AUTOMOTIVE TECHNOLOGY PROGRAM

Five Year
INSTITUTIONAL REVIEW

By
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March 28, 2008

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Institutional Effectiveness Review
Automotive Technology Program

The purpose of the review is to:

Assess the currency, scope, strengths, opportunities for improvement, and the needs of the Automotive Technology Program.

The process will involve the following steps:

The Automotive Technology faculty met with the Dean and the Associate Dean to discuss the Program Review Process.

The Program Review document was completed based on data compiled by the Automotive Technology faculty.

The Automotive Technology faculty met again with the Dean and the Associate Dean to discuss the findings presented in the Program Review document.

Additional follow up meetings were scheduled as needed to assess the status of the Learning Goals and Action Plans.

Time frames/timeline for the review will be:

The initial meeting with the Dean and Associate Dean took place during the fall 2007 semester.

A meeting was scheduled with the Dean and Associate Dean in early February 2008to assess progress toward completing the Program Review.

The Program Review document was submitted to the Dean and Associate Dean bythe middle of March 2008.

The follow up with the Associate Dean took place in March 2008.

Additional follow up meetings were scheduled as needed.

Program/Service: **Automotive Technology**
Date of Review: **Date here**
Review Participants: **Gary Boyher, Gerard Uhls**

Overview

Purpose of the program/service and how it relates to college mission, values, vision:

The Automotive Technology Program is designed to prepare students for entry level employment in the Automotive Industry. It also exposes students to skills and ideas they will need to develop to advance in the Automotive Industry. A student pursuing an Automotive Certificate will be required to complete 52 credit hours of course/lab work. A student pursuing an Associate of Applied Science Degree will need to complete all the course/lab work required for the Automotive Certificate plus an additional 17 credit hours of General Education coursework. These students will also have to fulfill the Computer Literacy requirement.

The Automotive Technology Program has had students successfully enter the Automotive Field in a variety of positions. Some students have started working at new car dealerships. Others have gone to work at general repair or specialty (high performance and electrical repair) shops. Some have gone into the automotive parts industry.

The Automotive Technology Program serves a diverse student population, which includes dual enrolled high school seniors, non-traditional students, as well as traditional students. An active and diverse advisory committee is used to review and adjust curriculum offerings to meet the needs of the local business community. The faculty has extensive work experience in both the classroom and industry. All faculty in this program have completed a Bachelor's Degree. Through continued course work, professional development opportunities, and industry involvement, the faculty is able to remain current with the needs and demands of today's workplace.

Institutional Effectiveness Review

Present Status:
Learning/Service and Action from 2002/2003 Institutional Effectiveness Review:

Learning/Service Goal	Assessment Measurement Action	Person(s) to Implement	Time Frame	Resource Implications	Use of Results
Goal #1 Increase the use of technology in the classroom	Smartboard technology has been installed in each classroom	Allan Wamsley Don Boyer	Spring 2007 Fall 2006	Enhancement grant, General fund, Foundation	Equipment is used daily as a regular part of the classroom delivery system

Goal #2 Maintain industry standards in equipment	See innovative changes below	Various	Ongoing	Enhancement grant, General fund, Foundation funds	Equipment is used to show current industry practices.
Goal #3 Maintain enrollment at or near maximum seating	Set up booth at College and High School career days. Presentations to tour groups	Gary Boyher Gerard Uhls	Ongoing	Department Budget	Continuation of classes that are at or near maximum seating
Goal #4 Optimize the use of existing facilities	Classroom and shop schedules are being revised	Gary Boyher Gerard Uhls Brenda Russell	Ongoing	Department Budget	Classroom and Lab facilities will be used to maximize learning

Innovative Changes (in last 5 years)

The Automotive Technology Program added the Auto Collision certificate program to the curriculum in fall 2007. The program was developed and added at the request of businesses in the collision industry and students in the Jefferson College service delivery area. Jefferson College and Sapaugh Motors created a partnership where by Sapaugh Motors would provide space and the large equipment needed for the program, and Jefferson College would provide the instructor, small equipment, supplies, and support services. The program and instructor are I-CAR certified so that when students complete the program, they may take I-CAR tests for certification.

Addition of the following equipment to the lab: Alignment rack, tire pressure monitoring equipment, scan tool, lab scopes, lap top computers for faculty, computer network in classroom, electrical/electronic trainers, new hand tools and tool storage, and new valve grinding machine.

Use of Melior online curriculum.

Faculty/Staff (Degree to which faculty/staff are qualified, effective, and supported.)

