Turtle Mountain Community College

Assessment of Academic Achievement

2003 – 2004

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Introduction

Turtle Mountain Community College has a long tradition of assessing academic achievement. In recent years, faculty relied on an instrument known as the graduate survey. The survey related generally to the

institutional mission and goals and employed indirect measurements of achievement. Inclusive in the instrument were items of integration of culture and heritage into the curriculum, utilization of technology in learning, application of learning to problem solving, acquisition of knowledge of the traditions of the tribe, the nature of Indian society, and skills of leadership. This assessment was taken by graduates annually and analyzed by faculty at the close of the semester. Faculty then considered the implications of the analysis as a group and by academic area and would agree on a plan of action for the following year as a result of assessment outcomes. One recent plan called for faculty to provide more community involvement for students as an outgrowth of students' classroom experiences.

During the 2001 – 2002 academic year, faculty began planning for refinement of academic assessment. Under the leadership of Dr. Scott Hanson (assessment coordinator), faculty began exploration of the various academic programs and how they might be realistically assessed. With the help of consultants and under Dr. Hanson's leadership, faculty began a study of goals and objectives and the assessment process. Goals and objectives for programs used the institutional mission and goals statements as foundation and then delineated the specific desired outcomes of the various programs. Faculty began its first tentative steps with the assessment of program

outcomes and, to their credit, actually designed assessment instruments to provide direct measurements of these outcomes. Although the clear emphasis of assessment during this period was program assessment, faculty began some consideration of assessment at the course level. As the year ended there was a stated commitment to assess at least one course every academic year, although it was apparent that faculty would need additional in-service training with the concept and process of course-level assessment.

Dr. Hanson, working with consultants and limited, but solicited, input from faculty, assembled the first comprehensive Assessment Operations Manual for Turtle Mountain Community College. This manual was delivered into the hands of faculty during October of the 2003 – 2004 year, days before the NCA self-study team visitation. The intent was to begin this new level of assessment as soon as possible to replace the old, graduate survey which has been used previously.

On November 20, 2003, Andrew Johnson was appointed by administration to assume the role of assessment coordinator for period of time from November to August 31, 2004. One of his first actions was to re-form an Assessment Committee to oversee and implement work-related work through the rest of the year. An attempt was made to structure the committee in such a way that continuity of effort and representation of the

various divisions of the curriculum would be kept intact. The committee members for this term are listed here: Andrew Johnson, Coordinator; Dr. Scott Hanson, Past Coordinator; Dr. Linda Marsh, Elementary Education Program; Kathe Zaste, Career and Technology Education; Rollin Kekahbah, Social Science; Charmane Disrud, Math and Science; Dr. Penny Parzyjagla, Arts and Humanities; Cheryl Blue, Student Services; Larry Baker, Student Representative.

On December 5, 2003, the new coordinator gave faculty members folders and directed them to place syllabi for all classes taught during the fall semester in the folders. Also to be included in the folder were any pre- and post-test assessment instruments used during the fall semester and any analysis of outcomes. If course modification was considered as a result of outcomes analysis, a brief statement of the proposed changes was also requested. If no assessment was conducted during the fall semester, then a statement of assessment planning or other explanation of what was done was requested.

At that time faculty were using certain courses which the year previously they mistakenly called “capstone” courses to pre- and post-test the four General Education program objectives. Chippewa History and Ojibwa Language were designated as “capstones” to assess cultural

relevancy. Composition I and II were designated as “capstone” courses for technology literacy goal. Algebra I was designated as a “capstone” course for the problem-solving goal, and American Government was designated as a “capstone” for the critical thinking goal. These courses, according to the Assessment Procedures Manual were to pre- and post-test the four General Education goals during the fall semester and again during the spring semester. Through a breakdown in communication, these designated courses failed to pre- and post-test the goals during the fall semester, but made an attempt to do so during the onset of the spring semester with limited success.

It was not until the second week in March that we understood, in light of the NCA report that these courses were not in any sense of the work capstone courses. In March faculty abandoned this assessment approach of the General Education goals and began a serious re-thinking of the goals and how to assess them.

Faculty were advised of assessment training which was scheduled for January of 2004 and would focus on both program and course-level assessment.

At the onset of the second semester, faculty claimed ownership and responsibility for the assessment of academic achievement. With the help of consultants, faculty moved ahead with assessment at the course level,

utilizing the approach of pre- and post-testing in primarily. Some pre- and post-test tests were designed to be administered on-line in the WebCt environment. Freshmen English 110, 120, and chemistry were designed by instructors and placed on the TMCC server in the WebCt environment. The Elementary Education program continued assessment utilizing electronic portfolio assessment.

On March 8, 2004, faculty was given the NCA response to the institutional self-study efforts. In light of the NCA report, it became necessary to re-examine the program goals, especially for the General Education program. The coordinator formed faculty committees to re-examine the originally stated four General Education program goals and to begin work to address the omissions of goals suggested by NCA in their report. The original General Education goals stated outcomes for (1) cultural relevancy, (2) technology literacy, (3) critical thinking, and (4) problem solving. The report suggested needed improvement with each of these goals, pointing out problems primarily associated with the assessment of the goals.

As a result of NCA's input, faculty's concept of "capstone" courses became more enlightened, and faculty dropped the stated procedures with respect to those identified classes. Faculty remained intrigued with the idea

of using true capstone courses sometime in the future and will continue to explore possibilities for such courses.

New General Education goals were added to the original four: (1) Communication skills (both oral and written), (2) math, (3) science, (4) social science, and (5) arts and humanities. The number of goals for this program has grown from four to nine, and the first four have undergone substantial revision in light of the NCA report. These goals will be reflected in the continued revision of the TMCC Assessment Operations Manual.

At the close of the spring semester, faculty were involved in post-testing in their courses. Consultants worked with faculty for two days on the twelfth and thirteenth of May, reviewing course-level assessment reports and General Education goals. For the first time in the history of the college a clear majority of full-time faculty were involved in the assessment of academic achievement of the classes they taught during the second semester. Those reports were received and reviewed by the Assessment Committee, who used them to compile this end-of-year report on the assessment of learning here at Turtle Mountain Community College.

General Education Program Assessment Efforts

Fall Semester 2003 – 2004

Technological Literacy

The Technology Literacy committee implemented the assessment pre-test during fall orientation of 2003 –2004. Test results were collected and evaluated in terms of the assessment manual matrix. The records, which identify the students who took the pre-test, will allow the committee to post-test the same students. Initial results are revealing and quantifiable. The committee feels that it would not be a problem to bring the same students back in May for interim testing, provided they are still enrolled. The test would be administered in like fashion as the pre-test. The data would be collected, scored, and labeled as an interim test for May 2004. The committee would, of course, reflect on the results of the interim testing as they look forward to post-testing in May 2005.

The committee discussed possible revision of the instrument for the next cycle of testing. Adding items which would test a student's ability to use Internet to locate test information was suggested. Also suggested was

that we test students' abilities to use e-mail and e-mail-related activities such as archiving mail, creating attachments, forwarding, sending copies, etc.

The following instructors serve on the Technology Literacy committee: Julie Desjarlais, Kathe Zaste, Chad DeCoteau, Chad Davis, Andy Johnson, and Toni Parisien.

CRITICAL THINKING: ASSESSMENT INSTRUMENT, SCORING RUBRIC, RESULTS, ANALYSIS, AND RECOMMENDATIONS

ASSESSMENT INSTRUMENT

The critical thinking committee devised an essay test and rubric for critical thinking and administered it to over 40 students during Fall 2003 orientation. The test presented the students with a scenario and asked them to respond with an essay. However, we soon realized that each of us interpreted the rubric differently and could not agree on a standard method of scoring the exams. For these reasons, the committee decided to explore a professionally-designed assessment instrument called Accuplacer. We then administered the Accuplacer to a number of students during week 6 of the semester. We discovered afterwards that only 18 of the students tested had

completed 6 college credits or fewer at the time of testing. The following is information provided by the creators of Accuplacer:

Reading Comprehension Test

Each student taking this test will be presented with a series of 20 questions of two primary types. The first type consists of a reading passage followed by a question based on the text. Both short and long narratives are provided. The reading passages can also be classified according to the kind of information processing required, including explicit statements related to the main idea, explicit statements related to a secondary idea, application, and inference.

The second type of question, sentence relationships, presents two sentences followed by a question about the relationship between

these two sentences. The question may ask, for example, if the statement in the second sentence supports that in the first, if it contradicts it, or if it repeats the same information.

Both reading passages and sentence relationship questions are varied according to content categories to help prevent bias because of a student's particular knowledge. These categories include social sciences, natural and physical sciences, human relations and practical affairs, and the arts. In the Reading Comprehension test, for example, each student will receive four long reading passages, eight to nine questions based on short passages, and four to five questions involving sentence relationships

The students take the test by logging on to www.accuplacer.com, giving a password and a username, and answering a series of questions. The test takes approximately 30 minutes and is then scored electronically in a matter of seconds.

SCORING RUBRIC

The scoring rubric has been developed by the creators of the particular Accuplacer module we are using to measure students' critical thinking skills.

Total Right Score of about 51 - 77

Students at this level are able to comprehend short passages that are characterized by uncomplicated ideas, straightforward presentation, and for the most part, subject matter that reflects everyday experience. These students are able to:

- recognize the main idea and less central ideas; and
- recognize the tone of the passage when questions do not require fine distinctions

recognize relationships between sentences, such as the use of one sentence to illustrate another

Total Right Score of about 78 - 98

Students at this level are able to comprehend short passages that are characterized by moderately uncomplicated ideas and organization, and employ moderately sophisticated vocabulary. These students are able to:

- answer questions that require them to synthesize information, including gauging point of view and intended audience; and
- recognize organizing principles in a paragraph or passage

  identify contradictory or contrasting statements

RESULTS

Number of students tested: 18

Mean Score: 43.3%

Standard Deviation: 14.70%

Standard Error: 3.47%

Range: 24.3% to 69.8%

ANALYSIS

Most students manifest at least some difficulty in:

a. synthesizing information, and

b. recognizing organizing principles.

RECOMMENDATIONS

a. Instructors should provide students opportunities to strengthen their ability to synthesize information.

b. Instructors should provide students opportunities to strengthen their ability to recognize organizing principles.

ASSESSMENT REPORT
GENERAL EDUCATION COMMITTEE
CULTURAL RELEVANCY

Fall Semester 2003/2004

The pre-test prepared for the assessment of cultural relevancy was not adequate to the task of assessing the students as regards their understanding of the cultural heritage of the Turtle Mountain Band of Chippewa Indians. The primary reason determined for this inadequacy was the instrument designed for this purpose. The implementation of the instrument revealed it was too cumbersome in that it required a verbal response to open questions. The students being in a group were reluctant to respond openly to the question asked. Because of this problem it was difficult for the instructors involved to acquire enough information from the students regarding cultural heritage to be sure they did or did not have any degree of understanding and knowledge of this criterion.

