Section 3333.162(B); (in relevant part)... the Ohio Board of Regents, in consultation with the Department of Education, ... secondary career-technical education institutions, and state institutions of higher education, shall establish criteria, policies, and procedures that enable students to transfer agreed-upon technical courses completed through ... a public secondary career-technical institution, ... without unnecessary duplication or institutional barriers. The courses to which the criteria, policies, and procedures apply shall be those that adhere to recognized industry standards and equivalent coursework common to the secondary career pathway .... Where applicable, the policies and procedures shall build upon the articulation agreement and transfer initiative course equivalency system required by section 3333.16 of the Revised Code.

8 Career-Technical Assurance Guides (CTAGs) are postsecondary and secondary advising tools. Each CTAG identifies the courses within a career field/pathway that are guaranteed to transfer to any public college statewide and describes any other condition of the guarantee, such as a particular industry credential requirement. https://www.ohiohighered.org/transfer/ct2/ctags
This expansion of Ohio’s postsecondary articulation and transfer guarantee combined with the Department of Education’s commitment to a uniform set of CTE standards set the stage for the state to establish a broader array of statewide articulated agreements, allowing more CTE students to earn postsecondary career-technical credit that would transfer to any Ohio college that offers similar CTE programming. In 2011, the Secondary Career-Technical Alignment Initiative (SCTAI) was established as a collaborative effort between the Ohio Board of Regents and the Ohio Department of Education. Recognizing that every five years the state examines the career-technical content standards that guide CTE instruction, ODE and OBR seized the opportunity under the SCTAI to work toward accelerating the alignment of CTE content with postsecondary coursework. The SCTAI continues to involve faculty, teachers, business and industry, school districts, the Higher Learning Commission, and others to examine the CTE content standards and develop statewide articulation agreements and assessment measures for that learning (see APPENDIX 3).

During fiscal year 2015, the first of the SCTAI statewide articulation agreements, serving six Career Fields in phase one, are scheduled to be rolled out to high schools statewide. To maximize the student advantage of the SCTAI, the state intends to explore CTE career pathways and create statewide articulation agreements that are appropriate for each pathway. As more and more CTE Career Fields reflect college-level content, more and more CTE students will be afforded statewide postsecondary opportunities. The communication between and among secondary CTE instructors and college faculty in that same career field is a critical element of the SCTAI. This communication is fundamental to the content alignment and to the development of the assessment tools necessary to evaluate CTE students’ attainment of knowledge worthy of statewide award of postsecondary credit. Figure 1 below reflects the anticipated FY 2015 and the FY 2016 SCTAI course availability of career fields subject to the SCTAI process.

<table>
<thead>
<tr>
<th>Career Field</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
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<tbody>
<tr>
<td>Health Science</td>
<td>Finance</td>
<td>Lodging and Travel Services</td>
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<tr>
<td>Law and Public Safety</td>
<td>Marketing</td>
<td>Culinary and Food Service Operations</td>
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<tr>
<td>Information Technology</td>
<td>Engineering and Science Technology</td>
<td>Education</td>
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<td>Transportation Systems</td>
<td>Business and Administrative Services</td>
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<td>Construction Technologies</td>
<td>Agricultural and Environmental Systems</td>
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<tr>
<td>Manufacturing Technologies</td>
<td>Arts and Communications</td>
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* Human Services is not intended to have aligned college courses.
** This chart represents an anticipated timeline for content availability. Timing is dependent on the postsecondary and secondary collaborative alignment process.
STAKEHOLDER INPUT PROCESS

House Bill 59 required the Board of Regents and the Department of Education to study and make recommendations regarding how career-technical programs of study might be included under Chapter 3365 of the Revised Code and the implications of including them. In order to conduct an effective study, the Chancellor and the Superintendent of Public Instruction convened CTE representatives from both the secondary and postsecondary fields to gather their perceptions on the strengths and opportunities for improvement of the CTE system, specifically as it relates to the award of postsecondary credit. This process was necessary to the evaluation of whether the CTE postsecondary credit structure should come under the CCP program, and to understanding the practical and operational implications if the move was made.