Faculty/Staff qualifications and Professional Development:

Gary Boyher has been teaching full time at Jefferson College since June of 1993. He has served on the Steering Committee for HLC and Co-chaired the Criterion 5 sub committee (Institutional Integrity.) He has also served on the ad hoc committee that wrote the Professional Development System for faculty at Jefferson College. Mr. Boyher has also been the president of the JCNEA.

He is presently serving on the Library Committee. Mr. Boyher completed an Associate of Applied Science Degree in Automotive Technology at Jefferson College in 1979. He completed a Bachelor's Degree in Management and Marketing at Southwest Missouri State University in 1985. Most recently, he attended a week long course on driveability and engine performance in Indianapolis, Indiana. Mr. Boyher also holds ASE Master Certification and L1 Certification. Mr. Boyher has taken graduate level courses in education and continues to take automotive courses. He maintains his membership in MNEA.

Gerard Uhls has been teaching full time at Jefferson College since August 2003. Gerard received his Automotive and Diesel Technology Degree from Lincoln Technical Institute in 1978. In 1984 he received an Associate of Arts Degree in Mass Communications from Florissant Valley Community College. He received his Bachelor's Degree in Speech Communications with a minor in Business from SIUE in 1987. Gerard has taken additional coursework at CMSU at the graduate level. He came to Jefferson College with ASE Master Certification status and is Gold Certified through Diamler Chrysler. He also serves on the Public Relations and Marketing Committee and is a member of MNEA and the Missouri Association of Career and Technical Education.

Howard Hesketh joined the Automotive Department in spring 2007 as an adjunct instructor to develop the auto collision courses. Mr. Hesketh graduated from Southern Illinois University Carbondale with an AAS in Automotive Technology and a BS in Business Administration. He is a journeyman technician and certified as an ASE Certified Master Technician, ASE Master Collision Repair/Refinish Technician, Ford Senior Master Technician, and an I-CAR certified instructor. Howard is also certified in ASE Advanced Engine Performance, ASE Certified Refrigerant Recovery & Recycling Technician, a Missouri Recognized Emissions Repair Technician, and as a Missouri Safety and Emissions inspector. Howard also has four years of teaching experience in auto collision.

Faculty/Staff Data:

Faculty indicators for Automotive Technology Program Review, 2003-2008
School Terms 200301 – 200703 (Summer 01 through Spring 06)

Instructor	Number of Terms taught (Max = 10)	Course sections taught	Total students	Graded credit hours	Average students	Average GPA	Annualized Program FTE Per year
Boyher	10	42	652	3,002	15.5	2.29	20.0
Uhls	8	18	323	2,808	17.9	2.47	23.4
Slinkard*	2	4	82	729	20.5	2.22	4.9
Hesketh	2	4	53	N/A	13.25	N/A	N/A
Totals	20	64	1,057	6,539	16.5	2.36	48.3

Source: BANNER report WSHRGDST printed 29 October 2007

Student/Constituent Success:

The success of the Automotive Technology students, and therefore the Automotive Technology Program, are measured with follow up studies conducted each year. The follow up studies

include the following general categories. Related Occupational Placement, Unrelated Occupational Placement, Continuing Education, Military, and Other. The following table indicates the percent of graduates in each category from the years 2003-2007. The most available average wage data indicates the average wage for Automotive Technology graduates at $11.00 per hour with a range from $8.00 per hour to $13.00.

Year	# of graduates	Related/ Occupational Placement	Non-Related Occupational Placement	Continuing Education	Military	Other
2003	15	na	na	Na	na	na
2004	14	87.50%	na	Na	na	na
2005	26	100%	na	Na	na	na
2006	19	90.91%	na	Na	na	na
2007	15	na	na	Na	na	na
Totals	89	na	na	Na	na	na

Curriculum/Services (Scope, Currency, Changes):
The curriculum of the Automotive Technology Program addresses the many areas related to diagnosis and repair of the modern automobile in the context of today's business environment. The faculty evaluates textbooks, materials, equipment, and lab facilities on a regular basis and makes changes according to the relevance of each. The advisory committee reviews the curriculum and facilities each year. Suggestions are considered and changes are made as needed in order to remain current with the needs of the automotive industry. The most recent changes include the addition of Melior online curriculum and the auto collision certificate. The Melior curriculum uses online tests, animations, and graphics to enhance the learning process for students. Following is a list of courses representing the core curriculum for the Automotive Technology Program.

Power Plants	AUT 101
Wheel Frame and Suspension Systems	AUT 107
Electrical Systems	AUT 203
Power Trains	AUT 215
Heating and Air Conditioning	AUT 251
Fuel Systems and Emissions Controls	AUT 253
Automotive Electronics	AUT 256
Computerized Automotive Electronics	AUT 260
Math for Technicians	AUT 102

Curriculum/Services Issues (Support, Technology, Equipment):
The college provides the Automotive Technology Program with technical support for the equipment used within the classroom (i.e. smartboards, projectors, and computers.) Computer lab support and office computer support are also available. The automotive industry provides support for the program by serving on the advisory committee, donating equipment, donating supplies, providing money for equipment, providing money for scholarships, donating cars, hiring our students, and providing students with tuition support.

