

# **Assessment Progress Report**

## **Status of Mesabi Range Community & Technical College's Outcomes Assessment Plan**

**2001-02**



**2001-02  
ANNUAL ASSESSMENT REPORT**

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## **INTRODUCTION**

Academic and college services' outcomes assessment at Mesabi Range Community & Technical College (Mesabi Range College) is based on a process in which faculty and staff have identified the most appropriate objectives for academic units, specific technical programs, student services, and college services. It employs a wide variety of measurements to discover as accurately as possible whether the department, program, and the institution are achieving the announced objectives in these areas.

The purpose of assessment is to produce feedback to the department, program, administrative unit, and College on the performance of its curriculum, learning process, and/or services, thereby allowing each unit to improve. It is not an evaluation of individual students or of individual faculty or staff.

The goal of this document is to report on the assessment progress for the 2001-02 academic year, detailing the assessment methods, data collection, results, and use of results in the various departments and programs. Assessment at Mesabi Range College has provided useful information and insight on how students learn and what students learn. Collecting systematic data has improved our awareness of how well students can integrate content, skills, and attitudes, thus improving teaching and learning practices.

## **BACKGROUND**

The Higher Learning Commission (formerly the North Central Association of Colleges and Schools: NCA) is Mesabi Range College's institutional accrediting agency. The Commission adopted student outcomes assessment as one of its requirements in 1993. It mandated that all its affiliated institutions develop a comprehensive institutional assessment plan by June 1995. The Commission requires that all member institutions employ student outcomes assessment measures in academic units, technical programs, general education and institutional support services.

The Commission identified ten characteristics of an effective program to assess student academic achievement:

1. Successful assessment flows from the institution's mission and educational purposes.
2. Successful assessment emerges from a conceptual framework.
3. Successful assessment is marked by faculty ownership and responsibility.
4. Successful assessment has institution-wide support.

5. Successful assessment relies on multiple measures.
6. Successful assessment provides feedback to students and the institution.
7. Successful assessment is cost-effective.
8. Successful assessment does not restrict or inhibit goals of access, equity, and diversity established by the institution.
9. Successful assessment leads to improvement.
10. Successful assessment includes a process for evaluating the assessment program.

The Higher Learning Commission recognizes that faculty determination of the crucial issues of each academic unit and technical program is essential and that student outcomes assessment planning is most effectively devised by faculty and staff at the department/program level. A successful program will also address the need for students to understand the purpose of assessment.

In responding to The Higher Learning Commission's mandated outcomes assessment requirement, Mesabi Range College developed an assessment plan during the 2000 spring and summer semesters that described their institutional strategies for incorporating outcomes assessment into academic units, technical programs, general education, and college services. Significant progress has been made during the past two academic years to create a culture of assessment at Mesabi Range College. Through departmental/program involvement and commitment, assessment practices reflect the uniqueness of these units and the diversity of educational goals and missions determined by the academic unit, technical program, and institutional support services.

The initial assessment program has evolved and undergone refinement based on the availability of data, how it was utilized, and for what end. However, the primary purpose of the assessment plan remains unchanged.

## **MESABI RANGE COLLEGE'S ASSESSMENT APPROACH**

The College's assessment approach is dedicated to the assessment and documentation of student academic achievement and student support services. The assessment approach and activities derive from many sources. Primary among them are the faculty's commitment to effective teaching and learning. Faculty administer direct measures of student learning on a daily basis through classroom assessment, while other evidence of learning is gathered through course assessment: tests (standardized and classroom), papers, projects, portfolios, or employer input related to performance of students. Multiple constituencies contribute to the successful assessment operation, including students, faculty, administration, staff, an institutional researcher, advisory committees, employers, and graduates.

The assessment approach is dynamic and evolving, for an assessment of assessment is conducted at the end of each academic year. The College has a commitment to assess, evaluate, and seek to improve its efforts to maximize student academic achievement and student support services.

## **MESABI RANGE COLLEGE'S CAMPUS-BASED ASSESSMENT RESOURCES**

### **Resources**

- **\$134,909** allocated from 1999-2002 in strategic planning, assessment implementation, administration of assessment in-service/professional development days, faculty release time, clerical support, general administration and supplies.
- One hundred CAAP tests @ \$5.00 per test plus scoring fee added to annual budget for CAAP testing (overseen by the Directors of Testing and Placement, Virginia and Eveleth campuses).
- Assessment Coordinator position (50%) established (1999-03), reporting to the Provost and responsible for assessment implementation.

### **Program and Curriculum Review**

- Participatory program review implemented in 1999 with seven chapters of program effectiveness and efficiency; programs are evaluated on a five-year cycle; however, annual cycles provide recommendations on curricular change, technology requests, and requests for professional development funds;

- The Academic Affairs and Standards Council (formerly the Curriculum Committee) comprised of faculty from both campuses provides assurance that each course will cover the essential points for transfer or business/industry expectations without prescribing the specific teaching methods to be used in helping the students learn those objectives or outcomes;

### **Faculty Review and Development**

- New faculty performance appraisal developed in 2001 that includes student evaluation and administrator evaluation.
- Full-time unlimited faculty evaluation developed in 2001; performed once every five years; includes student evaluation and administrator evaluation.
- Faculty meetings and workshops held (beginning fall 2000) for discussion on assessment implementation and sharing of information, convened by Assessment Coordinator and Assessment Committee.
- In-house newsletters, e-mail distributions, and oral presentations, more widely read formats include the Assessment Plan and the annual Assessment Progress Reports;
- Three to five faculty and administrators annually attended The Higher Learning Commission Chicago meetings for the past ten years.

### **Support Services**

- **Testing, Career Advising, and Placement Center** for entry and exit testing for transfer and technical programs; for student goals, graduation, and placement tracking; and for employer and student satisfaction tracking.
- **Office of Institutional Research:** the activities of this office fall into three main categories:
  - Region-wide survey administration, analysis and reporting;
  - Enrollment reporting using the student databases;
  - Support and consulting for other college activities such as The Higher Learning Commission, assessment, and grant writing.

### **Assessment Coordinator**

The **Assessment Coordinator** works collaboratively with the Mesabi Range College's **Assessment Steering Committee** to provide assistance to all programs, academic units, college services, continuing education departments and concurrent enrollment teachers in developing assessment strategies.

The **Assessment Coordinator** chairs the **Assessment Committee**, publishes fall semester classroom assessment techniques and yearly institutional assessment progress reports; conducts assessment workshops throughout the

year; presents Mesabi Range College's assessment efforts at student and faculty fall orientations; informs and instructs new faculty and staff on assessment at the New Employee Orientation in September, and coordinates data gathering efforts with the **Office of Institutional Research** throughout the year.

In the **Office of the Assessment Coordinator**, discipline and program-specific data are kept as a resource for faculty and staff inquiring about various assessment techniques.

### **Office of the Provost**

The **Provost** works collaboratively with the Assessment Coordinator and Assessment Committee to provide assistance to departments and programs developing assessment strategies.

### **Library and Reference Materials**

The following reference materials have been purchased over the past two years to assist faculty and staff with effective teaching techniques and assessment methods.

#### **Assessment Books on Reserve in the Library:**

<b><u>Title</u></b>	<b><u>Author</u></b>
<i>Art and Science of Classroom Assessment</i>	Brookhart, Susan M.
<i>Assessment for Excellence</i>	Astin, Alexander W.
<i>Assessment in Practice</i>	Banta, Trudy W.
<i>Assessment in Student Affairs</i>	Upcraft, Lee M.
<i>Classroom Assessment Techniques (2)</i>	Angelo, Thomas A.
<i>Classroom Research (2)</i>	Cross, Patricia K.
<i>Discussion as a Way of Teaching</i>	Brookfield, Stephen D.
<i>Effective Grading</i>	Walvoord, Barbara & Johnson, V.
<i>Faculty in New Jobs</i>	Menges, Robert J. & Associates
<i>Games That Teach</i>	Sugar, Steve
<i>Improving the Environment for Learning</i>	Donald, Janet
<i>The Invisible Faculty (2)</i>	Gappa, Judith M.
<i>McKeachie's Teaching Tips</i>	McKeachie, Wilbert J.
<i>Teaching Within the Rhythms of the Semester</i>	Duffy, Donna
<i>Tools for Teaching</i>	Davis, Barbara

<i>What's the Use of Lectures?</i>	Davis, Barbara Gross
<i>100 Classic Books About Higher Education</i>	Davis, Barbara
Video: <i>Many Streams One River</i>	Fincher, Cameron

**Assessment Books in the Library NOT on Reserve**

<i>The Assessment Debate: A Reference Handbook</i>	Janesick, Valerie J.
<i>Assessment Practice in Student Affairs*</i>	Schuh, John H.
<i>Designing and Assessing Courses and Curricula</i>	Diamond, Robert M.
<i>Educative Assessment: Designing Assessments*</i>	Wiggins, Grant P.
<i>Handbook of Multicultural Assessment*</i>	Suzuki, Lisa A.
<i>High Stakes: Testing for Tracking, Promotion*</i>	Heubert, Jay P.
<i>Higher Education in an Era of Digital Competition</i>	Hanna, Donald E.
<i>Hot Buttons</i>	Walling, Donovan R.
<i>Open to Change: Strategies in Thinking, Writing Portfolio Approach to Assessment</i>	Grady, Emily
<i>Testing and Assessment in Counseling Practice*</i>	Watkins, C. Edward
<i>Toward the Multicultural University</i>	Bowser, Benjamin P.

\*Electronic Books Located on Library Web Site

**Students**

The mission of Mesabi Range Community & Technical College is to “provide high quality education resulting in rewarding employment, lifelong learning, and the enriched lives of our students and community.” It would only make sense to actively involve our students in the assessment process to ensure that we are achieving this mission.

Mesabi Range College believes that **student involvement** is a critical component in the assessment process. Some of the ways students are informed that they are needed in this role and are active in decision-making and evaluation include the following:

1. Students are informed during orientation of the importance of the assessment process and their needed role in filling out surveys with care and seriousness.

2. Students are informed through the Student Assessment Handbook and on the Mesabi Range College website about the assessment process and its importance.
3. There are many different vehicles in which students can voice their opinions. Some of the typical ongoing surveys that students are asked to complete include the following: Graduation Satisfaction Survey, Student Satisfaction Survey, “Faces of the Future Survey,” faculty evaluations, surveys regarding specific student services departments, and program reviews.
4. Students have also been active on the Assessment Committee and are continuing to provide input and feedback to the committee.
5. Students are encouraged to take an active role on the decisions that are made on campus. One way students accomplish this decision-making is their service on various committees throughout the campus community to share their thoughts, ideas, and concerns. Some of the committees in which students have been active include the following: Judicial Board Committee, Joint Meet & Confer Committee, Student Life Committee, Cross Cultural Education Committee, and College Hiring Committee.