The stakeholders convened by the Department of Education and the Board of Regents included the Ohio Association of Community Colleges, the Inter-University Council of Ohio, the Ohio Association of Career-Technical Superintendents, the Ohio Association of School Business Officials, Joint Vocational School Districts, the Buckeye Association of School Administrators (BASA), Ohio Association of Secondary School Administrators (OASSA), Ohio School Boards Association (OSBA), Ohio Tech Prep Regional Managers, and Compact Comprehensives Directors. The groups met as a whole six times over the course of four months, and offered feedback based upon the following framework for assessing how career-technical programs might enhance CTE student opportunities for postsecondary credit: Statewide Postsecondary Credit Initiatives; Bilateral Articulation Agreements; clarity of understanding of career-technical college credit opportunities; transparency and efficiency of the process to award credit; funding of postsecondary opportunities; and data.
STRENGTHS OF CTE POSTSECONDARY CREDIT PROCESS

STATEWIDE ARTICULATION AGREEMENT CREDIT EARNED
There was a strong consensus among stakeholders that the state’s efforts in developing a statewide articulation system for CTE content taught at the secondary level\(^9\) have tremendous benefits for students and clearly advance the goal of providing high-quality postsecondary CTE credit opportunities for students while they are in high school. The stakeholders confirm that the process of involving faculty at both the secondary and postsecondary levels in the content alignment process is a core strength of the statewide articulation process.

The statewide credit articulation process also assists with creating transparency of college credit opportunities available in CTE programs. Additionally, it creates an equity between and among students from different high schools who are engaged in coursework within the same career field and who choose to attend different USO institutions. Under the CTE statewide articulation guarantee, all courses or programs identified as part of the guarantee (including CTE courses taught at the secondary level) will be honored for the same amount of credit at all public institutions of higher education through the statewide credit articulation agreement.

The career fields noted in Figure 1 of this report represent approximately 100 proposed courses, currently under college-level review, that have been identified for inclusion in the current CTE statewide articulation guarantee process called the SCTAI over the next three fiscal years. The stakeholder group encouraged ODE and BOR to make every effort to accelerate the process of including more programs under the statewide credit articulation process.

BILATERAL ARTICULATION AGREEMENT CREDIT EARNED
Distinct from the statewide articulation process where CTE credit earned is accepted at all USO institutions, by definition, Bilateral Agreements limit the student opportunity to receive the postsecondary credit earned in CTE programs specifically to the college that has entered into agreement with the secondary CTE program to recognize the credit upon the student’s matriculation to that institution. Students have no guarantee that the credit earned through the Bilateral Agreement will be accepted at other USO institutions.

Despite the limitations on the transferability of credit, the stakeholder group continues to view Bilateral Agreements as a necessary component of being able to afford CTE students the opportunity to earn postsecondary career-technical credit. One reason cited is that, to date, not all of the CTE programs targeted for statewide articulation agreements have gone through the statewide articulation alignment, SCTAI, process; therefore, they are not yet included in

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\(^9\) “secondary” means high school
the CTE statewide articulation guarantee. Until such time that all CTE programs fall under the statewide guarantee, the Bilateral Agreement process will be needed to ensure that a postsecondary credit opportunity exists for all CTE programs.

The stakeholder group additionally pointed out that Bilateral Agreements provide needed flexibility in the development of new CTE programs. In many instances, secondary and postsecondary career-technical programs consult directly with industry to establish educational training programs to meet a particular industry need. When new programs are developed in this manner, they typically do not undergo a state review to determine statewide application. In these circumstances, the Bilateral Agreement process will continue to be the only mechanism available for students to earn college credit in a newly established program. The group did reach consensus on the proposition that Bilateral Agreements should not include CTE programs included in the statewide articulation guarantee.