Community: (The degree to which the program contributes to the community and responds to community needs.)

The Automotive Technology Program works to provide qualified entry level employees for the community. Upon graduation, our students find employment in a variety of jobs related to the automotive industry. Some of our students (4 that we have direct knowledge of) with entrepreneurial attributes, have started his or her own business or become managers. In response to input from industry, we are now adding additional learning experiences in the area of Automotive Electronics. We have added several electrical/electronic trainers that will allow our students to practice their diagnostic skills in electrical systems and electronics. These additions will include increased use of a lab scope and scan tool. These additional experiences will provide our graduates with a tremendous advantage when seeking employment in the Automotive Industry.

Cost:

Description	2003/2004	2004/2005	2005/2006	2006/2007
Full time faculty Base contract	86,479.66	95,839.34	100,411.02	105,280.92
Full time faculty overload	7,463.24	13,462.72	19,806.76	24,377.52
Adjunct faculty	NA	NA	NA	570.00
Health insurance reimbursement	NA	700.00	1,630.00	1,360.00
Medical benefits	8,450.49	9,172.00	8,312.00	9,384.00
Dental benefits	574.80	614.16	663.36	688.08
FICA Expense (employer's portion)	1,005.39	1,310.68	1,498.35	1,638.73
Retirement contributions (PSRS)	10,015.72	12,930.42	14,856.57	16,739.19
Disability insurance expense	243.10	290.56	306.96	256.46
Life insurance	127.80	148.80	124.80	124.80
Newspaper ads	NA	NA	NA	87.50
General contractor services	NA	NA	NA	535.50
Service agreements	NA	886.07	824.99	460.06

Non capital equipment	NA	2,700.00	3,047.72	167.42
Other freight expense	3.89	32.24	NA	27.35
Classroom printing	60.20	44.40	66.40	48.31
Copier printing	222.90	301.07	455.06	435.76
Professional membership dues	NA	NA	NA	293.00
Instructional supplies	6,528.61	3,770.84	4,525.38	3,869.27
Office supplies		145.72	54.48	223.14
Maintenance supplies	NA	NA	NA	10.14
Professional development(other)	664.61	987.68	283.00	NA
Special professional development	NA		(1,507.72)	NA
Total	$121,396.52	$144.677.65	$155,359.13	$166,577.15

Summary: (S.W.O.T.)

Strengths	Weaknesses
Dedicated full time faculty Curriculum changes that meet industry needs Involved advisory committee Positive graduation placement rates Increasing use of technology with the classroom and lab Positive student evaluations for faculty Adding modern equipment to our shop Dobbs internship Addition of collision program	Lack of room, classroom or lab, for expansion of program or addition of new equipment. No computer lab available in CEB Dual enrolled high school students need to be on campus more. Lack of a specific marketing program for Automotive Technology Lack of certification by NATEF for our program
Opportunities	**Threats**
More direct involvement of the Advising and Retention Center with the Automotive Technology Program to assist in recruitment and advising. Continued need for highly trained Automotive Technicians in the area. Expand the use of Melior online curriculum as a part of the program. NATEF certification for our program Expand use of video on website	Automotive programs at other schools, public, private, online. Lack of a program in the northern part of the county.

Future: (Proposed Learning and Services Goals and Action Plan.)

Proposed learning/services goal	Proposed Assessment/ Measurement Action	Person(s) to Implement	Timeframe	Resource Implications
Goal 1 Rework Automotive schedule into a block format	Review number of successful graduates	Automotive Faculty	Begin implementing Spring 2009	Additional classroom space
Goal 2 Work toward NATEF certification.	Program will be NATEF certified.	Automotive faculty and Associate Dean.	FY 2011	Budget for supplies, painting, and curriculum materials to meet NATEF requirements.
Goal 3 Develop lab simulations using computerized management system.	Classroom will be set up using A-Tech boards, computers, and software to track time on task.	Automotive faculty.	Fall 2008	Desktop computers and software.
Goal 4 Continue to grow Auto Collision program by adding paint courses to curriculum.	Four paint classes will be added to the Auto Collision curriculum. Classes will be I-CAR certified.	Associate Dean.	Fall 2008and spring 2009.	Additional instructor.

Discipline Status

_____ Satisfactory

_____ Requires Immediate Attention

_____Unsatisfactory

_____ _____

Dean Date