The Cultural Relevancy component of the General Education Committee has determined that the purpose of measuring student knowledge

of TMBCI cultural heritage would be better served by the creation of a different instrument that would provide direct questions in a written form and in a multiple choice format. It is believed by the Cultural Relevancy sub-committee this approach to assessing student knowledge, pre and post test, would provide more substantive results and be easier to administer.

Problem Solving Assessment Effort

During the orientation for fall semester in 2003, students who had fewer than six college credits were assigned to one of four assessment groups: assessing problem solving skills, assessing critical thinking skills, assessing cultural awareness, and assessing technological literacy. The rationale behind the early assessment was to provide information concerning incoming students' skills in these four areas so that later assessing could be done to see what changes would occur as a result of their experiences at Turtle Mountain Community College.

The TMCC general education goal regarding problem solving states "Students will know one or more recognized problem solving models and be able to apply a problem solving model to situations in more than one content area." To assess if or to what extent students entering TMCC already are aware of problem solving models and can apply such a model to situations in more than one content area, the committee assigned the task of assessing problem solving skills developed an assessment instrument consisting of four essay questions. Students were asked to choose any one of the four and write a response that would demonstrate their understanding of the problem-solving process.

After students had completed the assessment, the five instructor who were on the team met to evaluate the responses, using a problem solving scoring rubric that they had developed to aid in evaluating the essays. The student responses were read by an instructor, who wrote a score (from 1 to 4) on the paper and then passed the response to another instructor, who did the same thing.

The process revealed a number of problems. First of all, instructors were not in agreement on the scores many of the responses merited. While most agreed that certain responses were good and others were clearly “bad,” opinions concerning the majority of the responses varied widely, with some believing a response merited a “2” or a “1.5,” while others would rate the same response as a “3” or a “3.5.”

Instructors also were not in agreement about averaging scores and giving a total score of, for example, a 2.5. One reason for the disagreement related to the questions themselves. For example, one questions having to do with a problem with a car that wouldn’t start asked the student how s/he would solve the problem. Some instructors felt that a student who responded by saying he or she would call an uncle who was really good with cars and would call another uncle, also good with cars, if the first one were unavailable, had offered two solutions and demonstrated good problem-solving skills. Others thought that was basically only one response, while still others questioned whether the student had demonstrated an understanding of problem solving models.

Another concern with the questions had to do with their relative difficulty. Instructors felt that some of the questions related to more complex problems than others and believed the students who attempted those questions deserved credit for choosing them rather than an “easier” one. Others pointed out that students had had a choice.

Although instructors were not in agreement and felt the assessment instrument needed improvement, they did arrive at the following conclusions: Of the forty-one students who took the assessment

- Twenty accurately identified the problem
- Twenty-eight identified more than two relevant solutions
- Fourteen drew warranted conclusions
- Two justified a plan of action by analyzing each option and explaining what made one option better than the other options
- Eleven followed where evidence and reason led

The committee assessing the problem solving assessments concluded that students appeared to be especially weak in justifying a plan of action. In addition, many student responses to the questions were superficial, lacking the sort of in-depth analysis necessary in the problem-solving process.

Instructors concluded that the findings are of questionable value because the assessment instrument appears to be invalid. They recommended that a new assessment instrument be developed. Such an instrument should be easier to evaluate than the one used in the fall of 2003 so that people doing the evaluating will be able to agree on scores. The instrument also needs to include more than one type of problem since the general education goal states that students will "**be able to apply a problem solving model to situations in more than one content area**."

COURSE-LEVEL ASSESSMENT

MATH AND SCIENCE

Luther Olson, Mathematics Instructor

Luther supplied syllabi for each of his four courses, all containing measurable objectives. He did not have a pre/posttest for Statistics I; however, he did include a pre/posttest for his three Algebra I courses (Sections A, B, and Online). He apparently didn't have it ready in time for the beginning of the course, but he did administer the posttest at the end of the semester. He found that the students did well on this, and will use it again in Spring Semester, 2004. The pre and posttests are almost identical in wording except for different numbers in the equations, so hopefully he will then be able to compare the amount learned during the course with the knowledge they had prior to taking the course.

Charmane Disrud, Science Instructor

Charmane supplied syllabi for each of her three courses, all containing measurable objectives. No pre/post tests were developed for CHEM 121 or BIOL 202, as faculty weren't aware of this initiative at the beginning of the

semester. However, a pre/post test sample was included for Introductory Chemistry (CHEM 115) because that course is taught every semester, and she intends to administer it during Spring Semester, 2004. She will have pre/posttests ready for CHEM 121 and BIOL 202 when they are next taught in Fall Semester, 2004.

Included in the folder was a copy of her present assessment system for these three courses, with the notation that while grading papers and labs measures knowledge at the end of the course, there is no measure of prior knowledge coming into the course. Thus she believes that pre/posttests are needed in addition to the present system.

EVALUATION OF COURSE-LEVEL ASSESSMENT

Scott Hanson

Every instructor submitted syllabi. Most (5/7) of the syllabi included measurable course objectives. Some courses have a pretest and included

reflection on the pretest. Most (6/7) of the courses had a posttest and reflection upon the posttest. Thus, it seems the instructors were a bit more keen on post-testing than on pre-testing.

ASSESSMENT REPORT-SOCIAL SCIENCE, FALL 2003

1. Four faculty submitted folders for assessment: Cecelia Myerion, Leslie Peltier, Julie Desjarlais, and Rollin Kekahbah.

2. Courses included are:

   LANG 121 Ojibwa Language
   ECON 201 Principles of Microeconomics
   HIST 103 United States History
   HIST 251 Chippewa History I
   POLS 287 Tribal Government
   HUMM 190 Traditional Use of Plants
   HIST 220 North Dakota History
   HIST 261 Indian History I
   POLS 115 American Government & Politics
   HIST 101 History of Western Civilization I
   SOCI 270 Sociology of Indian Reservations

3. All syllabi are accounted for.

4. Most of the faculty reported their involvement in the Fall 2003 was spotty and inconsistent, and was largely due to the Assessment Program itself getting off to
   a slow start. Most did not receive the Asssessment Operations Manual until
   October. No pre tests or post tests were administered.

5. Because of the lack of preparation time no assessment of students in the above
   courses was done.

Assessment Report – Arts and Humanities, Fall 2003

1. Three faculty submitted folders for assessment: Peggy Johnson, Andrew Johnson, Cynthia Jellenburg

2. Courses included the following:
   ENG 110 Composition I,
   HUM 101 Humanities,
   ENG 239 Native American Children's Literature,
   VART 130 Drawing I
   VART 110 Intro to Visual Arts
   VART 123 Color and Design
   VART 407 Music and Art for Elementary Education
   VART 250 Ceramics I

3. All syllabi were accounted for.

4. All faculty mentioned the fact that specific pre-tests for evaluating course objectives were not included. One faculty member included a pre-course survey she administered to her students to assess their "readiness" for the course content and which she used to determine the subsequent focus of the class.

5. No post-test instruments were included. And therefore,

6. No interpretation of student learning was available.

NCA Assessment Report

Elementary Education Department

Fall 2003

Linda Marsh

EDUC 301: Introduction to Teaching and Learning (3 cr.)

- Taught by Karen Roberts, Zelma Peltier, and Linda Marsh.
- It is an introductory course and it is a gateway course intended to help students make an informed decision about their teaching "vocation." It acquaints the student with practical aspects of teaching and learning that highlight the history, classical and traditional theories of education and contemporary shifts in the "paradigm" of teaching.
- 12 students completed the class
- No pre or post tests were administered

EDUC 403: Social Studies in the Elementary School

- Taught by Zelma Peltier
- This course explores the teaching of social studies in the elementary grades. Issues specific to Turtle Mountain as a reservation and the broader range of issues will be addressed so that the students learn how to teach from and adapt commercially available materials for their students' needs.

- The students will be expected to produce an interdisciplinary thematic unit in this course to demonstrated competency in teaching social studies.
- 18 students completed the class
- No pre or post tests were administered

EDUC 406: Science for Elementary Teachers (3 cr.)

- Taught by Linda Marsh
- This course addresses the philosophy, content and pedagogy for elementary teachers covering the scientific method and what that means when viewed from an indigenous perspective. Students will learn how to employ a developmentally based, problem-solving approach to instruction. They will also learn how to incorporate national science standards into the curriculum.
- 18 students completed the class
- No pre or post tests were administered

EDUC 420: Supervision of Student Teachers (1 cr)

- Taught by Karen Roberts
- This workshop, designed for cooperative teachers, involves instruction in teaching methods, evaluation methods, and

strategies for the supervision of student teachers from TMCC.

- 1 student completed the course
- No pre or post tests were administered

Career and Technical Education Programs of Study

Course Level Assessment Report
On Student Learning

Prepared by Kathe Zaste, CTE

Business/Accounting Program

A review of this program for course objectives and assessment materials reveals that the instructor had pre-/post-assessment materials for the majority of her courses. Her course objectives worked well with the assessment questions she designed for the program. She did not have pre-/post-assessment materials for two of her courses, but did have course objectives that looked to be measurable.

Business/Office Management Program

In reviewing this program for course objectives and assessment materials, I found that the instructor was lacking any pre-and-post assessment materials

for all of her courses. She did however have measurable objectives set for her courses by using the textbook chapter readings as the objectives.

Commercial Art Program

In reviewing this program for course objectives and assessment materials, I found that the instructor did have measurable objectives for all but one course. In reviewing that courses objectives I found that the instructor may want to re-evaluate her syllabus and course to find objectives and a pre-and-post assessment that can be more measurable. The instructor did have a pre-and-post assessment in place for one of her courses that was measurable and did meet the objectives of the course it was designed for.

Computer Support Specialist Program

In reviewing this program for course objectives and assessment materials, I found that the instructor did not have any pre-and-post assessments in place for his program. He did however have measurable objectives in each course syllabus. Half of the course objectives were based on the textbook chapters listed as the objectives and the remaining courses did have measurable objectives designed.

Early Childhood Program

In reviewing this program for course objectives and assessment materials, I found that the instructor did have one course that had what she referred to as,

a “reflective questionnaire”. It did have a couple questions that were measurable while other questions were based on the students’ opinion. She did not have any pre-and-post assessments designed for any of her courses, but did have measurable objectives set for all but one course. I found that the instructor may want to re-evaluate her syllabus and course to find objectives and a pre-and-post assessment that can be more measurable.

Entrepreneurship Program

In reviewing this program for course objectives and assessment materials, I found that the instructor was lacking any pre-and-post assessment materials for all of his courses but one. He had measurable objectives set for the one course by using the textbook chapter readings as the objectives and a pre-and-post assessment that met the objectives designed for that course. The remaining courses also did not have any objectives at all or no chapter readings listed that could be used for measuring student assessment. I found that the instructor may want to re-evaluate his syllabi to find objectives and to design pre-and-post assessments for his courses.

Spring Semester 2003-2004

Assessment Efforts

Program Assessment Development

Revision and re-planning of program assessment began shortly after receipt of the NCA self-study report. It became evident in light of that report that the original four General Education program goals and their assessment would need considerable revision. Additionally, faculty decided in light of the report that five more goals should be added to the program to adequately reflect the nature of the General Education program.

