# Student Learning Assessment Committee

# ANNUAL REPORT
# 2009-2010

**September 2010**

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# STUDENT LEARNING ASSESSMENT COMMITTEE

This report is a summary of the activities of the Student Learning Assessment Committee (SLAC) from June 2009 to May 2010.


## COMMITTEE COMPOSITION

During the 2009-2010 academic year the Student Learning Assessment Committee (SLAC) consisted of the following members:

Tom Morris                    Chair, Health and Wellness Facility
                              Coordinator/Faculty
Dr. John Bauler               Coordinator of Off-Campus Programs
Richard Gerbrandt             Building Trades Faculty
Dr. David Gallatin            Dean of Instructional Services
Donna Garcia                  Director of Instructional Services
Sabrina Gaskill               English/Communications Faculty
Natalie Gillard               Associate Dean of Instructional Services
Janet Griffiths               Pre-Collegiate Faculty
Dr. Axel Hungerbuehler        Museum Curator/Natural Sciences Faculty
Dr. Philip Kaatz              Mathematics/Physical Science Faculty
Kim Enriquez                  Committee Secretary, Administrative Secretary


## COMMITTEE INTERACTION WITH COLLEGE COMMUNITY

The Committee distributed *Faculty Assessment Notes,* a guide to using classroom and program assessment to enhance student learning, to all new adjunct faculty teaching during the fall 2009 and spring 2010 semesters, as well as full-time faculty and returning adjunct faculty. In the fall 2003 semester, *Faculty Assessment Notes* became an annual guide to assessing student learning at the College.

The Student Learning Assessment Committee held joint meetings with faculty in fall 2009 and spring 2010 to discuss assessment practices and the evaluation procedures of the College's current semester graduates for the assessment of the General Education competencies. These semi-annual "Assessment Day" meetings occurred on the following days:

- January 8, 2009
- August 11, 2009
- December 14, 2009

# ACTIVITIES OF THE COMMITTEE

The committee continued to mentor all adjunct faculty and new full-time faculty in assessing student learning.  Similar to previous semesters, all adjunct and new full-time faculty were assigned a mentor to assist them in assessing student learning each semester.

*Faculty Assessment Notes*, which are prepared for all full-time and adjunct faculty who teach for Mesalands Community College for both on-campus and off-campus programs, were significantly revised.  This practical guide to student learning assessment is a supplement to the *Student Learning Assessment Model* which was also significantly revised. The *Faculty Assessment Notes* were distributed to all adjunct faculty at the beginning of both the fall and spring semesters.

Members of the Committee and other College administration and staff attended the annual New Mexico Higher Education Assessment and Retention Conference held in Albuquerque on February 25-26, 2010.  The following committee members attended the conference: Sabrina Gaskill, Dr. Philip Kaatz, and Tom Morris.

The committee continued to review the course objectives for new and revised courses.

Committee members, along with other faculty, participated in the College's Assessment Days when selected students completed the General Education Assessment (GEA) and Collegiate Assessment of Academic Proficiency (CAAP) Exams.

The Committee continued its assessment-related work by completing its second year of participation in the Higher Learning Commission's Academy for Assessment of Student Learning Action Portfolio/Student Learning Plan entitled "Beyond the Basics: Reinventing Assessment at Mesalands Community College."

SLAC emphasized program assessment. Faculty received email reminders concerning program assessment during the last year.  All program directors/lead instructors met one-on-one with the Chair of the Student Learning Assessment Committee to review assessment activities.

The Committee also focused on College-wide assessment of the General Education Competency Communication-Writing by introducing the Writing Across the Curriculum initiative.

# COMMITTEE SELF-EDUCATION

In addition to attending the New Mexico Higher Education Assessment and Retention Conference in February, the Student Learning Assessment Committee continued its ongoing self-education process during the fall 2009 and spring 2010 semesters with mentor sharing. The committee also revised the *Student Learning Assessment Model*, including the 2009-2010 institutional focus on student learning assessment.   Dr. Gallatin, Ms. Gillard and Mr. Morris, members of the committee, also attended the North Central Accreditation Annual Conference in Chicago, Illinois, on April 9-13, 2010.

# COMMITTEE OBJECTIVES

The Student Learning Assessment Committee has four explicit objectives that are stated in the *Student Learning Assessment Model*.  The objectives of the Student Learning Assessment Committee are to:

Objective 1   *Enhance the knowledge of the faculty at Mesalands Community College about the assessment of student learning by conducting meetings and workshops, distributing materials, and by providing resources (e.g., Assessment Reserve Collection in the Library). One issue of* Assessment News *will be published each fall and spring semester and all faculty will receive a copy of* Faculty Assessment Notes *by the first week of classes.  The Student Learning Assessment Committee will have at least one joint meeting with the Faculty Council every semester.*

Objective 2    *Spearhead the development of assessment at the College by producing, if needed, by November 30 each year, a revised plan for assessment at the College.*

Objective 3    *Facilitate and implement the development of feedback loops and information dissemination about assessment at the College by:*

   a.  *producing an annual report by September 15 of each year*
   b.  *producing two issues of* Assessment News *each academic year*
   c.   *providing all faculty with copies of* Faculty Assessment Notes *each academic year*
   d.  *having at least one joint meeting with the Faculty Council every fall and spring semester*
   e.  *providing all adjunct and new faculty with an assessment mentor*
   f.  *presenting information on assessment at every new student orientation and at each section of ACS 100 Student College*

*Success class, including delivery of the brochure* Student Guide to Educational Assessment

*Objective 4    Oversee the implementation of the* Student Learning Assessment Model *so that faculty and staff will provide all the documents and reports specified in the* Model *within one week of the stated deadline.*

## INSTITUTIONAL FOCUS ON
## STUDENT LEARNING ASSESSMENT
## 2009–2010

The Student Learning Assessment Committee completed "Year Two" (2009-2010) of the Higher Learning Commission's "Academy for Assessment of Student Learning" by continuing to refine and implement its "Action Portfolio" (also referred to as the Student Learning Plan) entitled "Beyond the Basics: Reinventing Assessment at Mesalands Community College**."**  This Student Learning Plan continues to address and build upon the findings of the 2004 Higher Learning Commission on-site visit for accreditation with emphasis on both program level assessment and general education competency outcomes.   In order to continue this process, Mesalands Community College encourages lead instructors and faculty to take "ownership" of their respective programs in terms of whether or not students are learning what faculty say they are learning as identified in the program objectives and general education competencies. Clearly defined program objectives and general education competencies are Mesalands' contract with all stakeholders and reflect those outcomes that students will possess and demonstrate upon graduation.  These outcomes reflect knowledge, skills and professional dispositions valued by workplace employers and other interested parties and represent the most deeply held values of the College driving much of what occurs at Mesalands.

The following chart illustrates the 2009-2010 focus for student learning assessment:

| Priorities | Goals | Objectives | Responsible Individual(s) |
|---|---|---|---|
| Continue to refine and implement the "Action Portfolio" (also referred to as the Student Learning Plan) entitled "Beyond the Basics: Reinventing Assessment at Mesalands Community College." | Complete "Year Two" (2009-2010) of the Higher Learning Commission's "Academy for Assessment of Student Learning". | 1. Formal and informal faculty training in support of successfully implementing the Student Learning Plan will be scheduled as needed.<br><br>2. SLAC acknowledges that a number of programs do not have a lead instructor. The lack of a "lead instructor" will need to be addressed. Lead instructors will be identified on the "Student Learning Assessment and Retention" link on the College's website.<br><br>3. Updated program objectives will be posted on the "Student Learning Assessment and Retention" link of the Mesalands Community College web site. Consideration will be made whether or not to include the program objectives in future course Catalogs.<br><br>4. Lead instructors teaching courses related to general education competencies will be asked to meet and revisit those competencies and related rubrics. The goal is to revisit each of the three general education competencies (communication, quantitative and scientific reasoning and critical thinking) over the course of the next three years as follows:<br>• Communication **(2009-2010)**<br>• Critical Thinking **(2010-2011)**<br>• Quantitative and Scientific Reasoning **(2011-2012)**<br>Once rubrics are developed, embedded assessment utilizing the rubrics will be implemented during that same academic cycle in order to measure general education competency attainment. Finalized competencies and rubrics will be posted in both in the Catalog and the "Student Learning Assessment and Retention" link of the Mesalands Community College web site. | Student Learning Assessment Committee (SLAC).<br><br>Student Learning Assessment Committee (SLAC), Dean of Instructional Services, and Coordinator of Institutional Computing.<br><br>Student Learning Assessment Committee (SLAC), Coordinator of Institutional Computing and Dean of Instructional Services<br>.<br>Student Learning Assessment Committee (SLAC), Dean of Instructional Services, Program Directors/Lead Instructors and Coordinator of Institutional Computing. |

| | | | |
|---|---|---|---|
| | | 5. Implement the new Student Learning Assessment Program Report format for program assessment for the 2009-2010 reporting cycle. | Student Learning Assessment Committee (SLAC) and Program Directors/Lead Instructors. |
| | | 6. Activate the "Student Learning Assessment and Retention" website links. | Student Learning Assessment Committee (SLAC) and Coordinator of Institutional Computing. |
| | | 7. Develop and implement a comprehensive training program for adjunct faculty on the importance of assessment and the assessment process. | Student Learning Assessment Committee (SLAC), Director of Instructional Services, and Adjunct Faculty. |
| | | 8. Establish an assessment plan for the North Central Accreditation (NCA) proposals (Change in Educational Site) with consideration being made on how to most effectively embed assessment across all sites and tie that to the assessments being used at the main campus. | North Central Steering Committee, Student Learning Assessment Committee (SLAC), Director of Instructional Services, and Coordinator of Off Campus Programs. |
| | | 9. Develop more user friendly general education rubrics.<br>• Communication **(2009-2010)** Critical Thinking **(2010-2011)**<br>• Quantitative and Scientific Reasoning **(2011-2012)** | Student Learning Assessment Committee (SLAC) and Program Directors/Lead Instructors. |
| | | 10. Biannual reports **(June 2010 and December 2010)** to the Board of Trustees on assessment related activities. | SLAC Chair |

# RESULTS OF THE INSTITUTIONAL FOCUS

Mesalands Community College has made a commitment to develop and implement a sustainable plan to address the concerns identified by The Higher Learning Commissions' Accreditation Team.  The Student Learning Assessment Committee (formerly the Assessment Team) has been charged with facilitating this commitment and has entitled this "Action Portfolio"/Student Learning Plan "Beyond the Basics: Reinventing Assessment at Mesalands Community College**."**

Effective assessment of student learning is a matter of commitment, not a matter of compliance.  To that end, Mesalands Community College is dedicated to establishing a culture of assessment embedded in every aspect of the educational process.  This student learning plan is a living, breathing document that will mature and change as the college identifies the most effective and efficient methods of understanding, confirming and improving student learning.

The results of the goal of completing "year two" of the Higher Learning Commission's "Academy for Assessment of Student Learning" are stated below. All objectives associated with this goal are specific, measureable, attainable and relevant with specific timelines for completion.

Objective 1:  Formal and informal faculty training in support of successfully implementing the Student Learning Plan will be scheduled as needed.

The semi-annual "Assessment Day" dates and formal training topics were as follows:
- January 8, 2009
  - Introduction of the new Student Learning Assessment Program Report formats.
  - Curriculum mapping of program objectives and general education competencies.
- August 11, 2009
  - Practical steps to completing the Student Learning Assessment Program Reports.
- December 14, 2009
  - Rolling out the new Writing Rubric Reporting Form
  - Preliminary introduction of the College-wide Writing Across the Curriculum initiative.[1]

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[1] The Writing Across the Curriculum (WAC) movement (which first appeared on college campuses in the 1970's and 1980's) "is largely a reaction against traditional writing instruction that associates good writing primarily with grammatical accuracy and correctness, and thus isolates writing instruction within English departments, the home of grammar experts.  The problem with traditional writing instruction is that it leads to a view of writing as a set of isolated skills unconnected to" the students major and discipline.

Informal training frequently occurred with the Student Learning Assessment Committee Chair meeting one-on-one with every program director/lead instructor on the development of their Student Learning Assessment Program Reports.

Objective 2   SLAC acknowledges that a number of programs do not have a lead instructor.  The lack of a "lead instructor" will need to be addressed.  Lead instructors will be identified on the "Student Learning Assessment and Retention" link on the College's website.

A lead instructor has been identified for the following associate degree programs:
- AA General Studies
- AAS General Studies
- University Studies

SLAC will submit to Cabinet a request to identify lead instructors for active certificate programs with the goal of identifying these individuals during the fall 2010 semester.

A decision still needs to be made in terms of whether or not to identify lead instructors on the "Student Learning Assessment and Retention" link on the College's website.  SLAC will finalize a decision during the fall 2010 semester.

Objective 3   Updated program objectives will be posted on the "Student Learning Assessment and Retention" link of the Mesalands Community College web site.  Consideration will be made whether or not to include the program objectives in future course Catalogs.

