


Program	Motive Power Fundamentals (187) Motive Power Technician (446)
Ministry of Training, Colleges, Universities (MTCU) Program Descriptions	Motive Power Fundamentals 46405 Motive Power Technician 56405
Credential	Ontario College Certificate Ontario College Diploma
Dean	Piero Cherubini
Associate Dean	Anthony Fazzari
Program Review Membership	Program Faculty: B. Brown, V. Czajkowski Curriculum Design Specialist: Lisa Pegg Institutional Research: Carmelinda DelConte
Program of Studies (POS)	2012/2013 12-A
Final Analysis Session	December, 2012
Date of Interim Status Report	2015/2016 Academic Year
Date of Next Program Review	2017/2018 Academic Year
Date Submitted to VPA Office	January, 2013

This report represents the findings of program review for the Motive Power cluster of programs in the Faculty of Skilled Trades. The review was performed during the period May 2012-December 2012.

This report has been prepared, reviewed, and accepted by all parties in the review, including program faculty, Curriculum Design, Institutional Research, Dean/Associate Dean in the School of Business, and the Vice President Academic. The signatures of the representative parties demonstrate their acceptance of the content of this report and a commitment to prepare an interim status report in Fall 2015.

For the Program (Dean or Associate Dean):


8/1/13
 Signature Date

For the Vice President Academic:

 Signature Date

Summary: Highlights

Program Description

Students in the Motive Power Fundamentals program will develop a wide variety of skills to succeed at motive power occupations. Motive Power Fundamentals' students will:

- Learn to identify basic motive power systems
- Learn to inspect and test basic components using a variety of test equipment
- Develop safe work habits and perform customer service functions
- Enhance their skills for easier access to apprenticeship training and further technical studies at the college level

Pasted from <<http://www.mohawkcollege.ca/skilled-trades-programs/motive-power-fundamentals-certificate/description.html>> Dec, 2012

The Motive Power Technician program will provide students with the opportunity to:

- Analyze and solve motive power system problems
- Diagnose and repair mechanical, electrical and electronic components and systems using a variety of troubleshooting techniques and test tools
- Ensure safe work practices and develop skills in project management, quality control and assurance
- Enhance communication, customer service and computer skills

Opportunities for Graduates

- Gain advance standing in automotive apprenticeship
- Earn the opportunity to write the MTCU (Ministry of Training, Colleges and Universities) exemption tests for the basic and intermediate levels of an automotive service technician apprenticeship
- Pursue further technical studies at the college level

Pasted from <<http://www.mohawkcollege.ca/skilled-trades-programs/motive-power-technician-diploma/description.html>> Dec 2012

Evidence from program review for the Motive Power cluster of programs indicates that:

Phase 1-Curriculum: Courses in the Program of Studies (POS) contribute to *almost all* of the program learning outcomes for the Motive Power cluster of programs (MTCU requirement) and is compliant with all requirements of the MTCU framework for programs of instruction. *Recommendation: Utilize existing strategies to maintain current course outlines and curriculum mapping matrix through the Annual Review process. Explore POS hours and impact on curriculum and delivery compared to other colleges.*

Phase 2-Environmental Scan: There are 15 colleges (OCAS data) with a Motive Power Technician Ontario College Diploma program in the college system. Of those, 5 colleges also offer a one-year Ontario College Certificate. In most cases, applicant and enrolment has remained stable over 4-years trended analysis. An analysis of delivery model indicates that most competitor colleges have a co-op option for the technician program. KPI data indicates that the Motive Power cluster of program has overall student satisfaction scores higher than the MTCU and Mohawk College. *Recommendation: Utilize the Annual Review process to monitor applicant, enrolment, employment, labour market demand, and student satisfaction trends. Explore co-op opportunities for the technician program.*

Phase 3-Program Quality: PLAR for all courses in the Program Of Studies have been identified for the Motive Power programs. Some program courses have re-aligned assessment practices based on the Re-Thinking Assessment best practices criteria. Program level evaluation of assessment practices indicates that student assessment is relevant, regular and promote scaffolding and laddering of learning throughout the program. *Recommendation: None.*

Summary: Overall Findings by Program Review Component

Phase	Component	Met	Partially Met	Not Met	Evidence
Curriculum	Course Outlines	X			-Course Outline Review -Course Outline Policy and Program Review Policy
	Curriculum Mapping Matrix	X			-Curriculum Mapping Matrix provides evidence that the programs meet the requirements outlined in program review and program quality policy in keeping with MTCU framework for programs of instruction.
	MTCU Framework for Programs of Instruction	X			-Meets recommended timelines, depth/breadth/complexity of learning, and general education requirements of MTCU framework for programs of instruction program.
	Program Advisory Committee	X			-Program Advisory Committee meeting notes -Program Advisory Committee Policy
Environmental Scan	Key Performance Indicators	X			-KPI scores consistently over 85% and increasing 2-years trending.
	Applicant/Enrolment	X			Stable applicant/registrant data trended over 4 years. Fundamentals program is maintained as an exit strategy which results in low applicant/enrolment numbers.
	Student Success				-deferred to 5-Year Action Plan
Quality Priorities	PLAR	X			PLAR has been identified for all courses in the program of studies for the technician and fundamentals program
	Rethinking Assessment	X			Rethinking Assessment Worksheet Program Level Assessment Worksheet
	Learning Plans				This component of program review is under revision.
	eLearn				This component of program review is under revision.

