Introduction

Purpose of Group
The College, Career and Technical Education (CCTE) Transition Advisory Council was established in summer 2017 to provide immediate insight and direction as the state welcomed new leadership to guide our work in postsecondary and career readiness. The group met several times with the commissioner and new CCTE leadership—including new Assistant Commissioner Casey Haugner Wrenn and new Deputy Commissioner Lyle Ailshie—over several months to provide feedback on current CCTE work. The feedback specifically focused on the challenges, desires, and barriers to successful implementation of high-quality CTE programs. The council also provided input to the department on a unified vision related to the next stage of college, career and technical education.

Members
The CCTE Transition Advisory Council included the following members:

- Jeff Aiken, president, Tennessee Farm Bureau
- John Blakley, CTE director, Scott County Schools
- Dean Blevins, director, Tennessee College of Applied Technology—Elizabethton
- John Cagle, CTE director and assistant principal, Jefferson County Schools
- Jimmy Davis, president, Middle Tennessee Manufacturing Leadership Council, and owner, The Davis Groupe
- Beth Duffield, senior vice president of education and workforce development, Rutherford County Chamber of Commerce
- Jeff Frazier, dean of the Regional Center for Advanced Manufacturing, Eastman Chemical
- Marc Hill, chief policy officer, Nashville Area Chamber of Commerce
- Bradley Jackson, president, Tennessee Chamber of Commerce and Industry
- George Leake, CTE director, Obion County School District
- Tim Parrott, director of schools, Anderson County Schools
- Tyra Pilgrim, CTE director, Rutherford County Schools
- Karen Pitts, CTE director, Clarksville-Montgomery County School System
- Senator Jim Tracy, Tennessee General Assembly
Council members reviewed activities, reforms, and programs from the college, career and technical education division over the past five years to evaluate effectiveness and progress toward goals. The council reviewed data on program of study and course enrollment and concentrator achievement, along with updates to annual program revision processes. Throughout the meetings, members documented areas where they agreed with the current direction of the department and offered commendations to continue or expand the work.

The council members would like to commend the department on the following:

1. **Improved culture around postsecondary and career success, specifically in the use of communication leading all students to postsecondary.**

   The department has done significant work to raise the profile of career and technical education (CTE) and ensure that it is better utilized as an opportunity for all students by increasing the rigor of CTE course standards, ensuring vertical alignment with postsecondary programs, and highlighting integration between general education graduation requirements and CTE courses and programs of study. The high expectation that students will progress on to postsecondary and career after high school is evident throughout the state, and these higher expectations should be maintained. Additionally, grounding conversations about student preparation and success in economic development and workforce alignment is important and should continue.

2. **Statewide focus on CTE and the revision of courses and programs of study, leading to increased rigor, value, and alignment.**

   The multi-phased reform effort that has resulted in revised career and technical education course standards and updated sequences of courses in the programs of study has been successful. Industry involvement in the standard-writing process has produced more rigorous standards that are more aligned to workforce needs and general education content, like literacy and applied mathematics. Additionally, the creation of the Tennessee Specific Industry Certifications (TSICs) in agriculture and human services fills gaps that existed in industry-recognized demonstration of skills and provides an opportunity for students to be acknowledged for their learning.

   The standards revision has raised the profile of CTE courses, and the council commends the department for continuing to increase the number of CTE courses that satisfy general education graduation requirements, such as laboratory science. The council also
commends the department for establishing and communicating the clear vertical alignment of the state’s CTE programs with postsecondary programs – one example being the alignment of the new mechatronics program of study with programs at the TCAT, community college, and four-year college levels. Additionally, the state should continue to support high-quality career and technical student organizations (CTSOs) and the alignment of these organizations to high-quality CTE classroom instruction, as CTSOs provide an important opportunity for students to practice and demonstrate their technical and employability skills.