Cabinet has approved updates to Assessment link on College's web site (July 2010).  Updated program objectives will be included as part of the Student Learning Assessment Committee Annual Report document link.

A decision still needs to be made in terms of whether or not to identify program objectives on the "Student Learning Assessment and Retention" link on the College's website.  SLAC will finalize a decision during the fall 2010 semester.

Objective 4   Lead instructors teaching courses related to general education competencies will be asked to meet and revisit those competencies and related rubrics.  The goal is to revisit each of the three general education competencies (communication, quantitative and scientific reasoning and critical thinking) over the course of the next three years as follows:
o Communication **(2009-2010)**

Learning to write in a discipline is intimately connected to learning to think within that discipline.  This will improve both the students writing abilities as well as their understanding of their major field of study.

o Critical Thinking **(2010-2011)**
o Quantitative and Scientific Reasoning **(2011-2012)**
Once rubrics are developed, embedded assessment utilizing the rubrics will be implemented during that same academic cycle in order to measure general education competency attainment. Finalized competencies and rubrics will be posted in both in the Catalog and the "Student Learning Assessment and Retention" link of the Mesalands Community College
web site.

The communication general education competencies (writing, oral presentation and informational technology) were revisited and revised. New rubrics were developed for each. The Writing Across the Curriculum initiative was introduced, embedded into the curriculum and preliminary data was collected utilizing the newly developed General Education Competency Communication: Writing Rubric Reporting Form.

Cabinet has approved updates to the assessment link on College's web site (July 2010). Finalized communication competencies will be included.

A decision still needs to be made in terms of whether or not to include the rubrics in the College Catalog or course schedule. SLAC will finalize a decision during the fall 2010 semester.

Objective 5    Implement the new Student Learning Assessment Program Report format for program assessment for the 2009-2010 reporting cycle.

Fifteen degree programs and one certificate program implemented the plan→do→study→adjust assessment cycle and reported their activities using the new Student Learning Assessment Program Report.

Objective 6    Activate the "Student Learning Assessment and Retention" website links.

The Assessment website link was activated during the fall 2009 semester. Cabinet has approved updates to Assessment link on College's web site (July 2010).

Objective 7    Develop and implement a comprehensive training program for adjunct faculty on the importance of assessment and the assessment process.

In addition to the semi-annual "Assessment Day" training that occurred at Main Campus, formal training was performed at Guadalupe County Correctional Facility on May 20-21, 2010. Additional training is presently being scheduled for

all dual enrollment sites as well as Northeast New Mexico Detention Facility (NENMDF).  The goal is to complete these additional trainings prior to the third week of the fall 2010 semester.

Objective 8   Establish an assessment plan for The Higher Learning Commission of the North Central Association of Colleges and Schools proposals (Change in Educational Site) with consideration being made on how to most effectively embed assessment across all sites and tie that to the assessments being used at the main campus.

Completed during the spring 2010 semester.

Objective 9   Develop more user friendly general education rubrics.
o Communication **(2009-2010)**
o Critical Thinking **(2010-2011)**
o Quantitative and Scientific Reasoning **(2011-2012)**

Communications rubrics for writing, oral presentation and informational technology were updated during the fall 2009 semester.  These updated rubrics were used during the spring 2010 semester and included as the assessment tool during the relevant portions of the General Education Assessment (GEA).

Critical thinking will be addressed during the fall 2010 semester.

Objective 10  Biannual reports **(June 2010 and December 2010)** to the Board of Trustees on assessment related activities.

Semi-Annual Report to the Mesalands Community College Board of Trustees was submitted and presented on May 11, 2010.

## Summary of Assessment Activities 2009-2010

| Objective | Action | Deliverables | Date Accomplished | Future Actions |
|---|---|---|---|---|
| Formal and informal faculty training in support of successfully implementing the Student Learning Plan will be scheduled as needed. | "Assessment Day" was held on three separate occasions. | • Training materials<br>• Student Learning Assessment Program Reports | • January 8, 2009<br>• August 11, 2009<br>• December 14, 2009<br><br>Training also took place at Guadalupe County Correctional Facility on May 20-21, 2010. | Semi-annual "Assessment Day" will become a permanent event for on-campus faulty.<br>Training for off-campus adjunct faculty will occur within the first three weeks of the fall and spring semesters with the goal of scheduling this training at the off-site location. |
| SLAC acknowledges that a number of programs do not have a lead instructor. The lack of a "lead instructor" will need to be addressed. Lead instructors will be identified on the "Student Learning Assessment and Retention" link on the College's website. | Lead instructor identified for the following programs:<br>• AA General Studies<br>• AAS General Studies<br>• University Studies | • Student Learning Assessment Program Reports | Spring 2010 semester | SLAC will submit to Cabinet a request to identify lead instructors for active certificate programs with the goal of identifying these individuals during the Fall 2010 semester.<br><br>A decision still needs to be made in terms of whether or not to identify lead instructors on the "Student Learning Assessment and Retention" link on the College's website. SLAC will finalize a decision during the fall 2010 semester. |

## Summary of Assessment Activities 2009-2010

| Objective | Action | Deliverables | Date Accomplished | Future Actions |
|---|---|---|---|---|
| Updated program objectives will be posted on the "Student Learning Assessment and Retention" link of the Mesalands Community College web site. Consideration will be made whether or not to include the program objectives in future schedule or College Catalog. | Cabinet has approved updates to Assessment link on College's web site (July 2010). Updated program objectives will be included as part of the Student Learning Assessment Committee Annual Report document link. | Student Learning Assessment Committee Annual Report | Fall 2010 semester | A decision still needs to be made in terms of whether or not to identify program objectives on the "Student Learning Assessment and Retention" link on the College's website. SLAC will finalize a decision during the fall 2010 semester. |
| Lead instructors teaching courses related to general education competencies will be asked to meet and revisit those competencies and related rubrics. The goal is to revisit each of the three general education competencies (communication, quantitative and scientific reasoning and critical thinking) over the course of the next three years as follows: | The communication general education competencies (writing, oral presentation and informational technology) were revisited and revised. New rubrics were developed for each. The Writing Across the Curriculum (WAC) initiative was introduced, embedded into the curriculum and preliminary data was collected utilizing the newly developed General Education Competency Communication: Writing Rubric Reporting Form. | • Writing Rubric<br>• Oral Presentation Rubric<br>• Informational Technology Rubric<br>• WAC preliminary data | Spring 2010 semester | A decision still needs to be made in terms of whether or not to include the rubrics in the course Catalog. SLAC will finalize a decision during the fall 2010 semester. |

| Summary of Assessment Activities 2009-2010 | | | | |
|---|---|---|---|---|
| **Objective** | **Action** | **Deliverables** | **Date Accomplished** | **Future Actions** |
| • Communication **(2009-2010)** <br> • Critical Thinking **(2010-2011)** <br> • Quantitative and Scientific Reasoning **(2011-2012)** <br> Once rubrics are developed, embedded assessment utilizing the rubrics will be implemented during that same academic cycle in order to measure general education competency attainment.  Finalized competencies and rubrics will be posted in both in the Catalog and the "Student Learning Assessment and Retention" link of the Mesalands Community College web site. | | | | |
| Implement the new Student Learning Assessment Program Report format for program assessment for the 2009-2010 reporting cycle. | Fifteen degree programs and one certificate program implemented the plan→do→study→adjust assessment cycle and reported their activities using the new Student | Student Learning Assessment Program Reports | Spring 2010 semester | Make sure lead instructors are "closing the loop" in future reports. |

## Summary of Assessment Activities 2009-2010

| Objective | Action | Deliverables | Date Accomplished | Future Actions |
|---|---|---|---|---|
| | Learning Assessment Program Report. | | | |
| Activate the "Student Learning Assessment and Retention" website links. | The Assessment website link was activated during the fall 2009 semester. | Assessment website link | Fall 2009 semester | Ensure updates are posted based on July 2010 Cabinet approval. |
| Develop and implement a comprehensive training program for adjunct faculty on the importance of assessment and the assessment process. | In addition to the semi-annual "Assessment Day" training that occurred at Main Campus, formal training was performed at Guadalupe County Correctional Facility on May 20-21, 2010. | Training materials. | May 20-21, 2010 | Additional training is presently being scheduled for all dual enrollment sites as well as NENMDF. The goal is to complete these additional trainings prior to the third week of the fall 2010 semester. |
| Establish an assessment plan for the The Higher Learning Commission of the North Central Association of Colleges and Schools proposals (Change in Educational Site) with consideration being made on how to most effectively embed assessment across all sites and tie that to the assessments being used at the main campus. | Committee completed and submitted Institutional Request for Change 2010 Report during the spring 2010 semester.<br><br>HLC granted approval, site visit scheduled for fall 2010. | Institutional Request for Change 2010 Report | Spring 2010 semester | Assessment of general education competencies using rubrics will be embedded in those courses that teach or evaluate communication, quantitative and scientific reasoning and/or critical thinking skills. This data will be reported by the faculty member and used to compare oral communication outcomes across different courses, different degrees and different education sites with the goal of improving learning across the |

| Summary of Assessment Activities 2009-2010 | | | | |
|---|---|---|---|---|
| **Objective** | **Action** | **Deliverables** | **Date Accomplished** | **Future Actions** |
| | | | | College. This will ensure that the quality of a Mesalands education is the same regardless of educational site and/or mode of delivery, e.g., traditional classroom, internet, podcast, webcast, directed study.<br><br>The Student Learning Assessment Committee will also seek to embed identical assessment tools into the same courses offered at main as well as off-campus. This will help the College identify whether or not the quality and quantity of learning is similar between the two sites. |
| Develop more user friendly general education rubrics.<br>• Communication **(2009-2010)**<br>• Critical Thinking **(2010-2011)**<br>• Quantitative and Scientific Reasoning **(2011-2012)** | Communications rubrics for writing, oral presentation and informational technology were updated during the fall 2009 semester. These updated rubrics were used during the spring 2010 semester and included as the assessment tool during the relevant portions of the | • Writing Rubric<br>• Oral Presentation Rubric<br>• Informational Technology Rubric | Spring 2010 semester | Critical thinking will be addressed during the fall 2010 semester. |

## Summary of Assessment Activities 2009-2010

| Objective | Action | Deliverables | Date Accomplished | Future Actions |
|---|---|---|---|---|
| | General Education Assessment (GEA). | | | |
| Biannual reports **(June 2010 and December 2010)** to the Board of Trustees on assessment related activities. | Semi-Annual Report to the Mesalands Community College Board of Trustees was submitted and presented on May 11, 2010. | The Higher Learning Commission/North Central Accreditation Student Learning Plan Semi-Annual Report to the Mesalands Community College Board of Trustees. | May 11, 2010 | December 2010 report |

**ASSESSMENT FEEDBACK DRIVEN CHANGES**

**IMPLEMENTED CHANGES**

1. Refer to previous tables (pages 11-16) for implemented changes.

2. The Committee is working with the New Mexico Assessment Task Force and creating a report for the New Mexico Higher Education Department regarding assessment of requested competencies.

**OPPORTUNITIES FOR IMPROVEMENT**

1. Refer to previous tables (pages 11-16) for opportunities for improvement/future activities.

2. Complete "Year Two" (2009-2010) participation in The Academy by continuing to develop and implement an "Action Portfolio" (also referred to as the Student Learning Plan) that the College Assessment Team has entitled **Beyond the Basics: Reinventing Assessment at Mesalands Community College.**

# INSTITUTIONAL LEVEL ASSESSMENT

Direct measures of student learning assessment at the institutional level include a variety of testing measures (COMPASS, CAAP, GEA). Indirect measures of student learning include a variety of student surveys. The following sections describe and summarize the results of these assessments.

**Computer Adaptive Placement Assessment and Support System (COMPASS)**

The COMPASS test is a comprehensive software and operational support package developed by ACT to help post-secondary institutions place students into appropriate entry-level courses and to diagnose specific areas of strengths and weaknesses. COMPASS software administers, scores, and reports the results of adaptive placement and diagnostic tests in the areas of mathematics, reading, and writing skills. The software also provides data management functions to help access test results in a variety of ways. All of these features are included in a single integrated software package. Using the system's most basic feature, the software can administer a test in one or more content areas to a student on demand and present the results immediately following the session either on the computer screen or in printed form. Test results can be stored for later retrieval so that summary reports can be created and scores can be transmitted to a student information system.

Mesalands Community College not only uses the COMPASS for student success/assessment placing in core math and English courses, as well as reading (if required), but the College has been collecting COMPASS data to provide assessment feedback for an institutional level pre-test assessment.