Faculty decided to focus their efforts on the General Education program, its goals and assessment, for the duration of the academic year. Presented below are the results of faculty effort with respect to the addition of new goals and the revision of the original four goals:

Goal 1: Students will gain an awareness of various cultures, including Ojibwe, and will contribute to the community.

Objectives:

1. Students will be exposed to the concepts of multiculturalism.

2. Students will be exposed to the Ojibwe culture in relation to the 7 teachings.

3. Students will complete at least one community service project.

Goal 2: Students will be able to solve problems.

Objectives:

- Students will know at least one problem-solving model.
- Students will solve problems in various content areas by applying an appropriate problem-solving model.

Goal 3: Students will be prepared to use computer technology in their fields of expertise.

Objectives:

1. Students will demonstrate general skills with operating systems:
    a. Windows
    b. Dialog Boxes
    c. Files
    d. Folders

2. Students will demonstrate general skills with word processing:
    a. Formatting of text
    b. Creating text files
    c. Storing of text files

3. Students will have a functional understanding of the Internet:
    a. Domains
    b. Search Engines
    c. Web Sites
    d. Security-files, programs and personal

4. Students will have basic e-mail skills:
    a. Set-up e-mail account
    b. Create address folders
    c. Send attachments
    d. Send and receive e-mail

Educational Practices- Relevant classes that touch on the basic technology skills such as, Word Processing, Outlook, Business Communication, Intro to Computers, Basic Keyboarding, Intermediate Keyboarding, Comp I and Comp II.

Assessment-Unresolved

Goal 4: Students will develop critical thinking skills:

Objectives: Students will be able to:

1. raise vital questions and problems,
2. gather and assess relevant information,
3. come to well-reasoned conclusions and solutions,
4. test those solutions against relevant criteria,
5. think open-mindedly about their assumptions and consider the practical consequences, and
6. communicate effectively to find solutions to complex problems.

Mathematics

<u>Goal 5:</u> Students will demonstrate knowledge of basic mathematical concepts, apply these concepts in appropriate situations, and interpret the results accurately.

<u>Objectives:</u>

1. Students will simplify, factor, and perform operations on polynomials.

2. Students will solve equations and inequalities.
3. Students will use graphing techniques to solve problems involving the rectangular coordinate system, equations, inequalities, and applications of technology.
4. Students will effectively communicate conclusions generated from applications of mathematical concepts.

Goal 6: Students will study and do research in the humanities and/or the social sciences, including the culture, traditions and government of the Turtle Mountain Band of Chippewa.

Objective 2 – Students will understand the elements and principles of the fine arts and will demonstrate how they contribute to express ideas, thoughts and feelings.

Objective 3 – Students will appreciate the fine arts as a means of expressing personal, social and cultural experiences.

Objective 4 – Students will experience and demonstrate an understanding of the aesthetics of literature, the fine arts, and history along with their contributions to the enrichment of modern society.

Goal 7: Students will understand scientific concepts and lab skills.

Objective 1. Students will demonstrate knowledge of scientific concepts, such as:

Outcomes:

1. Logic
2. interpreting scientific material
3. scientific method
4. applying mathematics to science problems

Objective 2. Students will demonstrate knowledge of lab skills such as:

Outcomes:

1. measurements

2. safety
3. use of equipment
4. interpretation of data

There are four lab science areas that should be assessed: Physical Science, Earth Science, Life Science and Computer Science. Each of the outcomes will be assessed separately. There will be one question/outcome/science area, as indicated by the table below.

		PHYSICAL SCIENCE	EARTH SCIENCE	LIFE SCIENCE	COMPUTER SCIENCE
OBJECTIVE 1	OUTCOME 1	One question	One question	One question	One question
	OUTCOME 2	One question	One question	One question	One question
	OUTCOME 3	One question	One question	One question	One question
	OUTCOME 4	One question	One question	One question	One question
OBJECTIVE 2	OUTCOME 1	One question	One question	One question	One question
	OUTCOME 2	One question	One question	One question	One question
	OUTCOME 3	One question	One question	One question	One question
	OUTCOME 4	One question	One question	One question	One question

PHYSICAL SCIENCE

We will use a pre/post test to measure the outcomes. The test will have one physical science question for each outcome. The following are the questions:

Objective 1., Outcome 1.: (Concept - logic)

Your family and neighbors have been complaining of upset stomachs lately, and you suspect it may be the water. If you have **unlimited funds**, what is your best course of action in order to solve the problem?

a. Write to your senator or representative.
b. Move your family to a new location with different water.
c. Ask the sick people to go to the doctor and compare diagnoses.
d. Send water samples to the State Health Dept. for testing.

Objective 1., Outcome 2.: (Concept - interpreting scientific material)

Which formula would be correct for hydrochloric acid?

a. $HClO_3$
b. HCl
c. NaCl
d. $Cl(OH)_2$

Objective 1., Outcome 3.: (Concept - scientific method)

Before performing an experiment, the scientist makes a prediction gathered from the works of other people. This part of the experiment is called the:

a. conclusion
b. hypothesis
c. control
d. data

Objective 1., Outcome 4.: (Concept – applying mathematics to scientific problems)

What is the density of a piece of metal that weighs 20 grams and occupies a volume of 2 cubic centimeters?

a. 0.1 g/cm^3
b. 10 cm^3/g

c. 10 g/cm^3
d. 5 cm^3/g

Objective 2., Outcome 1.: (Lab skills – measurements)
Which measurement below is the same as 45 milligrams?
a. 45 grams
b. 0.45 grams
c. 0.045 grams
d. 0.0045 grams

Objective 2., Outcome 2.: (Lab skills – safety)
If you splash acid in your eyes, you should:
a. splash water in your eyes for 15 minutes.
b. rub your eyes immediately with glycerin.
c. splash your eyes with a base to neutralize the acid.
d. go immediately to a hospital emergency room.

Objective 2., Outcome 3.: (Lab skills – use of equipment)
A device used to measure mass is a:
a. pipet.
b. balance.
c. thermometer.
d. graduated cylinder.

Objective 2., Outcome 4.: (Lab skills – interpretation of data)
You have added different amounts of a green nickel salt to three equal volumes of water to make solutions of varying shades of green. Next you use a spectrophotometer to measure the absorbance of each solution as follows:

Tube 1: concentration of 0.09 moles/liter gives an absorbance of 0.009.
Tube 2: concentration of 0.27 moles/liter gives an absorbance of 0.134.
Tube 3: concentration of 0.36 moles/liter gives an absorbance of 0.191.

What would be the most likely concentration of a solution that gives an
absorbance of 0.047?

a. 0.04 moles/liter
b. 0.13 moles/liter
c. 0.31 moles/liter
d. 0.40 moles/liter

Physical Science Educational Practices:

1. Lectures
2. Lab experiments
3. Power Point oral reports
4. Tinker toy and button models
5. Assigned reading from textbook (with study guides)
6. Assigned problems
7. Chapter and final tests
8. Quizzes
9. Videos

LIFE SCIENCE

We will use a pre/post test to measure the outcomes. The test will have one life science question/outcome. The following are the questions:

Objective 1., Outcome 1.:

If a hormone cannot enter a cell unless the cell membrane has a specific type of receptor, you would conclude that

a. the receptor is an integral protein.
b. the hormone is hydrophobic.
c. the hormone is hydrophilic.
d. the receptor is hydrophobic.
e. The hormone is an eicosinoid

Social Sciences

Goal 8: Students will study and do research in the humanities and or the social sciences including the culture, traditions and government of the Turtle Mountain Band of Chippewa.

- Objective 1: Students will describe aspects of the cultural heritage of the Turtle Mountain Band of Chippewa.

- Objective 2: Students will describe aspects of the contemporary culture of the Turtle Mountain Band of Chippewa.

Students will demonstrate an understanding of the historical development of culture over time and its relation to the present.

- Objective 1**:** Students will demonstrate the ability to understand broad outlines of history and make accurate connections between developments separated in time and place.

- Objective 2**:** Students will demonstrate the ability to recognize the contribution of historical antecedents to the understanding of current personal, social, and political situations and developments.

Students will be able to think more critically about the society in which they live and to reflect more deeply about their personal experiences and how they are influenced by larger social processes.

- Objective 1**:** Students will demonstrate an understanding of the processes of human behavior, and social interaction and the use of social and behavioral science perspectives to interpret them**.**

- Objective 2**:** Students will apply the principles of sociological practices to issues of socialization at the community and global levels.

Student will be able to understand the benefits and responsibilities of living in a democratic society in which citizenship, leadership and economics are encompassed.

- Objective 1: Student will be able to explain and compare the basic structures, procedures, rights and responsibilities of governance.

- Objective 2: Student will understand how the government measures opportunity costs, specialization and trade.

Goal 9: Written and Oral Communication

A Turtle Mountain Community College graduate, like any educated person, must effectively communicate through writing and oral presentation.

I. Written Communication Goal: Students will communicate a central idea/thesis, developing and supporting the thesis with life experiences and/or resource material.

Objectives:

- Students' writing will demonstrate/reflect:
    a. Ability to formulate a thesis statement (Composition I, Composition II, Composition III, Fundamentals of Speech)
    b. Comprehension of unity in writing (Composition I, Composition II, Composition III, Fundamentals of Speech)
    c. Knowledge of development techniques, such as the use of facts, statistics, anecdotes, and examples (Composition I, Composition II, Composition III, Fundamentals of Speech,
    d. Supportive detail in the form of life experiences/resource materials (Composition I, Composition II, Composition III, Fundamentals of Speech)
    e. Knowledge of the associated mechanics of writing, such as punctuation, diction, standard usage (Composition I, Composition II, Composition III, Fundamentals of Speech,)

II Oral Communication Goal

- Students will communicate in a manner that reflects an understanding of speech design and delivery.

Objectives:

- Students' oral communications will demonstrate:
    a. Integration of an awareness of audience into speech design
    b. Formulation of purpose for speech design
    c. Ability to credit supportive source material used in the design and presentation of oral communication
    d. Application of organizational techniques, such as an outline, into speech design
    e. Principles of vocalization
    f. Usage of standard English

g. Application of critical listening skills to speech design and delivery
h. Audience interaction techniques, such as listening and responding appropriately to others

The goal will be assessed using a standardized test, such as Compass, ACT, BASE, or Accuplacer.

The assessment of the General Education goals is currently unresolved as the academic year comes to a close. Some exploratory examination of commercially available assessment instruments such as BASE and ETS will be on-going during the summer months. Some faculty, as evidenced by portions of this section have already begun the planning of assessment instruments. More work and consensus is needed before the faculty speaks with one voice about the assessment of the General Education Program.

Elementary Education Program Assessment

The Elementary Education program has laid its assessment foundation in electronic portfolios. These portfolios mark the achievement of students in the program and rely on a variety of electronic media to illustrate/demonstrate their achievement within the parameters of this program. The personnel within this program evaluate these portfolios in terms of the goals and objectives of the program.