We believe that manageable assessment leading to continuous, incremental change will—over time—make a difference in increasing student success. We welcome student engagement in this critical process.

## **ASSESSMENT INSTRUMENTS AND METHODS USED TO ASSESS STUDENT LEARNING AT MESABI RANGE COLLEGE**

Assessment of student learning has been conducted using a variety of instruments and methods. Mesabi Range faculty uses a combination of assessment approaches to determine whether students are attaining prescribed educational goals.

# Direct Indicators of Learning

## 1. Course-Embedded Assessment

Assessment practices embedded in academic courses generate information about what and how students are learning within the program and classroom environment. Course-embedded assessment takes advantage of already existing curricular offerings by using data instructors already collect or by introducing new assessment measures into courses. The embedded methods most commonly used involve the gathering of student data placed in course assignments. This assessment is a separate process from that used by the course instructor to grade the report, essay, or exam. Course-embedded assessment is part of the curricular structure and students have a tendency to respond seriously to this method. Numerous Mesabi Range programs and academic units use embedded assessment.

## 2. Tests and Examinations

Tests are commonly used in association with cognitive goals in order to review student achievement with respect to a common body of knowledge associated with a discipline or program. Instructors using this assessment measure whether students have acquired a certain process and content-related knowledge.

## 3. Portfolio Evaluation

Portfolios used at Mesabi Range College are characterized by collections of student work that exhibit to the instructors and the students the students' progress and achievement in given areas. Included in the portfolio may be essays, journals, self-evaluations, projects, computational exercises and problems, audiotapes, or videotapes. This information is gathered from in-class assignments.

Information about the students' skills, knowledge, development, quality of writing, and critical thinking is acquired through a comprehensive collection of work samples.

Portfolio assessment on the technical campus allows the program's instructors to assess their technical and general education goals and objectives. Collecting student work over time gives the programs a unique opportunity to assess students' progression in acquiring a variety of learning objectives. Portfolios give faculty the ability to determine the content and control the quality of the assessed artifacts.

#### **4. Pre-test/Post-test Evaluation**

Pre-test/post-test assessment is a method used by academic units at the beginning and at the end of courses. These test results enable faculty to monitor student progression and learning throughout prescribed periods of time. The results have been useful for determining the growth in skills and knowledge during a semester.

#### **5. Videotape Evaluation**

Videotapes have been used by faculty as pre-test/post-test assessments of student skills and knowledge. Disciplines, such as speech and communication, that have experienced difficulty in using some of the other assessment methods have had significant success in utilizing videotapes as assessment tools.

## **ASSESSMENT OF INSTITUTIONAL EFFECTIVENESS Indirect Indicators of Learning**

Mesabi Range College has implemented a comprehensive institutional effectiveness assessment model. The model is comprised of a number of components and assesses the effectiveness of all aspects of college transfer units, technical programs, administrative and student support services.

The major components of the model are as follows:

#### **1. Student Surveying**

Student surveying instruments have become increasingly important tools at Mesabi Range College for understanding the educational and student support needs of students. These instruments have produced important curricular and co-curricular information about student learning and educational experiences. During this process, students are asked to reflect on what they have learned in their general education and student support experiences; generally, what they like and do not like about various instructional and institutional approaches.

Student surveys are conducted in tandem with a number of other assessment tools.

Among the programs currently using these methods are developmental courses, general education, and the College Service division. (**See Appendix.**)

## 2. Alumni Surveying

Surveying of alumni is a useful assessment tool for generating data about student preparation for career work or transfer to a four-year institution. Alumni surveying provides the department and College with a variety of information that can highlight what areas are working well and what need to be enhanced. Alumni surveying reestablished relationships with individuals who want to help the department and College continually improve.

The **Math Department** used alumni surveying for their 2001-02 Program Review. A copy is available in the **Administrative Office**.

## 3. Employer Surveying

Employer surveys can provide information about the curriculum, programs, and general education skills that other forms of assessment cannot produce. Through these surveys, technical/career programs seek employer satisfaction levels with the abilities and skills of recent graduates. The advantages in using employer surveys include the ability to obtain external data that cannot be produced on campus, and the responses are helpful to instructors to discern the relevance of their students' educational and technical experiences. Instructors can assess whether or not they are addressing technical/career goals in a continuously evolving job market.

All technical programs administer employer surveying 180 days after student graduation. (**See Appendix.**)

## 4. Graduate Survey

Each year, all students graduating from Mesabi Range are asked to complete a student satisfaction survey that they submit with their Intent to Graduate form. This survey is intended to see how graduates rate their satisfaction with the college and how it could be improved. It also asks students to give themselves grades in various academic areas and indicate how much progress they made toward reaching educational goals. (**See Appendix.**)

## FOLLOW-UP OF CAREER PROGRAM COMPLETERS

Each year, Mesabi Range College's Office of Institutional Research conducts a follow-up study of students who completed a technical/career program during the previous academic year, and also surveys the employers of those completers, as major components of the College's overall plan to assess institutional effectiveness. We normally get better than 85% response from this mail-out with phone follow-up survey.

All students are also surveyed when they apply for a degree on their satisfaction with their experience at the college. On this survey we usually get a response rate of about 75%. The graduates from Spring 2002 reported high levels of satisfaction with the college. Seventy-nine percent stated they would attend Mesabi Range again. For a detailed summary of the survey and a breakdown by program, see **Table 26 (Status of Graduates within One Year of Graduation)** and the **Graduate Survey Report** in the **Appendix**.

## **Occupational Education Assessment**

We currently have 19 active technical programs approved by the state of Minnesota. Six are Associate Degree programs. We will continue to track student success in occupational programs to ensure that MRCTC students are successful in the workplace and that they complete programs intended for licensure or professional development. Data are gathered from various sources: state and accrediting agency licensure results, student surveys, employer surveys, advisory committees, and industry.

### **MESABI RANGE COLLEGE'S TRANSFER STUDENTS: THEIR DESTINATIONS AND ACHIEVEMENTS**

The data listed in the table titled ***Transfer Sending: Students Previously Enrolled at Mesabi Range College*** found in the **Appendix** reflect students who previously enrolled at Mesabi Range and enrolled at the new institution in Fall '99. Data are currently available for other institutions belonging to Minnesota State Colleges and Universities (MNSCU).

The Office of Institutional Research has identified 60 students who were previously at Mesabi Range and enrolled at one of five State Universities in Fall 1999. These data are reported on summary form only and are for students whose student identification number matches between the institutions.

These 60 students transferred a total of 1992 credits of the 2579 credits they earned at Mesabi Range, or 84%. Their average GPA at Mesabi Range was 2.9 and their average GPA as of Spring 2002 at the State Universities was 2.61, or a difference of 0.29.

## ANNUAL OUTCOMES ASSESSMENT REPORT TIMELINE

<b>August</b>	Departments/Programs' assessment activities during Staff Duty Days
<b>3<sup>rd</sup> Fri. Sept.</b>	<b>Assessment Contact Sheet (FORM A) DUE</b>
	Disciplines, programs, college services submit form to Assessment Coordinator
<b>2<sup>nd</sup> Fri. Oct.</b>	<b>Plan for Assessment (FORM B) DUE</b> Departments/disciplines, programs, college services submit form to Assessment Coordinator
<b>Fall Semester</b>	<b>Classroom Assessment Record DUE</b>
	Individual full and part-time faculty submits Assessment Record to Assessment Coordinator before final exams.
<b>Fall Semester</b>	<b>Submission of Annual Assessment Progress Report by Assessment Coordinator</b>
<b>1<sup>st</sup> Mon. March</b>	<b>Assessment Results (FORM C) DUE</b> Programs, departments/disciplines, college services submit form to Assessment Coordinator
<b>3<sup>rd</sup> Fri. April</b>	<b>Use of Results (FORM D) DUE</b> Programs, disciplines, college services submit reports to Assessment Coordinator
<b>Spring Semester</b>	<b>Classroom Assessment Record DUE</b> Individual full and part-time faculty submits Assessment Record to Assessment Coordinator before final exams.

### CLASSROOM ASSESSMENT Formative Feedback from Students Fall 2001

Good teaching can only be occurring if students are effectively learning. Effective student learning depends on the instructor having a well-developed set of goals for the course and an effective pedagogical plan to meet those goals. Additionally, though, instructors need to know if, in fact, students are learning as they are presuming they are. The information gathered about student learning, in turn, affects the direction of future teaching by assessing the goals, sequencing,

and activities employed by the faculty member. This is what **classroom assessment** is all about.

Mesabi Range instructors have many techniques at their disposal for gathering information about student learning. Much of what an instructor is already doing may be a rich source of information on student learning. Also, the *Classroom Assessment Techniques* handbook by Tom Angelo and Patricia Cross (1993) is an excellent resource on accessing student learning, motivation, preparation, etc. This book is available at the Mesabi Range libraries.

## Classroom Assessment

The following excerpts were recorded on the **Classroom Assessment Record** submitted to the Assessment Coordinator by MRCTC faculty during the fall 2001 semester. After analyzing the **Classroom Assessment Techniques (CATs)**, instructors shared in their reports how the data affected their teaching and students' learning. To preserve the privacy of individual instructors, names are not mentioned.

### Critical Incident Questionnaire

An instructor sought answers to the following questions at the end of the week:

*At what moment in the class this week did you feel most engaged with what was happening?*

*At what moment in the class this week did you feel most distanced from what was happening?*

*What action that anyone (instructor or student) took in class this week did you find most puzzling or confusing?*

*What about the class this week surprised you the most? (This could be something about your reactions to what went on or something that someone did, or anything else that occurs to you.)*

- The students expressed in the questionnaire how much they liked the group exercises and classroom activities. Next semester, I will include more of these into class time because the students responded with enthusiasm to the in-class activities. One student wrote on the Questionnaire: "During class, it wasn't all work. We had some fun and laughed." Students learn best in an atmosphere that fosters learning and usually that consists of various teaching techniques. I really like the **Critical Incident Questionnaire**. I use it several times throughout the semester.

