MONTANA UNIVERSITY SYSTEM

# **Mission Review**

# of

# **MONTANA STATE UNIVERSITY-NORTHERN**



May 2010

#### Memorandum of Understanding

This document serves as a Memorandum of Understanding between the Montana Board of Regents, the Montana University System Office, and Montana State University-Northern as a depiction of institutional role, characteristics, and system and statewide contributions. This agreement helps guide the system and the institution in developing strategic directions that build on distinctive strengths and the leadership role that Montana State University-Northern contributes to its affiliated campuses and the University System.

Stephen Barrett, Chair Montana Board of Regents

Sheila M. Stearns, Commissioner Montana University System

Frank Trocki, Chancellor Montana State University-Northern

Waded Cruzado, President Montana State University

### **MISSION STATEMENT**

Montana State University-Northern is a comprehensive state university which offers programs of professional preparation emphasizing discipline mastery, critical inquiry, and social responsibility in:

- teacher preparation
- mechanical and engineering technologies
- business and computer information systems
- nursing
- arts and sciences

MSU-Northern applies emerging technologies in degree programs ranging from the certificate and associate to master's level. MSU-Northern prepares well-educated students who are capable of decisive action and application of new ideas. The University is committed to excellence in teaching, service to its region and the state, and applied research and scholarship.

# **1.0 INSTITUTIONAL CHARACTERISTICS**

# 1.1 Profile

Montana State University-Northern (MSUN) serves the eastern and north central regions of Montana as well as southern Alberta and Saskatchewan. The institution has approximately 40 degrees and certificates with a small university atmosphere emphasizing service and interaction. In addition to traditional degrees and academic programs, the size of Northern provides a nimble responsiveness to Montana agencies requesting assistance for small scale service to state wide needs such as the Montana Environmental Training Center, the Montana Motorcycle Rider Safety Program the OPI Traffic education endorsement and the more recent Bio-Energy Center operations. MSUN continues to utilize distance learning capabilities through on-line course and degree offerings such as Business Administration and the BSN in Nursing. External funding agencies have recognized MSU-Northern's location as a prime advantage for support of unique programs and initiatives such as the recent US Department of Labor Youth Build initiative serving at risk youth from area Indian Reservations.

# 1.2 Role

MSU-N has the multifaceted role of undergraduate technology based degree offerings along with traditional degree programs in teacher education and graduate level (master's) degree offerings in education and counseling. MSUN offers an array of certificate and associate degree programs in the College of Technical Sciences (such as welding and automotive). Many associate degrees articulate efficiently into bachelor level programs. The College of Education, Arts & Sciences and Nursing has associate and baccalaureate degree offerings along with two Master's Degree programs in education and counseling, and extends administrative and related services, planning functions, and various other resources collaboratively to the three campuses: Havre, Great Falls, and Lewistown. MSU-Northern serves a vast region of north central Montana including four Indian Reservations. Northern has two distant sites: Lewistown and Great Falls with course and degree offerings serving the needs of those communities.

### 1.3 Distinct Characteristics & Strengths

<u>NWCCU Core Themes</u>: MSUN was reaffirmed for Accreditation in February 2010. The NWCCU Core Themes cycle will not begin until Fall 2011 for MSUN. Core Themes will be addressed in the 2010-11 academic year.

#### Academic Strategic Planning: Statement from the current MSUN Action Plan document:

Offer the best customer service while meeting the educational needs of north central Montana:

Objective A Evaluate all academic programs and related areas for strengths and weaknesses, fiscal viability and take subsequent action. Objective B Provide students with 2 and 4-year course schedule for all courses and make that schedule available by March each year. Objective C Make it easy for people to transfer to Northern from another institution Objective D Serve students and colleagues with a friendly demeanor, in a responsive and timely fashion, with accurate information.

MSU-Northern's Action Plan document is available at:

# http://www.msun.edu/admin/provost/Reports/msunactionplan08.pdf

MSU-Northern is unique among the MUS four-year institutions with regard to the technical array of programs coupled with traditional four year degree programs. The technical programs and the ASN in Nursing add a higher cost to the per student expenditure for Northern, but the traditional degree programs help to alleviate the average cost per student to some degree.