**ELEVATING THE VIABILITY OF THE CAREER-TECHNICAL PATHWAY**

The stakeholder group was impressed with state efforts to redefine the narrative regarding the viability of career opportunities in CTE pathways. A significant amount of work has gone into debunking myths regarding the rigor of CTE coursework, the inability of CTE students to earn significant postsecondary credit while in high school, and the ability of CTE students to matriculate to college and persist in postsecondary environments. The group agreed that there is more work to be done with respect to this topic, particularly as it relates to informing students much earlier in their educational career regarding CTE opportunities. Overall, the group believed that the state is engaged in a healthy and positive dialogue regarding ways to maximize CTE opportunities for students and adults.
OPPORTUNITIES TO IMPROVE CTE POSTSECONDARY CREDIT PROCESS

RECOGNIZING WHEN CREDIT IS EARNED

Developing seamless transitions between high school and postsecondary endeavors is a critical step in increasing the chances of students to persist in postsecondary education and career environments. For students who have taken steps to accumulate college credit while in high school, an important component of their transition to postsecondary education is knowing exactly how much credit they have earned and knowing exactly how that credit can be used toward their postsecondary educational aspirations.

A common theme that emerged from the stakeholder working group was that there is little transparency and much student and family confusion about the CTE postsecondary credit earned in secondary programs. The confusion extends to postsecondary institutions and can create inconsistencies relating to the amount of credit conferred to the student. CTE students take the vast majority of courses that lead to the accumulation of articulated college credit at their high schools. This means that the only official documentation of courses taken and credits earned is on the student's high school transcript. As it currently stands, high school transcripts do not generally contain any recognition that a student has taken a high school class that has also earned them articulated postsecondary credit.

In order to compensate for the absence of postsecondary credit recognition on the high school transcript, BOR and ODE together created a “verification form” that CTE students request. It is completed by the secondary CTE instructor, officially stamped by the CTE school, provided to the postsecondary admissions office, and used to determine whether the student earned postsecondary credit in a manner that allows that IHE to confer the credit to the student. The form covers only coursework that has been identified as part of the statewide articulation guarantee and places a significant burden on the student to demonstrate that they have earned post-secondary credit.

The burdens are even greater on students participating in bilateral agreements, where standard forms are not the norm. For CTE students taking coursework that is subject to a bilateral agreement, the information pertaining to the course and credit is reported to the state through the Education Management Information System (EMIS), but is not required to be included on a student’s high school transcript. According to stakeholders, students often are required to deal with multiple offices at the postsecondary institutions to verify that the coursework taken was subject to a bilateral agreement, and the students often are unaware of the amount or application of credit they are due upon matriculation to the institution.

The stakeholder group has requested that the state examine ways to standardize the process for officially recognizing CTE credit earned at the secondary level that is eligible for postsecondary articulated credit at institutions of higher education.
BILATERAL AGREEMENTS

The stakeholder group enthusiastically supported both the SCTAI’s acceleration of guaranteed statewide articulated CTE postsecondary credit and the role of the Bilateral Agreements to provide opportunities in areas that have not yet been included in the statewide articulation agreements or have local industry appeal. A significant opportunity for improvement exists if the state codifies this clear role for Bilateral Agreements and addresses the group’s concern regarding current inconsistencies of accessibility, transparency (as to the substantive nature of the agreement), and bilateral agreement performance data available to students, parents, and postsecondary institutions.

Students’ ability to make critical decisions about their postsecondary and career options is dependent on their knowing what postsecondary credit they can and did earn during high school and how that credit may advance their credentialing toward employment. It became apparent from the workgroup that there are inconsistencies around the state as to what, if any, elements of a Bilateral Agreement are communicated and accessible to students and parents, the select courses within a CTE career field that apply to the Bilateral Agreement, and what that means for a student’s program choice and postsecondary future. In many instances students may have completed a CTE course or program within a particular CTE career field and not be aware that that course or program qualifies for postsecondary credit under that secondary/postsecondary Bilateral Agreement. In other instances there is confusion among students, parents, and even within the partnering postsecondary institution as to the particular amount of credit to be accepted and whether that credit which is accepted is applied to a degree path or serves as students’ accumulated elective credit. The stakeholder group unanimously agreed that postsecondary credit accepted under a Bilateral Agreement should be pre-established as part of the Bilateral Agreement and reasonably equivalent to the content described in the college’s course catalogue for the degree path that corresponds with the CTE career field.

In order for students to receive all the postsecondary credit they are due under a Bilateral Agreement, the work product or instrument used to evaluate student proficiency in the career-technical content area needs to be identified as part of the agreement and accessible at the postsecondary level.