## The Minute Paper

Faculty asked two key questions in this assessment: *What was the most useful or meaningful thing you learned during this session? What question(s) remain uppermost in your mind as we end this session?*

- The results were no surprise to me, for the most part. The results of this assessment were effective towards my teaching method/style in the sense that I followed up that classroom session with another classroom session discussion on the students' thoughts about the subject matter and how it affects all of us in society today, especially related to "college life." I might not change the method in which I used this present term, however, I will schedule in another classroom session in future terms for more opportunity to hold discussion and a question/answer forum not so much for the purpose that students did not currently understand the material presented, but for an opportunity for repetition to happen and really "send home" the message.
- I am happy with the way I presented the "if/else" selection structure. I need to always use examples suggested by the students for one of the examples. It always takes a while to grasp all the finer points. . .going back over each step uncovers something that is not quite clear.
- The first time I used the questions, I discovered that students like variety and don't want to be anchored by familiar activities. When teaching this class again, I will take note when I began the activities and move that date up by at least a week.
- The students unanimously comprehended the new material and were ready to incorporate it into their writing assignments. It was critical that the material be understood before students attempted to use it correctly. I felt that perhaps I spent too much time introducing the material and practicing the correct usage, but according to the Minute Papers, I spent just enough time! No changes are needed in future presentations. I would like to use my assessment techniques and others from the *Classroom Assessment* handbook. Students sincerely enjoy giving feedback and contributing to their learning success.
- I find that it is more effective to be available the last few minutes of class so students can seek me out privately. Minute Papers have been useful in class. I will continue to use the Minute Papers and private conferences. I feel the anonymous nature of the papers will enable students to make constructively critical comments more comfortably.
- I would prepare the students more for doing classroom assessment.

- It is easy to assume that the students know more about the concept than they actually do. Repetition aids the learning process. No matter how clear or well presented I think I've been, if it's really important, it needs to be repeated in reference to another situation or clarified in a different set of circumstances.
- Results were positive for the most part. All students have different motivations, as they should. Students also have different expectations. I think students learn more about themselves when they ask questions. What motivates them? I will use as many teaching techniques as possible.
- I think that the students in my class are learning that they have a voice and that what concerns them matters to me. This feedback has also taught me to relax a bit in my teaching. I tend to overprepare, and sometimes spending class time on student concerns and questions is more important than moving on to the next concept. I know for sure that I will revise my reflective reading assignment.
- The students were able to understand the basics; however, they tended to minimize the differences and think all agencies are more or less in operation. This affects my teaching in that I must emphasize these differences more specifically and periodically check if students are actually applying these principles in their net-working. I find I must be more specific in my explanations and point out differences.
- The students were given a better understanding of the assessment process by utilizing a variety of teaching methods: lecture, practice skills, and discussion on process. I was surprised by the students' continued unease with placement criteria. It reinforced my belief that a variety of teaching methods is the most successful approach.
- Minute Role Play: kind of like the Minute Paper but with a scenario. I did this in one section and not the other for comparison. The exercise kept the interest in the class going as students knew they would be called upon to show what they learned during that period. The class learned that they could ask for clarification at any time, not just when they were quizzed. I will incorporate this as a regular part of my classes.
- The general effect that the results had on my assessment procedure was overall positive. The lecture and the results indicated that almost each student found something different that was useful or meaningful to them. This is good, but not surprising. I learned to narrow my lecture to a few main concepts and focus on one or two key issues. As a result of this activity, I may survey the questions that remain uppermost in their mind and use them for a discussion activity the next session.

- Students had a thorough understanding of what was expected. I would not modify anything. I liked my results with the students and how they followed through with their final exams. I was extremely pleased!
- Occasionally, I discover that I went over an important point too quickly or too lightly the previous day, so I correct that on the spot. I am disappointed by how many students will settle for mediocre grades rather than invest more time and effort.
- I found that I not only had to extend the time used to explain concepts but also had to expand the means to get the concept across. I learned that some students understood the concept relatively quickly and than many need a variety of visuals to understand concepts. I will continue to use this method and ask more specific questions.
- The most clear/least clear questions helped both the students and myself know better which areas to focus on for review. It also helped me know which parts I needed to readdress because of confusion. Using these assessment techniques confirmed to me that using quick and frequent assessment writing is, I think, useful to students and myself and helps with the retention of information. If anything, I would like to use these more frequently and try some other methods in the *Classroom Assessment* handbook.

### **Individual Interviews**

- These interviews turned to be very valuable. They are simpler and less stressful for the students but seem to be even more effective. I will continue to have students record themselves as a part of coaching them to develop their speaking. There is a positive secondary benefit in repeating (and remembering) correct forms.

### **Pre/Post Test**

- I used a pre/post test to determine the students' prior and post knowledge. I used the assessments to determine and to identify any unanswered questions students may have had. In the pre-test, I discovered that 1 out of 5 students had 70% of the questions correct, 2 students had 80% correct and 2 students completed the pretest with 90% correct. After administering the posttest, the results were quite different with 100% of the students scoring 100% on the posttest. It was encouraging to see the improvement in the knowledge each student demonstrated by his or her scores. I was pleased with the improvement.

### **Five-Minute Write**

- I have learned that students often have questions (usually the same ones). They're not prepared to verbalize in class. I may add in or modify instruction techniques on their comments.

### **Reflection Paper**

- This paper listed three elements from the chapter that students particularly liked or connected with as well as elements that they didn't understand or that they would like more information about. Students felt that they had an integral part in sharing information about the chapter. It becomes more of a Socratic form of teaching. Students needed to read the chapter to come up with the comments, and they found commonality with thoughts. Learning is a two-way process: if you can't explain ideas to others and mentally or orally engage in a conversation with others, you really don't know the information.

### **In-Class Student Advisory Groups**

- Students were in their advisory groups and given time to reflect on a series of questions about the course. The results showed me where students were having trouble so I could review those concepts. It also gave me a good idea what type of teaching style(s) work best for this group of developmental students. I will keep assessing using different questions for a different group of students or a different time of the semester.

### **Concepts Quiz**

- This is designed to check students' core understanding of principles without involving any calculations or numbers. The students did unexpectedly poorly. I will have to integrate this type of testing throughout the semester and assign all the web-based conceptual quizzes. I have learned that you can't do too many example problems that keep hammering home the same techniques. I cannot assume that the students have fully grasped the fundamental concepts just because they can produce some correct numerical answers. This technique has been a real eye-opener for me. I will use it more frequently throughout the semester.

### **Assignment Evaluation**

- Students learn that application of knowledge is critical in the technical fields and that it is not enough to be physically industrious and mentally lazy. I learn that each year the learning needs must be adjusted without jeopardizing program standards. Each year I need to gear my lessons to

accommodate the spread between the best and worst of my students. The outline does not change nor do the goals and expectations; only the day-to-day routine changes.

### **Essay Assessment**

- After the lecture, I assigned a 300 word essay, looking for retention of the information I covered. The results of this assessment proved to me that the material was being retained by the students. I did not expect the results of this particular lecture to be this high because we had not talked about the concept prior to the lecture. Surprised? Yes, over 90% of the students included the 10 points in the essay covered in the lecture. Short to the point lectures work! However, I may change the order of the material covered.

### **Surveys**

- I was pleased to find out that although I only had a single one-hour session to teach, the majority of the students assessed the instruction session to be very well suited to their needs for their assignment. Visual aids such as handouts are a big help in the learning process for students, and they really seemed to appreciate the handouts I prepared. I would include a “hands-on” component so I could work interactively with the students.
- It was unanimous that all would recommend the class or take it again. Students liked the variety of forms and variety of the course.

### **“Bart”**

- Excerpts from students’ work are discussed in class; students’ names are not identified (I am adamant about this), and all are attributed to “Bart.” Many students report that they both enjoy and learn from the Barts. One wrote that Bart “let me learn faster.” I can’t say this surprises me. I have used this system for years now. Next time around, I will have more Bart sessions with a specific “lesson” to be learned, rather than concentrating entirely on the process itself. I’m not sure this will be an improvement, but often students report that they want to “get something” measurable out of a “lecture.”

## Muddiest Point

Faculty asked this question: *What was the “muddiest” point in this session? (In other words, what was least clear to you?)*

- Students had a good grasp of the various events of neuron action potentials. Twenty-five percent had confusion over repolarization. The students who were confused had not read the chapter prior to lecture as they were instructed. I would use interactive activities before and after my lecture.
- I lectured one day and then the next and asked what they thought to be the least unclear. Poor student attendance affected the results; however, it was easier to focus in on the concept they found to be the most difficult.
- The general effect the results had on my assessment procedure was confusing. Many students stated no muddiest point existed, several commented on my use of the chalkboard—it could use some improvement, and the rest all had different concerns. I witnessed no surprise, but perhaps corroboration of what happens in other classes as well—lack of disciplined readers.
- Most people had some item they were confused by. One thing I am reminded of often is I must not assume students understand me or the material that I am presenting.
- I used a combination of muddiest point and “overall effectiveness” assessment. I realized I did better in one class than the other, probably because I tried to squeeze too many points into the latter. Mainly, I learned (again!) that I can be too intent on cramming material into a given block of time without paying enough attention to the need for frequent “checks for understanding.” I do think I continue to make use of the overhead, the board, and use of anecdotes or real-life examples in my instruction. I was also reminded how important it is to have a basic “game plan” for the amount of material to be presented and the time it takes to do so.
- With the introduction of “muddiest point” cards my students lost their shell-shocked, frantic note-taking, never-volunteer mien. (The “I’ll never get this stuff” look). I think they gained a sense of having more control of class and course direction, every class period began with my answering them. They learned to trust that since I belittled no question or remark presented in this anonymous format, I would even more respect sallies more orally and spontaneously in class. Therefore, they seemed more relaxed in class and more ready to volunteer questions and even their private interpretative notions.