Recently, MSU-Northern has enhanced its technical reputation with the development of the Bio-Energy Center for testing bio-diesel fuel derived from Montana produced vegetable oils as well as other energy research.

MSU-Northern has long been and recognized for automotive technology manufacturer training programs of excellence with Toyota and Ford. Further, MSUN students may complete up to eight Automotive Service Excellence (ASE) certification tests.

# 1.4 Areas of Commonality

Montana State University- Northern shares areas of commonality with other units of the Montana University System in a number of academic and outreach endeavors. As a Carnegie classed Baccalaureate College with diverse fields, MSUN has certificate of applied science, associate of applied science, AS and AA degree authorization in addition to BA and BS and master's degree authorizations. MSU-N shares the teacher education preparation role along with a technical role for two-year programming in specialty fields similar to colleges of technology and community colleges. Technology degrees with focus on the trades and industry provide a unique niche for MSU-Northern.

#### 1.5 Peer Institutions

MSU-Northern, using the IPEDS system, has identified a set of regional peer institutions (see Appendix A-1) with similar profiles, and collects data for institutional comparisons of such basic features as tuition rates, expenditure levels by category, student-faculty and faculty-staff ratios. MSUN conducts other institutional comparisons relying on data and information from the member universities of the American Association of State Colleges and Universities (AASCU).

### 2.0 ACADEMIC PROFILE

### 2.1 Academic Programs

Program Array: MSU-Northern offers multiple programs at the respective degree levels:

- Certificate 4
- Associate of Applied Science 12
- Associate of Science 2
- Associate of Arts 1
- Bachelor 22
- Master 2

The College of Education, Arts & Sciences and Nursing offer programs that are at the heart of the mission of Montana State University – Northern. Northern degree programs provide students with the opportunity to acquire knowledge and skills that can be utilized in employment opportunities throughout its service area. The degree programs offered through the College of Education, Arts & Sciences and Nursing include two year degree programs such as:

- General Education
- Graphic Design
- Nursing
- Water Quality

The baccalaureate degree programs include a variety of education degree programs, including:

- Elementary, K-8;
- English, 5-12;
- General Science, 5-12;
- Health and Physical Education, K-12;
- Industrial Arts, 5-12;
- Math, 5-12;
- Social Science, Broadfield, 5-12,

and endorsements in Art, English, Health and Physical Education, Reading and Traffic Education. In addition, MSU-Northern offers baccalaureate degrees in biology, community leadership, graphic design, health promotion, liberal studies, and mathematics.

The graduate degree programs offered by Montana State University – Northern include Learning Development and Counselor Education.

<u>General Education</u>: The general education requirement for the Associate of Applied Science (AAS) and Associate of Arts and Associate of Science degree programs model the basic requirements from Two Year Council of the Office of the Commissioner of Higher Education. The general education requirement for the baccalaureate programs models the Montana University System Transferable Core. Students who complete the general education requirements at Montana State University – Northern will have fulfilled the general education requirements for any other unit within the Montana University System. The general education requirements require students to take classes in communication, mathematics, natural science, cultural diversity, social sciences and history, humanities and fine arts. The unique requirement for a student of Montana State University – Northern is the requirement of a technology based course.

The College of Technical Sciences offers programs representing the applied technical disciplines. These programs provide knowledge and skills that enable a graduate to enter a career in a number of well-paid and highly in-demand jobs. Graduates are sought by both local and national/international companies. Many of MSU-Northern's degree programs include two-year associate of applied science curricula that articulate directly into baccalaureate degree programs in a 2+2 arrangement. Degree options include:

- BS in Business Administration with minors in Accounting, Business Technology, Technical Sales & Services, and Small Business Management, as well as an AS with a program of study in Business Technology.
- Mechanical Technologies including CAS, AAS, and Bachelors degree in Automotive Technology; AAS and Bachelors degree in Diesel Technology with an Emphasis in Field Maintenance; and AAS in Ag Mechanics
- Technical and Engineering Technology Disciplines include AAS and BS degrees in Agriculture and Ag Operations, Design Drafting, Computer Information Sciences, Industrial Technology – both teaching and non-teaching options, and Civil Engineering Technology with a certificate program in Land Surveying
- Trade technology degree programs include associate of applied sciences and certificate of applied sciences in Plumbing Technology, Electrical Technology, Welding (CAS only), and Sustainable Energy Technician.