Other Programs

Faculty will need to clarify the existence of other programs within the academic frame of the college, revisit goals and objectives of identified programs and spend additional time on the creation/selection of viable assessment of these programs. This work may continue for the next several years until assessment of all programs and a reliable pattern of course-level assessment provides a measure of stability of the assessment of academic achievement for Turtle Mountain Community College.

Spring Semester Course-Level Assessment Efforts

Science and Mathematics

Of the four science and mathematics instructors, all gave pre- and post-tests for all of the courses they taught during Spring 2004 except for one. This instructor has done some reading on course assessment (including *How to Make Achievement Tests and Assessments* by N. Gronlund). He believes it is only necessary to assess one course during the whole year, and he did that during the Fall semester, 2003. He gave the assessment instruments, data, and analysis for that assessment to Dr. Hess and associates for critique in January (it was favorable), and has since added several more questions to his test in order to assess all of the objectives in his syllabus, and also added one more choice to each question of the test (in order to reduce the guess factor). His folder contained this revised test and the syllabi for the two other courses he taught during Spring 2004.

Assessment Focal Points

The other instructors all gave pencil and paper pre- and post-tests except one who used WEB-CT (for one course only). The pre-test was identical to the pos-ttest in all cases except for one math test where the pretest contained different numbers from the posttest, but the wording was the same. Most of the pre- and post-tests were multiple choice, typically

including four choices, but one math test consisted totally of open-ended computation and graphing problems. In this test the instructor gave partial credit for problems attempted (a better method of assessing learning, but also more time-consuming).

Calculations

All instructors found the average percent of the pretest, average percent of the posttest, the difference between the two, and the ranges of the scores. Two instructors calculated the standard deviation, and one also did median and quartile scores. However they did it, they were all able to observe whether students were learning something in their classes.

Expectations, Outcomes, and Modifications

The math and science content is such that one would expect a student to know very little before taking the course, and a lot more afterward. This was the case in several of the math courses, but in the other courses the pre and posttest scores were closer together. The students learned, but not enough. Why? One reason given by an instructor was that the test was designed by the previous instructor (who may have emphasized different material). Another instructor reasoned that the average pretest score was abnormally high because the students had already been introduced to a certain topic in high school, so he will modify his course to no longer cover that topic.

After observing student behavior and achievement for several years, the math instructors have successfully persuaded the administration to modify a course to meet every day instead of twice a week. The prudence of this decision will no doubt show up positive in future assessment tests.

Most of the instructors gave some statistics on how many students completed the courses compared to how many registered, and most used only the completers (a representative group) for their calculations of student learning. The instructor who used WEB-CT was able to see which questions were most often missed. Those questions were either not written clearly and will have to be modified, or else the students didn't understand those concepts. Based on those results, the instructor can now plan to spend more time and effort on certain topics. The same instructor did a similar analysis of individual questions on another course pre/posttest, but it took more time without WEB-CT. One problem with WEB-CT is that it doesn't automatically select only the completers (those who took both the pre and posttest). Therefore, having the scores of the poorer students who dropped included in the pretest might give a false impression that more learning occurred than actually did.

One instructor did a separate analysis of the laboratory learning as opposed to the lecture part of the courses. She was not surprised that many students have trouble with metric measurements, and new strategies will have to be employed to teach them. For one course, she did an exit survey to assess students' perception of both the lectures and the labs. It was an IVN course, and the students would have preferred a live teacher in the room with them, although they liked the experience of comparing the results of their experiments with the results of students from other tribal college sites. These students were also asked to list which lab experiments they liked best and which they liked least and why. As a result of this data, the instructor will either modify or replace the ones they didn't like.

All four of the science and mathematics instructors included syllabi of the courses they taught during spring semester 2004, and all had objectives that seem measurable. All posttests showed an increase in average scores over pretests. Following this report is a summary of all of the increases in posttest percentage scores over pretest percentage scores. Also included are samples of various data and calculations submitted by two instructors for assessment of their pre and posttests.

SCIENCE AND MATHEMATICS ASSESSMENT

Pre- and Post-test Summary

The Science and Mathematics courses are listed below (without identification) along with the difference between pre and posttests. All courses tested reflect an increase in student learning in various degrees, and also drew various degrees of satisfaction from the instructors of the courses. Some instructors will be making changes to improve either the tests or the way the concepts are taught.

Course	Difference (%)
1	11.3
2 (lab)	7.1
3	16.0
4 (lab)	11.0
5	26.3

6	75
7	50
8	55
9	65.4
10	59.5

Introductory Chemistry - CHEM 115

Calculations

CONCEPTS AND LAB TOGETHER:

Avg. score of pretest = Σx/n = 147/16 students = 9.19 right out of 20 questions
Range of pretest scores = 5 – 13
Avg. % score of pretest = 9.19/20 questions = **45.9%**

Avg. score of posttest = Σx/n = 198/16 students = 12.4 right out of 20 questions
Range of posttest scores = 7 - 18
Avg. % score of posttest = 12.4/20 questions = **61.9%**

% difference between pre and posttests: 61.9% - 45.9% = **16.0%**

% increase in scores = difference/ pretest avg. = 16.0% /45,9% = **34.8% increase**

LAB ONLY:

Avg. score of lab pretest = Σx/n = 69/16 students = 4.3 right out of 10 questions
Range of lab pretest scores = 2 – 6
Avg. % score of lab pretests = 4.3/10 questions = **43%**

Avg. score of lab posttest = Σx/n = 86/16 students = 5.4 right out of 10 questions
Range of lab posttest scores = 3 - 8
Avg. % score of lab posttests = 5.4/10 questions = **54%**

% difference between pre and post lab tests: 54% - 43% = **11%**

% increase in lab scores = difference/lab pretest avg. = 11%/43% = **25% increase**

Algebra 1	Pretest	Posttest	Increase
	1	74	73
	0	72	72
	2	97	95
	0	80	80
	0	81	81
	3	82	79
	0	78	78
	15	99	84
	0	87	87
	0	78	78
	13	99	86
	4	91	87
	2	84	82
	0	76	76

Statistics 2	Pretest	Posttest	Increase
	24	84	60
	40	92	52
	24	76	52
	28	80	52
	36	68	32
Mean	30.4	80	49.6
St. Dev.	7.266	8.944	
	361	272	
Min	24	68	
Max	40	92	
Range	16	24	
Q1	24	76	
Median	28	80	
Q3	36	84	

	32	82	50
	0	67	67
	2	74	72
	6	80	74
	1	74	73
	8	91	83
	6	91	85
	2	77	75
	0	82	82
	5	87	82
	3	38	35
	10	69	59
	6	87	81
	9	55	46
Mean	4.642857	79.71429	75.07143
St. Dev.	6.788958	12.81162	
Min	0	38	
Max	32	99	
Range	32	61	
Q1	0	74	
Median	2	80.5	
Q3	6	87	

ANALYSIS and MODIFICATIONS

[Narrative by Algebra Instructor]

After examining my data, I reached the following conclusions. The average Pretest score in Algebra 1 was approximately 4.6, which shows the students generally didn't know the material at the beginning of the semester. The average Posttest score was approximately 79.7 which is a C+/B-. This shows me the students who remain in the class satisfactorily achieved the objectives of this course. Additionally, the average Increase was a 75% gain in understanding the objectives. I feel happy with this data, and will continue in this fashion next semester. I will again, evaluate the methods at the end of that semester and add the new data to the existing data.

In Statistics 2, however, the data isn't quite as convincing. The average Pretest score was approximately 30%, while the average Posttest score was 80%. This results in only about a 50% Increase in understanding of the objectives. I think, perhaps, one problem might be an exaggerated average Pretest score. Because the test was multiple choice, the "guess factor" comes into play. I suspect, if the average student guessed correctly about 25% of the time, the true amount of understanding of the objectives at the beginning of the semester would be closer to 5%. In any case, I will try one

more semester in a similar fashion and examine the new data once again before I make any significant changes.

CAREER AND TECHNICAL EDUCATION

CTE Assessment Introduction

The Career and Technical Education (CTE) Department currently has seven full-time instructors teaching the CTE programs offered at Turtle Mountain Community College (TMCC). Of the seven instructors, six participated in the final course level pre/post-assessment reporting and/or provided folders with completed reports and findings and/or a statements as to why assessment was not done at the course level in their program(s).

The CTE instructors that participated in the assessment reporting mainly used quantitative content in their reports; however, it was mentioned in three of the six reports that these instructors also felt it necessary to implement a criterion based assessment to gain a better picture on how well their students were able to apply what they have learned from the course. For instance one instructor noted, “In my scoring guide (criterion reference) for this course describes the criteria that will be applied to determining if the student has

achieved mastery of the learning task or, the “level” of what they know and can do. A combination of the two types of assessment establishes and describes the specific levels of achievement for students in these courses.” The three instructors feel that this type of assessment would be more practical based on the way that learning is achieved in the majority of CTE programs because they are hands-on learning programs and mastery of skills learned show up in final projects.

Of the participants, all mentioned in their reflections that improvements were needed to better the teaching strategies they are currently using in their courses. Three of the five felt that they would need to use both types of assessments to gain an accurate picture of student learning. One instructor felt they would have to develop better assessments than was currently utilized in the program due to the restructuring done in the program.

The objective was to assess the effectiveness of the teaching techniques and level of skills to be learned by the student by the end of the course and to develop educational programs targeting the Career and Technical Education students. The assessment results will be used to guide current and future instructors in planning their course strategies for effective learning.

Assessment Description

Details of the Career and Technical Educational programs and the evaluation efforts of the instructors have been described in the reports for the end of the academic year of 2004. This report was prepared describing the pre and post-assessment efforts and their results. The evaluation efforts and assessment results of the participants are briefly described below.

Business/Accounting Program Evaluation

Results and Conclusions

In this program, only one course was administered a post-assessment and from this the instructor gathered that at least 80% of the students completed the course with much more confidence than from the beginning of the course.

Reflection Plans

The instructor felt the need to adapt to the learning style of students in the way of recapping each lesson where there is a need to do so. Other reflections done by observation in the classroom were to work more with terminology, restructuring some of the courses and added more real world projects, and also do some group assessments rather than individual assessing.

Business/Office Management Program Evaluation

Results and Conclusions

The pre-post tests were based on a variety of instruments geared toward the skill needing to be mastered in a specific course. There was however no pre/post-assessments done therefore showing no actual data in the report.

Reflection Plans

To develop better communication between the instructor and the student as far as how each of the courses has an impact on community efforts regarding to projects done in the course.

Commercial Art Program Evaluation

Results and Conclusions

The results showed a steady increase in all courses with a 75% - 100% increase in knowledge gained from the pre-assessment data to the post-assessment. The assessments used a Likert-type scale, containing five indicators representing Commercial Art activities and awareness. Responses were recorded using the following scale:

Response Levels

Strongly disagree	Disagree	Somewhat agree	Agree	Strongly Agree
1	2	3	4	5

The greater portion of the students went from scoring at a level 1 (strongly disagree) in the pre-assessment to a level 5 (strongly agree) in the majority of the questions in the post-assessment.