Summary: Commendations, Affirmations and Recommendations

Commendations

There are a number of areas that the Motive Power program cluster demonstrates best practices and leadership in regard to program quality. They are:

- Block Credit Transfer pathway from Auto Service Technician Apprenticeship into the Motive Power Technician program has been completed. Mohawk's Motive Power program was recognized as a best practice in the college system for this pathway.
- Pathways to the Motive Power Technician program is a strength of this area. The program area plans to offer continuing education courses to Auto Service Technician Apprenticeship students and trades people, as well as former Mohawk students.
- Mohawk College's Motive Power program cluster is prepared to offer 30% of curriculum in an eLearn format. Most other college's are not providing alternative learning delivery models for this program.

Affirmations

Affirmations are declarations, which may/may not have evidence as a result of program review, that the program faculty identify are areas required to support program quality improvements. The areas identified include:

- Support for part-time faculty, financially and professionally.
 - Impact on student success and KPI
 - Require stability in regard to part-time faculty and technologists. Full-time program faculty are mentoring new part-time faculty and technologists every semester. There is no stability with keeping part-time faculty from year to year or semester to semester.
- Explore POS hours and impact on curriculum and delivery compared to other colleges.

Recommendations

Analysis of various data sources from program review identified the following areas that will assist in maintaining the quality and student satisfaction of the program. They are:

- Consolidate PLOs and re-map the program to eliminate the dispersion represented in the mapping report which will result in a curriculum map that better reflects the curriculum quality of the program.
 - Examine course curriculum to map to PLO14--assist in quality-control and quality-assurance programs and procedures.
- Maintain the current Curriculum Committee approach to maintaining curriculum currency and quality and ensure ongoing compliance to the course outline policy and maintenance of a comprehensive curriculum mapping matrix.
- Implement the Annual Program Review process to monitor curriculum currency and quality
- Utilize the Annual Program Review process to monitor applicant, enrollment trends, as well as student satisfaction
 - Monitor direct versus in-direct applications. Are there more direct students (i.e. direct from high school)? What about impact on elimination of victory lap? How to prepare for this with fundamentals program?
- Analyze employment and labour market trends for this program cluster
- Explore efficacy of a co-op option for the technician program.
 - Explore how a fundamentals program be a co-op? What is the value of a co-op for a fundamentals program? How is co-op calculated for duration re: MTCU funding formula?

Resources

Program Review Phases	Source	File Name	Date Completed/ Accessed	Used (Y/N)
Phase 1: Curriculum	Course Outline Review	187 446 Course Outline Review.xls	Winter 2012	Y
	Curriculum Mapping Matrix (CMM)	187 446 Curriculum Mapping Matrix.xls	Fall 2012	Y
	Competitive Curriculum Analysis (CCA)	446 Competitive Curriculum Analysis.xls	Winter 2012	Y
	Program of Studies (POS)	POS 187.pdf POS 446.pdf	Fall 2012	Y
	Program Descriptions/ Program Learning Outcomes	187 MTCU 46405 Vocational Standards.pdf 446 MTCU 56405 Vocational Standards.pdf	2003	Y
	Focus Group Notes	187 446 Focus Group Notes	April 2012	Y
	PAC Minutes	187 446 PAC Meeting Minutes.docx	October 2011	Y
	Credentials Framework (Diploma)	105-660 Credentials Framework	September 2011	Y
	POS Trend Analysis	Not required for this review		N
	Program System Matrix	Not required for this review		N
	Pathways Graphic	187 446 Pathways and Partnerships.doc	November 2012	Y
	Other (e.g. accreditation letters etc.)			N
	Phase 2: Environmental Scan	Key Performance Indicators	187 KPI.xls 446 KPI.xls	2011-2012
Surveys				N
Competitive Program Profile Applicant vs. Registrant Analysis		187 Competitive Program Profile.xls 187 Competitive Program Profile.pptx 446 Competitive Program Profile.xls 446 Competitive Program Profile.pptx	Fall 2012	Y
Student Success and Retention		Data not available for this review		N
Labour Market Demand				N
Program Job Search				N
Student Entrance survey				N
Employment Profile		Accessed via Mohawk College Website	2010-2011	Y
Employment Outlook				N

	OSAP Default Rates			N
	Assessment for Success			N
	Other			N
Phase 3: Quality Processes	Re-Thinking Assessment	Re-thinking Assessment Worksheet (hardcopy)	Spring 2012	Y
	Program Level Assessment Mapping	Program Level Assessment Worksheet (hardcopy)	Spring 2012	Y
	PLAR	187 446 Quality.xls	Spring 2012	Y
	Learning Plans	187 446 Quality.xls	Spring 2012	
Supporting Policies	Course Outline Policy		Accessed Winter 2012 via: http://www.mohawcollge.ca/about/policies/CorpSect5.html	Y
	Program Review Policy		See Course Outline Policy	Y
	Program Quality Policy		See Course Outline Policy	Y
	Program Advisory Committee		See Course Outline Policy	Y
	Prior Learning and Recognition			N
	General Education			N
	Program of Studies			N
	Academic Scheduling			N
Supporting MTCU Framework documents	Framework for Programs of Instruction		Accessed Winter 2012 via: http://www.accc.ca/ftp/ess-cc/MTCUCollegeFramework.pdf	Y
	Essential Employability Skills		See Framework for Programs of Instruction	Y
	General Education		See Framework for Programs of Instruction	Y
	Credentials Framework		See Framework for Programs of Instruction	Y

Curriculum: Summary

Overview

Phase 1 of program review is designed to develop and analyze a Curriculum Mapping Matrix which links course learning outcomes to program learning outcomes, essential employability skills and external standards (where applicable). Curriculum mapping is a ministry requirement and provides evidence of curriculum compliance to the program learning outcomes. Through focus groups, external stakeholders such as employers, graduates of the program and current students are also involved in this phase of program review. As well, program components are mapped to with MTCU requirements such as general education and recommended timelines.