#### Class Size Analysis, Student Faculty Ratios

# All Sections for Fall 2009

Section Size	Number of Sections	Percent of Sections
1	17	4.64%
2-9	121	33.06%
10-19	131	35.79%
20-29	91	24.86%
>29	6	1.64%
Total	366	

#### MSU-N Age Data Fall 2009

Student Level	Avg. Age	Ν
Graduate	38.55	123
Undergraduate	25.95	1149
Overall	25.90	1272

#### Student/Faculty Ratios (IPEDS)

Fall 2005	Fall 2006	Fall	Fall	Fall
	Fall 2000	2007	2008	2009
14:1	13:1	12:1	12:1	15:1

#### 2.2 Technology and Instruction

MSU-Northern is transitioning from delivering courses via interactive video to online using the Desire2Learn learning management system. Currently two programs are entirely online:

- Bachelor of Science Degree in Business Administration
- Bachelor of Science Degree in Nursing

In addition to these two online programs, Northern offers a wide variety of MUS general education courses to support this program. Faculty are also using the D2L system to support and enhance their face-to-face courses as well.

**Cooperative Distance Delivery Programs:** 

Mid-South Community College West Memphis, Arkansas

Program: Bachelor of Science Degree in Diesel Technology MSU-Northern will offer the 300 and 400 level courses leading to this degree.

# 2.3 Alternative Scheduling

The College of Education, Arts & Sciences and Nursing has attempted to provide students with online opportunities with coursework that will fulfill the Montana University System Transferable General Education Core. In addition, MSU-Northern has attempted to expand the course offerings from some of the programs to online so that students within the region who are place bound have an opportunity to pursue higher education. The BSN degree program, for those students who already have an ASN and a registered nurse license, is completely online.

The College of Education, Arts & Sciences and Nursing also works closely with the area tribal colleges to make a seamless transition for the students. MSU-Northern has a number of articulation agreements with the area tribal colleges to facilitate this transition. Northern also has an articulation agreement with Medicine Hat College to facilitate students transferring from Canada to MSU-Northern for baccalaureate degrees in education.

The College of Technical Sciences has a cooperative agreement for the Business Administration degree with Medicine Hat College which includes an excess capacity rate competitive to attract future students transferring to MSU-Northern.

# 3.0 STUDENTS

# 3.1 Student Characteristics and Student Services

# Third Week headcount enrollment data, Fall Semester

Office of the Registrar, MSU-Northern

# **Residency Status (Report A - Part C)**

Residency	2004	2005	2006	2007	2008	2009
Undergraduate Students						
In State	1173	1124	1115	996	977	1011
Out of State	38	26	28	24	26	29
WUE	57	63	84	65	73	91
Excess Capacity	11	18	18	24	26	18
Total Undergraduates	1279	1231	1245	1109	1102	1149
Post Baccalaureate Students						
In State	47	64	57	42	48	50
Out of State	0	0	0	1	1	1
WUE	0	0	0	0	0	0
Excess Capacity	1	1		1	1	0
Total Post Baccalaureate Students	48	65	57	44	50	51
Graduate Students						
In State	94	54	85	62	65	71
Out of State	0	0	1	0	0	1
WUE	0	0	0	0	0	0
Excess Capacity	0	0	0	0	0	0
Total Graduates	94	54	86	62	65	72
Total Students	1421	1350	1388	1215	1217	1272

# Fall 2009 MSUN Data

Office of the Registrar, MSU-Northern

Level	Part-Time	Full-Time	Total
Undergraduate Students			
Freshman	84	419	503
Sophomore	38	149	187
Junior	43	131	174
Senior	88	197	285
Total Undergraduates	253	896	1149
Post Baccalaureate & Gradua	te Students		
Post Baccalaureate	29	17	46
Graduate	63	14	77
Total Undergraduates	92	31	123
Total Students	345	927	1272
Total Students	345	9	27

See Appendix B-1 for a headcount distribution by major. Appendix B-2 displays ACT scores for entering Freshman and incoming Freshman requiring remediation.