- I have found no means to measure quantitatively the effect of the muddiest point technique on student performance, for example, on tests, although grades do seem to run higher than before. However, since my examinations are primarily essay, I have gained a strong impression that what they give me is less memorized and more understood. I, also, have a strong impression that we are on an honest footing with each other about what we are doing and equally strong impression that students become personally engaged with the literature we study in a lasting and positive way. Finally, I know that I have fewer students drop the course and that class sessions are more enjoyably relaxed, and I learn from students as they learn from me. As Mark Twain put it, "Supposing is good, but finding out is better."
- The Muddiest Point identified unclear points and concepts and reinforced weak points. Students needed reinforced learning on the subject. They needed further review and additional assignment to fully understand the topic.
- As always, it forces me to consider things such as delivery speed and depth of coverage. Diversity within the class requires a balancing act, of sorts, to meet everybody's needs. I learned that everybody learns differently. I also learned (confirmed) that many students struggle but don't seek help. I need to make sure students understand that help is available and that slower students are accommodated. I will use the Muddiest Point more often.
- This served as positive reinforcement. I was very pleased with the results. I think the students learn how valuable it is to not only talk about techniques, but to practice them with hands-on application. I would use the same technique again: lecture and hands-on application.
- One person said everything was clear, and another person thought the lecture was disjointed, which I didn't think it was. I conclude that changes are necessary. Next year, I must do a better job of explaining a key concept. Also, I need to give better examples to illustrate some of the points I am trying to make. I like the Muddiest Point because it tells me what is unclear and needs to be reviewed.
- This made obvious that the students who are sure of themselves are the most vocal. I need to be aware that a quiet student may not understand the material. I will try to detect when a student doesn't understand the material and cover the material more slowly for him or her.
- I was surprised that 19 students had the same (or related) muddiest point and therefore spent additional lecture time on the subject. I also assigned

and then reviewed another problem focusing on the concept. This is the first time I used “muddiest point” cards and I am happy with the results.

- Because of the Muddiest Point assessment, I decided to reteach the lesson because it seemed that most of the students were not understanding the same thing. As a result, with the reteaching, most students grasped the lesson. I feel that by using this technique, the students enjoyed giving me the feedback by writing it down and that the response by me was positive. I also felt that it was a positive activity. I like using these assessment techniques and I use them often. The students feel that they have input, and I can assess them in a positive way.
- I discovered that I was teaching to what I thought was the most difficult part of a procedure and students were stuck before they got to that step. I use the muddiest point regularly and it always helps.
- The openness of the dialogue was very nice. This interaction with students allowed for a free flow of ideas and communication. Students freely expressed their feelings about their learning.
- I have learned that the curriculum changes made last year in regard to this class must have helped because I did a similar CAT in this same course last year and results were less positive. The assessment interventions, including the CAT, have given us validation for changes to curriculum. I liked this CAT and found out what I was looking for as far as “feedback” from the students.

## **DEPARTMENTAL/PROGRAM ASSESSMENT PLANS**

When developing and implementing outcomes assessment strategies, academic units, technical programs, and college services have at least three purposes in mind: to improve, to inform, and/or to prove. The results from the assessment process provides information which can be used to determine whether or not intended outcomes are being achieved and how the programs can be improved. The assessment process is designed to inform the faculty, the staff, and other decision-makers about relevant issues that can impact student learning and the institution.

With assessment planning located primarily in the departments, faculty and staff exercise their responsibility to devise appropriate methods to measure student academic achievement and program effectiveness. This process gives widespread ownership of assessment planning to faculty and staff and enables them to determine the methods and instruments that are most applicable to their educational or program objectives and missions. Technical programs, academic

units, and college services are best suited to determine how assessment results can be used to ascertain strengths and weaknesses in the curriculum or student support services.

## **Course Assessment Form D: Use of Assessment**

The following comments were extracted from *Form D: Use of Results*. This form describes the use of the assessment results and data (the feedback loop) which includes changes and improvements in the courses or that no change was needed.

### **Academic Disciplines' Course Assessments: Use of Results**

**Art 1565: Basic Photography:** Our improvement is the kind and number of criterion was definitely indicated., Initially, students used technical and design terms in their analysis. Ultimately, the majority of the class was using criteria such as feelings and content. Obviously, students must learn the criteria used in responding to a work of art. The design elements and technical aspects were used earlier and more often. It seems that "feelings' or emotions are harder to express of art works. It is indicated that modeling is this area may be more important: suggest words to be used in describing the emotional content.

**Art 1541: Introduction to Art:** After or during each unit, students were asked to respond to a master work. As new concepts were introduced, students were asked to use the new criterion in addition to criterion used (design principles/use of elements). About 60% improved greatly while 80% improved somewhat. It seemed that some students forgot about some concepts that would have been helpful in their analysis. Reinforcement of concepts is important here because it is essential in analysis. The next task will be to figure out a way to help students to remember them and use them readily. Perhaps a journal format where the student can review previous critiques: perhaps a system for tabulating how many concepts are used.

**Computer Programming 1491 Visual Basic I:** The serious students are sifting to the top and the students who have not made the commitment are getting behind. Providing a full program early in the semester helps them see if they will do well as programmers. Those who are motivated will always find a way to keep up. Students enjoy Visual Basic because they can produce programs that look professional. The more "real world" the programs are, the better they like to program. Writing good quizzes or tests remain a challenge. The test generally helps but it cannot do the entire job. The instructor must tailor the measurement to the way he teaches. The instructor plans to explore the possibilities of coming up with better projects and will also explore books with web sites that go along with the books. The instructor may try to assess a different part of Visual Basic: perhaps loop, list, and arrays.

**Ethics 1551 Introduction to Ethics:** The students met the criterion of success for all four official assessments. In addition, a brief assessment took place at the end of each class meeting. Responses received were addressed at the next class session. Only 74% passed the midterm test the first time. The instructor modified the exam and allowed those who failed to re-take the test. Then 9 of the 13 students successfully completed the exam. Daily assessments sometimes revealed confusion on a particular ethical theory. Then the students would take extra minutes at the next class session to summarize it and answer particular questions. Lectures are edited after each class to improve them for next semester. The primary course outcomes, means of assessment, and criterion for success were good. The continued use of daily assessments keeps the instructor in touch when there are difficulties in understanding.

**EMT 1926 EMT Refresher:** The instructor decided to use the basic assessment tools to help her keep everyone on track throughout the course. She conducted oral interviews at the middle of the course and kept track of those she felt had the potential of falling behind. For this course, there is a lot of criterion that need to be met in order to test. The instructor mentioned that she should have used mid-course evaluation earlier; some of the students were “unaware” of some of their responsibilities. After she had them sign off on their progress and future duties, they became much more astute. The instructor learned a lot about this course and its potential for success/failure through the assessments. She may add a few questions to the reviews; otherwise, she is satisfied with the course presentation.

**Firefighter Training:** The instructor emphasized the marketing of courses this year and more travel and outreach to students, resulting in more course offerings. She also implemented a final exam and mandatory chapter exam for each segment of the FFI course, which proved beneficial to both the program and to the individual instructors. In certain subjects of the FFI curriculum, emphasis was needed in the fire behavior portion of the course, as the test results proved more time and concentration was needed in this area. When that subject was focused on through various other means, i.e. bringing in a fire behavior simulator borrowed from Lake Superior College, the students grasped the components of the class more clearly. The instructor would like to purchase a fire behavior simulator, but the kits are very expensive. She will continue to borrow Lake Superior College’s Carmody Behavior Kit until we are able to afford our own. The instructor is pleased with the assessment plan for this year. It allowed her to focus on the program’s contents itself rather than getting wrapped up in the routine methods of her position. It also helped her individual instructors to focus on their areas of teaching that needed more emphasis. Without this assessment, she did not believe that the program would have had such a thorough understanding of the student and instructor needs.

**English 1511 College Writing I:** This year the department analyzed paragraphs from our campuses (Virginia and Eveleth) and the concurrent enrollment sections totaling 201 paragraphs. Of those 201 paragraphs, 85% rated 2 or 3 on a three-point rubric for Outcome #1: *Analyze and use supporting evidence in paragraphs that is relevant, reliable, and adequate*. In addition, of those 201 paragraphs, 93.5% rated 2 or 3 on a three-point rubric for Outcome #2: *Demonstrate control over the conventions of edited American English*. The department notes that 63.5% scored a 3. Although the department changed some of the procedures for conducting the assessment and for scoring the results, it feels that the results of Outcome One shows a significant improvement (79% in 200-02 to 85% in 2001-2002). Changes included more controlled conditions for the giving of the prompt, the inclusion of concurrent enrollment sections, and Outcome Two. Outcome Two had not previously been assessed, but the department was highly pleased that 94% of their students show an acceptable command of standard usage. Before the department participated in assessment, the department assumed that its students were using supporting evidence effectively and had a command of Standard English usage. This assessment has confirmed their assumptions. In addition, these results are useful in showing the department that they can now focus on assessing and improving results with our course outcomes.

**French 1461:** All of the actual results met or exceeded the department's expectations in both the community college classes and the concurrent enrollment classes. Improvement is needed in demonstration of conversational skills in the target language in oral Interviews and in written autobiographies. The results will aid in the development of syllabi and lesson plans and will encourage practice in conversational and written skills. More emphasis will be placed on small group speaking opportunities during class time and writing journal take-home assignments. The instructor will need to keep the actual data collected from all means of assessment—especially concurrent enrollment students.

**Health and Physical Education 1459 & 1425:** In summarizing the Outcome #1, the department found that 82% of the students showed improvement in three or more areas of fitness from the beginning of the semester to the end. In response to Outcome #2, 66% of the students turned in a log of their 30 workouts. In summarizing the Outcome #2, 100% of the students improved their test scores from the pretest to the posttest. Ninety-five percent of the students attended practice sessions. In analyzing the results, the department would suggest that a more focused effort in helping motivate students to workout will enable the students to improve their fitness level throughout the semester. The tennis course seems to be accomplishing its goals. The health course needs to spend more additional time with feedback to the students throughout the semester. As a department, it suggests that it continues to assess participation in its PHED activity courses and fitness levels in its HLTH 1459 courses.

**History 1566 & 1565:** Predictable results based on teaching experience and practices already implemented to enhance the learning process. However, the

instructor cautions too much emphasis placed on percentages because small classrooms' numbers greatly impact the final outcome. Improvement is needed in communication between the assignment and what the student believes is the assigned work. Clearly, the student who does the assigned work is more able to comprehend and understand the lecture. The instructor has no intention of changing his approach. He clearly relates to the students both the significant as well as the insignificant parts of their assigned readings. He will continue to take the student comments seriously.

**Human Services/Chemical Dependency Specialist 2655 Group Dynamics:**

The assessment results were predictable and constant with over 30 years of originally designing and constant revisions in the teaching of this course. The results of this assessment verify that the intended purposes of this course are being accomplished. The instructor has no intention of changing his approach. He finds the current course requirements and content are necessary. In the future, the instructor plans to include in his assessments only those students who completed the course. The results inadvertently included one student who failed to complete the course and did not do the required work.

**Human Services 1231 Introduction to Human Services:** The results of this assessment verify that the intended purposes of this course are being accomplished and exceeded. This would indicate that the serious and dedicated human service student will not only complete but do a good job in his or her efforts. The instructor has no intention of changing his approach. He finds the current course requirements and content are necessary.