DATA

The stakeholder workgroup unanimously affirmed that there is ample opportunity to improve the statewide collection and reporting of data that could be used to inform students’ decision-making, secondary and postsecondary continuous improvement efforts toward content alignment and student learning, and how to best address industry needs. Currently, information reported to EMIS indicates if a CTE course provides an opportunity for students to earn college credit. However, there is no subsequent application of this information.
to the student’s high school transcript. Additionally, there are no standardized reporting requirements or mechanisms to assess student use of any articulated postsecondary credit earned from either statewide or Bilateral Agreements, or to identify the long-term efficacy of secondary to postsecondary content alignment. Bilateral Agreement course or program content is not uniformly reported, either statewide or regionally; therefore, there is a void in the ability to compile or compare the effectiveness of a regional response to workforce needs or to identify emerging coursework that might be prime for a statewide articulation agreement through the SCTAI.

As discussed earlier in the “Recognizing When Credit is Earned” section, assuring that all articulated and transcripted postsecondary credit earned at the secondary level is reflected on the high school transcript would advance an analysis and improve transparency. Additionally, the workgroup suggested that the information reported to both the secondary and postsecondary data systems create the ability to quantify success and continuously analyze areas for improvement.

COMMUNICATION
A common theme that ran through each of the stakeholder dialogue sessions was that transparency of information is directly correlated with the clarity, deliberateness, and accessibility of effective communication. The continued acceleration of statewide articulated credit agreements in each CTE career field requires ongoing planned communication opportunities for CTE instructors and career-technical faculty to continue to learn from each other and work toward content alignment within postsecondary career-technical degree paths.

The working group also suggested that improved transparent communication throughout the state likely will enhance the equitable treatment of students concerning their postsecondary credit attainment, the amount of credit being accepted at the postsecondary-level, and the clear prohibition of students being charged for the postsecondary acceptance of such credit upon enrollment at the college.

With improved clarity about the distinctions between College Credit Plus, statewide articulated postsecondary credit, and college credit opportunities afforded students through a Bilateral Agreement, there is great opportunity to intentionally increase statewide public awareness of CTE students’ postsecondary credit opportunities and to maximize the student attainment of earning such postsecondary credit during high school.
RECOMMENDATIONS

It is clear from the examination of the work being done by The Ohio Department of Education, the Ohio Board of Regents, and education professionals at the K-12 and higher education levels that a considerable and impressive amount of progress has been made in providing quality postsecondary credit opportunities to Ohio's secondary CTE students. Secondary instructors and postsecondary faculty are working together through the CTE articulation guarantee process to align CTE college expectations across K-12 and higher education. Aligned programs will result in the development of clearly identifiable secondary coursework where college credit can be earned. Once earned, the articulation process guarantees that the credit can be taken to any public school in the University System of Ohio.

Work to improve the content and quality of Bilateral Agreements also continues. While the statewide articulation guarantee process should limit the scope of these agreements in the future, they still remain a viable mechanism for students to earn meaningful postsecondary credit while in high school. Ensuring the integrity and quality of Bilateral Agreements going forward remains a top priority.

There is a clear path forward for the completion of this work, and the commitment level of the relevant stakeholders is high. The Chancellor and the Superintendent of Public Instruction conclude that to move the CTE articulation process under College Credit Plus as currently defined would be disruptive to work currently under way and could possibly jeopardize postsecondary credit opportunities for secondary CTE students.

By definition, programs under CCP must result in transcripted college credit at the completion of the course. This is possible only under CCP because students have gone through the admission process and have been accepted to the institution that is offering the coursework. Under the CTE articulation process, there is no college admittance process prior to the student engaging in postsecondary coursework; therefore, the credit cannot be transcripted upon completion as required in CCP.

Converting the CTE articulation model to a transcripted credit upon course completion model would require the development of a process to admit CTE students into college before engaging in CTE coursework. This would be a burdensome process that would not result in appreciable benefit to students and would have significant funding implications for school districts. CTE classes that students currently take as part of their high school curriculum would become subject to CCP funding requirements.
The statewide CTE articulation process currently under way, SCTAI, guarantees that CTE secondary coursework aligns to college standards. Students will continue to take these courses at their high school – for free – while earning articulated college credit. Because these courses would be subject to the statewide transfer guarantee, students would not be disadvantaged or limited in using the credit earned to further their postsecondary aspirations.