#### 3.2 Retention and Graduation Rates

See Appendix B-3 for a five-year summary of fall-to-fall retention rates and six-year graduation rates.

#### 3.3 Student Satisfaction and Student Learning

MSU-Northern measured student satisfaction with two approaches for 2009: (1) Noel-Levitz Student Satisfaction Survey and (2) ASMSUN Self Study using Survey Monkey. The response rate for the ASMSUN survey was quite high (N=326) for surveys of this type (28% of the undergraduate student enrollment). The Noel-Levitz Survey response was low (N=54) likely due to Banner Portal use for respondents. Nonetheless, both surveys were useful to the institution. When comparisons were made to previous surveys, there was a gain in satisfaction from 2007 to 2010. When students were asked about their overall experience at MSU-N, 62% rated good to excellent. **91% of current students were**  **satisfied with their overall education experience at MSU-Northern.** Appendix B-4 shows an extract of the ASMSUN Student Satisfaction Survey. Appendix B-5 shows an extract of the Noel-Levitz Survey.

## 3.4 Enrollment trends, projections, and challenges

See Appendix B-6 for a five year summary of Student FTE by Residency and Level.

### 3.5 Student Finances

Increases in tuition or erosion of state support results in more student loans for assistance with financing costs of education. Student award packages have become more limited with decreases with state funding. Limitations on the state funded work study program affect the number of students who desire to work and finance their education.

# 4.0 PUBLIC OUTREACH, RESEARCH, & TECHNOLOGY TRANSFER

MSU-Northern delivers programs to two outreach sites in Lewistown and Great Falls as well as online.

- Associate of Science Nursing (Lewistown & Great Falls)
- Associate of Arts (Lewistown)
- Bachelor of Science in Nursing (online)
- Bachelor of Science in Business Administration (online)
- Bachelor of Science in Elementary Education (Great Falls)
- Master of Education Counselor Education (various sites cohort)
- Master of Science Learning Development (Havre & Great Falls)
- Reading Minor (Great Falls)

#### 4.1 Outreach programs

As an integral part of the MSUN multi-faceted mission, the Extended University serves hundreds of clients through self support programs such as Cabin Fever, the Montana Environmental Training Center and the statewide mission for Montana Motorcycle Rider Safety. The MMRS program has over <u>1,500</u> participants annually. Continuing Education credit and non-credit courses are offered statewide to educators and other clients annually.

#### 4.2 Funded research program profile

Although MSU-Northern is not a research institution, the past seven fiscal years have resulted in over 3 million dollars in grant funded and other externally supported projects such as WIRED, MSUN Bio-Energy, Department of Energy and Department of Agriculture Bio-Fuel projects. These activities often include valuable indirect support to the institution in addition to equipment acquisitions helpful to the primary mission of Northern as a teaching institution. Considerable external support is directed to the technical programs including the Bio-Energy Center, automotive manufacturing training programs (e.g., Toyota, Ford, and GM). Relationships have been established with Hino of Japan, and local Montana companies for Bio-Diesel fuel research.

#### **5.0 SYSTEM COLLABORATION**

### 5.1 Collaborations with K-12

Collaboration with the area K-12 school districts is one of the key features of the education program. Without their help and collaboration, the education degree programs would not be possible. In addition, this spring a Northern English faculty member in collaboration with a Havre High English faculty member (an MSUN graduate) team taught a dual credit composition class. This collaboration has been very successful and the College of Education, Arts & Sciences and Nursing is considering expanding the dual credit listings.

### 5.2 Program Partnerships

The College of Education, Arts & Sciences and Nursing also works closely with the area tribal colleges to make a seamless transition for the students. Northern has a number of articulation agreements with the area tribal colleges to facilitate this transition. Northern also has an articulation agreement with Medicine Hat College to facilitate students transferring to MSU-Northern for baccalaureate degrees in education.

