

Adjusting the toolbox: Vocational schools craft creative ways to keep students engaged during pandemic

By John Laidler Globe Correspondent



Meghan Corrigan at her construction technology class at Blue Hills Regional Technical School. JONATHAN WIGGS/GLOBE STAFF

When Blue Hills Regional Technical School in Canton announced that its vocational shop classes would be holding some in-school sessions this fall, it came as welcome news to senior Christopher Alcimbert.

“It gave me a sense of relief because I’m able to communicate much better with the teacher and to learn skills better when I am there in person,” said the Randolph resident, who is in Blue Hills’ cosmetology program. “It’s going to be a challenging year but having those days in school will make it easier.”

As schools statewide struggle with the complexities of educating students amid the COVID-19 pandemic, regional vocational schools face a particular challenge since many of their technical programs involve working directly with equipment, making them less conducive to virtual learning.

“Career and technical education is by its very nature hands-on,” said Edward Bouquillon, superintendent of Minuteman Regional Vocational Technical High School, located on the Lexington/Lincoln line. “So we have to have kids in their shop or laboratory environment.”

Recognizing the importance of in-person instruction, many of the state’s regional vocational schools have found ways to offer students at least some in-school time for their shop programs, and in some cases for academic classes. The situation is in contrast to last spring, where the pandemic forced vocational and all other schools to switch entirely to at-home remote learning.

Massachusetts has 26 regional vocational schools. Vocational programs also are offered at about 30 comprehensive high schools.

At Blue Hills, officials have devised a schedule for prioritizing in-school learning for its shop courses, which — as is typical with vocational schools — are held in alternating weeks with academic classes. Students this fall have two in-school days every shop week. Their other vocational classes and all academic classes are taken virtually at home.

Officials said the plan provides students in all four grades some in-person vocational instruction while also enabling the school to operate at 25 percent enrollment capacity — one quarter of the student body attending in person on any one school day — which is necessary to meet social distancing guidelines.



Christopher Alcimbert at his cosmetology class at Blue Hills Regional Technical School. JONATHAN WIGGS/GLOBE STAFF

“Students really need the hands-on experience,” said Blue Hills Superintendent Jill Rossetti. “How could you hire someone who has never changed a tire but only read about it? How do you hire someone to use an acetylene torch who has only watched it demonstrated online?”

To make the plan work, the school is following such safety procedures as requiring students to wear masks, remain 6 feet apart from others, and wipe down their equipment after use. Custodians also are deep-cleaning the building two nights a week, on top of regular cleaning throughout each school day.

Rossetti said she is not surprised teachers are rising to the challenge of instructing students with limited in-person interaction.

“By nature, voke instructors are problem-solvers,” she said. “Most of them work in industry so they are used to taking on problems and having to figure them out.”

As an example of their creativity, she said culinary arts instructors are sending students home with coolers filled with premeasured ingredients they can use

to prepare dishes during remote learning days. Students in other programs also are taking home tools and kits to complete hands-on assignments.

“The focus of vocational schools now is to do everything possible to get students in front of vocational instructors as many days as possible,” said Kevin Farr, executive director of the Massachusetts Association of Vocational Administrators.

He said the extent to which they are meeting that goal and the plans they are implementing vary widely due to such factors as local COVID-19 rates. Some schools are offering full in-school vocational weeks, and others a hybrid between home and school days. Several others are all virtual. Similar variations exist for academic classes.

At Minuteman, students attend in-school classes all five days for one of their two monthly shop weeks, and virtual at-home classes for the other weeks. All academic classes are taken remotely at home, according to officials at the 650-student school that serves nine member communities.

Bouquillon said the scheduling format, arrived at after much deliberation over the summer, is based on “safety and the most effective way to do what we are designed to do — career and technical education.”



Students work in the advanced manufacturing shop at Minuteman Regional High School.

Minuteman is operating at 25 percent capacity, providing enough space to practice social distancing. With that and such measures as requiring students and teachers to wear masks and installing numerous sanitation stations, Bouquillon is confident the school can operate safely, adding that its new building — opened in 2019 — includes features such as a state-of-the-art ventilation system that will further reduce risks of spreading COVID-19.

Lucy Kitchenka, who is senior class president and in the carpentry program at Minuteman, appreciates having at least some in-person vocational classes.

“I personally have [attention-deficit/hyperactivity disorder]. For someone like me to not be able to actually see what I am working on, to move the pieces and put them together, makes it a lot more difficult to learn,” said the Arlington resident. “I definitely think a lot of students would be having more difficulty if we had to have our voke classes completely online.”

At Greater Lowell Technical High School, a 2,310-student school in Tyngsborough serving four member communities including Lowell, students are attending in-school classes one day of each vocational and each academic week.

“It’s extremely important that we provide in-person learning because so much of technical programming is all hands-on,” said School Superintendent Jill Davis, who is hopeful the school can soon expand to two in-person days during vocational weeks.

“Class sizes are much smaller so those students are getting much more small group instruction,” said Davis, noting an advantage of the current format. And some vocational teachers are providing students with learning kits to allow hands-on work during their at-home days, according to Michael Barton, Greater Lowell’s assistant superintendent and principal.

The school is at 25 percent capacity for in-person learning and other steps, from mask-wearing requirements to replacing group seating with individual tables in the cafeteria, have been taken to further enhance safety.

“We are excited to see students back in the building,” Davis said. “A lot of them have said they are happy and grateful to have at least one day of in-person learning.”

At Northeast Metropolitan Regional Vocational High School, students are taking all their classes remotely from home, according to David DiBarri, superintendent of the 1,260-student school in Wakefield.

DiBarri said the school was effectively required to go all-remote because under state rules, it must share the COVID-19 risk designation status of Revere, one of its 12 member districts. Revere is currently designated a high-risk community based on its COVID-19 case numbers. Two other communities that send students to Northeast Metro Tech — Chelsea and Winthrop — also are currently in the state-designated “red zone.”

Noting that the school had intended to implement a hybrid plan, DiBarri said it was disappointing Northeast had to instead go with an all-remote format. But he said the school has quickly shifted focus to providing students as interactive an experience as possible when taking their classes at home.

In all the school's vocational programs, students receive kits filled with supplies, tools, and materials they can use in learning skills during their virtual sessions. Chromebooks also have been provided to all students.

“We felt you can't just have students staring at the computer,” DiBarri said. “If they are using their hands and minds doing problem-solving, it will be a much better experience. It's trying to make lemonade out of a lemon.”



A masonry shop class at Greater Lowell Technical High School. From left, Yan Ortiz, grade 10, of Lowell; teacher Jay Foster; and Eric Briere, grade 11, of Tyngsborough.

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