3. **Intentional collaboration with industry, postsecondary, and political leaders.**

   The department has created several intentional collaboration opportunities with educators, industry partners, chambers of commerce, workforce and economic and community development, and legislators, and these opportunities should continue. The voice of industry is apparent in CTE programs, as well as other department programs, such as work-based learning (WBL) and PathwaysTN. The council commends Commissioner McQueen on her continued personal participation in meetings, such as this council, as her presence proves the value placed in these collaborative opportunities.

   The council also commends the department for working to build local and regional capacity to assist schools and districts in increasing industry engagement in their programs. This work should continue and be expanded if possible.

4. **Use of data to drive decision making.**

   It is clear through the intentional use of student data coupled with labor and workforce data that the department has a desire to justify its decision making with clear evidence of opportunity and progress. The use of data to create programs, as well as to evaluate progress and make changes to improve existing programs, is commendable and should continue. The council also commends the department on its desire to continue to expand and utilize student longitudinal data from the state’s P20 Connect data system, as it is important to monitor actual student outcomes after high school and to in turn make programmatic changes based on real-world data.

5. **Responsiveness to feedback from industry and educators in the field.**

   The department intentionally seeks input from educators as well as industry professionals and uses this input to make clear changes to course standards, program of study course sequences, vertical pathways of alignment to postsecondary, and recognized industry certifications. This responsiveness is commendable and should continue and be expanded
where appropriate. Providing clear avenues and channels for educators and industry professionals to share their feedback is important, and these processes should be well documented and shared more broadly.


One of the most important aspects of college and career readiness is an intentional involvement of industry in the shaping of our K-12 education system and programs. The department’s revised work-based learning framework spans primary and secondary grade levels and offers a graduated approach (from career awareness activities to specific career training) that supports all learners. The council commends this approach, and it is important to continue to implement this framework with fidelity.

Recommendations

The council members shared challenges of CTE program implementation from the field and discussed barriers to program improvement. Recommendations to address, lessen, or remove these barriers were discussed and are captured below. These recommendations fall into four categories: Postsecondary Alignment; Work-Based Learning, Apprenticeships, and Industry Engagement; Student Advisement & Career Exploration; and High-Quality CTE Programs.

Postsecondary Alignment

1. The department should develop resources and guidance to support districts in providing appropriate and timely intervention across all grade levels that ensures students are prepared to obtain postsecondary credit in high school and immediately upon graduation. Districts should work with regional postsecondary institutions to provide remediation coursework in high school where appropriate.

2. The department should work with Tennessee higher education systems to establish policy and/or guidance that outlines criteria for awarding postsecondary credit to high school students [in all eight early postsecondary opportunity (EPSO) types] to ensure articulation upon student matriculation to postsecondary. This guidance should include a list of industry certifications that are considered to be culminating postsecondary credentials toward the governor’s Drive to 55 initiative.

3. The department should work with the General Assembly to increase budget investments to allow for more students to participate in high-quality early postsecondary opportunities (EPSOs).
4. To ensure consistency across the secondary-postsecondary continuum, the department should work with other state agencies, such as the Tennessee Board of Regents (TBR), to provide shared funding for equipment in in-demand program areas across institutions/schools.

5. The department should work with TBR, the University of Tennessee (UT) system, Tennessee Higher Education Commission (THEC), and four-year institutions to more clearly align secondary elective focus/programs of study with TCAT programs, with Tennessee Transfer Pathways, and academic focus areas to ensure vertical alignment between programs.

Work-Based Learning, Apprenticeships, and Industry Engagement

6. The department should update the CTE concentrator definition to allow one course in aligned work-based learning to count toward a student's concentrator status.

7. The department should pursue development of a statewide registered apprenticeship model for high school student participation, including pre-apprenticeship where appropriate.

8. The department should work with the General Assembly and other stakeholders to incentivize companies for participating in apprenticeship and other work-based learning opportunities through tax credits or other incentives.

9. The department should work with the State Board of Education to develop a policy that incorporates a “work ethic” diploma into graduation with distinction.