**Chemical Dependency Specialist #2263 Treatment Procedures:** Of the five students who successfully completed the course for Criterion 1A, two students achieved 96% accuracy; one students achieved 90%; one student achieved 88%; and one student achieved 85%. The results exceeded the criterion. For accuracy of the diagnosis utilizing DSM criteria, the five students who completed the course made only three inaccurate diagnoses out of 50. Overall accuracy was 90%. Two of the five students misdiagnosed the same client's data. Upon review of this data, it appears that the diagnosis was difficult in comparison to some of the more obvious, clear-cut assessments. More time will be spent in educating the students on the finer points of diagnosis, differentiating chemical abuse versus chemical dependency. More clearly state that the data will pertain only to students who complete the entire course, excluding withdrawals.

**Library Instruction:** Instructors were supportive of the Power Point sessions and students generally agreed that they learned something new. The instructor thinks these sessions fill a need not met in general computer classes such as Intro to Computers. There is definitely a need for this type of instruction as it relates to library research, fact gathering, and organization/presentation of information. While students and instructors appreciated the sessions and found it valuable, administration felt it was not an appropriate use of the librarian's time

and expertise. The PowerPoint instruction could be incorporated into a broader session on how to integrate research information into reports and thesis papers, making it more “library specific.” The instructor will rework the Power Point session into a broader instructional session as described above, making it two days instead of just one. She will discuss this need for practical application of Power Point, charts, graphs, etc. as it relates to library research with the instructors to see what solutions will work best for their students and their curriculum.

**Mathematics #1521 College Algebra:** Fifty-eight percent of the students scored 5 or 4 or 3 on the function outcome. This was an improvement from the previous years’ 34% of the students. Sixty-four percent of the students scored a 5 or 4 or 3 on the graphing outcome. This was an improvement from the previous year’s 30% of the students. As a department, its instructors are very pleased with this year’s results. Although there was a significant amount of increase, they would like to have one more year of data before they can make any kind of statistical analysis for improvement and to set the criteria for each objective. The department is choosing to keep the assessment plan the same to obtain relevant data. After next year’s assessment, the department will look at the results and determine if changes need to be made to the tool and to the instructors’ teaching methods. The department will also look at other courses to assess in the future.

**Mathematics #1511 Foundations of Mathematics I:** Seventy-six percent of the students scored 5 or 4 or 3 on the function outcome. This was an improvement from the previous year’s 61% of the students. Seventy percent of the students scored a 5 or 4 or 3 on the graphing outcome. This was an improvement from the previous year’s 45% of the students. The department was very pleased with this year’s results. Although there was a significant amount of increase, the department would like to have one more year of data before it can make any kind of statistical analysis for improvement and to set the criteria for each objective. The mathematics department needs another year of data before any statistical analysis can be made and any criteria set for success. The department is choosing to keep the assessment plan the same to obtain relevant data. After next year’s assessment, the department will look at the results and determine if changes need to be made to the tool and to the instructors’ teaching methods. The department will also look at other courses to assess in the future.

**Psychology #2551:** After lecturing on Kohlberg’s theory of moral development, students were asked to prepare an essay describing this theory. During the next class, they wrote the essay, 41 students completed the essay. The goal was to achieve 80% of a “C” or higher. Thirty-eight of the forty-one students received a grade of “C” or higher.

**Science #1546:** Pre-test average: 44%; post-test average: 66%. The earlier material was missed more often on the post-test. The instructor does not know if this is because of retention or if the students did not understand the material. The

instructor is going to revise the test and to do more classroom assessment as she goes through the semester. She believes giving the post-test at the same time as the final was a mistake. The students were burned-out and just wanted to get it done.

**Science #1561 College Physics:** All criteria were successfully met. The results indicate that learning is successfully taking place in College Physics. Students are working hard and despite some early struggles, they came together as a group and achieved their goals. The results are encouraging; however, this assessment was for a small class size of 15 students. There was time available for personal attention, especially in lab. Should enrollment increase significantly, it would be wise to revisit the assessment of this course.

**Sociology # 1555:** Overall, the assessment results were successful. As far as chapter testing was concerned, out of 58 students in the course, 56 students successfully earned a C or better; one earned an F; and one earned a W grade. In assessing the Internet exercises, 63.77% earned a C or better and 91.37% earned a C or better. Students primarily need to improve the completion rate of additional classroom assignments. Only 63.70% of the students adequately completed the Internet exercise in 1b and 91.37% of the students adequately completed the Internet exercise in 2B. The instructor believes that the students found the exercise in 1b to be more difficult in nature; therefore, 26.21% of the students did not complete it. The instructor plans to implement a shorter textbook next year. By doing so, more time can be spent on classroom exercises that complement the textbook chapters. If possible, the instructor will arrange computer lab time as part of class time so that extra help is made available for those students who need it. Many students have difficulty in the computer labs—accessing information, printing documents, etc.

**Spanish #1461:** Students made better and more consistent progress in pronouncing Spanish vowel sounds. Good pronunciation skills raise students' over-all confidence. As always, with Spanish, the phonemes prove difficult. The individual recordings are an excellent tool to help develop good pronunciation before actual testing. They let students practice, self-correct, and self-monitor. The instructor suggests developing a page to document each student's progress toward correct pronunciation.

**Speech #1575 Intercultural Communication:** When the instructor asked students to score at least 80% on the questions/activities assigned, she found that approximately only 70% had correctly done the exercises. When she asked why, the students felt that they needed the instructor to walk through two or more similar examples in order for them to fully understand the process and use of terminology. The written papers definitely indicated that students were "getting it." The understanding appreciation and need for interaction with other cultures were indicated by 95% of the students rather than the 80% that the instructor had hoped for. This was rewarding! The instructor was exceptionally pleased with the

results; the course must be constructed so that this overriding message is getting through. The instructor will, indeed, demonstrate more thoroughly and continue the make-up of the course.

**Speech #1565 Interpersonal Communication:** Students had improved in their interpersonal skills and knowledge from the first day of class to the last week of class (pre and post self-assessments). An interesting, but positive, sideline is that some students actually scored lower on their post assessment than their pre-assessment. When I asked how this could happen, many concurred that it was because they weren't aware of what an effective relationship could look like and all the skills and knowledge involved in the process of making a relationship work. This awareness was a growing experience. When the instructor asked students to connect theories and concepts of this discipline to real-life case studies, they were all able to do so; some were able to do the process quicker and more thoroughly than others, but they all were able to make connections. The instructor believes she will continue to do the pre and post assessments. After the students take the assessment, the instructor will explain the possible results at the end of the semester.

### **Technical Programs' Course Assessments: Use of Results**

**Automotive Technician #1272 Disassemble an Automatic Transmission:** The results indicate below acceptable levels of learning the automatic transmission power flow. The results indicate a need for a method to help the student better understand automatic transmission power flow. The action phase step is still in progress.

**#2256 Understanding and Diagnosing Basic Electric Systems:** The data indicates that the students have accomplished acceptable levels of learning with their understanding of electrical circuits and the use of available test equipment. The expansion of diagrams and symbols in other areas of component use should be expanded to make students better prepared for changes in future use of new technology. The action phase step is in progress.

**Electrical and Industrial Automation Technology 1233 & 1243:** Analysis of student performance data showed that minimum performance goals were met for both outcomes. While minimum goals were met, continued improvement is always needed (see Summary section for a description of the findings). Upon analysis of data, the instructor has determined that improvement was made over last year's project. While the instructor may need to make minor strategy changes, more time in lecture, for example, the results will depend largely on the makeup of the class. Strategies will depend on make-up of class and will be a dynamic variable.

**Electrical and Industrial Automation Technology II #2257:**

- Need more concise measurement of practical exercises to objective to substantiate clear results due to student work in partnership;
- Written test results generally poor;
- Need more connection between lab assignments and lecture;
- Need more lab stations to allow students to work independently;
- More practice in relating written material to practical;
- More practical exercise testing;
- Instill more skills assessment on an individual student basis;
- Students must have more detailed documentation of lab exercise;
- More independent student lab work, less team work approach.

**Network Cabling Technician #1225:** Overall, the instructor is pleased with the results. He would like to see improvement in the written exam area: 80% scored high enough. More homework assignments may help improve written exam results. Also, improved lecture delivery methods which the instructor has worked on with Power Point presentations.

**Carpentry 1<sup>st</sup> Year #1242:** Students did well on dry wall finishing and door hanging. They all completed checklist and passed the written exam. In the future, the instructor will continue checklist and exams. Students indicated they wanted to do more with texturing and painting of drywall. Also, they liked hanging a door but found out it takes hanging several doors to become a craftsman at door installation. The instructor will try to have student paint and texture dry wall next year. Also, he will have students hang at least two doors. Possibly a classroom aid would help students, and the instructor will accomplish the additional work.

**Carpentry 2<sup>nd</sup> Year #2275 Exterior Finishing:** The instructor's means of assessment clearly shows that his goal of having 80% of the class achieve a grade of C or higher was definitely attainable. He believes the homework assignments, tests, and quizzes, along with associated lab assignments, really helped clear up gray areas. Tests and quizzes showed weak areas. Lab assignments directed towards the weak areas help to clarify the students understanding. Next year the instructor will assess the same courses using the same process for comparable data.

**Graphic Arts 1<sup>st</sup> Year #'s 1235 & 1226:** Students need to slow down and take their time on their first lab assignments. The oral report/written report shows that some students struggle; however, they all completed the project successfully.

**Graphic Arts 2<sup>nd</sup> Year #'s 2265 & 2276:** Form D was not submitted.

**Information Management Specialist Program #'s 1245 & 2285:** One hundred percent of students reached pinpoints of 94-100% and the program was satisfied with the results. The program will continue with the same pinpoints and curriculum.

**Job Search #2175:** The means used to assess the students were successful in measuring their progress. Working one on one allowed personal measure of each student's progress. The assignments showed both the student and the instructor: the students capability to create, edit and print out documents; the mock interviews show both the students and instructor their progress for completing an interview successfully. All students should have Introduction to Computers before job search. Having to teach the students how to use Word and Internet before the content of the course took away time to concentrate on Job Search skills. The instructor spoke to the Provost and counselors, expressing the need for students to have Introduction to Computers as a prerequisite. Also, the instructor recommends a different book.

**Masonry #1223 Principles of Blocklaying:** Assessment goal percentages were met with a goal of 80% and an outcome of 88%. This was the first year for the Masonry Program, so actual results could be better studied after completion of the second year. The instructor's plans are to use the same assessment methods to be able to see differences as the first year students were 100% non-traditional. With the second year of predominately traditional students, the instructor will be able to better assess the outcome from the two years.