Academic programs extended to other sites:

Lewistown:	Associate of Science Degree in Nursing Bachelor of Science in Business Administration Associate of Arts
Great Falls:	Bachelor of Science Degree in Elementary Education (K-8) Reading Minor Master of Education Counselor Education Master of Science Learning Development

# 5.3 Participation in System Initiatives

MSU-Northern has been an active participant in the Common Course Numbering and Faculty Learning Outcomes Councils (FLOCS). To date over 15 MSU-Northern faculty have participated in FLOC activities. MSU-Northern has been an active participant in the College Now! (MOA) project as well as internal MSU Integration initiatives. Synergy has been captured for such projects as common calendars, faculty evaluation, on-line learning platform (D2L) as well as other <u>Banner</u> projects.

5.4 Support for Campuses Affiliated with the University

The entire administrative system of the MSU campuses involves active collaboration among all MSU campuses. With the Bozeman campus in the lead, the collective progress to date would not have been possible without the contributions from Northern, Great Falls and Billings.

5.5 Support/Collaboration with other campuses (CC's, Tribal Colleges, other)

MSUN has a considerable number (>39) Articulation Agreements with institutions in the region and across the U.S. Montana Tribal colleges articulate a wide variety of programs into MSU-Northern.

#### 6.0 OPERATING BUDGET

NARRATIVE { trends and analysis of expenditures per student)

REPORTING METRIC EXPENDITURES PER STUDENT											
Campus		Y 05 Actual		FY 06 Actual		FY 07 Actual		FY 08 Actual		FY 09 udgeted	Growth <u>Rate</u>
University of Montana UM - Missoula UM - MT Tech UM - Western UM - Helena COT	\$	8,904 9,341 8,302 6,177	\$	9,369 10,192 8,561 6,815	\$	9,799 10,443 9,298 6,793	\$	10,354 10,903 9,794 7,671	-	10,851 11,198 10,412 7,677	5.1% 4.6% 5.8% 5.6%
Montana State University MSU - Bozeman MSU - Billings MSU - Northern MSU - Great Falls COT		9,692 7,568 9,143 6,504		10,370 7,897 9,839 6,734		11,242 8,375 10,498 7,071		12,090 8,786 11,826 7,656		12,429 9,133 12,521 7,772	6.4% 4.8% 8.2% 4.6%
Community Colleges* Dawson Flathead Valley Miles		6,423 6,267 7,095		6,881 7,027 8,412		8,319 7,820 9,265		8,939 8,328 10,698		9,316 8,208 11,229	9.7% 7.0% 12.2%
Source: Individual campus	report	ting met	ric v	worksheets	for	"Expend	itur	es per S	tude	ent FTE"	

\*FY 08 was the first year this information was reported for Community Colleges.

### APPENDICES

# **Appendix A – Institutional Characteristics**

A-1 List of Peer Institutions

# MSU-Northern Peer Institutions Using IPEDS Data

Institution	Total Fall Enrollment 2008
Montana State University-Northern	1217
The University of Montana-Western	1190
Valley City State University	1019
Chadron State College	2649
Dakota State University	2675
Peru State College	2328
Lewis-Clark State College	3940
Northern State University	2927
Oregon Institute of Technology	3515
Black Hills State University	4016

# Appendix B – Students

B-1 General description of student body (headcount distribution by majors)

Majors Combined Majors				
Levels	Description	Fall 2009		
AG	Agriculture	31		
AUTO	Auto & Diesel	170		
BAMATH	Mathematics	5		
BAS	Applied Science	3		
BIO	Biology	40		
BUS	Business	111		
CARP	Carpentry	8		
CET	Civil Eng. Technology	29		
CIS	Computer Info Systems	27		
COMLDR	Community Leadership	20		
DDT	Design Drafting Technology	16		
EDENG	English Education	20		
EDMATH	Mathematics Education	7		
EDMNR	Traffic Ed & Recertify	5		
EDSCI	Science Education	7		
EDSOCI	Social Science Education	16		
EET	Electronics Eng. Technology	2		
ELECT	Electrical Technology	38		
ELEM	Elementary Education	111		
GD	Graphics Design	23		
GEN	General Studies	152		
GRAD	Graduate Programs	76		
HPE	Health & Physical Education	41		
HPRO	Health Promotions	29		
IT	Industrial Technology	20		
NUR	Nursing	235		
PLMB	Plumbing	19		
SET	Sustainable Energy Tech.	3		
WLD	Welding	8		
		1272		

