

MEMORANDUM

TO: House and Senate Committee of Education via email
Vermont State Board of Education via email

CC: Dr. Parwinder Grewal, President, Vermont State University
Sophie Zdatny, Chancellor, Vermont State Colleges
Nolan Atkins, Provost, Vermont State University

FROM: Patricia Moulton, Executive Director of Workforce Development, VCSC
Barry Hulce, Executive Director, Vermont Manufacturing Collaborative, Vermont
Technical College

DATE: January 20, 2023



In accordance with Act 80 of 2019 and amended by Act 83 of 2021, Section 66 which reads (c) Vermont State College System (VSCS) shall use funds remaining with Vermont Technical College provided in 2019 Acts and Resolves No. 80 to continue to study a model for course delivery at Career and Technical Education (CTE) centers in Vermont and pilot up to two programs that offer these degree programs in up to two CTE centers. On or before January 15, 2023, the VSCS shall submit a written supplemental report to the House and Senate Committees on Education and the State Board of Education with its findings and recommendations from the pilot programs, please find the required supplemental report on the use of remaining funds from Act 80 of 2019 related to a model to deliver courses at Career and Technical Education Centers in Vermont and pilot up to two programs. This report was due on January 15, 2023.

Vermont Technical College (soon to be Vermont State University)¹ and Vermont Career Technology Education (CTE) centers continue to explore collaborative approaches on how best to provide a locally convenient, accessible, and financially affordable option to high school students and adult learners who want, while still enrolled with their CTE centers, to also enroll in a high demand, high-skill, industry-specific associate degree offering and/or a pathway to a degree.

President Parwinder Grewal of Vermont State University and Barry Hulce, Executive Director of the Vermont Manufacturing Collaborative, and Patricia Moulton, VSCS Executive Director of Workforce Development, as well as partners at the Springfield and Barre CTEs are designing this pilot in two important industries: Health Sciences and Advanced Manufacturing. The conceptualized programs blend curriculum from the sending high school, the CTE, and a VTC associate degree program to streamline learning.

¹ Vermont Technical College will be joining with Castleton University and Northern Vermont University to form Vermont State University, effective July 1, 2023. Therefore, references to Vermont Technical College in this report should be understood to mean Vermont State University in the future.

These programs will provide significant benefits to the students, industry, CTEs, Vermont State University, and Vermont including:

- Providing a faster student pathway to a degree and to industry certifications with less debt;
- Bringing trained and degreed students into the Vermont workforce more quickly;
- Demonstrating CTE's viability for teaching industry critical skills at a higher level;
- Utilizing existing infrastructure to expand offerings;
- Building collaboration between Vermont's high schools, CTEs, and the State Colleges System; and
- Supporting vital industries within Vermont.

Health Sciences Pathway: Vermont Technical College is working on a Health Services Pathway pilot project with the Central Vermont Career Center (CVCC) in Barre. The pilot began in the fall of 2022 with admission of two CVCC students in to the VTC Emergency Services (EMS) program. In addition, CVCC has strengthened their Medical Professions program to include Certified Clinical Medical Assistant (CCMA) and Phlebotomy certification, both of which lead to pathways into college.

Currently, students enroll at CVCC in the EMS Program or Medical Professions programs as high school juniors or seniors. This year two students enrolled in a second year of EMS as full-time students in the CVCC EMS 2 course and in the VTC paramedic program, which is a similar approach to [Fast Forward](#). CVCC pays that the Fast Forward rate for students attending the VTC Paramedic program in Williston.

Rationale EMS/Paramedicine Pathway:

Vermont's Emergency Services workforce has remained relatively flat over the past two decades; however, it has seen significant decline over the last 30 years. Given the stressful nature of this work, the profession has a high attrition rate. Meanwhile, the requests for service from Vermonters have significantly increased (about 30% in the last decade). Currently the average age of the Emergency Services responder is mid to late 40's, or even older in some areas of Vermont. It would help the current workforce to decrease the age that EMTs can be licensed to 17 from 18 as several states have successfully done, most notably Connecticut.

There is a lot of opportunity to strengthen the Emergency Services system, education access, and workforce development within Vermont. Having all the major stakeholders involved is going to be key to success; those stakeholders include the Department of Health, the Department of Labor, the Agency of Education, the Vermont Ambulance Association, the Vermont EMS Advisory Committee, Vermont Association of CTE Directors and Vermont Technical College (soon to be Vermont State University). If Vermont's system continues as it is, there is a risk it could become as fragile as [Maine's system](#), where the State is looking at infusing \$70 million annually into the system to prevent it from collapsing. Vermont's Emergency Services face the same challenges as Maine

Rationale Medical Professions Pathway:

Enabling high school students to access college level courses through Fast Forward, dual enrollment and other means of early college, gives them the opportunity to take required prerequisite courses and jump start their college career. Spreading out those requirements will enable a more robust and manageable course load while in high school and a more manageable course load their first year of college.

Students could graduate from high school with a variety of credentials, meet program prerequisites for a variety of health science programs at Vermont Tech (nursing, paramedicine, radiologic science, respiratory therapy, and dental hygiene), as well as obtain additional college credits depending on course load and proficiency. This program would make a significant difference for students who are very bright and capable but may not thrive in the traditional intense pace of the nursing program.

Part of the exploration of these health pathways is to investigate the circumstances under which appropriate CTE faculty could teach Vermont Tech courses, as well as exploring accreditation, workload, scheduling and other aspects of such an approach. The first study showed there are a variety of issues with a full program delivered at CTE. However, there may be options for some course work to occur in that setting and this will continue to be explored.

Advanced Manufacturing Pathway: Advanced Manufacturing jobs are in high demand throughout Vermont. Core manufacturing skills are currently taught in many Vermont CTEs and the curriculum can provide a good foundation for Vermont Tech's Engineering Technology degree programs, which leverage the newly built Advanced Manufacturing Center at Vermont Tech, funded by the Department of Defense. Streamlined curriculum exploration is in process between CTEs (Central Vermont, Hartford, Stafford, River Valley), and Vermont Tech. The currently anticipated outcome is a curriculum pathway that earns a participating student a high school diploma, an associate degree in Mechanical Engineering Technology, and relevant industry certificates (to be determined). Instruction would take place at the CTEs and at Vermont Tech so that industry-utilized advanced manufacturing tools can be taught.

The exploration and study for the blended Advanced Manufacturing program are taking significant time as college-level engineering curriculum has high demands on previous math and science aptitude. Educators from the representative institutions will help envision how to get students this knowledge early in the pathway.

Timeline: The health sciences pathway is partially underway with two CVCC students engaged in the paramedicine program at VT Tech. The goal is to be ready to market these two pathways for fall of 2024. Much work remains to align curriculum and receive needed approvals to implement. Marketing needs to align with the academic year and should begin in the summer/fall 2023.

Financial: To date, no additional funds have been spent on the work. It is anticipated the remaining funding will be needed to implement the two pilots.

Summary: While the work of this pilot was delayed significantly due to the lingering impacts of the pandemic and longer design timelines than originally anticipated, the design of these pilots is underway. Narrowing down to these two pilots enables the parties to work through logistical, accreditation, financial and additional implications of enabling these pathways for high school students. The work will also enhance relationships between Vermont State University and CTE in Vermont.