Background

- The Motive Power cluster of programs were reviewed as part of the regular review cycle.

Highlights

- Curriculum Mapping provides evidence that the Motive Power program ensures compliance to almost all of the program learning outcomes
- Curriculum Mapping provides evidence that the curriculum in the programs are appropriately scaffolded and laddered.
- The Motive Power cluster of programs meet all requirements of MTCU framework for programs of instruction.

Recommendations

- Consolidate PLOs and re-map the program to eliminate the dispersion represented in the mapping report. The result will be a curriculum map that better reflects the curriculum quality of the program.
 - Examine course curriculum to map to PLO14--assist in quality-control and quality-assurance programs and procedures.
- Maintain the current Curriculum Committee approach to maintaining curriculum currency and quality and ensure ongoing compliance to the course outline policy and maintenance of a comprehensive curriculum mapping matrix.
- Implement the Annual Program Review process to monitor curriculum currency and quality

Curriculum: Mapping Analysis--446

Overview

A Curriculum Mapping Matrix (CMM) is developed based on links between course curriculum and program learning outcomes, essential employability skills and external standards (where applicable). The CMM provides program areas with data in order to make decisions about curriculum, scaffolding/ laddering and breadth, depth and complexity of student experience with the curriculum.

Course Level Links to Program Learning Outcomes

Breadth of Learning Summary

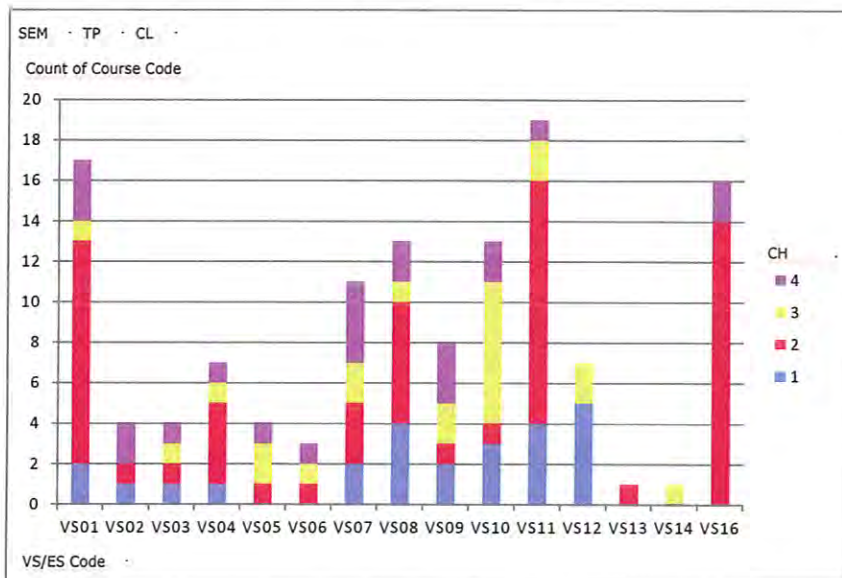
An analysis of the CMM shows students are exposed to almost all program learning outcomes (PLOs) for the Motive Power Technician program which is an indication of breadth of learning. However, there appears to be opportunity for enhancing the exposure to the PLOs through the consolidation and revision of the PLOs to more accurately reflect the experience of the learners in the program.

Program Learning Outcomes

- 8/16 PLOs have an adequate number of course level links (ranging from approximately 7 to 16) from a broad range of courses in the program of studies
- There are too many PLOs for a diploma program that make it difficult to map to the other 8/16 PLOs
 - Recommendation: Consolidate PLOs and re-map the program to eliminate the dispersion represented in the mapping report which will result in a curriculum map that better reflects the curriculum quality of the program

External Standards: Not Applicable

Curriculum Mapping Matrix: Breadth of Learning



Course Level Links to Program Learning Outcomes

Depth and Complexity of Learning Summary

An analysis of the CMM shows students are exposed to most program learning outcomes (PLOs) for the Motive Power Technician program at various levels of scaffolding and laddering which is an indication of depth and complexity of learning.

Program Learning Outcomes

- Approximately 36% of total course level links to PLOs are characterized as contributing to a significant (3) or very significant (4) degree to graduates' ability to demonstrate the outlined skill or ability.
- A large proportion of the links are characterized as contributing moderately (2) to the graduate outcomes. The rationale for this is that the first year of the program is clustered with the Motive Power Fundamentals program and requires more linking at a level 2 characterization.

Characterization of Linking by Program Learning Outcome

Row Labels	1	2	3	4	Grand Total
VS01	2	11	1	3	17
VS02	1	1		2	4
VS03	1	1	1	1	4
VS04	1	4	1	1	7
VS05		1	2	1	4
VS06		1	1	1	3
VS07	2	3	2	4	11
VS08	4	6	1	2	13
VS09	2	1	2	3	8
VS10	3	1	7	2	13
VS11	4	12	2	1	19
VS12	5		2		7
VS13		1			1
VS14			1		1
VS16		14		2	16
Grand Total	25	57	23	23	128

Course Level Links to Program Learning Outcomes

Semester

An analysis of the CMM shows students are exposed to most program learning outcomes (PLOs) for the Motive Power Technician program at various levels of scaffolding and laddering within each semester. It appears as though course level links to PLOs are *somewhat* dispersed throughout all four semesters with some variability in semester 4 which could be attributed to the large number of PLOs for a diploma program

of Course Level Links to PLOs by Semester

SEM	Minor (1)	Moderate (2)	Significant (3)	Very Significant (4)	Total
One	13	13	5	1	32
Two	1	11	5	3	20
Three	3	18	11	7	39
Four	8	15	2	12	37
Total	25	57	23	23	128

Course Learning Outcome Links to Program Learning Outcomes

Program Composition

An analysis of the CMM shows students are exposed to most program learning outcomes (PLOs) for the Motive Power Technician to various levels of scaffolding and laddering when analyzed by course classification (Foundational, Integrational, Specialized).