We recommend that the CTE articulation options remain separate and distinct from the College Credit Plus program as defined in Chapter 3365 of the Ohio Revised Code, and that Section 3365.02(3), exempting Career-Technical programs from College Credit Plus only until July 1, 2016, be changed to reflect this recommendation.

We want to be clear, however, that CTE students should continue to be permitted – like other high school students – to engage in coursework that falls under College Credit Plus requirements.

The process of reviewing the awarding of postsecondary credit in CTE programs has also revealed significant opportunities for improvement. The additional recommendations that follow are targeted at addressing issues that pose barriers to secondary CTE students’ opportunity to earn and utilize postsecondary credit.
Data

**GOAL: OPTIMIZE STATEWIDE COLLECTION AND REPORTING OF DATA**

**This area contains TWO recommendations**

1. ODE and BOR shall jointly define, and establish in rules, data sets at the secondary and postsecondary levels to assure:
   - CTE postsecondary credit earned is recognized beyond the secondary level
   - CTE postsecondary credit opportunities, under both statewide articulation agreements and Bilateral Agreements, are identified; and
   - Postsecondary award of Career-Technical credit previously earned by the CTE student is tracked.

2. BOR and ODE develop guidelines for the data reporting.
Recognize Student Achievement

GOAL: CREATE UNDERSTANDABLE AND USEABLE TOOLS THAT RECOGNIZE CTE STUDENTS’ POSTSECONDARY CREDIT EARNED AT THE SECONDARY LEVEL

This area contains THREE recommendations

1. Require the Chancellor and the Superintendent of Public Instruction to jointly explore the development of mechanisms to uniformly recognize that the student has earned articulated post-secondary credit on official education documents that can be used by Ohio institutions of higher education to confer postsecondary credit, which shall include, but not be limited to, a review of the following options:

   - Include CTE credit attainment elements within the state’s ongoing eTranscript pilot project.

   - Require the inclusion of CTE credit attainment data within existing school district transcript processes.

   - Examine the feasibility of using existing state-level information systems to provide institutions of higher education with secondary CTE postsecondary credit attainment information.

2. Require the Superintendent and the Chancellor to create a secure mechanism whereby CTE students automatically receive a CTE postsecondary credit verification form.

3. BOR and ODE jointly submit a status report and plan to the Chancellor and Superintendent no later than six months prior to the extinction of the eTranscript pilot program’s current funding.
Communication

GOAL: ASSURE CLEAR, DELIBERATE AND ACCESSIBLE COMMUNICATION INFORMATION CONCERNING CTE STUDENTS’ POSTSECONDARY CREDIT OPPORTUNITIES

This area contains TWO recommendations

1. Require ODE and BOR to, jointly and in consultation with appropriate stakeholders, develop accessible information tools for use by students and parents that provide information on CTE postsecondary credit opportunities.

2. Require each CTE secondary school to:

   • Promote on its website the postsecondary articulated credit opportunities offered to students as per its Bilateral Agreement(s), including what CTE courses or programs articulate to postsecondary institutions, how postsecondary credits are earned, and how those credits articulate to one or multiple postsecondary institutions.

   • Annually conduct, beginning at the seventh-grade level, at least one parent and student orientation on CTE postsecondary credit opportunities.

   • Include postsecondary credit opportunity information in all general direct communications to students and parents.
**Miscellaneous**

This area contains **THREE recommendations**

1. CTE students shall incur no cost related to receipt of postsecondary credit upon enrollment at the institution of higher education when the articulated credit was earned under a Bilateral Agreement and the college was a party to the Bilateral Agreement, or when the credit was earned under a statewide articulated agreement.

2. BOR and ODE jointly develop CTE Postsecondary Credit Opportunity guidelines for Ohio’s postsecondary and secondary institutions to consider as new technologies and industry learning outcome needs emerge; these guidelines should consider efficiency, student access, and student credit equity.