The following tables shows the number of students who completed each of the compass sub-tests, their averages, and standard deviation for each sub-test completed in preparation for the 2009-2010 academic year (April 30, 2009– March 30, 2010). The summer testing period was from April 30, 2009 – June 30, 2009, the fall testing period from July 1, 2009 – Oct 31, 2009 and the spring testing period was from Nov 1, 2009 – Mar 30, 2010.

| COMPASS SCORE SUMMARY<br>2009-2010 ACADEMIC YEAR | | | | | | |
|---|---|---|---|---|---|---|
| | Pre- Algebra | Algebra | College Algebra | Trigonometry | Reading | Writing |
| Summer 2009 | | | | | | |
| N | 30 | 73 | 2 | | 55 | 50 |
| M | 46.6 | 31.1 | 43.5 | | 74.3 | 55.2 |
| SD | 15.5 | 13.0 | 7.8 | | 17.7 | 29.8 |
| Fall 2009 | | | | | | |
| N | 164 | 289 | 15 | 10 | 261 | 249 |
| M | 33.7 | 29.3 | 55.5 | 47.7 | 76.3 | 58.6 |
| SD | 15.7 | 16.7 | 16.6 | 10.1 | 17.4 | 30.5 |
| Spring 2010 | | | | | | |
| N | 48 | 62 | 2 | 1 | 83 | 56 |
| M | 32.9 | 22.9 | 42 | 33 | 68.9 | 42.6 |
| SD | 12.7 | 12.1 | 15.6 | | 19.0 | 29.5 |

N=number of students tested; M=mean (average score); SD=standard deviation

The following table displays the numbers of students that were placed in each course level for each semester of this report:

| MESALANDS COMMUNITY COLLEGE<br>COMPASS DISTRIBUTION SUMMARY<br>2009-2010 ACADEMIC YEAR | | | | | | | |
|---|---|---|---|---|---|---|---|
| | ABE | 099/100 | 101/102 | 107 | 110 | 112 | None |
| Summer 2009 | | | | | | | |
| Math | 2 | 10 | 52 | 8 | 2 | | |
| English | 6 | 28 | 16 | | | | |
| Reading | | 29 | | | | | 26 |
| Fall 2009 | | | | | | | |
| Math | 50 | 77 | 117 | 31 | 4 | 10 | |
| English | 30 | 114 | 105 | | | | |
| Reading | | 124 | | | | | 137 |
| Spring 2010 | | | | | | | |
| Math | 8 | 29 | 23 | | 1 | 1 | |
| English | 15 | 30 | 11 | | | | |
| Reading | | 58 | | | | | 25 |

## Collegiate Assessment of Academic Proficiency Testing (CAAP)

The CAAP test was administered to four students, all who had petitioned to graduate, on October 31, 2009, as well as to 41 students on April 9, 2010. These students had or would complete the required 60 hours of course work by their testing date.  Students who have completed ENG 102 – English Composition are eligible to complete the writing and reading portions of the CAAP.  Students who

have completed a required science course with a laboratory are eligible to complete the science reasoning and critical thinking portions of the CAAP. Students who have completed Math 110 – College Algebra are eligible to take the math portion of the test.

Students who score above the 50th percentile nationally in any subject are awarded certificates of achievement from ACT. The following tables summarize these achievement results:

| MESALANDS COMMUNITY COLLEGE<br>CAAP CERTIFICATE AWARDS BY SUBJECT<br>FALL 2009 AND SPRING 2010 SEMESTERS | | | | | |
|---|---|---|---|---|---|
| | Writing | Math | Reading | Critical Thinking | Science |
| Number of Certificates Awarded | 7 | 8 | 12 | 12 | 19 |
| Number of Students Participating | 33 | 9 | 35 | 41 | 40 |

| MESALANDS COMMUNITY COLLEGE<br>NUMBER OF STUDENTS RECEIVING CAAP CERTIFICATE<br>AWARDS BY NUMBER OF SUB-TESTS<br>FALL 2009 AND SPRING 2010 SEMESTERS | | | | | | |
|---|---|---|---|---|---|---|
| Number of Students Participating | Number of Certificates Awarded | Five Sub-tests | Four Sub-tests | Three Sub-tests | Two Sub-tests | One Sub-test |
| 45 | 58 | 0 | 4 | 6 | 5 | 14 |

The CAAP results for the fall 2009 students was too small for ACT to complete a statistical analysis; however, the spring 2010 averages for each subject area compared to the corresponding national average are given in the following table:

| MESALANDS COMMUNITY COLLEGE<br>CAAP AVERAGES BY SUBJECT AREA<br>SPRING 2010 SEMESTER | | | | | |
|---|---|---|---|---|---|
| Subject | Writing | Math | Reading | Critical Thinking | Science Reasoning |
| MCC Avg. | 60.0 | 57.5 | 59.5 | 58.9 | 59.3 |
| National Avg. | 62.0 | 56.1 | 60.4 | 60.7 | 59.2 |

Generally, the CAAP scores of Mesalands Community College students have been stable in comparison with national averages. The following table displays the comparative results of the CAAP Test for the years 2002 through 2010.

| CHANGES IN CAAP SCORES 2002–2010 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Mesalands Community College Mean Score as % of National Mean** | **Year** | | | | | | | | |
| | **2002** | **2003** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** | **2010** |
| Writing | 95.40 | 94.88 | 95.04 | 96.47 | 97.27 | 96.30 | 95.65 | 95.65 | 96.77 |
| Math | 103.20 | 99.82 | 102.14 | 99.47 | 98.25 | 99.82 | 96.98 | 103.20 | 102.45 |
| Reading | 98.36 | 95.40 | 94.88 | 97.35 | 95.70 | 97.85 | 97.35 | 99.00 | 98.51 |
| Critical Thinking | 96.90 | 94.07 | 98.02 | 98.84 | 95.22 | 97.04 | 97.05 | 95.89 | 97.03 |
| Science Reasoning | 99.50 | 95.93 | 97.80 | 97.95 | 97.97 | 97.29 | 98.65 | 97.47 | 100.17 |

## General Education Assessment (GEA)

Eight students who petitioned to graduate took the General Education Assessment on October 30, 2009, as well as 46 students on April 8, 2010. This assessment is done for all graduates of the A.A. and A.A.S degrees awarded by the College and it was administered for the first time to the spring 2005 graduating class. The rubrics for this assessment are given in Appendix E. Note that the rubrics for assessing communication were revised during the fall 2009 semester. A summary of the results in terms of the number of students that scored at various levels and the group averages are given in the following tables:

## MESALANDS COMMUNITY COLLEGE
## GENERAL EDUCATION ASSESSMENT
## FALL 2009 SEMESTER

| Criteria | Excellent 5 | Proficient 4 | Acceptable 3 | Inadequate 2 | Unacceptable 1 | Total | Average | % ≥ 3 |
|----------|-------------|--------------|--------------|--------------|----------------|-------|---------|-------|
| CE1-1 | 0 (0%) | 6 (75%) | 2 (25%) | 0 (0%) | 0 (0%) | 8 | 3.75 | 100.00 |
| CE1-2 | 0 (0%) | 5 (62.5%) | 3 (37.5%) | 0 (0%) | 0 (0%) | 8 | 3.63 | 100.00 |
| CE1-3 | 0 (0%) | 0 (0%) | 5 (62.5%) | 3 (37.5%) | 0 (0%) | 8 | 2.63 | 62.50 |
| CE1-4 | 0 (0%) | 8 (100%) | 0 (0%) | 0 (0%) | 0 (0%) | 8 | 4.00 | 100.00 |
| CE2-1 | 1 (12.5%) | 6 (75%) | 1 (12.5%) | 0 (0%) | 0 (0%) | 8 | 4.00 | 100.00 |
| CE2-2 | 0 (0%) | 3 (37.5%) | 4 (50%) | 1 (12.5%) | 0 (0%) | 8 | 3.25 | 87.50 |
| CE2-3 | 0 (0%) | 2 (25%) | 6 (75%) | 0 (0%) | 0 (0%) | 8 | 3.25 | 100.00 |
| CE3-1 | 6 (75%) | 2 (25%) | 0 (0%) | 0 (0%) | 0 (0%) | 8 | 4.75 | 100.00 |
| CE3-2 | 4 (50%) | 2 (25%) | 2 (25%) | 0 (0%) | 0 (0%) | 8 | 4.25 | 100.00 |
| CE3-3 | 7 (87.5%) | 1 (12.5%) | 0 (0%) | 0 (0%) | 0 (0%) | 8 | 4.88 | 100.00 |
| SQ4-1 | 0 (0%) | 0 (0%) | 3 (37.5%) | 1 (12.5%) | 4 (50%) | 8 | 1.88 | 37.50 |
| SQ4-2 | 0 (0%) | 1 (12.5%) | 5 (62.5%) | 1 (12.5%) | 1 (12.5%) | 8 | 2.75 | 75.00 |
| SQ4-3 | 0 (0%) | 1 (12.5%) | 3 (37.5%) | 0 (0%) | 4 (50%) | 8 | 2.13 | 50.00 |
| SQ4-4 | 1 (12.5%) | 0 (0%) | 1 (12.5%) | 1 (12.5%) | 5 (62.5%) | 8 | 1.88 | 25.00 |
| SQ5-1 | 1 (12.5%) | 3 (37.5%) | 3 (37.5%) | 1 (12.5%) | 0 (0%) | 8 | 3.50 | 87.50 |
| SQ5-2 | 2 (25%) | 4 (50%) | 2 (25%) | 0 (0%) | 0 (0%) | 8 | 4.00 | 100.00 |
| SQ5-3 | 2 (25%) | 3 (37.5%) | 3 (37.5%) | 0 (0%) | 0 (0%) | 8 | 3.88 | 100.00 |
| SQ5-4 | 1 (12.5%) | 5 (62.5%) | 2 (25%) | 0 (0%) | 0 (0%) | 8 | 3.88 | 100.00 |
| SQ6-1 | 0 (0%) | 6 (75%) | 0 (0%) | 1 (12.5%) | 1 (12.5%) | 8 | 3.38 | 75.00 |
| SQ6-2 | 2 (25%) | 3 (37.5%) | 0 (0%) | 1 (12.5%) | 2 (25%) | 8 | 3.25 | 62.50 |
| SQ6-3 | 0 (0%) | 4 (50%) | 3 (37.5%) | 1 (12.5%) | 0 (0%) | 8 | 3.38 | 87.50 |
| SQ6-4 | 1 (12.5%) | 2 (25%) | 3 (37.5%) | 2 (25%) | 0 (0%) | 8 | 3.25 | 75.00 |
| CT7-1 | 2 (25%) | 4 (50%) | 1 (12.5%) | 1 (12.5%) | 0 (0%) | 8 | 3.88 | 87.50 |
| CT7-2 | 3 (37.5%) | 2 (25%) | 3 (37.5%) | 0 (0%) | 0 (0%) | 8 | 4.00 | 100.00 |
| CT7-3 | 3 (37.5%) | 3 (37.5%) | 1 (12.5%) | 1 (12.5%) | 0 (0%) | 8 | 4.00 | 87.50 |
| CT7-4 | 2 (25%) | 3 (37.5%) | 3 (37.5%) | 0 (0%) | 0 (0%) | 8 | 3.88 | 100.00 |
| CT8-1 | 0 (0%) | 6 (75%) | 2 (25%) | 0 (0%) | 0 (0%) | 8 | 3.75 | 100.00 |
| CT8-2 | 0 (0%) | 8 (100%) | 0 (0%) | 0 (0%) | 0 (0%) | 8 | 4.00 | 100.00 |
| CT8-3 | 0 (0%) | 4 (50%) | 4 (50%) | 0 (0%) | 0 (0%) | 8 | 3.50 | 100.00 |
| CT8-4 | 0 (0%) | 1 (12.5%) | 7 (87.5%) | 0 (0%) | 0 (0%) | 8 | 3.13 | 100.00 |
| CT9-1 | 0 (0%) | 4 (50%) | 4 (50%) | 0 (0%) | 0 (0%) | 8 | 3.50 | 100.00 |
| CT9-2 | 0 (0%) | 5 (62.5%) | 3 (37.5%) | 0 (0%) | 0 (0%) | 8 | 3.63 | 100.00 |
| CT9-3 | 0 (0%) | 4 (50%) | 4 (50%) | 0 (0%) | 0 (0%) | 8 | 3.50 | 100.00 |
| CT9-4 | 0 (0%) | 4 (50%) | 4 (50%) | 0 (0%) | 0 (0%) | 8 | 3.50 | 100.00 |