- There are 10 Foundational courses, 8 Specialized courses, 1 Integrational courses and 3 General Education courses in the POS.
- Total of 128 course level links spread over 24 courses in 4 semesters
- Approximately, 53% of course level links are in Foundational courses, 42% in Specialized courses and 5% in Integrational
- Students are not being exposed to curriculum at the foundational level for PLO 13, 14, 15 which can be attributed to the large number of PLOs
 - Recommendation: Consolidate PLOS and consider additional integrational courses in POS

Foundational Classification Links

Row Labels	1	2	3	4	Grand Total
VS01	2	7			9
VS02	1			2	3
VS03	1	1			2
VS04		3			3
VS05		1	1		2
VS06		1	1		2
VS07	1	3	2		6
VS08	1	4	1		6
VS09	1	1	1		3
VS10	3	1	4		8
VS11	4	6	1		11
VS12	4				4
VS16		7		2	9

Grand Total	18	35	11	4	68
--------------------	-----------	-----------	-----------	----------	-----------

Integrational Classification Links

Row Labels	1	2	4	Grand Total
VS01			1	1
VS03			1	1
VS07			1	1
VS08	1			1
VS11		1		1
VS16		1		1
Grand Total	1	2	3	6

Specialized Classification Links

Row Labels	1	2	3	4	Grand Total
VS01		4	1	2	7
VS02		1			1
VS03			1		1
VS04	1	1	1	1	4
VS05			1	1	2
VS06				1	1
VS07	1			3	4
VS08	2	2		2	6
VS09	1		1	3	5
VS10			3	2	5
VS11		5	1	1	7
VS12	1		2		3
VS13		1			1
VS14			1		1
VS16		6			6
Grand Total	6	20	12	16	54

Course Learning Outcomes Linked to Essential Employability Skills

Due to issues with the CORE database in regard to Essential Employability Skills, this section is not completed.

Course Learning Outcomes Linked to External Standards: Not Applicable

Compliance: Framework for Programs of Instruction

Compliance: Framework for Programs of Instruction - Diploma		√
Scope: Depth, Breadth and Complexity	<ul style="list-style-type: none"> • Meets all specific Vocational Outcomes as defined by the provincial program standards • Planning and implementation of alternative approaches to skill and knowledge application across 	√

	<p>a broad range of technical and/or administrative requirements showing substantial depth in some areas where judgement is required</p> <ul style="list-style-type: none"> • Applications involve personal responsibility, autonomy in performance, working in teams 	
Essential Employability Skills	<ul style="list-style-type: none"> • Basic fundamental personal management and teamwork skills <p><i>NOTE: the Mohawk College Curriculum Overview, Research and Evaluation (CORE) database is unable to extract Essential Employability Skills mapping due to a technological error in the programming. Program Faculty completed the mapping requirements for this MTCU requirement but due to the technological issues with CORE the data cannot be analyzed.</i></p>	Unable to Assess
General Education	<ul style="list-style-type: none"> • Exposure to at least ONE discipline outside field of study • Access to 3-5 courses designed discretely from vocational standards <p><i>Note: assessment based on Mohawk College General Education Policy.</i></p>	√
Typical Duration	<ul style="list-style-type: none"> • Approximately, four semesters or 1200-1400 equivalent instructional hours <ul style="list-style-type: none"> • POS as of Fall 2012 was 1118 POS hours for the Technician Program which includes calculation with 2 COMM courses. • POS as of Fall 2012 was 1062 when calculated with 1 COMM course which indicates that the POS hours are slightly lower than the hours recommended by MTCU 	√
Admission Requirements	<ul style="list-style-type: none"> • OSSD or equivalent (Mohawk Academic Upgrading, GED) including: <ul style="list-style-type: none"> • Grade 12 English, C or U or equivalent • Grade 10 Mathematics, D or P • Grade 12 Foundations for College Mathematics (MAP4C) recommended 	√
Name of Credential	Ontario College Diploma	√

Curriculum: Mapping Analysis--187

Course Level Links to Program Learning Outcomes

Breadth of Learning Summary

An analysis of the CMM shows students are exposed to all program learning outcomes (PLOs) for the Motive Power Fundamentals program which is an indication of breadth of learning. However, there appears to be opportunity for enhancing the exposure to the PLOs through the consolidation and revision of the PLOs to more accurately reflect the experience of the learners in the program.

Program Learning Outcomes

- There are too many PLOs for a certificate program which makes it difficult to accurately map the courses to the PLOs.
 - Recommendation: While program faculty mapped to the 14 PLOs for the Fundamentals program, it is recommended that the program consolidate PLOs and re-map the program to eliminate the dispersion represented in the mapping report which will result in a curriculum map that better reflects the curriculum quality of the program.

External Standards: Not Applicable

Curriculum Mapping Matrix: Breadth of Learning

See recommendation

Course Level Links to Program Learning Outcomes

Depth and Complexity of Learning Summary

An analysis of the CMM shows students are exposed to most program learning outcomes (PLOs) for the Motive Power Fundamentals program at various levels of scaffolding and laddering which is an indication of depth and complexity of learning.

Program Learning Outcomes

- See Recommendation

Characterization of Linking by Program Learning Outcome

- See Recommendation

Course Level Links to Program Learning Outcomes

Semester

- See Recommendation

Course Learning Outcome Links to Program Learning Outcomes

Program Composition

- See Recommendation

Course Learning Outcomes Linked to Essential Employability Skills

Due to issues with the CORE database in regard to Essential Employability Skills, this section is not completed.