**Maintenance Mechanics #1251 Basic Arc & Oxy-Acetylene Welding & Cutting:** Standards were set at industry standards and exceeded to 90 – 100%. The quality of student seemed to be better than prior years. This could be a result of teaching style and experience. The instructor will try to teach the same based on positive data results and next year assess Bearings and Lube.  
**#1235 Basic Hydraulic Symbols:** Standards for passing grades were set at 70%. Students achieved the 70% or higher up to 86% overall. Course exceed criterion. This could be partly due to teaching style and the experience the instructor has gained. The instructor will try to teach the same based on the positive data results and will next year assess Power Transmissions.

**Computer Networking # 1229:** Form D was not submitted.

**Practical Nursing #'s 1232 & 1222:** Basically, all criterion were met (in one case, 89% instead of 90%). Twelve percent of students needed more than two attempts to meet math calculation criteria. Results were as desired and the instructors will strive to maintain and even improve this as class sizes increase in the next academic year. Next year the program will use the same plan for assessment in order to accurately evaluate a much larger class.

**Nursing Assistant Program #1215:** Students felt that the overall program was good and met the objective set forth. Students would like more one on one time with the instructor for individualized skill training. The program will use a part-time instructor on lab days to give more individualized instruction for skills. Next year

the instructor will assess overall satisfaction with program and satisfaction of individual instruction.

**Welding Program 1<sup>st</sup> Year #1221:** Two assignments, Unit 2 and Unit 4, written review and exams, were successfully completed by a percentage of students higher than expected. Unit 2 written assignments – 89% scored better than 75%; exam: 100% scored 75% or better. Unit 4 written assignment – 50% of students scored 75% or better; exam – 100% scored 75% or better. The exam results seem much better due to four students withdrawing from the program. Overall, the results seem quite satisfactory. After two years of assessing this area, the instructors believe the level of teaching and learning to be a quality level with always room for improvement. The instructors will continue to monitor this area. The written assignments will require a bit more detailed explanation and an urging of students to be more fastidious in their homework. Next year the program will assess Welding #1231: Intro to Thermal Cutting Processes.

**Welding Program 2<sup>nd</sup> Year #'s 2275 & 2291:** Assignments are handed in usually on time—unfortunately, too often, the students' goal is just to complete the assignment and not to learn the information. Retention and past assignments are improving because program has been changed to build on past knowledge. The non-traditional students are more interested in learning and retention. Cognitive skills need improving but are overall better with this course. Basic skills in math, geometry and drawing are lacking. Strategies: daily quizzes and review; using shop time in classroom and expanding classroom time; projects and materials prep; more time is spent on course concepts; evaluation forms covering 10-12 points are now being used for major projects and assignments.

Students do very well with template when they draw under supervision and have to write down each step that is required. Welding proficiency is gained through repetition until a minimum proficiency is reached. Some students lack the mental and physical dexterity to accomplish all goals set in the time frame allowed. They do, however, have the ability to succeed if given enough time and can retest. The instructor will remove one portion of the class and incorporate into WELD 2275 GMAW of stainless. This will allow more time to gain proficiency. The instructor will grade on a more refined scale to better differentiate the various students' abilities.

# DEVELOPMENTAL EDUCATION ASSESSMENT

## Evidence of Commitment to Developmental Education

Students admitted to Mesabi Range Community & Technical College are expected to take Reading, Writing, and Math college placement tests (CPT) in order for counselors to assist them in developing their educational plans, and placing them into appropriate level coursework. Evidence of specific placement scores is a pre-requisite to entering college-level math, English, history, political science, sociology, and science courses.

There are several levels of developmental coursework. In writing, the lowest level is Basic English 091, and the next higher level is Refresher English 092. In math, the lowest level is Arithmetic with Applications 091, then Beginning Algebra 093, and Higher Algebra 094. Students who do not have college level reading placement test scores are placed into Efficient Reading I 081 or Efficient Reading II 082.

Data collection and analysis of students placed in developmental courses in subsequent college level courses provides faculty and administration with information to assess the developmental program effectiveness. Annually, the English, math, and reading developmental programs conduct assessment. The following statements are drawn from their assessment reports.

### **English 0091: Basic English &**

**English 0092: Refresher English:** The department is still endeavoring to streamline and fine-tune procedures for accurate assessment of these developmental courses. The department is comfortable with and confident in their plan for assessment, but need to improve the thoroughness of its testing, post-testing, and surveying procedure.

The instruction appears to be at least 80% effective as measured by the results that were turned in, but the department needs to involve more of the department's faculty in all phases of the process and make more routine the gathering of this information. While the information from two instructors was helpful, it may not give a totally accurate picture of the status of our developmental program.

The department is still gathering as a department to establish a timeline and procedures for regular assessment. Its instructional methods appear to be relatively successful, thorough, and measurable. What it may need to do is evaluate whether the standards it has set are rigorous enough, and whether it is following through on the process as effectively as it might.

The English department suggests assigning a department member to facilitate the developmental assessment process. Phil Fitzpatrick agreed to do that; he is currently in the process of contacting all developmental English faculty regarding the assessment process for 2002-03. The department will be reviewing the assessment plan for Developmental English during the spring semester of

2002-03. Otherwise, the recommendations of the 5/4/2001 report are still in effect.

**Mathematics #0091, #0092, #0093**

**Arithmetic with Applications; Beginning Algebra, Higher Algebra:** In the two outcomes chosen to assess Developmental Mathematics, both criteria for success were met. The completion of course outcomes exceeded the criterion by 3% and 0.8 percent exceeded the survey of teaching quality and support criterion. As a department, they are pleased with the results. Students are satisfied with the overall quality and support they receive in their developmental courses. No improvement is needed.

**Reading #0081, #0082**

**Efficient Reading I; Efficient Reading II:** The assessment results showed a significant number of students passing the coursework in Reading I and Reading II but not passing the CPT test at the level necessary to move forward in the program. Last year, the reading students all passed the test. This year the program's reading instructor was on sabbatical and replaced by three adjunct instructors, only one of which had taught reading. A lack of instructor experience and two problems administering the CAPP test probably reflected the lack of achievement on that test. When the reading instructor returns in the fall 2002, she will probably bring a greater consistency to the program. Should she repeat her earlier results, the problem will be solved. If there are problems with student passing the CAPP test again, then this year's problems should be analyzed again.

## **College Services' Assessment Results**

College Services assessment seeks constantly to challenge current ways of doing things by assessing whether outcomes are appropriate and whether methods in use are achieving those ends. This assessment is continuously seeking improvement in the *process*. The intent of college services' assessment, in addition to the collection of data for process mapping, is to initiate on-going discussions and move toward designing services to better accommodate student needs.

**Administrative and Institutional Support:** On the performance review, all three individuals were rated 100%--fully meets standards or above by their supervisors. The department will continue to treat all constituencies fairly and equally in a courteous and respectful manner and be helpful and approachable—striving to improve our services. The performance review is given yearly and will be use next year. The department deals with various constituencies and a survey of these constituents is being considered.

**Athletics:** In summarizing Outcome #1, the survey showed that 82% of the students said they had a positive experience during the men's basketball season. In response to the question on students having a favorable feeling that the facilities, equipment, supplies, and uniforms have fulfilled the expectations of the student/athletes at the college level, there were only 18% of the students who agreed with this question. In analyzing the results, the program director would suggest that the department complete a survey for each sport so the coaches have feedback on the experience all of our students have in athletics. In regards to the facilities issue, the College is limited to what improvements we can make due to budget considerations. The program will strive to improve the facilities in small increments. Next year, the director will try to get all coaches to assess their team. Only the men's basketball program was assessed this year. The program maintains its assessment of the student's positive experience. Because the facilities are out of the program's control, the program will look at how the student perceives his or her development as a player and a person.

**Bookstore:** Form D was not submitted.

**Business Office:** Form D was not submitted.

**Counseling/Advising – Virginia Campus:** Under Outcome #1, the department contacted the students who were not registered for Fall 2002 as of the end of Spring 2002. The results were that 111 students did not return to Mesabi Range for reasons other than graduation, transfer, work, and health issues. Of these students, 55% were not able to be reached or did not respond, 23% were academically suspended, 21% were part-time students who did not return for fall, and less than 1% were incarcerated. In the Outcome #2 Survey, there were 272 students contacted. The results showed that 25% of students returned for fall (69 students), 23% of students did not respond, 13% of students graduated (34), 12% of students transferred (33), 9% of students were academically suspended (25), 8% of students were part-time (23), 7% of students did not return for health/personal reasons (19) and 2% did not return due to work (6). One person did not return due to incarceration. Under Outcome #2a, the program had a total of 179 students on academic alert for fall semester. Of these, 92 returned for spring semester, 44 of these 92 students were not on academic alert during spring semester. Percentages are 51% (92) returned for spring. Of this, 92 students (47%) were not on academic alert. Under Means of Assessment 2b, 164 students on probation after fall '01. Of these students, 53 were suspended after spring semester '02. This number equates to 32% of students on probation after fall '01 leaving 68% of students improving/maintaining their academic standing by the end of spring semester '02.

Improvement is needed in retaining students from one year to the next. Counseling/Advising staff needs to develop programming that will address student needs as far as academic support and personal issues in an attempt to improve retention. Realization that retention is not a simple matter of assisting

students but that demographics as to the make-up of the student body must be looked at when addressing retention issues.

**Enrollment Services:** The assessment results for 1a came in at about what the director thought it would be. The program believes that the campus visit is very important to a student making a final decision to attend Mesabi Range. The program takes time in giving the prospective student what he or she need to enroll at the College. The number of high school visits increased because the department had Mike Flaten helping out with high school visits. The program will continue to increase the number of high school visits. Also, to improve the assessment, the program will take time to have everyone fill out the survey. And, when the program hands out the survey, it makes the program more aware of the quality of the prospective student's visit. Perhaps the program will attach the survey to an application or campus visit give-away.

**Financial Aid:** Student satisfaction remained at 85% for the Virginia campus from 2000-01 year. However, Eveleth campus increased from 71% to 80%. Increase in student satisfaction may be attributed to addition of half time staff for Eveleth campus. Retention of additional staff can be measured by 2002-03 satisfaction results. Next year, the program will continue satisfaction survey and monitor use of electronic loan applications for new Web page.