| | |
|---|---|
| CE1-1 | Provides an appropriate introduction and conclusion |
| CE1-2 | Provides main points that are documented, developed, clear and focused |
| CE1-3 | Provides appropriate handouts and audio-visual aids |
| CE1-4 | Speaks clearly and understandably using standard, edited English |
| CE2-1 | Provides content that is clearly focused and supported by the writer's understanding of the topic |
| CE2-2 | Uses appropriate grammar, syntax, usage, punctuation, and spelling |
| CE2-3 | Logically organizes and develops ideas in writing |
| CE3-1 | Demonstrates basic computer and operating system skills |
| CE3-2 | Performs tasks within computer software packages, such as Word, Power-Point, and Excel |
| CE3-3 | Uses a search engine to access, navigate, and evaluate information on the internet |
| SQ4-1 | Understands Mathematical vocabulary |
| SQ4-2 | Solves linear equations |
| SQ4-3 | Graphs data and equations |
| SQ4-4 | Understands Polynomials |
| SQ5-1 | Separation of observations (data) and interpretations |
| SQ5-2 | Reasoning supported by using a variety of evidence |
| SQ5-3 | Interpretation and analysis of results |
| SQ5-4 | Distinguishes well-supported from poorly supported scientific claims |
| SQ6-1 | Problem is recognized and investigative question is formulated |
| SQ6-2 | Reasonable, testable hypothesis is presented |
| SQ6-3 | Prediction is formulated as logical consequence of the hypothesis |
| SQ6-4 | Formulation of a conclusion |
| CT7-1 | Analyzes and questions data validity |
| CT7-2 | Does not allow bias to affect results |
| CT7-3 | Interpretation and analysis of results |
| CT7-4 | Distinguishes well-supported from poorly supported scientific claims |
| CT8-1 | Develops and evaluates conclusions from research |
| CT8-2 | Develops and evaluates logical arguments within research |
| CT8-3 | Comprehends and applies research data |
| CT8-4 | Locates and applies research |
| CT9-1 | Provides strong arguments |
| CT9-2 | Identifies and presents issues |
| CT9-3 | Conclusions justified by arguments |
| CT9-4 | Evaluates and utilizes information |

| MESALANDS COMMUNITY COLLEGE<br>GENERAL EDUCATION ASSESSMENT<br>Spring 2010 SEMESTER | | | | | | | |
|---|---|---|---|---|---|---|---|
| Criteria | | Excellent 4 | Proficient 3 | Adequate 2 | Inadequate 1 | Total | Average | % ≥ 2 |
| CE1-1 | | 6 (13.6%) | 27 (61.4%) | 11 (25%) | 0 (0%) | 44 | 2.89 | 100.00 |
| CE1-2 | | 10 (22.7%) | 23 (52.3%) | 11 (25%) | 0 (0%) | 44 | 2.98 | 100.00 |
| CE1-3 | | 5 (11.4%) | 36 (81.8%) | 3 (6.8%) | 0 (0%) | 44 | 3.05 | 100.00 |
| CE1-4 | | 5 (11.4%) | 37 (84.1%) | 2 (4.5%) | 0 (0%) | 44 | 3.07 | 100.00 |
| CE1-5 | | 2 (4.5%) | 22 (50%) | 7 (15.9%) | 13 (29.5%) | 44 | 2.30 | 70.45 |
| CE2-1 | | 2 (4.5%) | 24 (54.5%) | 14 (31.8%) | 4 (9.1%) | 44 | 2.55 | 90.91 |
| CE2-2 | | 2 (4.5%) | 20 (45.5%) | 18 (40.9%) | 4 (9.1%) | 44 | 2.45 | 90.91 |
| CE2-3 | | 1 (2.3%) | 14 (31.8%) | 11 (25%) | 18 (40.9%) | 44 | 1.95 | 59.09 |
| CE2-4 | | 4 (9.1%) | 29 (65.9%) | 8 (18.2%) | 3 (6.8%) | 44 | 2.77 | 93.18 |
| | Excellent | Proficient | Acceptable | Inadequate | Unacceptable | | | % ≥ 3 |
| CE3-1 | 9 (20.5%) | 16 (36.4%) | 13 (29.5%) | 2 (4.5%) | 4 (9.1%) | 44 | 3.55 | 86.36 |
| CE3-2 | 5 (11.4%) | 9 (20.5%) | 14 (31.8%) | 8 (18.2%) | 8 (18.2%) | 44 | 2.89 | 63.64 |
| CE3-3 | 2 (4.5%) | 0 (0%) | 41 (93.2%) | 0 (0%) | 1 (2.3%) | 44 | 3.05 | 97.73 |
| CE3-4 | 23 (53.5%) | 0 (0%) | 6 (14%) | 0 (0%) | 14 (32.6%) | 43 | 3.42 | 67.44 |
| SQ4-1 | 1 (2.3%) | 1 (2.3%) | 8 (18.6%) | 7 (16.3%) | 26 (60.5%) | 43 | 1.70 | 23.26 |
| SQ4-2 | 2 (4.7%) | 6 (14%) | 7 (16.3%) | 11 (25.6%) | 17 (39.5%) | 43 | 2.19 | 34.88 |
| SQ4-3 | 4 (9.3%) | 1 (2.3%) | 4 (9.3%) | 3 (7%) | 31 (72.1%) | 43 | 1.70 | 20.93 |
| SQ4-4 | 1 (2.3%) | 2 (4.7%) | 3 (7%) | 1 (2.3%) | 36 (83.7%) | 43 | 1.40 | 13.95 |
| SQ5-1 | 8 (17.8%) | 18 (40%) | 10 (22.2%) | 4 (8.9%) | 5 (11.1%) | 45 | 3.44 | 80.00 |
| SQ5-2 | 6 (13.3%) | 16 (35.6%) | 13 (28.9%) | 6 (13.3%) | 4 (8.9%) | 45 | 3.31 | 77.78 |
| SQ5-3 | 5 (11.1%) | 16 (35.6%) | 15 (33.3%) | 3 (6.7%) | 6 (13.3%) | 45 | 3.24 | 80.00 |
| SQ5-4 | 11 (24.4%) | 17 (37.8%) | 9 (20%) | 4 (8.9%) | 4 (8.9%) | 45 | 3.60 | 82.22 |
| SQ6-1 | 9 (20%) | 16 (35.6%) | 9 (20%) | 8 (17.8%) | 3 (6.7%) | 45 | 3.44 | 75.56 |
| SQ6-2 | 4 (8.9%) | 9 (20%) | 19 (42.2%) | 7 (15.6%) | 6 (13.3%) | 45 | 2.96 | 71.11 |
| SQ6-3 | 7 (15.6%) | 8 (17.8%) | 7 (15.6%) | 15 (33.3%) | 8 (17.8%) | 45 | 2.80 | 48.89 |
| SQ6-4 | 5 (11.1%) | 7 (15.6%) | 16 (35.6%) | 11 (24.4%) | 6 (13.3%) | 45 | 2.87 | 62.22 |
| CT7-1 | 6 (13.6%) | 12 (27.3%) | 14 (31.8%) | 9 (20.5%) | 3 (6.8%) | 44 | 3.20 | 72.73 |
| CT7-2 | 5 (11.4%) | 17 (38.6%) | 15 (34.1%) | 4 (9.1%) | 3 (6.8%) | 44 | 3.39 | 84.09 |
| CT7-3 | 8 (18.2%) | 17 (38.6%) | 10 (22.7%) | 6 (13.6%) | 3 (6.8%) | 44 | 3.48 | 79.55 |
| CT7-4 | 10 (22.7%) | 13 (29.5%) | 12 (27.3%) | 6 (13.6%) | 3 (6.8%) | 44 | 3.48 | 79.55 |
| CT8-1 | 2 (4.5%) | 9 (20.5%) | 23 (52.3%) | 8 (18.2%) | 2 (4.5%) | 44 | 3.02 | 77.27 |
| CT8-2 | 1 (2.3%) | 11 (25%) | 20 (45.5%) | 10 (22.7%) | 2 (4.5%) | 44 | 2.98 | 72.73 |
| CT8-3 | 1 (2.3%) | 6 (13.6%) | 22 (50%) | 13 (29.5%) | 2 (4.5%) | 44 | 2.80 | 65.91 |
| CT8-4 | 1 (2.3%) | 2 (4.5%) | 18 (40.9%) | 21 (47.7%) | 2 (4.5%) | 44 | 2.52 | 47.73 |
| CT9-1 | 1 (2.3%) | 15 (34.1%) | 23 (52.3%) | 4 (9.1%) | 1 (2.3%) | 44 | 3.25 | 88.64 |
| CT9-2 | 1 (2.3%) | 18 (40.9%) | 21 (47.7%) | 4 (9.1%) | 0 (0%) | 44 | 3.36 | 90.91 |
| CT9-3 | 1 (2.3%) | 14 (31.8%) | 22 (50%) | 7 (15.9%) | 0 (0%) | 44 | 3.20 | 84.09 |
| CT9-4 | 1 (2.3%) | 14 (31.8%) | 20 (45.5%) | 9 (20.5%) | 0 (0%) | 44 | 3.16 | 79.55 |

| CE1-1 | Provides an organized speech with an appropriate introduction and conclusion |
| CE1-2 | Provides main points that are well documented, developed clearly and concisely |
| CE1-3 | Uses appropriate gestures, movements and eye contact |
| CE1-4 | Speaks clearly and understandably using standard, edited English |
| CE1-5 | Provides appropriate handouts and audio-visual aids |
| CE2-1 | Provides a clear, concise thesis statement |
| CE2-2 | Provides supporting paragraphs which relate to the thesis |
| CE2-3 | Correctly incorporates outside sources |
| CE2-4 | Uses appropriate grammar, syntax, usage, punctuation, and spelling |
| CE3-1 | Demonstrates basic computer and operating system skills |
| CE3-2 | Performs core application Microsoft Office applications |
| CE3-3 | Uses a search engine to access, navigate, and evaluate information on the internet |
| CE3-4 | Uses email with appropriate etiquette |
| SQ4-1 | Understands Mathematical  vocabulary |
| SQ4-2 | Solves linear equations |
| SQ4-3 | Graphs data and equations |
| SQ4-4 | Understands Polynomials |
| SQ5-1 | Separation of observations (data) and interpretations |
| SQ5-2 | Reasoning supported by using a variety of evidence |
| SQ5-3 | Interpretation and analysis of results |
| SQ5-4 | Distinguishes well-supported from poorly supported scientific claims |
| SQ6-1 | Problem is recognized and investigative question is formulated |
| SQ6-2 | Reasonable, testable hypothesis is presented |
| SQ6-3 | Prediction is formulated as logical consequence of the hypothesis |
| SQ6-4 | Formulation of a conclusion |
| CT7-1 | Analyzes and questions data validity |
| CT7-2 | Does not allow bias to affect results |
| CT7-3 | Interpretation and analysis of results |
| CT7-4 | Distinguishes well-supported from poorly supported scientific claims |
| CT8-1 | Develops and evaluates conclusions from research |
| CT8-2 | Develops and evaluates logical arguments within research |
| CT8-3 | Comprehends and applies research data |
| CT8-4 | Locates and applies research |
| CT9-1 | Provides strong arguments |
| CT9-2 | Identifies and presents issues |
| CT9-3 | Conclusions justified by arguments |
| CT9-4 | Evaluates and utilizes information |

Scores on the assessment of Communicating Effectively assessment were in general acceptable, with the exception of criteria 3 of Objective #1(criteria 5 of Objective #1in the Spring rubric) which was: Provides appropriate handouts and/or audio-visual aids. Some students felt that the time restriction for this section of the assessment was too short, which may have contributed to the lack of appropriate visual aids for their presentations.

The math reasoning assessment results were poor for most students for several objectives.  Changes were proposed to the general math program and Math 101 was approved to run as a four credit course starting fall 2007.  This will provide an additional two hours of instructional time per week and hopefully will lead to improved performance on the mathematical reasoning section of the GEA as these students continue to graduate.

The results for the goals of Science Reasoning and Applying the Scientific Method were acceptable for most students.  The scenarios and the rubrics for these assessments were revised from the assessment given in the spring 2005 semester. The science instructors still felt that this area could be improved in terms of the written laboratory reports that students write in these classes.  The instructors are considering options on how instruction in writing an effective laboratory report might be implemented to improve results in this area. The Writing Across the Curriculum college initiative may aid in this endeavor.

The objectives for Critical Thinking were in general acceptable or nearly so. Objective #7 was assessed as part of the science reasoning assessment.  The assessment instrument was modified from that previously given in the spring of 2005 to provide a better measure of this objective.

The General Education Assessment goals are being discussed by the committee to review how quantitative and qualitative data values are determined. The Critical Thinking objectives and criteria will be revised in the next academic year and a re-evaluation of the rubrics and scoring methods will be implemented in the Spring 2011 semester.