Reflection Plans

The instructor felt that more time was needed to spend on projects geared towards problem solving and on the design principles. Also, to develop a criterion based assessment for all the courses in the program would be more viable due to a project based curriculum.

Computer Support Specialist Program Evaluation

Results and Conclusions

In this program, only one program was administered a pre/post-assessment it is the Networking Academy program which provides students with a complete online curriculum including all assessments. Students are given both a pretest and posttest. Pretest is given at the beginning of semester 1 and the posttest/final exam is given at the end of semester 4. Cisco compiles and records all assessment information at the following website. However, no statistical or analytical information is available to the instructor as to how

each student did with respects to the different learning outcomes of the courses.

Reflection Plans

Although the instructor only assessed one program he/she now realizes that assessment is major part of the learning process and feels he/she can better prepare for it in the summer so that when fall courses begin they will have a better grasp on the assessment process and what needs to be done.

Early Childhood Program Evaluation

Results and Conclusions

There is a significant increase of students who acquired the knowledge and applied it to complete the questions in the post test assessment. However, this type of assessment (norm-referenced) fails to analyze the overall performance of my students. These scores earned by each student only calculate a class mean, median, and range.

In the scoring guide (criterion reference) for this course describes the criteria that will be applied to determining if the student has achieved mastery of the learning task or, the “level” of what they know and can do. A combination of the two types of assessment establishes and describes the specific levels of achievement for students in these courses.

Reflection Plans

The instructor plans to develop an assessment for the courses that combines the two types of assessment. However, feels that he/she is not quite sure this will work, or if this will be a more complex method of assessing students. The instructor feels the need to develop an assessment test to show students have met the goals and objectives in each course.

Entrepreneurship & Small Business

Results and Conclusions

The instructor from this program did not use a pre/post-assessment in either of his/her courses to date. So, no results or conclusions could be gathered from this program.

Reflection Plans

The instructor did state however, that he/she would develop assessments for future semesters beginning with Summer Semester 2004. From this summer semester, data could be analyzed from assessment results to draw more realistic conclusions about the materials and methodology of instruction for his/her courses.

Summary

To the extent of what faculty felt they made a difference in student learning seemed to be positive from the data provided from each of the instructors. There was a significant increase of students who acquired the knowledge and applied it to complete the questions in the post test assessment.

The positive feedback from the participants was that pre and post-assessments gave results that could be used to improve the current teaching strategies of the instructors and where they may need to spend more time on a topic to better assist the students.

The main concern from the participants was that criterion based assessments needed to be developed for the majority of the CTE programs as they are more hands-on programs. They also showed how a criterion based assessment should not be used alone and that the quantitative assessment should also be utilized. The two together would reflect better results of Career and Technical Education.

Another concern gathered from some of the instructors, was that there is inconsistency between all the instructors in the way data is collected and statistics are determined from this data. They feel the need that all instructors should be on the same page as far as an assessment that is designed steady

across the board, and if a criterion based assessment is needed then it to should be designed with consistency across the board.

Yet another concern was and I quote, “There are still some things that I’m still unsure of when it comes to the assessment process. For example, when is it a good time to assess students? The goal of assessment is that student learning is taking place. Well in most cases students entering courses have little or no knowledge of the subject at hand. So is it fair to assess students at the very beginning of the course?”

SOCIAL SCIENCE CURRICULUM AREA

COURSE LEVEL ASSESSMENT

SPRING 2004

INTRODUCTION-

The instructors within this curriculum area are three in number. They are Julie Desjarlais, Leslie Peltier, and Rollin Kekahbah. They were not able to include in the course level assessment effort all of the courses they instructed in the Spring Semester 2004. Neither was what they included as the results of their effort representative of a standardized format. However, each of the instructors determined, in keeping with the relatively new institutional focus of the need for curriculum assessment, to make a

reasonable and meaningful first step toward evaluating the progress of their students through a pre and post-test approach this spring semester. The following is a summary of their efforts and their findings.

Student learning in the instruction of American Government and Politics was assessed by the use of a Spring Semester pre and post-test approach. As a result of this approach the instructor reported satisfaction with the learning of the students in American Government and Politics as evidenced by the post-test results compared to that of the pre-test results.

Likewise, the instructor, using the pre and post-test approach to assessing student learning in the course entitled, Sociology of Indian Reservations, was happy with the results of the testing in that the results reflected a significant degree of learning in this course.

However, the instructor was not happy with the results of assessment in the course entitled, Indian History II. The difference between the results of the pre- and post-tests in this course did not reflect appreciable learning in this course. The instructor was critical of the preparation of the test believing that response to some of the items on the test was an unfair expectation because the class presentations did not always include information on the content evident on the assessment test.

To address other problems identified by the instructor it was suggested that perhaps using WebCT as a format for assessment could be helpful, not just because of its convenience to the students and the instructor but because of the program's evaluative qualities.

The instructor of the course entitled, U.S. History determined that very few wrong answers were evident after grading the post-test and, therefore, the students have increased their knowledge of the four questions asked. A comparison of responses by the students taking the post-test to all the students taking the pre-test did not include the same students in every case. The numbers taking the pre and post-tests were different.

The instructor of the course entitled, Chippewa History, determined that the results of the pre- and post-tests were inconclusive as they did not reflect a method by which the results could be tied to the institutional goals. The method or content of the assessment items, the instructor believes, were too subjective calling upon an opinion by the student and, in turn, making it difficult to evaluate the responses.

The instruction of the course, Native American Literature II, used three questions in the pre and post-test assessments. The result of the assessment showed a 100% improvement on the first question, while the second question was correctly responded to on both the pre and post-tests. The third

question results indicated a significant improvement of responses when the pre- and post-tests results were compared.

The post-tests for the course entitled, Traditional Dance, showed almost 100% correct answers which reflected remarkable improvement over the pre-test results. The instructor, however, was not satisfied with the process used for these tests and noted she will use a criterion-referencing methodology next semester.

The instructor of Macroeconomics was satisfied that substantial improvement has been made by students taking the pre- and post-tests. She determined that splitting the nine students into two groups, one representing those with prior knowledge of macroeconomics and the other without prior knowledge of macroeconomics, was beneficial to understanding the range of responses to the assessment tests.

CONCLUSIONS

The overall results of this assessment effort must take into account the nature of the times. Because of the problem of the faculty not having the Assessment Operations Manual in their possession until October 2003, the faculty was not well oriented in the content of the Manual. In fact, the faculty member selected to be a new coordinator did not assume this responsibility until the Spring Semester 2005 was underway. As a result, the

curriculum assessment effort got off to a shaky start with a largely agreed to notion that the October 2003 Assessment Operations Manual was a very weak guideline to what was to occur in the Spring Semester and thereafter. Nonetheless, the faculty pressed on (ably led by Andrew Johnson) making adjustments to the original Manual approach as the need presented itself.

SUGGESTIONS

Based upon the results representative of the Spring Semester 2004 Social Science curriculum assessment noted above one suggestion that could be considered would be to seek uniformity in the method by which the assessment is done. For example, if it's possible, have the faculty agree to a standardized assessment tool such as ACT to accommodate the need for determining how well the instruction of social science is being addressed by the instructors. There may be a difference of opinion but the major reason this institution exists is to provided the students an adequate to excellent chance to acquire the 3 R's and, if this is true, a standardized test could be chosen to address the need for standardized assessment. If there are other parts of the curriculum that are not mainstream but deemed necessary to student learning then, perhaps, assessment instruments could be devised to accommodate this need. Another consideration could be to make use of the WebCT program for instrumentation and analysis of the assessment tests

that might be beyond the ordinary curriculum. Whatever the case, it is possible that NCA would look askance at assessment tools too loosely constructed to provide for meaningful results and evaluation.

Arts and Humanities

TMCC Institutional Goal #5:

> "Continuous assessment of institutional programs and student academic achievement for the purpose of continuous improvement of student learning."

The purpose of this comprehensive assessment report for the Arts and Humanities Department is to determine if Institutional Goal #5 is being met for the academic term, Spring 2004.

To complete the report, each faculty member in the Arts and Humanities was asked to contribute course syllabi, samples of the pre/post-tests used in each course, data derived from the pre/post-tests and personal reflections on the test outcomes.

This report is divided into two sub-sections: Part A – Collection of Data and Part B- Faculty Reflections on Course Outcomes.

In the initial section, the data has been collated into a chart for easy reference. The viewer will note that the majority of students did increase in test scores between pre/post-testing.

The second section, Part B-Faculty Reflections on Course Outcomes, is considerably different in nature. In this section, faculty observations were included. Each faculty member who

submitted pertinent information for a category was directly quoted. The viewer will note that the faculty did learn from the assessment experiences. Some faculty determined that their methodology needed some revisions. Some faculty noticed a trend in student outcomes that warranted further study into course objectives and goals, perhaps leading to the creation of new courses (or course related laboratories) altogether. Several faculty also indicated that the testing process needs to be revised.

One faculty member mentioned that there seemed to be a relationship between ACT scores and post-test scores, and attendance and post-test scores. A few faculty members felt it was important to reflect on the fact that course content cannot be taught in an isolated manner, but had to be more relevant to the current needs/values of the students.

One faculty member generated statistical data that reflected students' abilities according to specific content area. Perhaps this is an area that can be supported by more faculty in the future as it could prove to be a valuable tool in cross-referencing objective data in specific content areas throughout the various academic programs offered at TMCC.

In general, most faculty felt that this process was in the best interests of the students. It is their hope that the material found within this report be used to further the academic learning of the students in attendance at TMCC.

Part A – Collation of Data

The courses included in this assessment are Fine Arts and Aesthetics, Painting I, Sculpture I, Ojibwa Language I and II, American Indian Games, Composition I and II, Children's Literature Assessment, Beginning Fiddle, Beginning Piano, and Theory I.

Class sizes ranged from 3 students through 31 students. The following chart demonstrates the data generated by pre and post-tests in each of the classes.

Course	n	PRE-TEST			POST-TEST			Δ between pre/post AVG scores
		AVG %	MEDIAN %	MODE (corresponding letter grade)	AVG %	MEDIAN %	MODE corresponding letter grade)	
Fine Arts and Aesthetics								
Painting I								
Sculpture I								
Ojibwa Language I								
Ojibwa Language II								
American Indian Games								
Composition Ia	31							
Composition II	15							
Composition II	10							
Composition II								
Children's Literature Assessment	10							
Beginning Fiddle	6	56	23	F	78.8	91	A	+35
Beginning Piano	9	41.6	17	F	75.6	93	A	+34
Theory I	3	42	40	N/a	77	76	N/a	+35

In each course, the scores indicated that students had higher scores on the post-test than the pre-test (see final column of above table regarding score change). Therefore, assuming that the pre-and post-tests were valid and reliable indicators, the majority of students in each course did indeed learn as a result class instruction.

Part B – Faculty Reflections on Above Data

Faculty were required to assess pre/post-test data regarding three outcomes: methodology (teaching approach), course content/scope, testing procedures (reliability and validity of data). In addition, faculty were invited to share other observations they may have had during the process. The following material details the faculty observations.