**Food Service:** Form D was not submitted.

**Human Resources:** The Human Resources section at Mesabi Range College has provided New Employee Orientation for three consecutive years. The first year was September 2000. The orientation was performed in six segments in the first year, 2000. It covers information on all institutional departments: academic, fiscal, student services, continuing education and custom training, bargaining units, library and technical services, and human resources. In fall 2002, the orientation schedule changed from six Mondays to four Mondays. The program is held at 4:00 p.m. on each of the Mondays. It is a general orientation for all employees, instructional staff as well as support staff. Four sessions are planned for September 2002 beginning September 9. We hoped for a 75% satisfaction rate from employees attending this voluntary program. We received 100% satisfaction from employees who completed the survey. Employees indicated that four sessions were adequate and that they were helpful. They indicated that we should continue New Employee Orientation in the format it has been in for the past years.

All new employees attending orientation receive a survey. The participation rate for attendance was 75% in 2000 and in 2001. It ranged from 67% to 90% over the four sessions. All attendees were given the survey. The satisfaction rate in both years was 100% from those completing the survey.

At the sessions, discussions were held with HR staff and individual employees regarding ideas and thoughts about information presented and any

ideas of subjects that they would like to see included in the program. This constitutes a nonscientific type of information, but helpful nevertheless. The satisfaction surveys speak for themselves. One thing which can be considered is whether to offer the sessions more than once for employees unable to make the 4:00 p.m. sessions. The program will continue to update informational materials and get informal feedback from employees in an ongoing basis.

**Library Services:** Students are very aware of the resources and services offered in the Media Center but need more instruction on how to utilize resources such as ILL, Library Web page and databases. Students are satisfied overall with resources and services in the Media Center but are dissatisfied on two points: 1). Availability of Media Center computers and 2) access to Media Center resources restricted when area is used as a classroom and closed to users. Students requested longer Media Center hours, more reference resources and program-specific materials. New book shelves will be arranged to separate library area from computer area to create study area while computers are in use. Access to Media Center computers for class use vs. student use is an issue to be addressed with Administration. Instructors will be approached more aggressively with offers for in-class instruction so all students can receive library training and instruction. Survey results have given impetus to such improvements as reorganization and recataloging of current resources, weeding of outdated materials and reorganization of room layout to provide better access to resources and to separate the library area from the computer area. More program specific materials and reference resources are on order for the Media Center collection. Hiring more work study students will provide assistants who can help students find resources and navigate web databases, plus provide the staffing needed to keep the Media Center open longer. Next year the service will track student responses to these improvements with follow-up surveys and interviews to see if needs and expectations are being met.

**Learning Center – Virginia Campus:** Faculty and staff rated the Learning Center an inviting place to work. Students who sought tutoring also reported being helped. The number of students tutored per tutor needs to be increased. The Learning Center is not equally inviting to all students. The Learning Center needs to make tutors more visible. Tutors should introduce themselves in some classes; encourage instructors to share the tutor schedule with students; check in with instructors periodically to see if there is anyone in need of help and set up study groups for specific classes upon request. Next year the Center will continue to assess the number of students seeing tutors and assess other avenues for offering study aids to students.

**Maintenance:** Students and staff felt overwhelmingly that the cleanliness of the campus was very good. Forty-eight out of 61 respondents answered 4 or 5. The overall grounds were rated very high as well. Students and staff rated the overall grounds 3, 4, or 5 with a percentage of 91%. The highest score came from students and staff with regards to the safety of the campus: the scoring of 3, 4, or 5 with the percentage of 98 percent. The cleanliness of the offices were rated at

96 percent. The cleanliness of the restrooms was rated at 90%. The climate or temperature of the rooms created the low point of the survey. Students and staff rated the climate or temp of the classrooms at a level of 3, 4, or 5 with a percentage of 52 percent. The department will keep grounds and campus at current condition. The department is currently meeting the needs of students and staff in regards to the safety and cleanliness of the two campuses. A plan of action should be considered or developed to improve the climate or temperatures in the classrooms. However, to streamline the action, a more comprehensive study would be required to determine which rooms are deemed least comfortable, as far as temperature.

**Minority Services:** The Minority Services Students Survey Question #4 asked students: *How satisfied were you with the information or service received today?* The data show a 22.03% response of SATISFIED while 76.2% indicated a VERY SATISFIED satisfaction level. The data reveal a combined rating of 98.3% combined **positive satisfaction rating** with the services of the program. Fifty-nine students participated in the survey. Increased academic advising and interaction with students account for the improvement in services and achievement of stated objective.

The results of the Minority Services Student Survey Question #2: *Was the service or information helpful to you as a student?* Indicates this objective to be achieved. Of the 59 surveyed students, 58 students (98.3%) responded that the service or information was helpful and the same percent and number responded they would use the service again.

The College Lab Assistants (CLA's) were evaluated to determine effectiveness and measure satisfaction levels of services at the Technical Campus in Eveleth. One hundred fifty students completed a 14 Question Evaluation of their program CLA. The total responses were aggregated on satisfaction levels of 1-5 by program. The score of 1 represented a Poor rating, 2 Satisfactory, 3 Good, 4 Very Good and 5 Excellent. The aggregate total of responses in the 4 Level (Very Good) was at 248 out of 2100 at 12%. This result was combined with the Level % (Excellent) response of 1610 or 77%. The combined total of 1858 favorable responses of 2100 reflects an **88.47%** positive responses rate of the College Lab Assistants performance in assisting students.

The CLA Survey was also instrumental in measuring students response to the *helpfulness of the CLA in the learning process*. One hundred eight students rated the CLA as Excellent (72%) and 22 students rated the CLA as Very Good (14.66%). One hundred thirty students gave the CLA's a combined 86.66% favorable response rating. The results of this question indicates that the College Lab Assistants contribute to the success of students enrolled in Career and Technical Programs that deploy such services.

The results of assessing student satisfaction with program services indicate the projected outcomes to be achieved. Areas in need of improvement remain in international student programming and student data collection. Minority Club advising is also in need of improvement due to limited student involvement and participation. Program participation by students declined in 2001-02 on the

Virginia campus but remained strong on the Eveleth Campus. The program director assumed a more active role in academic advising and registration of a larger segment of students beginning in the fall semester of 2001 on both campuses. In addition, more time was spent on the Eveleth campus due to additional assignments relating to grant administration and advising.

The Minority Services Student survey instrument will be used again in the fall semester 2002 with more student participation and improved data collection efforts. Students will be encouraged to participate in increased data collection efforts.

The College Lab Assistant Student Evaluation was designed as an instrument to measure student satisfaction with the performance of the program CLA's. The survey would also indicate whether the CLA program should continue. The finding indicated a high level of satisfaction and the program will be enhanced with the addition of one more CLA in 2003. The College Lab Assistants for Information Management and Carpentry will also be replaced.

The overall goal of providing quality services has been achieved.

**Records Office – Eveleth Campus:** All faculty on Eveleth Campus who completed the survey were satisfied with the work of the Records Office. One suggestion was about scheduling which is not a part of the Records Office. The Records Office on the Eveleth campus will continue the services to faculty as before and look for ways to help faculty do their job for the betterment of the students.

**Student Services/Eveleth Campus – (Advising, Admissions, Counseling, Disability and Placement):** Two hundred two students returned surveys that were created by the Student Services Unit on the Eveleth campus. Students 9150/202) responded that the services they received from Students Services were helpful, and 195 of 202 records indicated that student rated the services they received at a level 3 or better of a scale of 1 being the lowest and five being the highest. While the rating for the Student Services remains high, it is through this data we can conclude that all areas in the students services can be improved. MRCTC will continue to provide exceptional services to all students who wish to access those resources. The program should keep improving vehicles for students to express their feedback with the services that they choose to use. Student Services will keep improving vehicles for students to express their feedback with the services that they choose to use.

**Student Support Services – Virginia Campus:** One hundred percent of students in program were offered financial aid to meet their documented needs. Not all students accepted aid offered. Eighty-four percent of program participants completed their academic year in good standing. Student Services needs to continue to assist our students in completing the year in good academic standing. By continuing to attempt to meet with our students throughout the year, getting them involved in program activities, and offering personal, academic, social, and transfer support, we can meet our goals/objectives. Student services

will continue to look at program objectives. Two more objectives will be assessed this next year. The SSS grant assesses itself each year for Federal reporting. Documentation is available each fall when the previous year is closed out. Due to the grant cycle, final documentation is available during fall semester for the previous year.

**Technology:** One hundred twenty faculty and staff on both campuses were contacted by the Technology Department and 42 responded with completed surveys. That results in a 35% response rate. Overall, on all four categories of service (Internet, email, network printing and network storage) the response was 96% favorable. Internet service had a 100% positive response (very satisfied and satisfied), email service had a 98% favorable response, and network printing and storage both had 93% positive responses.

Eleven point eight percent (11.8%) of the responding faculty members do not use the available Internet service, but all of the responding staff members do make use of it. 6.3% of the faculty do not use email, but, again, all of the staff do use it. 29.4% of the faculty do not use network printing or network storage, while only 4% of the staff do not use network printing and 8% do not use network storage. 18.8% of the faculty gave a negative response regarding email, but no staff indicated any negative response. 11.8% of the faculty indicated a negative response on network printing and network storage services, while only 4% of the staff did so.

Improvements need to be made in the network printing and network storage services. In some cases, this might be better served by better communication of the available services. Comments indicated that the campuses need more printers, new printers, and networked color printers, especially in the teaching/open labs. Also, some faculty feels that more network server space should be made available for each faculty member.

The department will attempt to respond to all requests written as part of the evaluation survey. Many of the comments reinforced the positive survey results. Next year, the department will plan to assess the student population on software issues.

## **GENERAL EDUCATION ASSESSMENT**

### **General Education Philosophy/Mission Statement**

*Mesabi Range Community & Technical College provides an appropriate general education component in all degree, diploma and certificate programs as an essential intellectual and practical foundation to students' life-long learning.*

### **Evidence of Commitment to General Education**

Mesabi Range College offers an average of **238 sections of general education courses during the academic year** and **31 sections during summer session** for a total of **269 sections** involving approximately **86 faculty (full and part-**

**time)** with an average enrollment of 1250 students. General education courses account for **766 credit hours** during the academic year and **97 hours during the summer session**.

### **General Education Goals for Student Success**

During the 2001-02 academic year, the Assessment Committee examined the goals of the general education program at Mesabi Range College. Our first task was to assess the current goals to see if they were still appropriate for Mesabi Range and our students through the review of course outlines. In a sense, we continue to define our students and thus ourselves.