Course Learning Outcomes Linked to External Standards: Not Applicable

Compliance: Framework for Programs of Instruction

Scope: Depth, Breadth and Complexity	<ul style="list-style-type: none">• Meets all specific program learning outcomes as defined by the MTCU program description• Perform in a range of varied activities involving known routines and some accountability for outcomes.• Applications are clearly defined and complexity is limited• Preparation for further post-secondary education	✓
Essential Employability Skills	<ul style="list-style-type: none">• Basic fundamental communication, personal management and teamwork skills• <i>NOTE: the Mohawk College Curriculum Overview, Research and Evaluation (CORE) database is unable to extract Essential Employability Skills mapping due to a technological error in the programming. Program Faculty completed the mapping requirements for this MTCU requirement but due to the technological issues with CORE the data cannot be analyzed.</i>	Unable to Assess
General Education	<ul style="list-style-type: none">• Locally determined• Recommendation by MTCU to provide breadth of learning outside of vocationally specific courses	✓
Typical Duration	<ul style="list-style-type: none">• Approximately two semesters or 600-700 equivalent instructional hours<ul style="list-style-type: none">• POS as of Fall 2012 was 602 POS hours for the Fundamentals Program which includes calculation with 2 COMM courses.• POS as of Fall 2012 was 546 when calculated with 1 COMM course which indicates that the POS hours are slightly lower than the hours recommended by MTCU	✓
Admission Requirements	<ul style="list-style-type: none">• OSSD or equivalent (Mohawk Academic Upgrading, GED) including:• Grade 12 English, C or U or equivalent• Grade 10 Mathematics, D or P• Grade 12 Foundations for College Mathematics (MAP4C) recommended• Options are available for mature applicants. Please contact Admissions for more information.	✓
Credential	Ontario College Certificate	✓

Curriculum: Focus Group April 16, 2012

Strengths, Challenges, Opportunities, Threats

Strengths

- Graduate preparedness for employment
- Application of Knowledge while on shop floor

Challenges

- Competition with car dealerships for car repair and maintenance

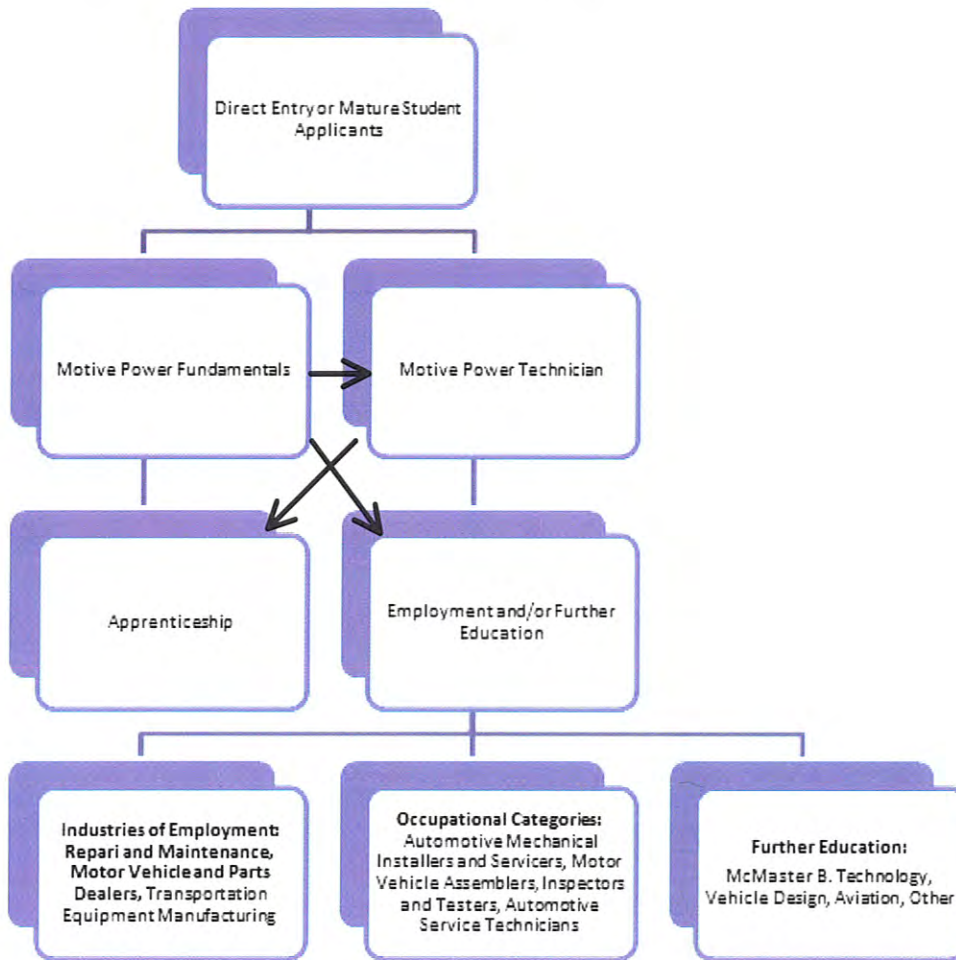
Opportunities

- Development of essential employability skills such as taking initiative while on shop floor, ability to follow procedures, customer service
- Include more curriculum relevant to exhaust
- Include more curriculum relevant to electronics and sustainable automobiles

Issues

- Vehicles are getting more complicated and aftermarket service is having a hard time keeping up. Most customers are going to car dealer for car maintenance and repairs which is a deliberate strategy of automotive manufacturers.
 - Faculty observation: Many graduates of the program acquire employment with dealers and with aftermarket service. The concern about aftermarket service was from a specific board member in the aftermarket sector.

