

Assessment, Improvement, Measurement (AIM): 09/20/2013

Plan Year: 2012-2013

Unit: Electrical Technology

Coordinator(s): Bobby Royalty Jr, 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.

Achievement Target: Program Health Review Target - Maintain a level 1 assessment with comments from program coordinator, assistant dean, dean and vice president according to attached time schedule.

Student Learning Outcome Target - Student learning outcomes are identified, assessed on level of achievement, and evidence of improvement are provided based on analysis of the results according to the attached time schedule.

Results: Program Coordinator:

1. Strengths of the Program -
2. Items Requiring Continued Attention -

3. Document and provide evidence indicating how last year's program review resulted in improvements in the program/department.

AD Comments: The Electrical Technology program has high scores for Student Satisfaction (100%) and Employer Satisfaction for technical classes/proficiency (100%) for the reporting period. The Employer Satisfaction for General Education courses did drop from (100% to 50%) for this reporting period. We will monitor this for the coming year and discuss the findings with the program advisory committee. The reported Job placement figures did drop from 100% to 25% for the 2010 2011 school year. The economy was sluggish during the period and may account for some of this decrease in placement. Since that time manufacturing in the Bluegrass region has rebounded and it is hoped returned to normal figures for the area. There were only four responses returned during this reporting period calling into question the validity of the data. The placement rate will be monitored for the coming year and reevaluated at that time. The Electrical Technology program continues to have strong enrollment and a high number of credentials issued for the reporting period. According to the KCTCS 2010 2011 Fact Book the program issued 283 credentials which included associate degrees, diplomas, and certificates. This represents 7.66 percent of the total credentials issued by Bluegrass Community and Technical College. This was up from 242 for the preceding reporting period. Please see below.

http://www.kctcs.edu/~media/System_Office/About/Factbook%2012/1_Factbook_11-12_WEB_2.ashx Prior to 2009 2010 school year student Retention scores have been above 50% for the Electrical Technology program. Beginning in 2009 2010 a large number of WIA, WIB, and TIA students returned to school as the economy forced many companies in the area to lay off workers. This may have contributed to a larger number of workers with needs for transitional/remedial courses which adversely affected the retention rates. According to data available from the BCTC Retention Committee individuals with low Reading, Writing, and Mathematics scores have a higher dropout rates historically. The figures will be monitored in the coming reporting period.

Dean Comments: Agree with comments from assistant dean and coordinator.

VP Comments: Electrical Technology is a cornerstone industrial program with dedicated faculty and leadership. The ratio of full-time equivalent students to full-time equivalent faculty (10.5) is down from 11.5 and needs to return to a healthier level.

Target Results:

Findings: Program Coordinator: 1. Strengths of the Program – Graduated students are being hired at local factories and students are in good demand. Local industries are contacting instructors and coordinators, when searching for new hires. Local construction is slow, but picking up for students pursuing electrical construction work. Student's numbers are average, but remaining stable, most classes offered are made. Licensure rates for electricians are not being reported, because there is no means other than direct contact with working students to find out if they tested, and passed. Maintenance electricians are often not required to be licensed. The division safety committee has procured equipment and materials needed to enhance awareness and student safety from electrical hazards. Instructors are pursuing training in new technologies, but not finding funding with Allen Bradley PLC training. Labs are improved with newer and innovative equipment such as; controllogix programmable logic trainers and timer modules for the motor control 1 lab. Past assessments of students in motor control and rotating machines has identified needs for newer technology, and they are currently being utilized; this will allow more standardization of our equipment in these labs. Pursuit of green and renewable technologies is ongoing and is awaiting money and space that has been requested to the academic dean and vice-president. The Coordinator is scheduled for Advanced Training in Solar Voltaic Systems and Installation November and December 2012. Funding for Green Technologies is requested. A plan is being developed by the state curriculum committee for electrical technology to use a national assessment instrument to evaluate finishing students before graduation; the NOCTI evaluation has been selected, and should be implemented in the coming year. These assessments will better identify deficiencies

or improvements needed for our program instruction. The communication between the program coordinator, and instructors teaching motor controls and rotating machinery has improved, and more a more comprehensive means of assessment has been discussed that should result in better reporting of progress by the student. The replacement of Mr. Douglass retiring at Danville Campus will insure someone qualified to teach Motor Controls II; the hiring process should begin soon. A hybrid class that was started 4 semesters ago at Danville Campus (Industrial Safety) is continuing and has improved student knowledge of electrical hazards and has taught them to assess electrical, and work site hazards, and how to select proper PPE, and communication of affected persons. 2. Items Requiring Continued Attention - Space and storage is still a problem, unused program materials are being scrapped, and thrown away for lack of space. Some lab instruction has been restricted, or not performed because tasks cannot be simulated as in the field. This will be a problem since tasks in the NOCTI test standards may not be adequately practiced. This may cause the electrical technology program to eliminate electrical construction out of the program offerings. Training of instructors in newer technologies such as Allen Bradley is needed, and should be discussed in division meetings; to find a resolution of this need. Industry needs must be re-evaluated, or better communication established to improve employer satisfaction of our student hires, and open new avenues of employment for our program graduates, discussions in progress. 3. Document and provide evidence indicating how last year program review has resulted in improvements in the program/department. Evaluation of the motor control, and rotating machine labs was improved with task evaluation rubrics, and statistics being forwarded to the coordinator. The last assessment this time last year did not concentrate on the objectives planned, but was corrected. The evaluation instrument in these laboratories will include both written and observed task performance per the plan implemented by the coordinator and instructors. This model will be used going forward as described in the end of year report 2011/2012