## Writing Across the Curriculum (WAC)

Summary of 291 students that have not taken a previous ENG 102 class

| Criteria | MESALANDS COMMUNITY COLLEGE WRITING ACROSS THE CURRICULUM STUDENTS WITHOUT A PREVIOUS ENG 102 CLASS SPRING 2010 SEMESTER | | | | | | |
|---|---|---|---|---|---|---|---|
| Criteria | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) | Total | Average | % ≥ 2 |
| 1.1.1 | 90 (32.4%) | 71 (25.5%) | 72 (25.9%) | 45 (16.2%) | 278 | 2.74 | 83.81% |
| 1.1.2 | 82 (29.5%) | 75 (27%) | 74 (26.6%) | 47 (16.9%) | 278 | 2.69 | 83.09% |
| 1.1.3 | 73 (30.7%) | 50 (21%) | 73 (30.7%) | 42 (17.6%) | 238 | 2.65 | 82.35% |
| 1.2.1 | 108 (39.6%) | 81 (29.7%) | 40 (14.7%) | 44 (16.1%) | 273 | 2.93 | 83.88% |
| 1.2.2 | 106 (39.0%) | 77 (28.3%) | 43 (15.8%) | 46 (16.9%) | 272 | 2.89 | 83.09% |
| 1.2.3 | 91 (35.3%) | 82 (31.8%) | 38 (14.7%) | 47 (18.2%) | 258 | 2.84 | 81.78% |
| 1.3.1 | 115 (42.4%) | 47 (17.3%) | 32 (11.8%) | 77 (28.4%) | 271 | 2.74 | 71.59% |
| 1.3.2 | 102 (42.7%) | 38 (15.9%) | 21 (8.8%) | 78 (32.6%) | 239 | 2.69 | 67.36% |
| 1.4.1 | 76 (26.7%) | 56 (19.6%) | 110 (38.6%) | 43 (15.1%) | 285 | 2.58 | 84.91% |
| 1.4.2 | 76 (27.9%) | 52 (19.1%) | 103 (37.9%) | 41 (15.1%) | 272 | 2.60 | 84.93% |

Summary of 328 students that have taken a previous ENG 102 class

| Criteria | MESALANDS COMMUNITY COLLEGE WRITING ACROSS THE CURRICULUM STUDENTS WITH A PREVIOUS ENG 102 CLASS SPRING 2010 SEMESTER | | | | | | |
|---|---|---|---|---|---|---|---|
| Criteria | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) | Total | Average | % ≥ 2 |
| 1.1.1 | 170 (52.5%) | 102 (31.5%) | 41 (12.7%) | 11 (3.4%) | 324 | 3.33 | 96.60% |
| 1.1.2 | 160 (51.6%) | 100 (32.3%) | 41 (13.2%) | 9 (2.9%) | 310 | 3.33 | 97.10% |
| 1.1.3 | 135 (48.7%) | 86 (31%) | 44 (15.9%) | 12 (4.3%) | 277 | 3.24 | 95.67% |
| 1.2.1 | 171 (52.6%) | 105 (32.3%) | 42 (12.9%) | 7 (2.2%) | 325 | 3.35 | 97.85% |
| 1.2.2 | 168 (53.8%) | 86 (27.6%) | 46 (14.7%) | 12 (3.8%) | 312 | 3.31 | 96.15% |
| 1.2.3 | 162 (52.9%) | 89 (29.1%) | 44 (14.4%) | 11 (3.6%) | 306 | 3.31 | 96.41% |
| 1.3.1 | 137 (46.4%) | 76 (25.8%) | 34 (11.5%) | 48 (16.3%) | 295 | 3.02 | 83.73% |
| 1.3.2 | 127 (46.2%) | 78 (28.4%) | 27 (9.8%) | 43 (15.6%) | 275 | 3.05 | 84.36% |
| 1.4.1 | 157 (48.2%) | 108 (33.1%) | 41 (12.6%) | 20 (6.1%) | 326 | 3.23 | 93.87% |
| 1.4.2 | 163 (50.8%) | 100 (31.2%) | 46 (14.3%) | 12 (3.7%) | 321 | 3.29 | 96.26% |

1. Provides a clear, concise thesis statement.
      1.1.1 Statement is clear and concise
      1.1.2 Statement is well reasoned
      1.1.3 Statement leads to plentiful additional discussion

2. Provides supporting paragraphs which relate to the thesis.
        1.2.1 Supporting paragraph are well reasoned
        1.2.2 Supporting paragraphs clearly relate to the thesis
        1.2.3 Supporting paragraphs are cohesive and logically developed
3. Correctly incorporates outside sources.
        1.3.1 Provides relevant outside sources
        1.3.2 Cites outside sources correctly
4. Uses appropriate grammar, syntax, punctuation, and spelling.
        1.4.1 Writing is error free in all categories (structure, punctuation, spelling and grammar).
        1.4.2 Sentence structure and vocabulary are well developed and varied.

# INSTITUTIONAL SURVEYS

Mesalands Community College has a regular cycle of surveys which provides indirect measures of student learning, as well as some attitudinal data useful for assessment. Data from three ACT surveys were administered and/or compiled during the 2009-10 academic year. Results from the ACT Entering Student Opinion Survey (82 students), the ACT Student Opinion Survey (86 students) and the ACT Alumni Survey (25 graduates from 2007-09) are included in this report.

## ACT Entering Student Opinion Survey

There were three questions in the Entering Student Opinion Survey that relate directly to student learning. Under the College Impressions section (Section III, Item B) of the survey, students were asked to rate their opinions on a one to five Likert scale to the following statements:

| ACT ENTERING STUDENT OPINION SURVEY ACADEMIC YEAR 2009 - 2010 | | |
|---|---|---|
| Question | MCC Avg.* | National Norm* |
| College has high-quality academic programs | 3.99 | 3.94 |
| College has a high-quality program in the subject area I plan to pursue | 3.91 | 3.93 |
| This college has high-quality classroom and laboratory facilities | 3.79 | 3.49 |

*Agreement scale: 5=strongly agree, 4=agree, 3=neutral, 2=disagree, 1=strongly disagree

In general, entering students to Mesalands Community College appear to be satisfied with the quality of their educational programs/facilities compared to the corresponding national averages.

## ACT Student Opinion Survey

There were twelve questions in the two-year Student Opinion Survey that relate to either the academic aspects or the facilities aspects of student learning. Under the College Environment section - Section IV of the survey, students were asked to rate their opinions on a one to five Likert scale to the following statements:

| ACT STUDENT OPINION SURVEY ACADEMIC YEAR 2009 - 2010 | | |
| --- | --- | --- |
| Question | MCC Avg.* | National Norm* |
| **Academic Aspects** | | |
| Attitude of the teaching staff toward students | 4.14 | 4.16 |
| Out-of-class availability of your instructors | 4.04 | 3.95 |
| Quality of instruction in your major area of study | 3.77 | 4.07 |
| Testing/grading system | 4.05 | 3.95 |
| Challenge offered by your program of study | 3.70 | 4.02 |
| Course content in your major area of study | 3.72 | 4.03 |
| Preparation you are receiving for your chosen occupation | 3.60 | 3.95 |
| **Facilities Aspects** | | |
| Industrial Arts/shop facilities | 3.96 | 3.65 |
| Laboratory facilities | 3.95 | 3.86 |
| Classroom facilities | 3.94 | 4.00 |
| Study areas | 3.80 | 3.92 |
| Business-training facilities/equipment | 3.69 | 3.95 |

*Satisfaction scale: 5=very satisfied, 4=satisfied, 3=neutral, 2=dissatisfied, 1=very dissatisfied*

In general, Mesalands Community College students appear to be more satisfied with the facilities aspect of their education but less so of the academic aspects of the quality of their education compared to the corresponding national averages.

## ACT Alumni Survey

There were two sections in the Alumni Survey that relate to student learning.  In section III, educational experiences, alumni responses indicated that they felt that they were well served by Mesalands Community College, as their responses were consistently higher than the corresponding national averages. Responses

from section IV, employment history, were also comparable to national averages when available. The following tables summarize the results:

| ACT ALUMNI SURVEY<br>SECTION III EDUCATIONAL EXPERIENCES<br>GRADUATES FROM 2007 - 2009 | | |
| --- | --- | --- |
| **Question** | **MCC Avg\*** | **National Norm\*** |
| How well did this college prepare you for your continuing education? | 3.88 | 3.92 |
| Would you choose to attend this college again? | 4.36 | 4.19 |
| Has a college education improved your quality of life? | 4.16 | NA |

\* Five point Likert scale

| ACT ALUMNI SURVEY<br>SECTION III EDUCATIONAL EXPERIENCES<br>GRADUATES FROM 2007 - 2009 | | |
| --- | --- | --- |
| **Question** | **MCC Avg\*** | **National Norm\*** |
| Persisting at difficult tasks | 2.50 | 2.27 |
| Learning on your own | 2.48 | 2.32 |
| Working independently | 2.45 | 2.25 |
| Planning and carrying out projects | 2.43 | 2.17 |
| Leading/guiding others | 2.33 | 2.09 |
| Recognizing your rights/responsibilities as a citizen | 2.17 | 2.01 |
| Caring for your physical and mental health | 2.15 | 1.94 |
| Understanding consumer issues | 2.12 | 1.85 |
| Understanding written information | 2.10 | 2.16 |
| Managing personal/family finances | 2.06 | 1.86 |

\*Three point Likert scale 3:very much, 2: somewhat, 1: very little

| ACT ALUMNI SURVEY<br>SECTION III EDUCATIONAL EXPERIENCES<br>GRADUATES FROM 2007 - 2009 | |
| --- | --- |
| **Question** | **MCC Avg*** |
| Attitude of the faculty toward students | 4.38 |
| This college in general | 4.36 |
| Quality of instruction in your major area of study | 4.36 |
| Testing/grading system | 4.12 |
| Preparation you are receiving for your future occupation | 3.86 |

*Five point Likert scale. National averages not available

| ACT ALUMNI SURVEY<br>SECTION IV EMPLOYMENT HISTORY<br>GRADUATES FROM 2007 - 2009 | | |
| --- | --- | --- |
| **Employment Status** | **Number (%)** | **National %** |
| Employed (full-time, part-time, self-employed) | 14 (56) | 67 |
| Continuing my education | 9 (36) | 25 |
| Unemployed, other | 2 (8) | 8 |

| ACT ALUMNI SURVEY<br>SECTION IV EMPLOYMENT HISTORY<br>GRADUATES FROM 2007 - 2009 | |
| --- | --- |
| **Question** | **MCC Avg*** |
| How well did college prepare you for your present occupation? | 3.06 |
| How closely related is current occupation to college major? | 2.67 |

*Four point Likert scale

# PROGRAM LEVEL ASSESSMENT

## DEGREES AND CERTIFICATES GRANTED

A significant increase was seen in degrees awarded in the Associate of Applied Science-General Studies program. The Wind Energy Technology program also had its first Associate of Applied Science graduates this year. A comparison of the number of graduates in the various degree plans of 2009-2010 academic year with the previous six years follows:

| ASSOCIATE OF ARTS DEGREES | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Program** | **2003-04** | **2004-05** | **2005-06** | **2006-07** | **2007-08** | **2008-09** | **2009-10** |
| Business Administration | | | 3 | | | 2 | 1 |
| Criminal Justice | 1 | 2 | | | 1 | | |
| Early Childhood Education | | 1 | 1 | 1 | 2 | 2 | 4 |
| Elementary Education | 5 | 1 | 6 | 3 | 2 | 2 | 1 |
| Fine Arts | | | 1 | | 1 | | 2 |
| General Studies | | | 1 | | | | 1 |
| Human Services | | | 1 | | | | |
| Paleontology | | | | 1 | | | 1 |
| Pre-Dentistry | | | 1 | | | | |
| Pre-Engineering | 1 | | | | 1 | | |
| Pre-Medical Arts | 2 | | | | | | |
| Secondary Education | | 1 | 2 | 1 | 2 | | |
| Social Work | | 2 | 2 | 2 | 1 | 5 | |
| University Studies | 3 | 3 | 4 | 5 | 2 | 2 | 4 |
| ASSOCIATE OF APPLIED SCIENCE DEGREES | | | | | | | |
| **Program** | **2003-04** | **2004-05** | **2005-06** | **2006-07** | **2007-08** | **2008-09** | **2009-10** |
| Agricultural Business | | | 1 | 2 | | | |
| Animal Science | 3 | | | 3 | 2 | 2 | 3 |
| Automotive Technology | 1 | 1 | | | 1 | | 1 |
| Building Trades | | | | | 1 | | 1 |
| Business Administration | 7 | | 7 | 3 | 2 | 3 | 4 |
| Business Office Technology | 6 | | 3 | | | | |
| Communications | | | | | | 1 | |
| Computer Science | | | | 1 | | 1 | 2 |
| Diesel Technology | | | 1 | 1 | | | |
| Farrier Science | | | 2 | 1 | 2 | | 3 |
| General Studies | 4 | | 4 | 4 | 9 | 4 | 12 |
| Office Systems | | | | 1 | | 15 | 2 |
| Public Administration | | | | 1 | 1 | 2 | 3 |
| Wind Energy Technology | | | | | | | 16 |

| OCCUPATIONAL CERTIFICATES | | | | | | | |
|---|---|---|---|---|---|---|---|
| Program | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009 -10 |
| Automotive Technology | | | | | 1 | | |
| Building Trades | | | | 1 | | 2 | 2 |
| Commercial Truck Driving | 13 | 21 | 16 | 29 | 48 | | |
| Computer/ Information Systems | | | 8 | | 18 | | |
| Diesel Technology | | | | | 1 | | |
| Farrier Science | 3 | 1 | 1 | | 6 | 3 | 3 |
| Fine Arts | | | 3 | | 3 | | 1 |
| Metal Arts | | | | | | | 1 |
| Nail Technology | 3 | 1 | 2 | | | | |
| Pre-Nursing | | | | | 2 | 7 | 2 |
| Wind Energy Technology | | | | | | 17 | 23 |
| | | | | | | | |
| **Total Degrees and Certificates** | **52** | **34** | **70** | **60** | **108** | **70** | **93** |