B-2 ACT Scores for Incoming Freshman and Incoming Freshman Requiring Remediation

# ACT Scores for Incoming Freshman

ACT	<18	<b>18-20</b>	21-24	25-29	30 >
Number	64	63	52	16	5
Percent	32.00%	31.50%	26.00%	8.00%	2.50%

# Fall 2009 Incoming Freshman Requiring Remediation

	MATH	ENGLISH	BOTH
Number	103	116	84
% of Total Freshman*	20%	23%	17%

\* Total Freshman 503

# B-3 Retention & Graduation Rate of First-time, Full-time Freshman

	2004	2005	2006	2007	2008
Fall to Fall Retention Rate	61.7%	58.6%	60.0%	59.1%	66.6%
Six year Graduation Rate	30.4%	30.8%	31.0%	32.6%	26.6%
Total Degrees Awarded	464	464	423	438	368

# B-4 Extract of ASMSUN Student Satisfaction Survey

	Excellent	Good	Adequate	Poor	Unacceptable	N/A	Rating	Response
							Average	Count
Class availability?	19.7% (62)	45.4% (143)	24.4% (77)	7.3% (23)	2.5% (8)	0.6% (2)	2.27	315
Relevance of course material taught?	20.3% (64)	48.3% (152)	24.8% (78)	4.4% (14)	1.9% (6)	0.3% (1)	2.19	315
Were the class outcome's what you expected?	17.8% (56)	45.4% (143)	27.9% (88)	6.0% (19)	2.2% (7)	0.6% (2)	2.29	315
Do you believe the education you recieved was a good value?	19.4% (61)	47.5% (149)	22.9% (72)	6.7% (21)	3.2% (10)	0.3% (1)	2.27	314
answered question skipped question					d question	315		
					auestion	11		

6. Why did you choose to join or stay in the Montana University System?	
	Response Count
	211
answered question	211
skipped question	115

### B-5 Extract of Noel-Levitz Survey

# Montana State University - Northern vs Western Comparison - 2/2010 Institutional Summary

Student Satisfaction Inventory Form B

	·v		-
	Montana State University - Northern	Western SSI 4- Year Public Form B	
Summary			Mean Difference
So far, how has your college experience met your expectations?	4.60	4.52	0.08
1=Much worse than expected	1%	2%	
2=Quite a bit worse than I expected	5%	1%	
3=Worse than I expected	3%	10%	
4=About what I expected	39%	42%	
5=Better than I expected	24%	24%	
6=Quite a bit better than I expected	16%	9%	
7=Much better than expected	7%	9%	
Rate your overall satisfaction with your experience here thus far.	5.13	5.29	-0.16
1=Not satisfied at all	1%	1%	
2=Not very satisfied	5%	3%	
3=Somewhat dissatisfied	5%	8%	
4=Neutral	13%	8%	
5=Somewhat satisfied	22%	20%	
6=Satisfied	39%	41%	
7=Very satisfied	11%	15%	
All in all, if you had to do it over, would you enroll here again?	5.21	5.31	-0.10
1=Definitely not	3%	4%	
2=Probably not	11%	7%	
3=Maybe not	5%	6%	
4=I don't know	9%	8%	
5=Maybe yes	9%	12%	
6=Probably yes	30%	30%	
7=Definitely yes	30%	31%	
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	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
Resident Total	1,204.61	1,140.43	1,083.39	977.78	955.93	977.50
Undergraduate	1,110.73	1,070.27	1,008.94	915.87	881.97	912.84
Graduate	93.88	70.17	74.46	61.92	73.96	64.67
Non-Resident Total	110.80	112.48	122.83	116.87	117.40	137.62
Undergraduate	35.27	25.45	24.80	21.87	24.47	26.94
WUE	55.33	66.67	79.24	65.80	67.27	92.50
Excess Capacity	18.51	20.37	18.80	29.04	25.67	17.94
Graduate	1.70	0.00	0.00	0.17	0.00	0.25
Total FTE	1,315.40	1,252.91	1,206.22	1,094.65	1,073.33	1,115.12

# B-6 Student FTE by Residency & Level