During the 2001-02 academic year, the Committee accomplished:

- Survey of goals;
- Agreement to include a general education matrix with each Program Review to assess the general education component of a student's education and to ascertain if the General Education goals were adequately being covered by Mesabi Range's course offerings. (The Maintenance Mechanics program completed a pilot project for the Committee. See Appendix.)
- Agreement to begin comparing scores in pre and post General Education testing in English, Math, & Reading;
- Agreement to begin Information Technology assessment during 2002-03 academic year;
- Agreement to begin consideration of General Education Portfolio Assessment as a capstone course that will analyze student work (artifacts) collected in an institutional portfolio.
- Agreement to consider adding another General Education goal during the 2002-03 academic year;
- Administer the CAAP test for Communication and Critical Thinking;
- Administer General Education Graduation and Employer Survey

## **Assessment of General Education Through Program Review**

Assessment of general education is college-wide and currently takes place in each course through the program review process. General Education matrixes are applied to evaluate the general education components in the technical and liberal arts programs. Measures include pretests and posttests, as well as writing samples in the composition courses and speech evaluations in the oral communications courses.

Assessment of the program-level skills and knowledge is a multifaceted process. Each program has a mission statement. The mission sets the stage for the development of program goals and student learning outcome objectives. To evaluate student success in achieving the outcomes, faculty members choose specific assessments.

The general approach of using course-embedded assessment is effective in establishing a database through which to gauge student learning in all programs. Continued refinement of the process is key to enduring that the assessment of student learning is of real value for program improvement.

## **SPRING 2001-2002 CAAP RESULTS COLLEGIATE ASSESSMENT OF ACADEMIC PROFICIENCY**

Before graduation, The American College Testing's Collegiate Assessment of Academic Proficiency (CAAP) was administered to a random sample of graduating students to determine students' exit-level knowledge and skills in communication and critical thinking.

### **Population Demographics: Spring 2001**

Ethnicity of students through self-reporting as two American Indians, thirty-one Caucasians, two responded as prefer not to respond, and one no response. The median age of the population tested was reported in the age group of 21-25. All students reported that English was their first language. The self-reporting from the testing cohort reported that 33 of 36 students were enrolled as freshman at Mesabi Range. The self-reported education level of the cohort is broken down as such: eight freshmen, 25 sophomores, two juniors, and one no response. The **Cumulative GPA** for the student reporting is as follows: **3 students at 2.01-2.50; 10 students at 2.51-3.0, 9 students at 3.1-3.5 and 14 students reported as having a Cumulative GPA of 3.51-4.0.**

## CAAP Performance Results

With regards to writing skills, students mean score was 60.8, the national mean was rated at 62.6. Our population was based on a cohort of 36 students as compared nationally of a cohort of 24,558 persons tested. Our standard deviation was 4.5, compared nationally with the national deviation of 4.7. Mesabi Range College had **nine students of thirty-six or 40 percent tested who scored higher than the national average of the mean score.** In regards to **writing mechanics**, Mesabi Range students mean score was rated at 15.6, while the national mean was 16.3. **Mesabi Range had 16 students of 20 who scored above the national mean score.** In regards to **rhetorical skills**, Mesabi Range had a mean score of 15.3; conversely, the national mean score was reported at 16.3. Mesabi Range tested 17 students above the national mean score. In reporting the **critical thinking test**, Mesabi Range's cohort tested at a mean of 59.9, while the national test mean was reported at 61.1. **Mesabi Range reports that 16 students of 36 scored at or above the national mean of 61.1**

## Population Demographics: Spring 2002

Ethnicity of students through self-reporting is shown as three American Indians, forty-eight Caucasians, two responded as "prefer not to respond." The gender breakdown was reported as 20 male and 33 female. The median age of the population tested was reported in the age group of 19-20. Fifty-two students reported that English was their first language. The self-reporting from the testing cohort reported that 48 of 53 students were enrolled as freshmen at Mesabi Range. The self-reported education level of the cohort is broken down as such: 1 freshman, 30 sophomores, 0 juniors and 20 seniors. The possibility of students who have identified themselves as seniors is due to the fact that technical students will be graduating the last year of their college tenure; therefore, one could make the reasonable conclusions that they are indeed seniors. The **Cumulative GPA for the student reporting is as follows: 2 students below 2.0; 3 students at 2.01-2.50; 14 students at 2.51-3.0; 17 students at 3.1-3.5 and 16 students reported as having a Cumulative GPA 3.51-4.0 and one "no response."**

## CAAP Performance Results

With regards to writing skills, students mean score was 62.2; the national mean was rated at 62.2. Our population was based on a cohort of 53 students as compared nationally of a cohort of 25,209 persons tested. Our standard deviation was 4.9, compared nationally with the national deviation of 4.7. Mesabi Range College had **thirty students of fifty-three or 56.6 percent tested who scored higher than the national average of the mean score.** In regards to **writing mechanics**, Mesabi Range students mean score was rated at 15.8, while the national mean was 16.3. **Mesabi Range had 29 students of 53 who scored above the national mean score.** In regards to **rhetorical skills**, Mesabi Range had a mean score of 16.4; conversely, the national mean score was reported at 16.3. Mesabi Range tested 39 students above the national mean score. In reporting the **critical**

**thinking test**, Mesabi Range's cohort tested at a mean of 60.5, while the national test mean was reported at 61.0. **Mesabi Range reports that 51 percent of students scored at or above the national mean of 61.1.**

## **MESABI RANGE COMMUNITY & TECHNICAL COLLEGE PROGRAM REVIEW PROCESS**

The purpose of program review at Mesabi Range College is to study each program of the College every five years in a manner that will accommodate improvement, change, and recognition of a job well done. Only by taking the time to look thoughtfully at various aspects of all programs (instructional and non-instructional) can we assess the needs and determine the future direction of the College. Program review provides the opportunity to contemplate and reflect about what works and what does not work within our programs. The process can be very productive and a worthwhile learning experience for the program being reviewed and the entire College. Program review emphasizes the assessment of student learning at the program level and is one facet of assessment that helps Mesabi Range Community & Technical College improve learning.

The Provost Office at Mesabi Range College coordinates a comprehensive program review process for all college academic units, technical programs, and administrative and college support units

Program review is part of the institution's overall planning/institutional effectiveness process. The review is formative in nature and is approached as a self-study, with the goal of assisting faculty, staff, and administration across campuses in improving and refining college programs and services.

Four basic types of programs are identified for evaluation: academic transfer programs, technical/career programs, college services, continuing education programs, and administrative/support services. The review process is initiated early in the academic year in meetings with the provost and each of these program divisions. Each program to be evaluated is provided a Program Review Guidebook. This Guidebook requests the information necessary to systematically review the achievement of a program's missions and goals and Mesabi Range College's Goals for Student Success. Programs are also asked to synthesize the information into a list of strengths and limitations, visions for the future, and cost effectiveness. The Review should be completed by April and returned to the Office of the Provost. This administrator reviews all information contained in the Review and makes the final determination of program strengths, limitations, recommendations, and actions to be taken.

The completed Program Reviews are then forwarded to Dr. Joe Sertich, president of the Northern Minnesota Higher Education District. The president reviews all information contained in the Review.

During the 2001-02 academic year, the English and Math departments participated in Program Review. These reviews are available for reading in the College Library Resource Room or in the Office of the Provost.

Program Review has become a very powerful process at Mesabi Range College. Results from program evaluations have been used as the basis for program and course revisions and as opportunities to build on strengths and remedy limitations.

## **CONCLUSIONS**

Outcomes assessment is a valuable and integral part of the College's institutional improvement and review—from the classroom to the conference room. It has begun to impact students, faculty, and staff throughout the campuses. As programs and departments devised and incorporated assessment plans and practices into on-going curricular decisions, faculty and staff have acquired useful information about students' learning and services that support existing educational practices and demonstrated where necessary changes need to occur. Faculty and staff have worked collaboratively to develop strategies that fit with the College's and department/program's mission, goals, and outcomes.

We are celebrating assessment of student learning and support services at Mesabi Range Community College for several reasons:

- Assessment at the curriculum level is beginning to be a part of our culture and is recognized as part of college life.
- The College assesses learning at the curriculum level, the program level, the general education and course level to determine if students are developing the appropriate skills, abilities, and knowledge base through a carefully planned curriculum and through services that support learning.
- Assessment findings about the state of student learning are beginning to be incorporated into reviews of the academic program and into the self-study of institutional effectiveness.
- Reflecting on learning is demonstrated through assessment with the opportunity to determine our successes and draw conclusions about what we need to do to improve.
- Faculty members are increasingly engaged in interpreting assessment results, discussing their implications and recommending changes in academic and technical programs and other areas in order to improve student learning;
- Fifty-six percent of the faculty participated in Classroom Assessment activities during FY 2001-02. Faculty makes adjustments in their classrooms, and they collaborate in order to make adjustments to the curriculum and to academic and technical programs. All faculty (full and part-time) are working on aligning

course outcomes and methods for assessing to what extent outcomes are achieved.

- Eighty-three percent of transfer departments participated in departmental assessment.
- Ninety-two percent of technical programs participated in departmental assessment.
- One hundred percent of developmental programs participated in program assessment.
- One hundred percent of college services programs participated in assessment. The College as a whole makes adjustments to the budget, to the services provided, and to the day-to-day activities that support learning.
- We are working to “close-the-loop” for assessment of student learning and are beginning to see positive results from our assessment program.
- Assessment informs our decision-making so we can make plans and continue to improve the teaching and learning process on our campuses.

### **Level of Implementation**

The College has made a good deal of progress in the previous two years, moving from Level One to Level Two patterns of characteristics (see Dr. Cecilia Lopez', Associate Director of The Higher Learning Commission, Levels of Implementation in Appendix). The Assessment Committee annually reviews and rates the College's assessment progress using these levels.

There is a system in place regarding the annual collection and analysis of student data with an established timetable. The Assessment Committee is accustomed to discussing assessment findings and recommending changes. Because assessment has indeed become part of the “culture of evidence” at Mesabi Range Community & Technical College, we believe that we have now begun *Level Three: Maturing Stages of Continuous Improvement*. Assessment has indeed “become an institutional priority, a way of life, sustained by a faculty and administrative commitment to excellent teaching and effective learning.”

Although Mesabi Range College's assessment program has been in operation for a relatively short period of time—three years—it has produced a significant impact on instructional programs as well as general college operations. Given the comprehensive nature of the assessment program and the fact that it involves all full-time, and a good portion of part-time faculty, plus college administration, student support staff, customized training, and continuing education departments, the expectation is that its impact will continue in the future.