I. Methodology

a. Composition II – The instructor noticed a general weakness in the students regarding paraphrasing. The instructor stated:

> Since paraphrasing is an area that presents challenges to most of the students, it may be necessary to devote even more time during the Composition II course to learning how to paraphrase. Perhaps if the class worked together to write a short paper at the beginning of the semester, students would more fully understand the process.

b. Composition II – The instructor noticed a general weakness in the students ability to retain subject matter over extended periods of time. The instructor suggested this may be the case because the course material is not presented in a manner that makes it relevant to the student:

> Overcoming short-term learning must be accomplished by causing the learning to be integral with the students' sense of self-identity. … what must be developed in students is their ability to see permanent value and relevancy for the learning in their future. To accomplish this objective… Students must be given the opportunity to practice skills and concepts… Practice should be done under laboratory conditions (computerized writing labs) under supervision of the instructor…Rationale which correlates the utility of the various units of instruction with their lives in the "world" should be provided by the instructor and tested by the students each academic term in the community.

c. Children's Literature Assessment: The instructor noted that there were several areas of concern with the manner in which this course was presented because, for the first time, it was

offered as an e-learning course rather than as a traditional classroom course. The difficulties were directly related to lack of instructor/student contact options. The solution offered by the instructor is that this course be modified and offered as a hybrid course rather than as an online course:

> This was the first semester that Children's Literature has been taught online, and a number of problems became evident. When the course has been taught face-to-face, many books have been viewed and critiqued in the classroom. Because of copyright laws, books that were showed to students in the classroom could not be showed to them online. That created problems since students needed to go to a library to look at books. It is not practical to buy copies of every book for students, yet for the course to be meaningful, they do need to see a lot of children's books. Since some of the students in the class were not on campus for other courses, many of them had difficulty looking at books in the library. Even those on campus sometimes had problems since someone else may have checked out a book they also needed.
>
> Another problem was teaching students how to use the Fry Readability Graph. Students often have trouble with this and need to be shown how to determine reading level several times before it makes sense to them. Although the website they were directed to use provides very good instructions, many of them were unable to follow them. Those students who had other classes on campus contacted the instructor and

received some face-to-face instruction. However, not all students taking an online class can meet with the instructor.

It took so much more time to cover units online that the course did not cover as much material as has been covered in the past. This is a problem since an online course needs to be comparable to a face-to-face one.

Some of the problems can be solved simply by knowing what they are. Possibly Children's Literature is a course that would be more effective as a hybrid class rather than completely online. That way books could be shown to students in the classroom without violating any copyright laws. Activities such as learning how to determine reading level could also then be done face-to-face. Another possible alternative would be to use more video demonstrations so that students could see how activities are done.

II. Course Content/Scope – Instructors offered short synapses of the scope of the courses as a basis for determining the content areas that were included in the pre-and post-tests. In most cases, the entire course content was not included in the pre- and post-evaluations. The Ojibwas Language instructor noted that because of the limited backgrounds of the students enrolled in the course, material is routinely addressed in class that is not on the course syllabi. This material was not included in the pre- and post-test material.

a. Children's Literature Assessment:

The outcomes for the course centered on students knowing how to select, evaluate,

and use literature for children…The outcomes for the course were centered on students knowing how to select, evaluate and use literature for children.

b. Beginning Fiddling and Piano:

Students learned parts of the instrument, note-reading, simple repertoire and technique… The pre-and post-tests measured students theoretical understanding of technique abilities in note-reading.

c. Theory I:

Students were tested in only one area of Theory: basic notation principles i.e. pitch notation in all clefs and rhythmic notation (simple and compound, multi-meter).

d. Composition II:

This course provides guided practice in writing with an emphasis on more demanding writing situations. It includes an introduction to the research process…The outcomes for the course centered on punctuation skills and recognition of the characteristics of an MLA source-supported essay.

e. Ojibwa Language

I also have to teach them the Ojibwa culture and the teachings of the Anishinabe people. The Circle of life for the Indian people is never ending with many issues that need to be taught with the Ojibwas Language, such as the scientific, the mathematical, the art of storytelling, visual arts and the humanities.

III. Testing Procedure – Since this was the first time the faculty had conducted pre- and post-tests for the purposes of Institutional Goal #5, some observed strengths and weaknesses in the nature of the tests.

a. Children's Literature Assessment: The instructor noted that a test that included only true/false questions was not appropriate to assess student comprehension of the entire course content because the results are not reliable:

> Clearly, the assessment instrument needs to be modified. The questions used were taken from final tests used in the past and do not adequately cover everything that is taught in the course. In addition, the questions used are all true-false questions. Many students guessed at the answers, and since the test was quite short, luck entered into the scores they received. Different kinds of questions and more questions need to be included to make the instrument better.

b. Ojibwa Language: The instructor noted that the tests were not valid. Based on deficiencies the instructor noted, the test will be revised for the next semester and will reflect the course objectives:

> The Ojibwa Language program should have its own pre- and post-test in the Ojibwa language and it all should be done in the Ojibwa Language.
>
> I will make my own pre and post tests for fall semester 2004.
>
> I did do a post-test using the Seven Teachings pre and post test…The Seven Teachings are automatically connected to the Ojibwa

> language, but they should not be used for a pre and post test as this is a language class and the language of Turtle Mountain Chippewa people is taught in this class along with many other teachings.

c. Sculpting, Painting, Piano, Fiddle: The instructors noted that pen/paper tests may not reflect courses which are more performance-oriented. Faculty members reflected on the need to utilize tests that reflect the dual nature of the courses (theoretical and performance ability):

> The results of the studio classes were very similar. The majority of the students did not score well on the pre-test and the post-test did not show significant improvements. I find that many of the students struggle with the terminology that is presented throughout the semester, yet technically they understand how to create with the materials presented. The process tends to become easier to understand from a demonstration than from information that is presented within their textbooks. After discussion with Dr. Hess, we both felt that perhaps we need to also apply questions on the assessment that apply to a reflection of the student's application of technique and understanding of materials and tools. I know that the students have improved upon their skills from the beginning of the semester to the end of the semester; however, the written assessment, the way it is designed now, does not show that improvement because it is based on an understanding of the knowledge of the language not the knowledge of the skill. Therefore, the existing assessment will need some serious adjustment.

> Piano and Fiddle: While students were not required to perform on the pre- and post-tests, the performance nature of these classes were taken into consideration. Thus, students were expected to discuss the performance aspect from a theoretical nature. The results were both objective and reflective of the course content….The purpose of the pre-test served as an student introduction to the scope of the course rather than as an indicator of student abilities.

d. Fine Arts and Aesthetics: The instructor noted that test-taking is a learned skill. Therefore the students who completed several chapter tests throughout the semester scored higher on post-test scores than those students who did not complete the chapter tests. According to the instructor, another variable which may have contributed to higher post-test scores, is the fact that regular testing reinforces course content through repetition:

The assessment results for the FINE ARTS & AESTHETICS classes showed a more consistent improvement. Approximately 62% of the students showed an improvement on the post-test. A number of chapter tests are presented during the semester and the course consists of lectures and presentations with usually only one project created for grading. The students may be more comfortable with taking a pre and post-test because they are more familiar with the

process. Also, the art language is being read and reinforced more frequently. Perhaps reinforcing the terminology usage has resulted in the better test scores.

IV. MISC

a. Composition II: The instructor discusses the possible relationship between pre/post-test scores and ACT scores:

> Student scores on the exit test were compared to ACT English score. Of the five students who did worse or the same on the exit test, three had ACT English scores in the top 1/3 of the class and two had ACT scores in the middle 1/3 of the class.

b. Composition II: The instructor discusses the possible relationship between post-test scores and final grades:

> There appears to be a possible similarity between students' final grades and their scores on the exit test. Only one person whose final grade placed her in the top 1/3 of the class was not in the top 1/3 on the exit test, and only one person who did worse on the exit test was not in the bottom 1/3 of the class for final grades.

c. Composition II: The instructor discusses the possible relationship between post-test scores and attendance:

> A possible pattern emerges when student scores on the exit test are compared with class attendance. Of those who scored the same or worse on the exit test, all had missed numerous classes or portions of classes. In contrast, all of the ones who scored in the top 1/3 on the exit test and in the top 1/3 for final grades had excellent attendance.

> While the number of students completing the exit test (fifteen) is rather small and does not include all of the students who completed the course, the findings do suggest that class attendance may be a better indicator of possible success in the class than either the preliminary assessment test or ACT scores.
>
> All fifteen of the students who completed the exit test also submitted the final paper that was a class requirement. The students who did the best on the exit test also generally did the best on the final paper, and the ones who had lower scores on the exit test—especially the ones with lower scores who did worse than they did on the preliminary test—also had lower grades on the final paper.
>
> Test results indicate that attendance is critical to success in the course. The challenge will be making students realize how important attendance is.

d. Composition II: The instructor reflects on methods for improving long-term cognitive retention. Solutions offered include: creation of preparatory courses, laboratory assignments, practice with knowledge transference:

> Many students tend to be short-term learners. They show some talent in packing short-term memories with sufficient data to pass exams but have difficult retaining information and skill for long-term usage. The impact of short-term learning is evident on tests that cover material studied over a long period of time. Students are hindered in

classes when they have not retained prior knowledge from prerequisite courses.

It is also evident in the student writing that many students do not apply what they have learned. Writing habits are difficult to change, and change will only happen when students make a conscious effort to do so. More repetition appears to be needed so that students will retain and apply what they have learned. Perhaps writing practice (on computer) in the technology center under the supervision of the instructor would help.

Students also seem to have difficulty transferring what they learned about essay writing in Composition I to the writing in Composition II. As soon as they are including source in writing, many of them want to slip into "report" mode and tell about a subject rather than develop an idea. They also have difficulty breaking the habit of copying nearly word for word from source. This is a habit most admit they acquired in high school (or before) and have continued in college. Their responses to the exit questions concerning use of source and paraphrasing (as well as the writing on the final papers) show many of them still do not understand what paraphrasing needs to be. Paraphrasing seems to be especially difficult for students who have low ACT scores in reading. Paraphrasing is a challenge for most students, but if students have difficulty understanding the passages they are attempting to paraphrase and/or have limited vocabularies, then paraphrasing becomes nearly impossible. Some of the students with weak reading skills would definitely benefit from a developmental reading class, which the college does not offer at the present time.

> Such a class seems to be needed to help students acquire skills they need to be successful in college classes.
>
> Since paraphrasing is an area that presents challenges to most of the students, it may be necessary to devote even more time during the Composition II course to learning how to paraphrase. Perhaps if the class worked together to write a short paper at the beginning of the semester, students would more fully understand the process.

b. Ojibwa Language: The instructor reflects on external inhibitors that affect learning. From personal experience, the instructor offers the solution that the strength, sensitivity and attitude of the professor can solve many barriers to learning:

> Each fall semester the students of Ojibwa Language Classes have a barrier in place that we need to get through together, as their self-esteem is not very high….then one day that barrier is broken and the student is finally accepting proudness in the right way and realizing that the Ojibwa Language and culture of their ancestors is very important and very valuable in their lives. Each student has benefited in some way…because I always put the learner first. I respect and hold the student in high esteem for I am his/her mentor, best friend, protector and even like a parent.

