Assessment, Improvement, Measurement (AIM): 04/09/2013

Plan Year: 2011-2012 Unit: Industrial Maintenance

Coordinator(s): Kenneth Douglass, Jarvis Long, Karman Wheeler, Paul Turner

Reviewer: Paul Turner

Program Health Review: Use the Annual Program Health Review to evaluate student achievement and, if warranted based upon analysis of the results, make program changes to improve student achievement.

Identify expected student learning outcomes, assess the extent to which these outcomes are achieved, and provide evidence of improvement based on analysis of the results.

Measure Text: PROGRAM HEALTH REVIEW - LEVEL 1

- 1. Program Health Review Refer to the attached Annual Program Summary for longitudinal information related to enrollment, graduates, employment, employer and alumni satisfaction, and licensure pass rates.
- 2. Student Learning outcomes

Three student learning outcomes – Plan an assessment for each outcome identified, and assess the extent to which these outcomes are achieved, and provide evidence of improvement based on analysis of the results.

Results: Program Coordinator:

1. Strengths of the Program - Highly qualified and knowledgeable Instructors in the Industrial Maintenance Technology program. The Instructors are cross-trained in several different areas. Each Instructor has many years of industrial experience along with years of classroom experience. These Instructors provide training to students in other technical programs including Electrical Technology and Engineering Technology. Student evaluations are consistently high.

The Industrial Maintenance Technology program consistently has high student enrollment that produces graduates that are valuable to local industries. Job placement rate is extremely high, although in this current economy, finding jobs has been a challenge. More recently, the job market has started to open up.

- 2. Items Requiring Continued Attention For the past several years, the Industrial Maintenance Technology program at the Danville campus has experienced rapid growth in student enrollment. As a result, the program has exceeded its ability to continue to expand. The program at Danville has only one dedicated lab/classroom for IMT. This one lab/classroom has to store all the lab equipment for three different technical classes. The lab/classroom has to be rearranged seven times a week to accommodate the different classes. In addition, students from the Electrical Technology program also utilize this lab equipment and classroom. Due to space limitations, the class cap has been set at 12.
- 3. Document and provide evidence indicating how last year's program review resulted in improvements in the program/department. It was suggested that the Danville Campus open up and expand the night offerings to accomodate additional students. The following are night classes that were offered in both the Fall and Spring semesters.

Fall 2011
MTT 114 Fundamentals of Machine Tools
ENGT 110 Circuits 1 and Lab
ENGT 114 Circuits 2 and Lab
IMT 100 Welding for Maintenance
IMT 101 Welding for Maintenance and Lab
BRX 120 Basic Blueprint Reading

Spring 2012 MTT 114 Fundamentals of Machine Tools IMT 100 Welding for Maintenance IMT 101 Welding for Maintenance Lab BRX 120 Basic Blueprint Reading

The results were excellent and this allowed additional capacity for our expanding program in Industrial Maintenance. Assistant Dean Comments.

The instructors of the Industrial Maintenance program have extensive industrial as well as classroom experience. They are cross trained in a number of areas and provide training for the students of several programs other than their own. The program enrollment continues to be good. The employer satisfaction rate and employer evaluation of student competency is high. The number of credentials awarded in the reporting period is excellent. Of the 3,694 credentials awarded to BCTC students during the reporting period 184 credentials or 4.98 percent of the total were awarded to the students of the Industrial Maintenance Technology program. Student satisfaction rates and job placement rates did drop somewhat in the reporting period. The two may be related to the ups and downs in the economy over the last several years. We will continue to monitor the situation and attempt to ascertain the root cause in the coming reporting period. As a possible solution to expansion we are studying the feasibility of offering expanded evening and weekend courses at the Danville campus. We are also looking at the possibility of utilizing the AMTEC curriculum as a viable instructional delivery alternative. The prospect of increased enrollment at the Georgetown campus seems very likely. A number of local industries are currently exploring the intern model developed at that site.

AD Comments: The Industrial Maintenance program continues to be very successful in all categories. The faculty members are veteran instructors with many years of industrial experience as well as a number of years in the

classroom. Their technical skills and industrial training and experience are first rate and current with cutting edge industry standards. Student satisfaction in the program has historically been high. It decreased somewhat for the reporting period from the last year. Industrial Maintenance programs are located on three campuses in the region. The Coordinator and Assistant Dean will endeavor to locate the area of concern. Employer Satisfaction has historically been at 100 percent. Employer Satisfaction with Technical Skills and General Education Skills were 100 percent for the reporting period. The program advisory committee continues to enjoy strong support from local business and industry. The program placement rate for the period was 100 percent. Enrollment continues to be good according to the unduplicated headcount (136 (TEDs Unofficial 167)) in TEDS. The graduation rates continue to be high with the number of graduates being over twice the number that the Council on Postsecondary Education sets as the minimum for program viability. Total certificates, diploma, and degrees awarded by the program have always been high, with the program granting a total of 123 in 2009-2010, and 122 for 2010-2011 according to the data up loaded to AIM. According to page 178 of the KCTCS Student Success section of the 2010 2011 KCTCS Factbook 179 credentials or 5.59 percent of the total credentials issued by BCTC were issued by Industrial Maintenance Technology in the 2009-2010 school year, which are the latest KCTCS data available. Items requiring continued attention include student retention. The completion rates for the beginning classes have always been problematic with the most student attrition occurring during the first and to a lesser degree in the second semester. There are at least two viable explanations for the decrease seen in the reporting period. The MIT division consists of Electrical Technology, Engineering and Electronics Technology, and Industrial Maintenance Technology. Roughly one half of MIT students earn degrees from two of the programs and one quarter to one third of the students complete the requirements for all three degrees. As they are awarded credentials for one program they are often reclassified as Undecided rather than under the appripriate MIT program. A large number of the students in the Manufacturing Industrial Technology Division and at the college have been listed under incorrect academic plan codes for some time. When the college assigned advisors this past semester MIT division found that one quarter to one third of our students had incorrect plan codes. Now that we have assigned advisors we expect this to be less of an issue in the future. As outlined by the program coordinator the problems of classroom and laboratory space restrictions at the Danville campus continue to be a source of concern. The three rooms available to the MIT division are being fully utilized from 8:00 am to 4:00 pm Monday through Thursday which makes up the typical day for a BCTC student. The only way to expand programming offerings at the campus is to expand the number of courses offered in the evening. The Coordinator, Mr. Kenneth Douglass has increased the number of evening classes in the reporting period to take advantage of this option.

Dean Comments: Coord and AD have fully stated situation with lack of space and need for continued support for equipment and supplies. Faculty do a fantastic job with this program on Leestown and Danville campus. Graduates are in demand in industry.

VP Comments: The faculty and faculty leaders are to be congratulated in the program for maintaining a high level of excellence and at sites.

Target Results: Met

Findings: The finding will be presented to the division faculty and the members of the Advisory Committee for their review and discussion.