3. The Chancellor shall update directives and rules to conform to the Bilateral Agreement requirements listed as APPENDIX 1 of this report.
CONCLUSION

It is clear that Ohio has worked extensively and collaboratively to ensure Career-Technical students have access to a variety of college credit opportunities while in high school. The state’s nationally renowned articulation and transfer system, coupled with its commitment to a uniform set of CTE standards, has increasingly expanded opportunities for CTE secondary students to earn postsecondary career-technical credit that transfers to any Ohio public college when the student enrolls at a public college.

Upon review of the current practices and statewide initiatives under way for awarding post-secondary credit for the completion of technical coursework, we conclude that career-technical students benefit when they have the opportunity to earn articulated credit in addition to the transcripted credit earned under the College Credit Plus program under Chapter 3365 of the Ohio Revised Code. The workgroup unanimously supported the current work of the Secondary Career-Technical Alignment Initiative process and encouraged an ongoing role and need for local Bilateral Agreements. Enhanced communication activities, robust data collection, and mechanisms that recognize students’ postsecondary credit earned through a CTE program were deemed critical improvements that better position CTE students to achieve college and career goals.

The robust processes already in place, together with the recommendations of this report, seek to improve the efficiency, transparency, and consistency of the credit-awarding process for career-technical students. The state-level commitment thus far has been vast. It has propelled and extended the postsecondary credit opportunities for CTE students. That same level of vigorous, dedicated effort must be sustained in order to assure CTE students have enhanced opportunities in the future to earn postsecondary credit and apply that credit as they make critical decisions about their postsecondary and career options.
APPENDIX 1:

1. Establish the following CTE articulated Bilateral Agreements requirements:

   a. Bilateral Agreement shall be: in writing; approved annually by the lead administrators of a secondary institution and a postsecondary educational institution; able to provide students with a non-duplicative sequence of progressive achievement leading to technical skill proficiency, a credential, or a degree; linked through a credit transfer agreement, which may be exclusive, between a secondary institution and an IHE, and may not include articulated statewide transferable courses, or courses governed by the College Credit Plus program.

   b. Instructor credentials for each course or program included in a Bilateral Agreement must be consistent with those required by the Ohio Board of Regents and a program-level accreditation body, when such an accrediting body exists.

   c. Each CTE course or program that is included in a Bilateral Agreement must be correlated with a course or courses listed in the partnering IHE’s course catalogue for a credential or degree within the correlated degree path.

   d. The articulated credit available under the Bilateral Agreement must be equivalent to the credit value of the correlated course(s) as listed in the catalogue; and upon enrollment at the partner IHE, a student shall not be required to duplicate curricular content for which the student earned articulated postsecondary credit under the Bilateral Agreement.

   e. The partnering IHE’s provost must authorize all courses identified within a Bilateral Agreement and all postsecondary articulated credit opportunity elements included in the Bilateral Agreement.

   f. Each Bilateral Agreement must include a syllabus for each course and/or program authorized for credit under the Bilateral Agreement; express the manner of documenting student work toward the demonstration of learning outcomes for each course or program authorized for credit under the Bilateral Agreement; make such student work available to an IHE upon request; and identify third-party assessment or credentialing standards to be used to evaluate student success relative to the established learning outcomes.

   g. Each course or program included in a Bilateral Agreement must confer postsecondary CTE credit toward a credential or degree upon the student enrollment at the partner IHE, and express the longevity of the available credit.
APPENDIX 2:

Ohio’s Quality Program Standards for Career-Technical Education Programs report consists of the 10 Standards, listed below. Standard 5 specifically correlates with student opportunities for postsecondary credit and educational options relevant to the subject of this Report. Therefore, Standard 5 is further detailed in this Appendix.

**Standard #1:** Instructional Facilities and Resources: The facility supports implementation of the career-technical program and provides students with opportunities for the development and application of technical knowledge and skills.

**Standard #2:** School and Community Relations: Stakeholders are engaged in developing and supporting the career-technical education program.

**Standard #3:** Program Planning and Evaluation: A results-driven needs assessment and evaluation exists for continual program development and improvement.

**Standard #4:** Quality Educators that Contribute to the Profession: Career-Technical educators continuously develop as professionals and support the growth of the profession they serve.

**Standard #5:** Curriculum and Program Design: The career-technical education program includes foundational and specialized courses designed to prepare students for lifelong learning within a career pathway by providing industry-recognized credentials and transferrable college credit along with quality student organization experiences.