Assessment Coordinator's 2003 – 2004 Assessment Report Summation and Reflection

The assessment activities for 2003 – 2004 centered on the initiation of course-level assessment and a rethinking of program assessment with special focus on the General Education program for the second half of the year. Revision of the Assessment Procedures Manual began after consideration of the NCA report on the institutional self-study efforts. This revision will be incomplete until faculty finishes the re-working of the General Education goals as well as other identified programs and stabilizes program assessment for each program. The General Education program goals have been expanded by faculty, with help from consultants from the original four to a total of nine. Some preliminary study of commercially available instruments for the assessment of General Education goals has begun and will continue through the summer of the 2004. A tentative plan to partially assess these new goals is being coordinated by Dr. Scott Hanson and Andrew Johnson (both assessment coordinators – past and present). The date for pre-testing these goals with such an instrument is now set for August 17, 2004 at 1:00 p.m. Work on the assessment of the expanded General

Education goals will progress under leadership of a new coordinator through 2004 – 2005. Depending how much progress is made by faculty, work on new goals and assessment instruments will be developed for other identified programs during this same year.

Course-level assessment during the second semester was largely experimental and new to faculty; nevertheless, a clear majority of faculty did attempt to ascertain the degree to which they obtained stated objectives for their classes. Most did this by administering pre-tests at the onset of the semester and then post-testing students towards the end of April. These tests, along with a statement of results and conclusions were placed in a folder and submitted to the assessment coordinator. The coordinator turned these over to the Assessment Committee for analysis and reporting, and the outcomes are a part of this report.

Some faculty are exploring different avenues of assessing their efforts, notably by documenting performance and activities which grow out of institutional goals. This is particularly true of some classes offered in the social science area.

All faculty could benefit from additional training and insight into the various approaches to assessing academic achievement. The librarian and the Vice President have accumulated assessment-relevant materials and

made those available in the library. The coordinators have attended the NCA conference in Chicago the last several years. The value of these conferences to involved faculty could be extremely helpful in developing and sustaining a culture of assessment within the institution. Greater effort should be made to involve more faculty in these conferences annually.

The report from NCA disclosed to faculty on March 8, 2004 had tremendous impact on much of the planned assessment. Much of what has transpired with assessment since March has been done in light of what the report revealed about our attempts to conduct meaningful assessment. Faculty feel that since March, great progress has been made towards the day when assessment of classes and programs will become characteristics of the culture of this institution.

The coordinator of assessment involved faculty in a joint review of portions of the NCA report which seem to impact on what we do as educators. Faculty have responded to these sections, and those responses are included here. It is hoped that this will constitute an attempt to connect what we do with assessment and as educators with the general effectiveness of this institution:

Issue	Page #	Action/Rationale

". . . institution-wide comprehensive assessment plan which follows the student throughout their educational process needs to be developed."	5	In the spirit of shared governance, faculty encourage the formation of a committee, which should include people from a variety of groups—college faculty, college staff, administration, board members, students, community members, tribal council members, etc.—to develop a comprehensive plan that will lead to assessment of institutional effectiveness.
"The lack of faculty involvement in top level decisions is a concern, especially in the areas of faculty hiring and evaluation processes."	5	In the spirit of shared governance, faculty welcomes the opportunity to share in the making of top level decisions, such as the hiring of faculty and having direct input into the hiring of faculty within their own disciplines.
"A strategic plan is needed that includes providing for the upkeep, repair, replacement of equipment and physical plant and personnel services that are grant funded."	7	The faculty supports the recommendation of the NCA report, as the sustainability of programs and upkeep/replacement of equipment benefits student learning and the effectiveness of the institution.
"There is a lack of formal evaluation processes for administration, faculty, and staff."	7	The faculty supports formal evaluation of administration, faculty, and board members, as well as students and programs, as an important part of the assessment of institutional effectiveness.
"There needs to be a systematic and formal retention program that addresses student retention."	7	The faculty suggests that a full-time person be hired to determine what can be done and to implement a plan to

		improve student retention.
"Lack of faculty and staff involvement in decision-making through a formal shared governance process needs to be addressed by the college."	7	Previously addressed
"As an institution of higher education matures, gains stability, and is expected to return more and more to its constituents, shared governance becomes necessary for the institution to progress in the areas of effectiveness and efficiency, if not survive in today's environment. Shared governance is not a democratic process, but is a process developed within an institution which calls for the sharing of input by internal stakeholders before a decision is made by the person or persons responsible for and with the authority to make the final decision related to an issue. Shared governance obligates those closest to the heart of issues to provide information and helpful ideas that the person or persons making the decisions may not be aware of. . . . a formal shared governance program. . . would also encourage the productive expression of difference of opinion in a way that is non-threatening to all yet meaningful . . . it is imperative that TMCC develop a formal shared governance process. . . . the visiting team does not believe the lottery system [for selecting committee members for search/screening committees] affords the decision maker(s) input that could be very helpful. . . "	18-19	Faculty recognizes its responsibility to share expertise and insight in the institutional decision-making process and hope administration and board will accept input and recommendations in the spirit in which it is intended.
"Faculty appears to play little, if any role, in hiring new faculty—even in their own department."	8	Previously addressed
". . . they [faculty and staff] are seldom involved in decision-making processes at the college."	8	Previously addressed
". . . assessment of student learning outcomes appears more administratively driven, rather than faculty-owned and driven."	8	Faculty recognizes the past efforts of administration in the assessment process while also acknowledging the need for student assessment to be faculty-owned and faculty-

		driven, and faculty welcomes the opportunity.
"There is lack of correlation between the courses in the general education program and the general education goals."	9	The faculty recognizes the need for further study of this concern.
"There is no institutional effectiveness plan."	9	Previously addressed
"The current assessment plan is in such an infancy stage that it is difficult to determine its effectiveness."	9	Faculty recognizes the need for further work on an assessment plan.
"There appears to be confusion as to the ownership of assessment of student learning. . . . Faculty must have the authority and responsibility for assessment of student learning."	9	Previously addressed
"Outcomes of the assessment of student learning and assessment of institutional effectiveness should drive the budget and the strategic plan . . . . . at present there is little evidence that the budget and strategic plan are driven by data collected from assessment processes."	9	Faculty agrees that unless money and other resources are available to implement necessary changes, assessment can have little value.
"The team believes further consideration is needed to verify that the assessment instruments are measuring fulfillment of the stated learning objectives."	9	Faculty recognizes the necessity for valid assessment instruments to assure that assessment results are reliable.
"The 1993 team identified assessment as an area in need of special attention. The 2000 team also identified assessment as a challenge for the institution. This team was disappointed to find that the institution still had not fulfilled the expectations of the Higher Learning Commission regarding assessment."	9	Faculty is in the process of revising the plan for student assessment. At the present time, instructors are doing course level assessment and are working on a plan to assess programs, including general education.

A progress report [is] due on July 1, 2005 that consists of a plan for assessing institutional effectiveness;"	9	Acknowledged
"A focused visit [should be conducted] in 2008—2009 on assessment of student learning; assessment of institutional effectiveness; and implementation of a strategic planning process linked to assessment."	9	Faculty acknowledges the need to connect assessment of student learning to institutional effectiveness and strategic planning.
"There should be more attention to building the endowment through private donations."	10	Ok
"There do not appear to be plans as well as on-going effective planning processes necessary to the institution's continuance."	10	Faculty acknowledges a need.
"There is no institutional technology plan which addresses future technology issues and also includes dates, timelines, and budgetary detail. . . . The purported technology plan is not a plan, but rather an inventory of technology on campus and does not discuss future needs and replacement of existing technology."	10	Technology has become a vital part of education at TMCC, and faculty agrees that a plan is needed to assure that technology continues to be available.
"A progress report [is] due October 1, 2006 that includes an institution-wide strategic plan. The strategic plan should incorporate the institution's plan for the use, implementation, and replacement of technology."	10	Acknowledged
The following notes in personnel policy manuals are inconsistent with other college policies and practices: . . . 'Turtle Mountain Community College can deviate from any of the described policies. . Turtle Mountain is free to modify, revise or revoke this series of documents at any time without notice to the employee.'"	11	Faculty strongly agrees that the policy that concerned NCA has no place in a policy manual.
"The written plan [due July 1, 2005] for assessing institutional effectiveness should include assessment of student learning that will contain . . . a coherent written plan for assessing student learning outcomes. . . . a plan that is faculty-driven . . . plan that is tied to student learning outcomes . . .employs both direct and indirect measures . . . employs multiple measures . . . assessment instruments that are congruent with stated	12-13	Faculty willingly agrees to assume responsibility for assessment of student learning and to make it a part of the institutional effectiveness plan and strategic plan.

learning outcomes. . . results that are tied to the planning processes to improve student learning."		
". . . institutional effectiveness plan should include an assessment of broader institutional issues such as student satisfaction, employee morale, financial fitness of the institution, facilities, community relations, and other issues. . . "	13	Faculty agrees that such issues are important and must be addressed. Faculty is willing to be a part of the process.
[At the time of the focused visit] the institution should be able to demonstrate in each of its educational programs how assessment data was used in decision-making processes to improve teaching and learning. This should include examples of the collection of assessment data, analysis of the data, decision-making based on the data, teaching or curricular changes implemented as a result of the data, and further assessment of how well the changes have enhanced student learning. These efforts should be primarily faculty-driven."	14	Faculty are in the process of identifying ways to improve teaching and learning and will provide the Administrative Council with recommendations and suggestions.
"Delivering a class within the open library is not conducive to quiet study that is normally conducted within a library. The team strongly recommends that the class be moved to another area. . . Another instance of usurping library space is the assignment of faculty offices to former tutor or quiet study rooms."	19-20	Acknowledged
"The team suggests that the college may find it more economical to consolidate all tutoring efforts in one area . . . "	20	Faculty agrees.
". . . students are only advised to take developmental courses when their skills are not at college level. Instead, the team recommends that students be required to take the appropriate reading, writing, and math course that are needed to increase their basic skills to college-level. They should be assessed again at the conclusion of each developmental course to determine, once more, student readiness for college-level courses."	20	Faculty recommends the creation of an academic success center and mandated developmental classes in reading, writing, and math. Faculty further agrees that students should not enroll in college-level courses until they have demonstrated readiness

		for such courses, even if that means students must remain longer in developmental classes. Faculty recommends that students not take core-curriculum classes that lead to associate degrees until they have completed the necessary developmental classes. Faculty is in the process of making the recommended changes.
"While the selection of courses that comprise the general education program at Turtle Mountain Community College is considered normal at community colleges, the stated goals are narrow since they only cover problem solving, technological literacy, cultural literacy/community service and critical thinking. . . . the total ignores such areas as composition, arts and humanities, history, social science, math and science. . . . the assessment of general education should be revisited to select more appropriate instruments than measuring courses completed during the first semester at the college. The effectiveness of general education should be measured after all of the defined courses are completed. There are no capstone courses in the general education program that can serve as appropriate areas for assessment. Capstone courses are generally found in the final semester of study in a student's major area, that incorporate all of the skills attained over the entire program."		
"The TMCC usage of the capstone label to foundational courses. . . and general education goals creates confusion in the context of the purposes of a capstone course in higher education for many reasons. . . . these TMCC courses are . . . beginning course, not advanced courses. . . . these TMCC courses are essentially 'stand-alone' courses and do not take an interdisciplinary or multiple-perspective approach to the high learning skills. . . the tying of each of the stand-alone 'capstone' courses to one of the four general education goals is additionally not matched by the assessment tool chosen to measure the objectives of those goals. . . . Overall, this unusual use of the capstone label may be symptomatic of a need to research and become more familiar with the literature and scholarship of assessment. Geographical isolation	25-26	Faculty is no longer using "capstone" courses or the capstone label in the assessment process.

