

Manufacturing Programs at CLC

Overview

The EMPS Division has a number of programs that support the needs of manufacturers in and outside of our district. Those programs include Mechatronics, Photonics/Optics, Nanotechnology, CNC/Machine Tool Operations, Electrical Engineering Technology, and Welding. All of these programs have a few things in common. They typically have one full-time faculty member leading the program, they require more specific strategies and expertise to recruit students because in general people are not aware of what these programs do, they typically have low enrollments even though there are good job opportunities, and they have program completion rates that are often less than 20%. The purpose of this white paper is to present a solution to the problems identified.

We are proposing a new manufacturing navigator position for academic year 2015-2016 that would be piloted for one year, and when successful be continued. This position is a cost recovery position and will be responsible for meeting specific accountability measures.

Background

As stated earlier, the manufacturing programs are typically being led by one full-time faculty member. These faculty have many responsibilities that includes teaching, recruiting, advising, adjunct mentoring, equipment purchasing, maintaining labs, budget development, scheduling, book evaluating and ordering, curriculum and program development, departmental assessment plans, career advisory committees, outreach to high schools, outreach to manufacturers, articulation/transfer agreements, chair and department meetings, maintaining relationships with local employers including meetings, phone calls and site visits, open houses, 5-year program review, interviewing and recommending adjunct faculty for hire, committee and commission work, professional development, student references, referrals, recommendations for jobs, etc.

As one can imagine, there is very little time for each of these tasks. Traditionally we have only had part time students in our programs. We have depended mostly on students to discover our programs on their own because a tremendous amount of time and effort is needed for marketing and recruitment. For the past two years we have been able to fund a “navigator” position from a Department of Labor, TAACCCT Round I grant to assist both the Mechatronics and Environmental Health & Safety programs with recruitment, retention and career placement assistance. Since implemented, the mechatronics enrollment numbers have ranged between 10-17 students per cohort, while experiencing a total enrollment of 78 students. The combined persistence rate for both programs currently stands at 88% within the normal timeframe. The Mechatronics program alone has a persistence rate of 90%. The job placement rate for those students that have already completed the Mechatronics program and were seeking employment currently stands above 90%. These enrollment numbers have been achieved despite not recruiting inside the local high schools, which would provide an even larger pool of prospective students.

While there are many challenges students face during their studies, it has been found that if they receive the proper support and guidance and have a “single point” of contact, the probability of them graduating and finding employment increases. This role allows someone to be hands-on addressing potential challenges on a proactive basis, while building the necessary relationships with the students that enable them to succeed.

What we have also found is that this role is critical in being a liaison between the career programs and local employers. In the process of building relationships with local businesses, it has become very efficient and effective for the employers to obtain program information, student background information, as well as determining how many students will graduate at any given time, creating a qualified pool of potential applicants that an employer can choose from.

After many phone calls, emails and meetings between the “navigator” and employers, several desired outcomes have been achieved: Identifying employer needs, Job placement, Internship opportunities, Future employment opportunities, increased program exposure, Employer facility visits, Employer campus visits, Student field trips to employer facilities, and Employer partnerships.

The networking capabilities of this role streamline the communication between the employers, students, department chairs, and other college staff members. Also, by the career programs having a centralized role for recruitment, student retention and job placement, it has made for a more efficient less time consuming process.

Position Details

The Manufacturing “navigator” that is being proposed would be responsible for supporting the Mechatronics certificate, Photonics certificate, A.A.S. Degree in CNC/Machine Tool Operations, A.A.S. Degree in Electrical Engineering Technology, and Welding certificate.

For the pilot year, these programs would be structured to run one full-time cohort of students either during the evening or day beginning in the fall 2015 term. The position would be responsible for working with student recruitment to recruit a minimum of 14 full-time cohort students in each program.

The position is responsible for being the “single point” of contact for students during their enrollment in the program. This includes utilizes all the best practice methods gained from the TAACCCT I grant experience across all programs.

This position is responsible for working with the faculty and staff to insure a minimum of a 70% program completion rate, and of those a 90% job placement rate or pathway to continued studies.

Cost Recovery

The estimated salary range for this position is \$45,000-\$50,000/yr.

Revenue Analysis

Program	# of Credits	# of Students	Revenue Tuition	Revenue State App	Comp Fee	Total Revenue
Mechatronics	30	14	\$99	\$31.80	\$22	\$64,176
Photonics	16	14	\$99	\$31.80	\$22	34,227
CNC/Machine Tool	64	14	\$99	\$31.80	\$22	136,909
Electrical Engineering Technology	71	14	\$99	\$31.80	\$22	151,883
Welding	41	14	\$99	\$31.80	\$22	87,707
TOTAL	222	70	-	-	-	\$474,902

Summary

All of the manufacturing programs at one point in time, except the welding program, have experienced enrollments of less than 10 students per class in any given semester, and program completion rates that range from 20-35%. It is believed that the implementation of this navigator position will increase enrollments and program completion rates with little if any impact on the expenditures, as classes will simply have more students in them.

The position will further the success of the manufacturing career programs, the college/employer relationship, current students, as well as build a consistent pipeline of prospective students. The additional revenue from that currently being generated (with the same expenditures) that is created from an increase in program completion/retention (at a minimum of 70%), and an increase in enrollment numbers per class (at a minimum of 14) will generate approximately \$135,000. This revenue far exceeds the cost of the position. With the success and positive outcomes that these programs will

experience, it will play a key role in the recruiting efforts that will take place for manufacturing career programs in the future.