**Standard #6:** Instruction: Career-Technical Education programs promote high academic achievement, technical knowledge and skill development of all students.

**Standard #7:** Assessment: Career-Technical education programs use authentic and performance-based assessments through classroom and student organization experiences, to measure student learning and skill attainment of Ohio’s Career Field Technical content standards.
Standard #8: Experiential Learning Experience Programs: All students plan and conduct a year-round experiential learning program that connects the technical knowledge and skills learned in both classroom and laboratory to the work place.

Standard #9: Leadership Development/CTSO: All students participate in a year-round intra-curricular Career-Technical Student Organization (CTSO) that promotes cognitive knowledge and skill and leadership development.

Standard #10: Student Access: Career-technical education programs serve all students interested in preparing for a career in any of Ohio’s 16 Career Fields and are reflective of the school’s student population.

Standard 5: Curriculum and Program Design

Standard Statement: The career-technical education program includes foundational and specialized courses designed to prepare students for lifelong learning within a career pathway.

Standard Definition: Quality curriculum and program design reflects standards that are relevant, rigorous, industry-validated and aligned with state and national technical content standards. Curriculum and program design focus on career readiness and postsecondary educational options. The curriculum and program design include career-planning activities for students, student leadership opportunities, and a program of study that supports overall student achievement.

<table>
<thead>
<tr>
<th>QUALITY INDICATOR</th>
<th>EXEMPLARY</th>
<th>EFFECTIVE</th>
<th>MINIMAL</th>
<th>UNSATISFACTORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) An approved program of study is current and based on industry validated technical content standards.</td>
<td>The local board of education program of study is based on current career field and industry content standards.</td>
<td></td>
<td></td>
<td>There is no locally approved program of study.</td>
</tr>
<tr>
<td>2.) The program of study is logically organized, including course descriptions and sequences, prerequisites and staffing assignments.</td>
<td>Program is logically and sequentially organized, including course sequences, course prerequisites and staffing assignments.</td>
<td>Program course curriculum content is organized, includes course prerequisites and staff assignments.</td>
<td>POS includes course listings.</td>
<td>No formal POS exists.</td>
</tr>
<tr>
<td>3.) Technical content is aligned with academic content standards.</td>
<td>Technical content is aligned with two or more of Ohio’s New Learning Standards.</td>
<td>Technical content is aligned with one of Ohio’s New Learning Standards.</td>
<td>Ohio’s New Learning Standards are recognized in the program of study.</td>
<td>No effort to align with or include learning standards.</td>
</tr>
<tr>
<td>4.) Curriculum is articulated with a Post-Secondary Institution and industry-recognized credentials.</td>
<td>Postsecondary relationships include shared instructional resources and transferrable college credit.</td>
<td>Postsecondary relationships include formal articulation agreements.</td>
<td>Postsecondary relationships include curriculum alignment.</td>
<td>No post-secondary relationships exist.</td>
</tr>
<tr>
<td>5.) Experiential Learning and engagement in Career Technical Student Organization are integrated throughout the instructional program.</td>
<td>100 percent of students are members of student organization and participate in experiential learning as an integral part of the instruction-al program.</td>
<td>75 percent of students are members of student organization and participate in experiential learning as an integral part of the instruction-al program.</td>
<td>50 percent of students are members of student organization and participate in experiential learning as an integral part of the instruction-al program.</td>
<td>Less than 50 percent of students are members of student organization and participate in experiential learning as an integral part of the instructional program.</td>
</tr>
</tbody>
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APPENDIX 3:

Creating a Statewide Career-Technical Articulation Agreement

Using the SCTAI process

**RESEARCH PHASE**

1. University System of Ohio (USO) Faculty/OBR
2. ODE
3. Career Fields Technical Content Standards (CFTCS) Review
4. Statewide Articulation Proposal

**ENDORSEMENT PHASE**

1. Statewide Survey
   - Function: Survey Aligned Content (Learning Outcomes and CFTCS)
2. Quality Check
   - Final endorsement: Includes assessment measures
3. Statewide Articulation Proposal
4. Statewide Articulation READY FOR USE

*Postsecondary faculty, from USO institutions, determine the criteria for postsecondary credit.*