may also lead to academic isolation from networking with colleges with proven assessment programs."		
"Of great concern to the team is the identification of general education goals and their corresponding assessment instruments. Although the course and credit requirements are different for the two kinds of degrees [AA an AS], the course requirements meet the expectations of the Higher Learning Commission's GIR 16, however the assessment of general education needs considerable attention. At issue are the assessment instruments and their corresponding goals, and whether or not these goals and instruments reflect values of collegiate learning at the level of the general education core. Many of the instruments outlined in the Assessment Operations Manual may not effectively assess the intended goal . . . Each of these four goals [General Education goals being assessed] is keyed with courses identified as 'capstone' courses . . . Inspection of the general education course requirements reveals a much broader curriculum than these four courses. . . . The college faculty should consider incorporating additional goals that speak to the learning outcomes of a science course, for instance, as well as other content areas required in the general education curriculum."	26	Faculty is in the process of revising program goals.
"While problem solving may be an acceptable general education outcome, the IPDE. . . algorithm constrains the assessment of alternative problem solving strategies. . . of more concern is the instrument itself: the four alternative problems presented . . . have little to do with Intermediate Algebra and quantitative reasoning that may be essential in the selection of alternatives solutions to a problem that has economic consequences. The nature of the questions contained in this instrument trivializes the expectations that students solve problems. . . . The college should research and obtain assessment instruments that provide valid and reliable data . . . . Faculty may want to roll this goal into the critical thinking goal and use a proven instrument designed to assess problem solving and critical thinking skill attainment."	27	Faculty is in the process of revising the assessment instrument.

"The six tasks outlined in the technological literacy rubric do not address an outcome expected of general education, but is more of a screening evaluation of whether or not a student can perform the most elementary of word processing tasks . . . The instrument appears to be more of an input measure, not an outcome measure. . . . the faculty should reconsider more sophisticated instruments that would inform more accurately and completely where future curricular interventions are needed to assure students have technological literacy. The instrument as designed would not provide necessary outcome measures data for improving student learning."	27	Revision is occurring.
"The faculty should be mindful that focus groups provide indirect measure of assessment of this [cultural literacy] goal's objectives. . . . Ojibwa culture in the traditional sense discourages individuals from self-promotion. . . It is unclear if this instrument has been piloted successfully in the context of a gathering of Ojibwa students who are respectful of this tradition. . . the involvement of the Vice-President may influence the conversations . . . The rubric is subjective and inter-rater reliability and rater training will need to occur to assure the results from group to group of students are comparable and consistent enough to inform the assessment committee whether or not this goal is being adequately addressed. . . .the college may want to consider course-embedded assessment strategies. . . "	28	Revision is occurring.
"The internet-delivered instrument chosen to assess critical thinking skills is Accuplacer, an instrument designed for placement into introductory course according to student performance measures. . . it is unclear if this instrument has utility in assessing critical thinking skills beyond the pre-entry level. There are many collegiate critical thinking skill instruments on the market and a faculty committee should review and select an appropriate instrument. . . "	28	Revision is occurring.
"Before the Focus Visit, the faculty will need to examine and revise the general education goals to be more congruent with the general education curriculum. The general education goals should reflect the collegiate nature of the general education curriculum in its breadth and depth. Faculty should be mindful that instruments designed to evaluate student	28-29	Revision is occurring.

preparation for entering college-level work may not be appropriate as instruments for assessing general education and degree outcomes. Instruments chosen should be aggressively piloted in order to evaluate their utility in informing the college whether or not these instruments will provide meaningful data to improve student learning."		
"The Assessment Operations Manual, 2003, limits program outcome assessment to degrees and not the actual programs completed by the student. It should be mentioned that according to the Academic Catalog, these associate degrees are largely general education with a greater emphasis of the arts, humanities, and social science for the A.A. degree or an emphasis of science for the A.S. degree. Many of the program outcome assessment goals are essentially general education goals. What is missing are the individual program outcomes, such as art, business administration, early childhood, English, History, Journalism, Tribal Advocacy—Legal Studies, Music, Pre-Law Curriculum, Secondary Education, Social Science, and Social Work in the A.A. degree, and Biology, Engineering, Environmental Science, Food/Nutrition, Math, Medical Records, Medical Terminology, Natural Resources, Nursing, Pharmacy, Physical Therapy, Pre-Dentistry, Pre-Medicine, Pre-Optometry, Pre-Veterinary Medicine, and Wildlife Studies for the A.S. degree. . . . program outcomes for each of these areas should exist and be assessed as part of the program outcome assessment process. Faculty should take advantage of the commonalities among related programs in the identification of program outcomes. Advanced courses in the program could serve as actual 'capstone' experiences with a course-embedded, authentic assessment activity or set of activities or assignments."	29	Faculty recommends that the catalog makes clear when TMCC has an actual program, which will be assessed, and when TMCC is simply suggesting courses that *may* be appropriate for students to take before they transfer to a four-year institution that does have a program.
"Perhaps Turtle Mountain Community College should consider offering the program [General Agriculture] as a native agriculture that would support cottage industries as opposed to the traditional agriculture of North Dakota."	21	Faculty agrees that it is necessary to look at what the needs of the community are and provide appropriate programs to meet those needs.

"Currently most AAS programs offered are business or health related fields. . . . In light of the high unemployment rate. . . TMCC must do more. It is suggested that TMCC establish additional certificate and AAS degree programs that will encourage entrepreneurship and cottage industries as well as attracting external funding. . . "	21	Faculty agrees that it is necessary to look at what the needs of the community are and provide appropriate programs to meet those needs.
"The Self-Study Report and interviews conducted on campus indicated that most faculty have an 18 credit teaching load. This appears to be excessive, given the usual 15 credits found in other community colleges. While requiring 18 credits appears to generate cost savings in instructional costs, the greater cost is the lack of time and resources for faculty to keep abreast of current developments in their fields, to conduct and evaluate assessment of student learning and institutional effectiveness, to contribute to shared governance, and to participate in the community on behalf of the college. The overall result is a decreased level of citizenship and faculty oversight in appropriate matters that pertain to their work, such as curriculum, shared governance, assessment, and student support. Turtle Mountain Community College should aggressively explore ways of reducing faculty loads to an average of 15 credits in a semester and undertake a thoughtful and deliberate process to involve faculty in the major issues cited by this team: participation in shared governance and implementation of assessment of student learning as well as implementation of assessment of institutional effectiveness."	21-22	Faculty believes instructors should not be teaching more than 15 semester hours/contact hours. In addition, faculty recommends that administration consult with departments concerning appropriate teaching loads.
"Design a plan to collect more of the tuition revenue. . . . Develop a plan for grant-writing that will help the college move forward as directly related to its mission. . . . careful planning would allow for a coordinated effort in writing grants. . . . The institution may want to invest in a Director of Development who would solicit businesses, individuals, alumni, corporations, and friends of Turtle Mountain Community College."	22	Faculty recommends that grants be tied to strategic planning.
This committee [the Recruitment Committee] is probably too large to be effective with retention oversight. . . . there needs to be a person devoted to the responsibility. . . . there should be a person or small task force assigned to reviewing why students leave and proposing ways to encourage retention. . . . There could be intervention steps put into place to lower the	23	Faculty recognizes that recruitment and retention are important and agree that a smaller, yet representative committee, would be better.

attrition figures. A higher retention rate is a goal that would be a win-win for the college and the students."		
"Assessment activities did not appear to be systemic, but rather were episodic, unconnected, and belated, as evidenced by the Fall 2003 implementation of the new general education assessment program. The Assessment Operations Manual was a document prepared for the 2003 Self-Study process, as well as a guide for the 2003 Implementation of the Assessment Plan. The 2003 Plan makes no mention of building on a history or culture of assessment. . . . Previous efforts. . . did not provide clarity of understanding to the team that assessment had advanced to a level of maturation requiring another cycle of improvement; instead, the 2003 Plan appeared to be another start from square one. . . . the Manual appears to set out future aspirations and intents, which, given the context of the impending accreditation site visit, give the appearance of making promises for future compliance when past performance has been less than successful."	24	The manual is in the process of being revised.
"Given the excessive teaching load expected of full-time faculty, it is difficult to expect faculty to exercise a great deal of ownership for assessment and shared governance. They are simply too busy in the classroom to devote time to other matters. . . . faculty participation [in assessment] should be encouraged by granting release time to those faculty members in addition to the Assessment Coordinator to own and evaluate the implementation of assessment of student learning. The duties of the Assessment Committee outlined in the Assessment Operations Manual are appropriate yet rather broadly defined. However, to assign overburdened faculty to carry out these duties may challenge the committee's effectiveness. Moreover, there appears to be an expectation that the Assessment Coordinator will be 'providing an analysis and an evaluation of all programmatic and course assessment activities reviewed by the Assessment Committee that year . . .yet there is no structure in identifying the faculty groups relative to programmatic and course goals and objectives that are supposed to	24-25	Faculty is willing to assume responsibility for assessment of student learning. Faculty, however, agrees that in order to do a good job of assessment, reduced teaching load of no more than twelve hours or a $3,000 stipend is necessary for the members of the assessment committee.

be doing this work."		
"By the time of the focused evaluation, the institution should have reviewed the organizational structure of the Assessment Committee and explicitly defined the lines of communication of assessment results from the course level to the broader general education and programmatic levels. Given the 18 credit faculty workload expectations, the institution is strongly encouraged to demonstrate commitment by providing the resources to do assessment well, and this includes reduction of faculty workloads as well as other human and financial support. Administrative involvement in assessment should be limited to support and indirect leadership rather than that of a co-chair position."	25	Faculty agrees that resources, including reduction of faculty workloads, are needed for assessment to be effective.
"The college should also use care in the selection of consultants to assist in the design and implementation of the assessment of student learning program as well as other institutional projects. The college . . . should continue to develop a core of faculty members who will take leadership roles in assessment design and implementation. By sending faculty leaders to such workshops [AAHE/Higher Learning Commission opportunities to learn about assessment] and conferences, the college will be able to establish a core of engaged and informed faculty members who will then advance and implement a system of assessment that meets the expectations of the Higher Learning Commission."	26	Faculty recommends that faculty have input into the hiring of consultants and scheduling of workshops and workshop topics.