Eastern West Virginia
Community & Technical College

Program Review

Associate in Applied Science in Technical Studies

April 6, 2011

Approved by Assessment: 4-25-11
Approved by LOT: 5-9-11 e-vote
Approved by Cabinet: 5-10-11
Approved by Board of Governors: 5-18-11

Name and degree level of program

Associate in Applied Science in Technical Studies

Approved partnerships include:

- Child Development Associate Certificate (CDA)
- Industrial Maintenance: South Branch Career and Technical Center (Adult Division)

Synopses of significant findings, including findings of external reviewer(s)

Program outcomes are uniquely defined for each of the training programs awarded credit through the Technical Studies AAS program agreements and combined with the standard general education core of 21 credit hours required for all associate in applied science programs. The common core for all program majors is the general education core as defined in the College Catalog and Board Policy 3.6.

The program, to date, has served forty-five students (unduplicated count) since Fall 2005. Of the forty-five students, 88 % participated in the entrance placement testing. Of those participating in the entrance assessment, 73% were required to enroll in Basic Mathematics, 22% in Reading/Study Skills and 42% in Beginning Composition. Students are given the option to take the elementary algebra testing or enroll in the Beginning Algebra course. Twenty-two students elected to complete the beginning algebra testing; all were required to enroll in the Beginning Algebra course. Students completing the required developmental courses are tracked through completion of the first college level course within the discipline in the developmental program assessment activities as part of the cohort for the Performance Indicator report; however, students are not tracked by major.

WorkKeys was administered to graduating students in career/technical programs as a measure of the effectiveness of the general education core in relation to the workplace through spring 2010. Three tests from the WorkKeys series were administered to graduating students: Applied Mathematics, Reading for Information and Locating Information. Only three of the program's four graduates participated in the WorkKeys testing; of these 100% met the performance standard for Reading for Information, 67% met the performance standard for Locating Information and 100% met the performance standard for Applied Mathematics.

Beginning in the spring 2008, Eastern began administering the ETS Proficiency Profile (formerly known as MAPP). Technical Studies, A.A.S. students participate in this testing. Due to the small number of graduates, results have not been analyzed by program. However, Eastern's graduates score within the mean score ranges noted in ETS Comparative Scores for associate degree granting institutions. Results are currently available for two graduating classes. Due to the small annual sample sizes, no general education curriculum changes have been made based on the test results. However, as the sample size increases, these results will be incorporated with course level assessment results to determine the efficacy of the general education curriculum (See Table 1 below).

Table 1
Eastern Students (2007-2010):
Comparison Between Eastern Test Groups and ETS Mean Scores

	Eastern 2007 – 2008 Mean = 437.78	Eastern 2008-2009 Mean = 436.88	Eastern 2009-2010 Mean = 432	ETS Mean = 440.67
% above mean	41% (11)	44% (11)	53% (21)	33% (30)
% below mean	59% (16)	56% (14)	48% (19)	67% (62)

Technical Studies graduating students are invited to participate in the Graduating Student Survey. Unfortunately, results show that no Technical Studies, AAS graduates completed the survey.

A review of enrollment patterns denotes a problem with program completion rates. Of the 45 students enrolled in the program during the review years, only nine percent completed the degree requirements. To date, no tracking studies have been conducted to discern an appropriate average rate of completion or the point at which students drop from the program. Given the number of students required to complete developmental mathematics/algebra series, in addition to other developmental courses, speculation is that students fail to complete the series or take longer to complete the series before entering into the general education core curriculum.

No external review was conducted for this program.

Plans for program improvement, including timeline

The program improvement plan includes a transcript analysis of all majors to determine student progression through the developmental series into college level courses and impediments to course completion. This review will be completed by December 2011. Results of this review will determine the intervention(s) to be employed by the College. The College will explore alternatives for improving enrollment by building parallel certificate tracks with existing A.A.S. Technical Studies programming. Providing an educational ladder will expand certificate opportunities for students and likely increase retention and completion rates in the Technical Studies, A.A.S. programs. Review for addition of certificate level tracks will be completed by December 2011. Identified certificate level programs will be implemented by May 2012.

Identification of weaknesses or deficiencies from the previous review and the status of improvements implemented or accomplished

This is the initial program review for Technical Studies, AAS program.

Five year trend data on graduates and majors enrolled

Number of Majors and Graduates by Term				
Academic Term	**Majors**	**Credit Hours**	**FTE**	**Graduates**
Fall 2005	13	137	9.13	0
Spring 2006	14	111	7.4	0
Fall 2006	17	91	6.07	1
Spring 2007	8	70	4.67	1
Fall 2007	7	41	2.73	1
Spring 2008	9	79	5.26	1
Fall 2008	12	90	6	0
Spring 2009	16	145	9.67	0
Fall 2009	12	117	7.8	0
Spring 2010	12	124	8.27	0
Total	120 (duplicated HC)	1101	67	4

Summary of assessment model and how results are used for program improvement

Eastern's assessment plan consists of three levels: entry level assessment, process assessment, and long term assessment (Alfred, Peterson and White, 1992). These levels address student satisfaction, academic achievement, program effectiveness, and student success (See Figure 1).

Assessment of academic achievement incorporates standardized processes to assess accomplishment of student learning and the College mission. Program assessment, incorporating all of the aforementioned assessment levels, serves as the core of the assessment plan. Given the individualized nature of the Technical Studies program, assessment activities focus primarily on general education assessment and long term assessment. Such activities include review of enrollment patterns, tracking studies, program completion, graduating student survey and alumni survey. The ETS Proficiency Profile (formerly known as MAPP) has been administered as the test of general education. Until 2010, WorkKeys was administered to the career-technical program graduates. Course evaluation surveys and distance course evaluation surveys are administered each semester in all course sections. Technical Studies, AAS students participate in these surveys.

The Assessment Process (Adapted "The Assessment Funnel", Alfred, et.al.)		
Assessment Level	Measures	Area(s) Responsible
Entry Level	Entry level testing	Learner Support Services
Process Level	Course level assessment, program level assessment, tracking studies, student satisfaction surveys, withdrawing student survey, drop rates from courses, faculty/course evaluation survey Summative assessment activities for program level assessment, technical skills assessment, general education assessment, graduating student survey, advisory committee survey/focus group, program graduation rate, placement rates, transfer data	Academic Services, Learner Support services
Long-Term Level	Employer satisfaction survey, alumni survey, continuing education data, employment & salary data	Learner Support Services, Academic Services

Figure 1

Technical Studies is a WVCCTCE system based degree program. When curriculum and implementation changes are made at the system level, these changes will be adopted by Eastern. However, future course assessment activities may yield data supporting revision of courses supporting the general education core or Eastern courses supporting technical core.

Data on student placement (for example, number of students employed in positions related to the field of study or pursuing advanced degrees)

Employment status of graduates is tracked through the Graduating Student Survey. No Technical Studies, AAS graduates participated in the survey.

Final recommendations approved by Board of Governors

The Technical Studies, A.A.S. program provides Eastern students with a flexible, general degree option to incorporate technical or occupational training provided through the workplace or other training providers. During the five year review cycle, the program had a total of 45 majors and 4 graduates. Eastern will continue to offer the program at it is currently offered. However, upon completion of the tracking study, the College will explore alternatives for improving the retention and program completion rates. The College will also explore alternatives for improving enrollment and retention by building parallel certificate tracks with existing A.A.S. Technical Studies programming. Providing an educational ladder will expand certificate opportunities for students and likely increase retention and completion rates in the Technical Studies, A.A.S. programs.