



## **Career and Technical Education: Preparing our Future Workforce. Bobby Deetjen, Director of Midcoast School of Technology, Presented Jan 26, 2021 For the Camden Rotary Club**

Mid-Coast School of Technology (MCST) Director Bobby Deetjen discussed the school's programs and how it is preparing our future workforce. This is part of a series of speakers our club is hosting to address local economic and workforce development.

A transition away from traditional vocational education occurred during the early 1990s. Teachers were passing on the training they had received to their students, which was inconsistent with industry needs. Industry was asking students, "Do you know this? Do you know that?" Too often they didn't know. The state realized industry was driving what needed to take place in our schools, so high schools adopted industry standards to ensure students would learn what they needed. This led to concurrent enrollment opportunities, a much more streamlined process where students earned college credits as well as industry certifications and licenses.

Nationally, students in a career and technical education (CTE) program have a graduation rate of 95%, compared to the traditional high school graduation rate of 84%. What CTE students learn in the classroom can be applied directly in real life. They choose to go to that school and have to apply to get in. The MCST gets more applications than they have openings. It's a very competitive process.

As part of our club's speaker series, our members have learned there's a significant skills gap all across Maine. Bobby said his school receives calls on a daily basis from local employers, and in some cases nationally, and students are even snatched up well before they graduate.

A study by the American Manufacturing Association for 2018-2028 found there is a 2.4 million shortage of skilled labor in our country. This shortage outpaces by far what is seen in other careers, and it does not include those who will be retiring and need to be replaced. By comparison, the computer science shortage is only 100K. The manufacturing shortages are in high-wage careers. For example, a third of welders nationwide are making six figures, and starting wages are \$60K for a recent school graduate.

We're starting to see a change as far as degrees. The thinking was the higher your degree, the more money you'll make over your lifetime. "This is no longer consistent from state to state," Bobby told us. "Texas, Alaska and Colorado are seeing associate's degrees out-



earning bachelor's degrees. That doesn't even get into the return on investment for the cost of the school."

Comparing the cost for education:

- UMaine bachelor's degree: Costs \$100K, and students leave school about \$26K in debt.
- CTE school associate's degree: Costs \$22K, including tuition and room and board. Most of these students have zero debt after school.

More and more jobs are requiring certification and not necessarily a degree. From 1991-2016, there was an 83% jump in the number of jobs that pay a median income of \$55K a year or more without a bachelor's degree, according to the American CTE Association. Bobby thinks that rather than asking what students are going to, "we should first be asking them what they're interested in doing, what career they're interested in, and then what skills do they need to be able to pursue that career. Then ask them what schools are going to align with your desired career."

What courses MCST offers: Design/Technology; small engine programs (highly sought after by employers); manufacturing skills; Hospitality; Outdoor Leadership, which can lead to such careers as game wardens and search & rescue, is quickly becoming one of their most sought after programs); Firefighting/EMT; Health Occupations (75-90% of their CNA graduates go on to nursing school); and Residential Construction.

They also offer Satellite Programs, including the CTE Exploratory Program. This is a hands-on opportunity to explore a variety of technical skills. It is housed at three different high schools in the local area: Camden Hills, Oceanside and Medomak Valley. Bobby said this allows students to "try out a CTE program while they're still at their high school, and then make a choice when they are ready."

What MCST doesn't offer: Electrical and Plumbing. Bobby explained that to offer a program, "We have to show that there is strong student interest for many years to come. We have to survey all the students from sixth through tenth grades throughout the region. We also have to give them options." Not enough students have been interested in these two areas — only five or six out of 200-300 students.



## CAMDEN ROTARY

Bobby shared a few MCST success stories with us:

- A CHRHS student took both EMT and firefighting in the Public Safety program and is now a full-time firefighter and full-time paramedic in southern Maine. She graduated from high school with 19 college credits. When she graduated as a firefighter and a paramedic from Southern Maine Community College, she had zero debt and was actually being paid to go to school as a live-in firefighter.
- Another CHRHS student was in the auto collision program for three years. She went on to Northern Maine Community College and majored in construction and welding in auto collision. At the age of 20 she was hired as the first female technician at POC Collision in Sanford, the second largest collision center in Maine. She quickly rose to the rank of assistant manager, and Bobby said “she will just continue to rise.” At the age of 21, “she purchased her first house, is debt-free from schools, and doing just a great job of representing the good school of technology.”
- Another local student took machine tool and graduated two years ago. He attended Wentworth Institute of Technology last year in the mechanical engineering program. He was programming a part for an electric engine that he built himself completely from scratch with scrap metal. He just transferred to the Colorado School of Mines as a mechanical engineer. They are focused on research, and that’s what he would like to do in his career.

“Unfortunately, we don’t have a system in the state of Maine that really focuses on career exploration,” Bobby said. He is hopeful that some day it will become a requirement for all students to look at different career opportunities during each of their four years of high school so they know what’s available.

Bobby said in conclusion, “We’ve had several students that have come back to this area in the last eight years after going away for further education. In the midcoast area, we’re starting to see the younger population (between 20 and 35) moving back to the area.... (It) is incredibly attractive to kids.” They will generally come back here after working in other areas of Maine. He continued, “They move here because they know how safe it is, the opportunities that are in the area, not just from a working standpoint, but also looking at enjoying living on the coast of Maine.” Based on studies he’s seen, Bobby said that “they don’t care as much as far as how much they’re making, they want to know what their life is going to be like and how much enjoyment they’re going to have outside of their work life. This area offers a whole lot!”