Curriculum: Pathways and Partnerships



Partnerships

Snap-On Tools supplies most of the training equipment for the program.

General Motors and Chrysler have donated vehicles to the program.

Affiliations

Program faculty are affiliated with Ontario College of Trades.

Curriculum: Competitive Curriculum Analysis--446

A Competitive Curriculum Analysis (CCA) provides program areas with a comparison and snapshot of program characteristics, admissions and program of studies for other colleges in the system with the same program. The CCA is useful to program areas for validation of the program characteristics, admissions and program of studies, as well as data to identify opportunities for improvements to the program

Highlights

- 15 colleges have a Motive Power Technician program. The CCA focused on 4 comparator programs--Sault, Loyalist, Conestoga, and St. Clair.
- All program characteristics (program length, model of delivery etc.) appear to be standard among the programs analyzed
- Conestoga College offers several different streams of the Motive Power Technician program, including Truck and Coach, Automotive Service, Motorcycle and Power Sport Vehicles
- All programs appear to require base tuition
- Admissions requirements for the comparator programs appear to be standard, however, Mohawk College may want to review the wording of the admissions requirements in comparison to Conestoga College
- The program of studies for the Mohawk College Motive Power Technician program sets the standard for the curriculum in comparison to other colleges with the same program.
- It appears as though the POS hours for the Mohawk College program are lower than at other colleges. This was also identified in the MTCU Framework for Programs of Instruction Data
- Mohawk's program is the only program in the MTCU that doesn't have a co-op option.

Recommendations

- Update the competitive curriculum analysis for all college comparators for the fundamentals and the technician programs.
- Review admissions requirements in regard to wording
- Compare POS hours for various college programs
- Analyze the impact of POS hour differentials on curriculum
- Appraise opportunities for co-op option

Curriculum: Program Advisory Committee

Assessment of the efficacy and currency of the Program Advisory Committee (PAC) is required based on criteria established in the Program Advisory Committee Policy.

Highlights

- PAC met a minimum of 2 times in 2012
- PAC membership is relatively new and will need to be monitored
- PAC membership is comprised of a sufficient cross-section of internal and external stakeholders

Recommendations

None

Environmental Scan: Summary

Overview

Phase 2 of program review analyzes several data sources such as Key Performance Indicators, and data direct from the Ontario College Application System to complete an "environmental scan" of the program in comparison to other colleges with the same program, Mohawk College overall and other programs under the Associate Dean.

Highlights

- There is a lot of competition in the college system for the Motive Power program cluster. With the exception of Niagara College, there doesn't appear to be competitive programs in the GHTA.
- Applications and registrations have generally risen over the last 4-years.
- Overall KPI Student Satisfaction Scores have risen significantly for the Motive Power program cluster and are generally higher than the Mohawk College score.
- Based on the 2010-2011 Graduate Employment Survey, 80% (12) of graduates responding to the survey were employed full-time. Of those, 75% (9) were employed full-time, program related.

Recommendations

- Utilize the Annual Program Review process to monitor applicant, enrollment trends, including conversion rate
 - Analyze direct versus in-direct applications. Are there more direct students (i.e. direct from high school)? What about impact on elimination of victory lap? How to prepare for this with fundamentals program?
- Analyze employment and labour market trends for this program cluster
- Explore efficacy of a co-op option for the technician program.
 - Explore how a fundamentals program be a co-op? What is the value of a co-op for a fundamentals program? How is co-op calculated for duration re: MTCU funding formula?

Environmental Scan: Competitive Overview

- There are 14 Motive Power Fundamentals programs at 9 colleges. Conestoga and Sault have several different streams of this program. The Fundamentals program has a weighting factor of 1.3, a funding factor of 1.1 and a tuition fee factor of 1.0.
- There are 28 Motive Power Technician programs at 16 colleges. 8 Colleges have at least two streams of the technician program. The Technician program has a weighting factor of 1.3, a funding factor of 2.6 and a tuition fee factor of 2.0.

Following is an overview of the CAAT system in regard to MTCU 46405 and 56405 (source APS-MTCU September 2012).

NOTE: Data in the APS-MTCU table provides different information about programs when compared to data accessed via OCAS. The APS-MTCU table provides information about programs that are approved by MTCU. OCAS data is based on applications. There are many programs that are approved by MTCU but do not have formal applications through OCAS.

Motive Power Fundamentals (MTCU 46405)

College	APS	APS Title	Start	Cancel	Family
CENT	1151	Transportation Equipment Service And Repair Fundamentals	1996-09-01	2009-12-01	6405
CONS	1130	Motive Power Techniques	2000-09-01	2007-04-20	6405
CONS	1201	Motive Power Fundamentals - Automotive Service	2007-09-01		6405
CONS	1202	Motive Power Fundamentals - Truck And Coach	2007-09-01		6405
CONS	1225	Motive Power Fundamentals - Truck Trailer Service	2008-09-01		6405
CONS	1237	Motive Power Fundamentals	2009-09-01		6405
CONS	1250	Motive Power Fundamentals – Motorcycle and Power Sport Vehicles	2010-09-01		6405
DURH	1106	Motive Power Fundamentals - Parts And Counter Personnel	1998-09-01	2007-04-16	6405
FANS	1265	Motive Power Fundamentals	2008-09-01		6405
LAMB	1062	Motive Power Fundamentals	1993-09-01	2004-09-01	6405
LOYT	1088	Motive Power Fundamentals - Parts And Counter Personnel	1998-09-01		6405
MOHA	1151	Motive Power Fundamentals	1998-09-01		6405
NIAG	1193	Motive Power Techniques	2006-09-01		6405
NORT	1215	Motive Power Fundamentals	2007-09-01		6405
SAUL	1143	Motive Power Fundamentals - Parts And Counter Personnel	1998-09-01		6405
SAUL	1185	Motive Power Fundamentals - Automotive Repair	2009-01-01		6405
SLAW	1148	Motive Power Fundamentals	1996-09-01		6405
STCL	1202	Motive Power Fundamentals - Truck and Coach Repair Techniques	2009-09-01		6405