10. The department should work with the Tennessee Department of Labor and Workforce Development, Tennessee Department of Economic and Community Development, and the governor’s office to develop clear statewide guidance and shared goals around industry engagement in K-12 education. This initiative could potentially include a “WBL Certified Community,” could modify requirements to become a “Three Star Community”, or offer a new state distinction/incentive opportunity for communities who successfully demonstrate engagement across industry and education.

11. The department should provide guidance, resources, templates, and technical assistance for hosting community conversations/events that bring in higher education and industry partners, including providing direct support to individuals serving as regional intermediaries.

12. The department should work with Tennessee Business Roundtable and the Tennessee Chamber of Commerce to produce clear communications and marketing materials to explain WBL to employers (e.g., one-pagers, FAQs, information about liability/insurance, etc.).

13. The department should include appropriate WBL opportunities (such as apprenticeships that include training credit) in the Ready Graduate indicator in the state accountability system.
**Student Advisement & Career Exploration**

14. The department should propose budget improvements and basic education program (BEP) changes to the General Assembly that would require and fund additional school counselors in schools.

15. The department should provide guidance and training to support schools in implementing career awareness and exploration initiatives, including summer bridge programs. The State Board of Education should consider adding career exploration as a graduation requirement and adding aptitude inventories to existing exploration tools.

16. The department should provide teacher and leader training and specific guidance to districts to incorporate contextual/project-based learning and career awareness into general education courses as well as guidance and training around incorporating math and literacy into CTE courses.

17. The department should work with districts and community stakeholders to develop an approach to ensuring students and families are comprehensively informed about the career and postsecondary opportunities available to them.

**High-Quality Career & Technical Education Programs**

18. The department should require/provide additional trainings for new occupationally licensed teachers to gain a deeper understanding of lesson planning, classroom management, and general pedagogy.

19. The department should continually increase efforts to support districts in utilizing regional labor data to assess industry/community needs, and districts should retire programs of study that are not aligned with industry/community demand and postsecondary offerings.

20. The department should propose changes to the BEP that would provide full-time CTE directors in every district and policy that requires districts to structure CTE director responsibilities, such that their primary function is supporting career and technical education efforts.

21. The department should create a structured training program to onboard new CTE directors.

22. The department should facilitate regional collaboration opportunities for CTE directors, including matching new directors with high-performing CTE directors as mentors.

23. The department should pursue strategies to increase CTE teacher recruitment and retention, including prioritizing differentiated pay, providing flexibility in licensure/training requirements, and working to develop a district-led educator preparation program to allow smaller and more rural districts easier access to educator preparation coursework.

24. The department should work with other state agencies to identify opportunities to increase industry involvement in standards and assessment development, including general education standards.
25. The department should continue its work to pilot benchmark opportunities to measure students’ technical skill competency attainment progress toward a culminating industry certification or postsecondary credential. Information learned should be used to develop further benchmarks and improve standards to ensure alignment with industry certifications and postsecondary credentials.

26. The department should increase efforts to ensure special populations are provided equal access and exposure to EPSOs, capstone courses, and all other college and career readiness activities.

27. The department should pursue policies and practices that would eliminate any potential negative impact of CTSO participation on attendance records and further integrate CTSO participation into coursework.

Vision for College & Career Readiness Work

The council, over the course of three in-person meetings, reviewed several published strategic and visioning documents created by the department to communicate the state's vision for student readiness and success. By and large, the council did not recommend significant changes to these visioning documents and agreed with the current strategic direction of the department in preparing students for their path of choice. Slight refinements to messaging recommended by the council included:

- Ensuring all messages around effective pathways for students begin in elementary (K-8) and providing clear messaging around how the department is supporting efforts at the elementary and middle school levels.
- Intentionally connecting the work of the department to the governor's Drive to 55 initiative and other state programs in workforce development.
- More clearly defining the term “postsecondary” to place focus on students obtaining a credential rather than attending a specific institution or training program.
- Ensuring importance of employability skills and leadership opportunities, such as those found in CTSOs.

An overall recommendation of the council is to work with the governor’s office and state postsecondary partners to ensure consistent definitions and clear messages around college and career readiness work, including telling success stories for an increased awareness by the general public, students, families, and educators.