## COMPLETION RATES OF GENERAL EDUCATION CORE CLASSES

Not all students find it in their interests to obtain a degree or certificate. They may transfer to another college or university to obtain the degree of their choice. The following completion rates of general education core classes provide a measure of transfer-preparation and readiness for these students and those in degree programs at the College. The data below also includes dual enrollment of high school students taking classes through the College.

| COMPLETION RATES OF GENERAL EDUCATION TRANSFER CLASSES 2007-2010 ACADEMIC YEARS | | | | | | |
|---|---|---|---|---|---|---|
| Year | 2007-08 | | 2008-09 | | 2009-10 | |
| Course | Number Enrolled | % C or better | Number Enrolled | % C or better | Number Enrolled | % C or better |
| Area I: Communications | | | | | | |
| ENG 102 | 187 | 86.63 | 258 | 81.78 | 205 | 78.04 |
| ENG 104 | 71 | 81.69 | 145 | 90.34 | 120 | 89.17 |
| COM 101 | 83 | 73.49 | 41 | 70.73 | 93 | 96.77 |
| COM 102 | 49 | 77.55 | 45 | 86.67 | 86 | 75.58 |
| Area II: Mathematics | | | | | | |
| MATH 110 | 36 | 77.78 | 58 | 82.76 | 51 | 80.39 |
| STAT 213 | 16 | 87.5 | 16 | 68.75 | 17 | 94.11 |
| Area III: Laboratory Science | | | | | | |
| BIOL 113 | 43 | 76.74 | 23 | 78.26 | 64 | 73.94 |
| CHEM 115 | 41 | 95.12 | 102 | 97.06 | 12 | 75.00 |
| CHEM 116 | 16 | 100.0 | 41 | 90.24 | 11 | 100.0 |
| GEOL 151 | 15 | 53.85 | 5 | 100.0 | 27 | 100.0 |
| PHYS 120 | 12 | 83.33 | 5 | 60.00 | 0 | NA |
| Area IV: Social and Behavioral Science | | | | | | |
| ANTH 101 | 20 | 55.00 | 17 | 82.35 | 5 | 60.00 |
| ECON 251 | 54 | 83.33 | 97 | 92.78 | 105 | 76.19 |
| PSCI 102 | 41 | 100 | 90 | 88.89 | 77 | 96.10 |
| PSCI 202 | 11 | 90.91 | 17 | 100.0 | 32 | 96.88 |
| PSY 101 | 46 | 91.30 | 110 | 84.55 | 107 | 88.79 |
| SOC 101 | 29 | 96.55 | 50 | 94.00 | 48 | 89.58 |
| SOC 212 | 14 | 78.57 | 0 | NA | 16 | 57.50 |
| Area V: Humanities and Fine Arts | | | | | | |
| ART 101 | 62 | 80.65 | 31 | 54.84 | 109 | 55.96 |
| MUS 101 | 26 | 80.77 | 39 | 66.67 | 39 | 79.49 |
| HIST 101 | 23 | 95.65 | 26 | 92.31 | 58 | 96.55 |
| HIST 102 | 28 | 96.43 | 35 | 100.0 | 59 | 96.61 |
| HIST 121 | 11 | 90.91 | 10 | 70.00 | 7 | 57.14 |

# STUDENT LEARNING ASSESSMENT
# PROGRAM REPORTS

The purpose of program level assessment is to document how well students are accomplishing the specific program objectives and general education competencies.  The program objectives and general education competencies are Mesalands' contract with all stakeholders and reflect those competencies that students will possess and demonstrate upon graduation.  These program objectives and general education competencies reflect those knowledge, skills and professional dispositions valued by workplace employers and other interested parties and represent the most deeply held values of the College driving much of what occurs at Mesalands.  Degree programs are required to assess both general education competency and program objective outcomes. Certificate programs are required to measure program objective outcomes only.

The following Student Learning Assessment Program Reports document the College's attempt to more succinctly and comprehensively identify and measure outcomes attainment.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# ASSOCIATE OF APPLIED SCIENCE – GENERAL STUDIES
# 2009-2010

This program, called experiential learning, will allow students to apply work experience and training toward an Associate of Applied Science degree.  It is a way for students to earn course credits at Mesalands Community College for having completed on-the-job training and courses where certificates are given. Obvious programs that may qualify for experiential learning credits are in certificate programs such as Diesel Technology, Farrier Science and other similar programs.  Experiential learning allows the student to improve upon that certificate to obtain an Applied Science degree.

Situation where qualified studies of this type may have been completed include in the military, business courses and seminars, and similar training situations. Students with certificates from other accredited institutions and/or documented work experience may be able to apply their previous training toward an Associate degree.

**General Education Competencies**

Upon completion of the Associate of Applied Science General Studies Degree Program:

1.  Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).

2.  Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3.  Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Associate of Applied Science General Studies Degree assessment plan is in its first year and is addressed via the Plan→Do→Study→Adjust (PDSA) Cycle that follows students from their first term through graduation.

## General Education Competencies Assessment Plan

General education competencies are measured with multiple tools.  The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives are Presented and/or Measured |
|---|---|---|
| **Communication**<br>1. Present ideas in writing.<br>2. Present ideas orally according to standard usage.<br>3. Demonstrate application of information technology. | • GEA College Rubric<br>• CAAP | • ACS 100<br>• COM 102<br>• CIS 101<br>• ENG 102<br>• ENG 104<br>• Lab Science Elective<br>• Social Sciences/ Humanities Elective |
| **Quantitative and Scientific Reasoning**<br>4. Demonstrate mathematical principles.<br>5. Demonstrate scientific reasoning.<br>6. Apply scientific methods to the inquiry process. | • GEA College Rubric<br>• CAAP | • MATH 101<br>• Lab Science Elective |
| **Critical Thinking**<br>7. Read and analyze complex ideas.<br>8. Locate, evaluate and apply research information.<br>9. Evaluate and present well-reasoned arguments. | • GEA College Rubric<br>• CAAP | • ACS 100<br>• Lab Science Elective<br>• Social Sciences/ Humanities Elective |

## General Education Competencies Results

This section presents the general education competencies results.  The Mesalands Community College created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 1, 2, 3
**Goal Results:** 100% "excellent (4)", "proficient (3)" or "adequate (2)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 1 | 2 | 2 | 100%(mean=3.125) |
| • 2 | 2 | 2 | 100%(mean=3.375) |
| • 3 | 2 | 1 | 50%(mean=3.5) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 4, 5, 6
**Goal Results:** 100% "excellent (5)","proficient (4)" or "acceptable (3)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 2 | 0 | 00%(mean=2.125) |
| • 5 | 2 | 2 | 100%(mean=4.25) |
| • 6 | 2 | 2 | 100%(mean=4.0) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 7, 8, 9
**Goal Results:** 100% "excellent (5)", "proficient (4)" or "acceptable (3)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 2 | 2 | 100%(mean=3.87) |
| • 8 | 2 | 2 | 100%(mean=4.0) |
| • 9 | 2 | 2 | 100%(mean=3.25) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

**Measurement Tool:** ACT Collegiate Assessment of Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9

**Goal Results:** 50%

**Legend:** n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|------|---------|------|---------|-------------------|---------|
| 2009-2010 | 2(89%) | N/A | 2(57%) | 2(60%) | 2(51%) |

## PDSA CYCLE GOALS
## (2009-2010)

### ANALYSIS

### Problem Area

Lack of data (other than end of program data) to support whether or not general education competencies are being accomplished.

### Goal

More and a greater variety of data needs to be collected other than during their last semester prior to graduation.

### Action Plan

Problem Area and Goal will be discussed with Student Learning Assessment Committee (SLAC) who is charged with designing more meaningful and comprehensive collection of assessment data.

### Results

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# ASSOCIATE OF ARTS - LIBERAL ARTS GENERAL STUDIES
# 2009-2010

Recognizing that adult learners have experiences outside the college classroom that have led to the acquisition of knowledge and skills equivalent to that which would have been obtained in a traditional course, Mesalands Community College provides a mechanism for awarding college credit based upon the documentation of collegiate-equivalent learning.

Students with appropriate life experiences may petition for college credit by developing and submitting an Experiential Learning Portfolio. Up to 18 hours college credits may be awarded toward the Associate of Arts Degree in General Studies. Credit is awarded only if appropriate experiential learning has occurred and is documented as specified in the Experiential Learning Portfolio Handbook.

**General Education Competencies**

Upon completion of the Liberal Arts General Studies Associate of Arts Degree Program:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).

2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Liberal Arts General Studies Associate of Arts Degree assessment plan is in its first year and is addressed via the Plan→Do→Study→Adjust Cycle that follows students from their first term through graduation.

**General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.  The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication** <br> 1. Present ideas in writing. <br> 2. Present ideas orally according to standard usage. <br> 3. Demonstrate application of information technology. | • GEA College Rubric <br> • CAAP | • ACS 100 <br> • COM 102 <br> • CIS 101 <br> • ENG 102 <br> • ENG 104 <br> • Lab Science Elective <br> • Social/Behavioral Science Elective <br> • Fine Arts/Humanities Elective |
| **Quantitative and Scientific Reasoning** <br> 4. Demonstrate mathematical principles. <br> 5. Demonstrate scientific reasoning. <br> 6. Apply scientific methods to the inquiry process. | • GEA College Rubric <br> • CAAP | • MATH 110 <br> • Lab Science Elective |
| **Critical Thinking** <br> 7. Read and analyze complex ideas. <br> 8. Locate, evaluate and apply research information. <br> 9. Evaluate and present well-reasoned arguments. | • GEA College Rubric <br> • CAAP | • ACS 100 <br> • Lab Science Elective <br> • Social/Behavioral Science Elective <br> • Fine Arts/Humanities Elective |

**General Education Competencies Results**

This section presents the general education competencies results.  The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 1, 2, 3
**Goal Results:** 100% "excellent (4)", "proficient (3)" or "adequate (2)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 1 | 1 | 1 | 100%(mean=3.0) |
| • 2 | 1 | 1 | 100%(mean=3.2) |
| • 3 | 1 | 1 | 100%(mean=3.75) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 4, 5, 6
**Goal Results:** 100% "excellent (5)","proficient (4)" or "acceptable (3)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 1 | 1 | 100% (mean=4.5) |
| • 5 | 1 | 1 | 100%(mean=4.75) |
| • 6 | 1 | 1 | 100%(mean=3.75) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 7, 8, 9
**Goal Results:** 100% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 1 | 1 | 100%(mean=4.75) |
| • 8 | 1 | 1 | 100%(mean=3.0) |
| • 9 | 1 | 1 | 0%(mean=4.0) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

**Measurement Tool:**                ACT Collegiate Assessment of
                                     Academic Proficiency (CAAP)
**General Education Objective(s):**   1, 4-9
**Goal Results:**                    50%
**Legend:**                          n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|------|---------|------|---------|-------------------|---------|
| 2009-2010 | 1(31%) | 1(91%) | 1(53%) | 1(48%) | 1(64%) |

## PDSA CYCLE GOALS
## (2009-2010)

### ANALYSIS

### Problem Area

Lack of data (other than end of program data) to support whether or not general education competencies are being accomplished.

### Goal

More and a greater variety of data needs to be collected other than during their last semester prior to graduation.

### Action Plan

Problem Area and Goal will be discussed with Student Learning Assessment Committee (SLAC) who is charged with designing more meaningful and comprehensive collection of assessment data.

### Results

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# ASSOCIATE OF ARTS - UNIVERSITY STUDIES
# 2009-2010

The University Studies option provides opportunities for students to explore areas of student interest while developing proficiencies in the liberal arts and selected areas of interest.  Graduates of the program will have completed coursework that explores a variety of academic disciplines.  Students intending to use the University Studies option as a basis for transfer should make certain that their course selections meet the requirements of the applicable degree at the college or university to which they plan to transfer.

**General Education Competencies**

Upon completion of the University Studies Degree Program:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).

2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The University Studies assessment plan is in its first year and is addressed via the Plan→Do→Study→Adjust Cycle that follows students from their first term through graduation.