Motive Power Technician (56405)

College	APS	APS Title	Start	Cancel	Family
ALGO	1290	Motive Power Technician	1992-09-01		6405

BORE	1135	Techniques des véhicules automobiles	2008-09-01		6405
CAMB	1240	Motive Power Technician - Service And Management	2001-09-01		6405
CAMB	1282	Motive Power Technician - Truck & Coach	2010-09-01		6405
CANA	1158	Motive Power Technician	2002-09-01		6405
CANA	1174	Motive Power Technician - Marine And Small Powered Equipment	2005-09-01		6405
CENT	1068	Motive Power Technician		2009-12-01	6405
CENT	1088	Motive Power Technician - Administration			6405
CENT	1089	Motive Power Technician - Technical			6405
CONF	1036	Petroleum And Automotive Management		1986-03-01	6405
CONS	1197	Motive Power Technician	2007-09-01		6405
CONS	1262	Motive Power Technician – Heavy Duty Equipment	2011-09-01		6405
CONS	1263	Motive Power Technician – Automotive Service	2011-09-01		6405
CONS	1264	Motive Power Technician – Truck and Coach	2011-09-01		6405
CONS	1265	Motive Power Technician – Motorcycle and Power Sport Vehicles	2011-09-01		6405
DURH	1107	Motive Power Technician - Service And Management	1998-09-01		6405
FANS	1065	Motive Power Technician - Automotive			6405
FANS	1066	Motive Power Technician - Diesel			6405
FANS	90004	Motive Power Technician (core)			6405
LACI	1111	Techniques Des Véhicules Automobiles	1998-09-01		6405
LOYT	1119	Motive Power Technician - Service And Management	2005-09-01		6405
LOYT	2000	Motive Power Technician - Service And Management (year 1)	1998-09-01		6405
MOHA	1041	Motive Power Engineering Technician		1986-03-01	6405
MOHA	1206	Motivwe Power Technician	2005-09-01		6405
NIAG	902	Motive Power Operations - Automotive	1999-09-01	2004-09-01	6405
NIAG	1173	Motive Power Technician - Automotive	2000-05-01		6405
NORT	1225	Motive Power Technician – Automotive Service	2010-09-01		6405
NORT	1226	Motive Power Technician - Heavy Equipment	2010-09-01		6405
SAUL	1144	Motive Power Technician - Service And Management	1998-09-01		6405
SAUL	1183	Motive Power Technician - Advanced Repair			6405
SLAW	1188	Motive Power Technician	2005-09-01		6405
SSFL	1103	Motive Power Technician - Marine And Leisure Equipment	1986-01-01	1989-12-01	6405
STCL	1038	Motive Power Technician			6405

Environmental Scan--Applicant, Enrollment, Catchment, Conversion

Overview

OCAS data, market demand data and labour market trends are used to analyze and compare Mohawk College's program(s) to similar programs in the Ontario college system.

The Institutional Research department has developed a comprehensive report for the environmental scan of the Motive Power programs. Following is a summary of the comprehensive report. The comprehensive report is available in the attached resources for the review.

Highlights

- 15 Colleges offer a Motive Power Technician program. Of those, 5 Colleges offer a Motive Power Fundamentals program.
- Applications and enrolment have risen steadily for the Motive Power Technician program over four years with a slight decrease in 2011.
- The applicant/enrolment trend for the Fundamentals program has been quite variable with less than a section size in enrolment over the last few years. *It is important to note that the first year of the two programs are clustered, which provides an exit strategy for individuals who registered in the technician program and wish to exit after one year, especially if there is an apprenticeship opportunity. Program faculty report that students are "special authorized" in and out of the two programs.*
- 25% of Mohawk's enrollments are international students compared to 15% for the MTCU
- Approximately 65% of registrants to Mohawk's program are 21 years of age or younger which is similar to the MTCU. Other college's have a significantly higher percentage of younger students--18 years old (14% Mohawk, 26% MTCU) which may be attributed to colleges that don't have a fundamentals program
- Approximately 47% of enrolments are from other catchments. Mohawk's program attracts students from the Sheridan catchment because Sheridan does not offer the program.
- Applicants to the program from Mohawk's catchment generally convert.
- Conestoga College appears to convert applicants from other catchments. Students are automatically registered as "apprentices".
- In 2010, the retention rate for the program was 61% which is up significantly from 2008 (44%) and a 35% graduation rate
- The majority of comparator programs offer a co-op option for the technician program

Recommendations

- Utilize the Annual Program Review process to monitor applicant, enrollment trends, as well as student satisfaction
 - Monitor direct versus in-direct applications. Are there more direct students (i.e. direct from high school)? What about impact on elimination of victory lap? How to prepare for this with fundamentals program?
- Analyze employment and labour market trends for this program cluster
- Explore efficacy of a co-op option for the technician program.
 - Explore how a fundamentals program be a co-op? What is the value of a co-op for a fundamentals program? How is co-op calculated for duration re: MTCU funding formula?

