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Manufacturing is our future

AS I SEE IT

By Daniel M. Asquino

Manufacturing in Central Massachusetts has long been rooted in health care (medical devices, life sciences, biomedical, etc.). In fact, if you're at Mount Wachusett Community College's Devens campus, you don't have to travel far to be at the doorstep of many health care manufacturers, including Bionostics, Bristol-Myers Squibb, Nypro, MagneMotion, Integra Companies, Johnson Matthey, Celltreat, Integrated Process Technologies, and PCI Synthesis.

With so many manufacturing employers in Central Massachusetts, it seems inconceivable that there would be a shortage of skilled employees to fill the job openings that these companies have. But that's exactly what the current reality is. And this problem will become more pronounced as an aging workforce retires.

MWCC's interviews with CEOs, human resources managers, technical managers, and temporary labor providers in the region revealed that they have a high demand for workers — especially entry-level and mid-level assemblers, operators, inspectors and technicians.

Yet they consistently struggle to find qualified candidates.

To try and get to the root of the issue, MWCC investigated how young adults

perceive jobs in manufacturing-related industries. What we found was that manufacturing is often seen as being "dirty" work, with long hours and low pay. Students used adjectives like boring, repetitious, and dangerous to describe their preconceived notion of manufacturing work.

That perception, however, couldn't be further from the truth. Today's manufacturing jobs are much more modern than they were even a few decades ago. Jobs often require employees to work in clean room environments and use complex high-tech equipment. Even the manufacturing floor tends to look more like a laboratory than a manufacturing plant. Workers at all levels are paid competitively and those who are eager to learn are given many opportunities to grow within the company and into higher-paying positions.

As a core educational institution in central Massachusetts, MWCC recognized that we have a responsibility to both our students and to the local business community to try and correct misguided thinking around manufacturing-related careers.

After an extensive needs assessment of the local manufacturing community, MWCC identified that the best way the college could help meet the most in-demand labor needs of Central Massachusetts was to develop training certification programs for students that would prepare them for entry- and mid-level jobs within biomedical device manufacturing.

With considerable input from the local biomedical device manufacturing community and from Operon Resource Management, a Massachusetts-based staffing and on-boarding company of temporary labor for healthcare manufacturers, MWCC created two certification training programs.

One is a 140-hour day program called "Manufacturing Career Prep," which runs for six weeks. The other is an 80-hour evening program called "Medical Device Manufacturing Training," which runs for five weeks. Offering day and evening programs helps meet the scheduling needs of the diverse population of students attending MWCC.

A Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant (which provides funding for the Community College Consortium for Biosciences Credentials), covers non-tuition-related expenses, such as materials, supplies, placement support, and instructors to teach the classes.

Tuition for the daytime Manufacturing Career Prep Program is funded by the Commonwealth Corporation through the North Central Workforce Investment Board. The Commonwealth Corporation is an organization that provides grants to businesses, educators, and training providers across Massachusetts to help address the "skills gap" and meet the needs of businesses and workers.

Mount Wachusett partnered with Operon Resources Management and received a "Rapid Response" grant through the Board of Higher Education to fund the evening Medical Device Manufacturing Training program.

Operon works with many biomedical device manufacturers in Massachusetts and provides specialized, company-specific training to meet the needs of their clients. MWCC students in both training programs are introduced to Operon's screening and training process and receive invaluable information about what is expected of them in order to secure employment.

While students' costs for the medical device manufacturing training are covered through grants, MWCC assesses and interviews prospective students to ensure that they can succeed in the program and are serious about their success.

Students who successfully complete the program earn an MWCC Certificate of Completion, OSHA 10-hour Safety Certification and the National Career Readiness Certificate. They also enhance their foundational math and reading skills, receive workplace success training (e.g. teamwork, time management, critical thinking), and industry-specific knowledge (e.g. regulatory requirements, gowning and clean room protocols, lean and quality systems, electronic and dimensional measurements, blueprint reading). In short, students acquire the necessary skill sets for entry-level positions, but

also develop mid-level skills that offer greater value to manufacturing companies.

MWCC is running their third day program and second evening program concurrently. Students who have completed these programs are acquiring valuable technical and workplace skills that have led to successful placement at medical device manufacturing companies in Central Massachusetts.

Convincing students that careers in manufacturing have great potential is not an overnight process. It will require collaboration, communication, and partnerships between academia, government, policy makers, and the private sector.

Manufacturing has long been a backbone of Massachusetts' economy. To keep quality manufacturing job opportunities in the state, we must all do our part to equip students with skills and aptitudes that will help them qualify for available positions within these high-growth, but often misunderstood industries.

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