**General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication** <br>1. Present ideas in writing. <br>2. Present ideas orally according to standard usage. <br>3. Demonstrate application of information technology. | • GEA College Rubric <br>• CAAP | • ACS 100 <br>• COM 102 <br>• CIS 101 <br>• ENG 102 <br>• ENG 104 <br>• Lab Science Elective <br>• Social/Behavioral Science Elective <br>• Fine Arts/Humanities Elective |
| **Quantitative and Scientific Reasoning** <br>4. Demonstrate mathematical principles. <br>5. Demonstrate scientific reasoning. <br>6. Apply scientific methods to the inquiry process. | • GEA College Rubric <br>• CAAP | • MATH 110 <br>• Lab Science Elective |
| **Critical Thinking** <br>7. Read and analyze complex ideas. <br>8. Locate, evaluate and apply research information. <br>9. Evaluate and present well-reasoned arguments. | • GEA College Rubric <br>• CAAP | • ACS 100 <br>• Lab Science Elective <br>• Social/Behavioral Science Elective <br>• Fine Arts/Humanities Elective |

**General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool:**                                 GEA College Rubric
**General Education Objective(s):**      1, 2, 3
**Goal Results:**                                  100% "excellent (4)", "proficient (3)" or "adequate (2)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 1 | 3 | 3 | 100%(mean=2.17) |
| • 2 | 3 | 3 | 100%(mean=2.73) |
| • 3 | 3 | 2 | 66%(mean=2.31) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:**                                 GEA College Rubric
**General Education Objective(s):**      4, 5, 6
**Goal Results:**                                  100% "excellent (5)","proficient (4)" or "acceptable (3)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 3 | 1 | 33% (mean=2.17) |
| • 5 | 3 | 3 | 100%(mean=4.08) |
| • 6 | 3 | 1 | 33%(mean=2.58) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:**                                 GEA College Rubric
**General Education Objective(s):**      7, 8, 9
**Goal Results:**                                  100% "excellent (5)", "proficient (4)" or "acceptable (3)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 3 | 3 | 100%(mean=3.92) |
| • 8 | 3 | 1 | 33%(mean=2.67) |
| • 9 | 3 | 2 | 66%(mean=3.67) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

**Measurement Tool:**                    ACT Collegiate Assessment of Academic Proficiency (CAAP)

**General Education Objective(s):**    1, 4-9
**Goal Results:**                        50%
**Legend:**                             n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|------|---------|------|---------|-------------------|---------|
| 2009-2010 | 3(29%) | 2(85%) | 3(26%) | 3(27%) | 3(31%) |

## PDSA CYCLE GOALS
## (2009-2010)

### ANALYSIS

### Problem Area

Lack of data (other than end of program data) to support whether or not general education competencies are being accomplished.

### Goal

More and a greater variety of data needs to be collected other than during their last semester prior to graduation.

### Action Plan

Problem Area and Goal will be discussed with Student Learning Assessment Committee (SLAC) who is charged with designing more meaningful and comprehensive collection of assessment data.

### Results

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# ANIMAL SCIENCE
# 2009-2010

The Animal Science program provides opportunity and instruction towards employment as well as continuing education opportunities at the university level. Mesalands Community College, through its Animal Science Program starts students on the pathway towards a variety of careers which are available in the field of animal science. From feed or agricultural medical sales to livestock nutritionist, to buyer, handler and manager, the field of animal science offers a variety of prospective career paths.

The Animal Science program at Mesalands Community College provides educational options in either equine science or beef science.

1.  Equine Science (horse science) involves multiple careers in the equine industry. Whether your interest is to work in a large stable, on a breeding farm or to have your own horses, having a background in equine science provides the foundation of sound equine management practices.

    The Equine Science option consists of three parts: Animal Science department core classes, equine science classes, and the general education required classes. The combination of these courses provides a comprehensive educational experience for many entry level positions in the equine industry.

2.  Beef science involves careers ranging from livestock exchange personnel to feed sales to farm/ranch managers. All segments of the beef industry from breeding and birth to slaughter and food sales create the need for knowledgeable people to be responsible for maintaining industry standards.

    The Beef Science option in Animal Science includes three parts of the curriculum: the Animal Science department core classes, the Beef Science option classes and the general education course requirements. The Beef Science option classes emphasize nutrition and beef production.

**Program Objectives/Competencies**

Upon completion of the Animal Science Associate Degree Program:

1.  The student will recognize, demonstrate, and explain the function and role of livestock within the agricultural and food industry.

2. The student will recognize and evaluate the use, structure, and function of livestock for various uses, as well as present their findings in a speech, such as a set of reasons.

3. The student will apply sound financial and management practices as well as principles utilized in the agricultural industry.

4. The Equine Science student will demonstrate a broad-based understanding of biological and management principles and develop the ability to incorporate the use of these principles into the horse industry along with aptitude to critically evaluate industry issues.

5. The Beef Science student will demonstrate a broad-based understanding of biological and management principles and develop the ability to incorporate the use of these principles into the beef cattle industry along with aptitude to critically evaluate industry issues.

**General Education Competencies**

Upon completion of the Animal Science Associate Degree Program and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).

2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Animal Science assessment plan is in its first year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every fall term and follows one Animal Science cohort from first term through graduation.

**Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. The student will recognize, demonstrate, and explain the function and role of livestock within the agricultural and food industry. | • Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Class projects<br>• Essays<br>• Class Presentations | • ANSC 100<br>• RGSC 100<br>• ANSC 150<br>• ANSC 170<br>• ANSC 245<br>• ANSC 230<br>• ANSC 151<br>• ABM 265<br>• ANSC 224<br>• ANSC 275<br>• ANSC 255<br>• Science Elective<br>• Science Req. |
| 2. The student will recognize and evaluate the use, structure, and function of livestock for various uses, as well as present their findings in a speech, such as a set of reasons. | • Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Class projects<br>• Essays<br>• Class Presentations | • ACS 100<br>• COM102<br>• ENG 102<br>• ANSC 100<br>• RGSC 100<br>• ANSC 141<br>• ANSC 150<br>• ANSC 170<br>• ANSC 245<br>• ANSC 230<br>• ANSC 151<br>• ANSC 224<br>• ANSC 275<br>• ANSC 255<br>• Lab Science Elective<br>• Lab Science Requirement |
| 3. The student will apply sound financial and management practices as well as principles utilized in the agricultural industry | • Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Class projects<br>• Essays<br>• Class Presentations | • ACS 100<br>• ANSC 100<br>• ABM 162<br>• ANSC 170<br>• MATH 101<br>• ABM 264<br>• ANSC 245<br>• ANSC 230<br>• ABM 265<br>• ANSC 224 |

| | | • ANSC 275 |
| | | • BUS 221 |
| | | • ANSC 255 |
| | | • CIS 101 |
| | | • Social Sciences/ Humanities Requirement |
| 4. The Equine Science student will demonstrate a broad-based understanding of biological and management principles and develop the ability to incorporate the use of these principles into the horse industry along with aptitude to critically evaluate industry issues. | • Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Class projects<br>• Essays<br>• Lab's<br>• Class Presentations | • ACS 100<br>• ANSC 100<br>• RGSC 100<br>• ANSC 141<br>• ABM 162<br>• ANSC 150<br>• ANSC 170<br>• ABM 264<br>• ANSC 245<br>• ANSC 230<br>• ANSC 151<br>• ABM 265<br>• ANSC 224<br>• ANSC 275<br>• CIS 101<br>• Lab Science Elective |
| 5. The Beef Science student will demonstrate a broad-based understanding of biological and management principles and develop the ability to incorporate the use of these principles into the beef cattle industry along with aptitude to critically evaluate industry issues. | • Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Class projects<br>• Essays<br>• Lab's<br>• Class Presentations | • ACS 100<br>• ANSC 100<br>• RGSC 100<br>• ABM 162<br>• ANSC 150<br>• ANSC 170<br>• ABM 264<br>• ANSC 245<br>• ANSC 230<br>• ABM 265<br>• ANSC 275<br>• ANSC 255<br>• CIS 101<br>• Lab Science Elective |

## Program Objective Results

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:**               Intro to ANSC Written Exam - ANSC  100
**Program Objective(s):**      1
**Goal Results:**                 100% pass rate

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 11 | 10 | 91% |

**Measurement Tool:**               Livestock Evaluation Written Exam- ANSC 170
**Program Objective(s):**      1
**Goal Results:**                 100% pass rate;

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 8 | 8 | 100% |

**Measurement Tool:**               Meat Animal/Carcass Evaluation Written Exam- ANSC 270
**Program Objective(s):**      1
**Goal Results:**                 100% pass rate;

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 3 | 3 | 100% |

**Measurement Tool:**               Livestock Evaluation Class Exercise- ANSC 170
**Program Objective(s):**      2
**Goal Results:**                 100% pass rate;

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 8 | 8 | 100% |

**Measurement Tool:**               Meat Animal/Carcass Evaluation Class Exercise - ANSC 270
**Program Objective(s):**      2
**Goal Results:**                 100% pass rate

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 3 | 3 | 100% |

# General Education Competencies Assessment Plan

General education competencies are measured with multiple tools.
The following **<u>Curriculum Map</u>** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication**<br>1. Present ideas in writing.<br>2. Present ideas orally according to standard usage.<br>3. Demonstrate application of information technology. | • GEA College Rubric<br>• CAAP<br>• CAT<br>• Class Presentation<br>• Class Writing Assignment | • ACS 100<br>• ANSC 100<br>• RGSC 100<br>• ANSC 141<br>• ANSC 150<br>• ANSC 170<br>• ANSC 245<br>• ANSC 230<br>• ANSC 151<br>• ANSC 224<br>• ANSC 275<br>• ANSC 255<br>• COM 102<br>• CIS 101<br>• ENG 102<br>• Lab Sciences |
| **Quantitative and Scientific Reasoning**<br>4. Demonstrate mathematical principles.<br>5. Demonstrate scientific reasoning.<br>6. Apply scientific methods to the inquiry process. | • GEA College Rubric<br>• CAAP<br>• Class Exercises<br>• Class Examinations | • ANSC 100<br>• RGSC 100<br>• ANSC 141<br>• ANSC 150<br>• ANSC 170<br>• ANSC 245<br>• ANSC 230<br>• ANSC 151<br>• ANSC 224<br>• ANSC 275<br>• ANSC 255<br>• Lab Sciences |
| **Critical Thinking**<br>7. Read and analyze complex ideas.<br>8. Locate, evaluate and apply research information. | • GEA College Rubric<br>• CAAP<br>• Class Exercises<br>• Class Examinations | • ACS 100<br>• ANSC 100<br>• RGSC 100<br>• ANSC 141<br>• ANSC 150<br>• ANSC 170 |

| | | |
|---|---|---|
| 9. Evaluate and present well-reasoned arguments. | | • ANSC 245<br>• ANSC 230<br>• ANSC 151<br>• ANSC 224<br>• ANSC 275<br>• ANSC 255<br>• Lab Sciences<br>• Social Sciences/ Humanities Elective |

## General Education Competencies Results

This section presents the general education competencies results.  The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool:**                   GEA College Rubric
**General Education Objective(s):**     1, 2, 3
**Goal Results:**                       100% "excellent (4)", "proficient (3)" or "adequate (2)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010<br>• 1<br>• 2<br>• 3 | 1<br>1<br>1 | 1<br>1<br>1 | 100%(mean=3.25)<br>100%(mean=2.6)<br>100%(mean=4.0) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:**                   GEA College Rubric
**General Education Objective(s):**     4, 5, 6
**Goal Results:**                       100% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010<br>• 4<br>• 5<br>• 6 | 3<br>3<br>3 | 0<br>3<br>1 | 0% (mean = 1.75)<br>100%(mean=3.92)<br>33%(mean=2.75) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 7, 8, 9
**Goal Results:** 100% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 3 | 3 | 100%(mean=4.0) |
| • 8 | 3 | 3 | 100%(mean=3.67) |
| • 9 | 3 | 3 | 100%(mean=3.5) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

**Measurement Tool:** ACT Collegiate Assessment of Academic Proficiency (CAAP)
**General Education Objective(s):** 1, 4-9
**Goal Results:** 50%
**Legend:** n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|---|---|---|---|---|---|
| 2009-2010 | 2(23%) | 1(85%) | 3(33%) | 2(31%) | 2(36%) |

## PDSA CYCLE GOALS
## (2009-2010)

### ANALYSIS

### Problem Area

Need more precise assessment tools.

### Goal

Implement a capstone project via a Capstone Class. Students enrolling in their last semester enrolled in the Animal Science program will be required to complete a Capstone class.

### Action Plan

Introduce the appropriate paperwork to add the Capstone class to both options within Animal Science.

### Results

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
## AUTOMOTIVE TECHNOLOGY
## 2009-2010

Mesalands Community College's Automotive Technology program prepares the student to enter a vast automotive service and repair field as an entry level technician. Upon completion of the program, career opportunities may include entry level positions such as service technician, specialist, service advisor, service dispatcher, parts sales advisor, sales representative, or crew members of a race team.