Additional Observations

Applicants (OCAS as of November 2012):

- Mohawk's program following the OCAS pattern. Spike in 2009 possibly due to second career. Fanshawe huge spike in 2009. To get into Fanshawe's technician program students had to apply to fundamentals program. Fanshawe no longer offering admissions to fundamentals.
- First choice is less than system average
 - second choice is higher than system average
 - Generally, 50% of applications are first and second choice

Registrants (OCAS as of November 2012):

- Appears to be no demand for the fundamentals program but really there is no cost to the program because first year is clustered with technician program
- Question: Is the technician program getting students from pre-technology program? Might be interesting to find out.
- Mohawk College had a Motive Power "techniques" program that was mapped to a different MTCU. It appears as though most colleges are cancelling techniques programs (APS-MTCU)

Catchment (OCAS as of November 2012):

- Conestoga's program attracts students from other catchments and keeps students in Conestoga area.
- Conestoga's students are registered as "apprentices"

Program Profile--Motive Power Technician

	Mohawk's Motive Power Technician Profile		MTCU 56405 Profile		All Mohawk College Programs	
	Applicant	Registrant	Applicant	Registrant	Applicant	Registrant
Applicant Type	64% are direct applicants	53% are direct registrants	56% are direct applicants	55% are direct registrants	50/50 split	non-direct registrants
Gender	predominantly males	predominantly males	predominantly males	predominantly males	50/50 split	male
Program Choice	30% of all Mohawk applicants chose the Mohawk program as 1st choice	n/a	37% picked one of the Motive Power Techn programs as 1st choice	n/a	heavier skew on 1st choice; 2nd and 3rd choices are second	n/a
Program Conversion Rate	30%		28%		21%	

Environmental Scan: Employment and Labour Market Demand

Employment

Based on the 2010-2011 Graduate Employment Survey, 80% (12) of graduates responding to the survey were employed full-time. Of those, 75% (9) were employed full-time, program related.

Labour Market Demand

Data not available at time of review.
Deferred to 5-Year Action Plan

Environmental Scan: Key Performance Indicators

Overview

Key Performance Indicators (KPI) are an MTCU directive. The data is used to analyze the program based on student satisfaction, teaching and learning, facilities etc. KPIs also provide comparator data for other programs in the college, programs under the Associate Dean, all programs at Mohawk, and similar programs in the college system

Mohawk Key Performance Indicators (KPIs) -Fundamentals 187 (*small number of respondents)

	Student Satisfaction (Satisfied/Very Satisfied)	
	2010*	2011
Overall	85.7%	89.3%
14. OVERALL, your program is giving you knowledge and skills that will be useful in your future career.	95.2%	100.0%
26. The OVERALL quality of the learning experiences in this program.	85.7%	90.5%

Mohawk Key Performance Indicators (KPIs) -Technician 446

	Student Satisfaction (Satisfied/Very Satisfied)	
	2010	2011
Overall	87.4%	93.9%
14. OVERALL, your program is giving you knowledge and skills that will be useful in your future career.	94.3%	98.2%
26. The OVERALL quality of the learning experiences in this program.	93.1%	98.2%

Recommendations

- None

Environmental Scan: Student Success and Retention

The data for this section of the report is not available due to an illness with a Mohawk Staff member in the registrar's office.

Deferred to 5-Year Action Plan

Quality Processes: Summary

Overview

Phase 3 of program review is designed to ensure that programs are recognizing and incorporating best practices in teaching and learning such as learning plans, PLAR, eLearn into the program. These aspects of teaching and learning are reviewed during regular provincial audits through the Program Quality Assurance Process Audit (PQAPA) process.

Highlights

- The program team participated in the Re-Thinking Assessment workshop which evaluates assessment practices at a course level and at a program level.

Recommendations

- None

Program Quality Action Plan

Objectives	Action Strategies	Timelines	Responsibility	Status
Short Term (within the next 18 months)				
Generate an aggregate set of vocational standards to address the dispersion within the current standards.	Revise program learning outcomes/vocational standards based on faculty input Re-Map program (include courses not included in original mapping)	Spring 2013	Program Quality	In progress
Adapt curriculum and course content based on analysis of curriculum mapping matrix and input from focus group	Examine course curriculum to map to PLO14--assist in quality-control and quality-assurance programs and procedures.	Spring 2013	Program Team	Not Started
Maintain the current Curriculum Committee approach to maintaining curriculum currency and quality and ensure ongoing compliance to the course outline policy and maintenance of a comprehensive curriculum mapping matrix.		Ongoing	Program Team	In Progress
Present program review summary to Program Advisory Committee		Spring 2013	Associate Dean	Not Started
Annual Program Review	Adopt an annual program review process to monitor curriculum and program quality enhancements (including environmental scan, learning plans)	Spring 2013- Ongoing	Program Quality /AD/ Program Team	Not Started
	Monitor direct versus in-direct applications. Are there more direct students (i.e. direct from high school)? What about impact on elimination of victory lap? How to prepare for this with fundamentals program? Analyze employment and labour market trends for this program cluster Explore efficacy of a co-op option for the technician program. Explore how a fundamentals program be a co-op? What is the value of a co-op for a fundamentals program? How is co-op calculated for duration re: MTCU funding formula?	Spring 2013- Ongoing	Program Quality/ Institutional Research/ AD/ Program Team	Not Started
Medium Term (within the next 18-36 months)				
Monitor short-term and medium-term program quality enhancements and adjust as required	Utilize Annual Program Review process to monitor program quality enhancements.	TBD	AD	Not Started
Long Term (within the next 36-60 months)				
Monitor short-term and long-term program quality enhancements and adjust as required	Utilize Annual Program Review process to monitor program quality enhancements.	To be determined pending outcome of medium term objectives Spring 2014 (tentative)		Not Started
	Submit interim program quality report to Program quality area	Fall 2015	AD	Not Started
	Plan and prepare for Comprehensive Program Review	Spring 2017		Not Started