**Program Objectives/Competencies**

Upon completion of the Automotive Technology Associate Degree Program:

1. Demonstrate knowledge of automotive mechanical components and systems based on Automotive Service Excellence (ASE) standards.

2. Demonstrate knowledge of automotive electrical and electronic components and systems based on ASE standards.

3. Application of automotive mechanical systems repair skills based on industry standards.

4. Application of automotive electrical and electronic systems repair skills based on industry standards.

**General Education Competencies**

Upon completion of the Automotive Technology Associate Degree Program and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Automotive Technology assessment plan is in its second year and is addressed via the Plan→Do→Study→Adjust Cycle that follows a two year program cycle.

**Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. Demonstrate knowledge of automotive mechanical components and systems based on Automotive Service Excellence (ASE) standards. | • CAT<br>• Pre/Post-Test<br>• ASE based Test | • AMT 101<br>• AMT 102<br>• AMT 121<br>• AMT 122<br>• AMT 201<br>• AMT 202<br>• AMT 211<br>• AMT 212<br>• AMT 221<br>• AMT 222<br>• AMT 231<br>• AMT 232 |
| 2. Demonstrate knowledge of automotive electrical and electronic components and systems based on ASE standards. | • CAT<br>• Pre/Post-Test<br>• ASE Based Test | • AMT 111<br>• AMT 112<br>• AMT 131<br>• AMT 132 |
| 3. Application of automotive mechanical systems repair skills based on industry standards. | • CAT<br>• Pre/Post-Test<br>• ASE Based Test | • AMT 101<br>• AMT 102<br>• AMT 121<br>• AMT 122<br>• AMT 201<br>• AMT 202<br>• AMT 211<br>• AMT 212<br>• AMT 221<br>• AMT 222 |

| | | • AMT 231 |
| | | • AMT 232 |
| 4. Application of automotive electrical and electronic systems repair skills based on industry standards. | • CAT<br>• Pre/Post-Test<br>• ASE based Test | • AMT 111<br>• AMT 112<br>• AMT 131<br>• AMT 132 |

**Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:**     CAT – Plus/Delta
**Program Objective(s):**  1, 2, 3, 4
**Results:**              Students biggest concern is the need for more and newer training equipment.


**Measurement Tool:**     Pre/post Test
**Program Objective(s):**  1, 2, 3, 4
**Goal Results:**         50% improvement


| Reporting Period | Course | Pre Test Mean(N) | Post Test Mean (N)/# of Students Achieving Goal |
|---|---|---|---|
| 2009-2010 | AMT 101 | 56%(11) | 78%(7)/ 7 |
| | AMT 102 | 40%(11) | 75%(7)/7 |
| | AMT 111 | 45%(18) | 71%(17)/12 |
| | AMT 112 | 6%(18) | 48%(17)/6 |
| | AMT131 | 40%(16) | 73%(15)/10 |
| | AMT 132 | 12%(16) | 70%(15)/11 |
| | AMT 231 | 47%(11) | 75%(7)/6 |
| | AMT 232 | 56%(11) | 81%(7)/6 |

**Measurement Tool:**      ASE Based Test
**Program Objective(s):**  1, 2, 3, 4
**Goal Results:**          70% pass rate/cut score

| Reporting Period | Course | Category (ASE ID#) | #Attempting/ # Achieving | %Achieving/ % Class Mean |
|---|---|---|---|---|
| 2009-2010 | AMT 101 | Suspension and Steering (A4) | 11/7 | 63%/53% |
| | AMT 102 | Brakes (A5) | 11/7 | 63%/53% |
| | AMT 111 | Electrical/ Electronic Systems (A6) | 18/12 | 66%/73% |
| | AMT 112 | Electrical/ Electronic Systems (A6) | 18/12 | 66%/73% |
| | AMT 131 | Electrical/ Electronic Systems (A6) | 16/13 | 81%/76% |
| | AMT 132 | Electrical/ Electronic Systems (A6) | 16/13 | 81%/76% |
| | AMT 231 | Heating and A/C (A7) | 11/7 | 63%/51% |
| | AMT 232 | Heating and A/C (A7) | 11/7 | 63%/51% |

**General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication**<br>1. Present ideas in writing.<br>2. Present ideas orally according to standard usage.<br>3. Demonstrate application of information technology. | • GEA College Rubrics<br>• CAAP | • ACS 100<br>• COM 102<br>• CIS 101<br>• ENG 102<br>• Lab Science Elective<br>• Social Sciences/ Humanities Elective |
| **Quantitative and Scientific Reasoning**<br>4. Demonstrate mathematical principles.<br>5. Demonstrate scientific reasoning.<br>6. Apply scientific methods to the inquiry process. | • GEA College Rubrics<br>• CAAP | • Lab Science Elective |
| **Critical Thinking**<br>7. Read and analyze complex ideas.<br>8. Locate, evaluate and apply research information.<br>9. Evaluate and present well-reasoned arguments. | • GEA College Rubrics<br>• CAAP | • ACS 100<br>• Lab Science Elective<br>• Social Sciences/ Humanities Elective |

## General Education Competencies Results

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool:** ACT Collegiate Assessment of Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9
**Goal Results:** 50%
**Legend:** n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|---|---|---|---|---|---|
| 2009-2010 | 1(14%) | N/A | 1(12%) | 1(6%) | 1(21%) |

# PDSA CYCLE GOALS
# (2009-2010)

**ANALYSIS**

**Problem Area**

This program needs newer training equipment to train and work on.

**Goal**

The goal is to continue to work with the budget available, donations, and to compete in Ford/AAA and SkillsUSA programs to update and add to the training equipment.

**Action Plan**

The Automotive Instructor will meet with the Dean of Instructional Service to discuss needs and available budget. Also the Automotive Instructor with meet with industry partners for donations and will continue to compete in SkillsUSA and Ford/AAA to make more partners if possible.

**Results**

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# BUSINESS ADMINISTRATION
# 2009-2010

The Business Department at Mesalands Community College offers students a wide range of programs that award associate degrees. Associate of Applied Science degrees are awarded to students completing the degree plan requirements in our Business Administration and Business Office Technology program. These students are prepared to enter the workforce. An Associate of Arts degree is awarded to students who complete the Business Administration degree with plans to pursue a four-year degree.

The core courses of the Business Administration program allow students to acquire skills in accounting, business communications, business law, computers, economics, and management. Graduates of the Business Administration program are exposed to a variety of disciplines and given the opportunity to improve and enhance their interpersonal skills and their critical thinking and problem solving skills.

## Program Objectives/Competencies

Upon completion of the Business Associate Degree Programs in Business Administration:

1. The student will demonstrate proficiency in public speaking and interpersonal communication.
2. The student will demonstrate the ability to create and present a final presentation with supportive documents.
3. The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipline.
4. The student will demonstrate the ability to conduct an environmental scan.

## General Education Competencies

Upon completion of the Business Associate Degree Programs and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Business assessment plan is in its first year and follows one Business cohort from first term (fall) through graduation.

**Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. The student will demonstrate proficiency in public speaking and interpersonal communication. | • GEA results<br>• Course exams<br>• CATs<br>• Pre/Post-Tests<br>• Speeches | • ACS 100<br>• BUS 221<br>• BUS 101<br>• MGT 113 |
| 2. The student will demonstrate the ability to create and present a final presentation with supportive documents. | • GEA results<br>• Course exams<br>• CATs<br>• Pre/Post-Test<br>• Research paper/abstracts<br>• Case analysis<br>• Business Plan | • ACS 100<br>• ENG 102<br>• ENG 104<br>• COM 102<br>• MGT 253<br>• MGT 113 |
| 3. The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipline. | • GEA results<br>• Course exams<br>• CATs<br>• Pre/Post-Test<br>• Case analysis | • ACS 100<br>• MGT 253<br>• ENG 102<br>• ENG 104<br>• ECON 251<br>• ECON 252 |
| 4. The student will demonstrate the ability to conduct an environmental scan. | • GEA results<br>• Course exams<br>• CATs<br>• Pre/Post-Test<br>• Case analysis<br>• Business Plan | • MGT 253<br>• MGT 113<br>• BUS 101 |

## Program Objective Results

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:** BUS 221 Final Presentation
**Program Objective:** 1
**Goal Results:** 100% pass rate; cut score is 70%

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 3 | 3 | 100% (mean=88%) |

**Measurement Tool:** MGT 115 Business Plan
**Program Objective:** 2
**Goal Results:** 100% pass rate; cut score is 70%

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 9 | 6 | 67% (mean=78%) |

**Measurement Tool:** ECON 251 Final Exam
**Program Objective:** 3
**Goal Results:** 100% pass rate; cut score is 70%

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 10 | 10 | 100% (mean=85%) |

**Measurement Tool:** MGT 115 Business Plan
**Program Objective:** 4
**Goal Results:** 100% pass rate; cut score is 70%

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 9 | 6 | 67% (mean=78%) |

## General Education Competencies Assessment Plan

General education competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication**<br>1. Present ideas in writing.<br>2. Present ideas orally according to standard usage.<br>3. Demonstrate application of information technology. | • GEA College Rubric<br>• CAAP<br>• CAT<br>• Class Presentations<br>• Exams | • ACS 100<br>• COM 102<br>• CIS 101<br>• ENG 102<br>• ENG 104<br>• Lab Science Elective<br>• Social Sciences/ Humanities Elective |
| **Quantitative and Scientific Reasoning**<br>4. Demonstrate mathematical principles.<br>5. Demonstrate scientific reasoning.<br>6. Apply scientific methods to the inquiry process. | • GEA College Rubric<br>• CAAP<br>• Exams<br>• Discussion Posts<br>• CATs<br>• Pre/Post-Test | • BUS 103<br>• MATH 101<br>• ACCT 111<br>• ECON 251<br>• ECON 252<br>• Lab Science Elective |
| **Critical Thinking**<br>7. Read and analyze complex ideas.<br>8. Locate, evaluate and apply research information.<br>9. Evaluate and present well-reasoned arguments. | • GEA College Rubric<br>• CAAP<br>• Research paper | • ACS 100<br>• CIS 101<br>• COM 102<br>• ECON 251<br>• ECON 252 |

## General Education Competencies Results

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 1, 2, 3
**Goal Results:** 80% "excellent (4)", "proficient (3)" or "adequate (2)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 1 | 4 | 4 | 100%(mean=3.13) |
| • 2 | 4 | 4 | 100%(mean=3.32) |
| • 3 | 4 | 4 | 100%(mean=4.5) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 4, 5, 6
**Goal Results:** 90% "excellent (5)","proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 4 | 1 | 25% (mean = 1.78) |
| • 5 | 4 | 3 | 75%(mean=3.84) |
| • 6 | 4 | 4 | 100%(mean=3.67) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 7, 8, 9
**Goal Results:** 80% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 4 | 4 | 100%(mean=4.19) |
| • 8 | 4 | 3 | 75%(mean=3.13) |
| • 9 | 4 | 4 | 100%(mean=3.38) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

**Measurement Tool:**   ACT Collegiate Assessment of Academic Proficiency (CAAP)
**General Education Objective(s):**   1, 4-9
**Goal Results:**   50%
**Legend:**   n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|---|---|---|---|---|---|
| 2009-10 | 3(27.67%) | 1(66%) | 3(34.33%) | 3(37.33%) | 3(48%) |

**Measurement Tool:**   Writing Across the Curriculum College Rubric – COM 102 Post-Test
**General Education Objective(s):**   1
**Goal Results:**   90% "Excellent(4)"/"Proficient(3)"/ "Adequate(2)"
**Legend:**   ENG 102(No ENG 102)

| Year | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
|---|---|---|---|---|
| 2009-2010 | | | | |
| • 1.1.1 | | 4(4) | | |
| • 1.1.2 | | 4(4) | | |
| • 1.1.3 | | 4(4) | | |
| • 1.2.1 | | 4(4) | | |
| • 1.2.2 | | 4(4) | | |
| • 1.2.3 | | 4(4) | | |
| • 1.3.1 | | 4(4) | | |
| • 1.3.2 | | 4(4) | | |
| • 1.4.1 | | 4(4) | | |
| • 1.4.2 | | 4(4) | | |

Provides a clear, concise thesis statement.
1.1.1 Statement is clear and concise
1.1.2 Statement is well reasoned
1.1.3 Statement leads to plentiful additional discussion
Provides supporting paragraphs which relate to the thesis.
1.2.1 Supporting paragraphs are well reasoned
1.2.2 Supporting paragraphs clearly relate to the thesis
1.2.3 Supporting paragraphs are cohesive and logically developed
Correctly incorporates outside sources.
1.3.1 Provides relevant outside sources
1.3.2 Cites outside sources correctly
Uses appropriate grammar, syntax, punctuation, and spelling.
1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).
1.4.2 Sentence structure and vocabulary are well developed and varied.

# PDSA CYCLE GOALS
# (2009-2010)

## ANALYSIS

## Problem Area

Although sample is small, many students still fail to write effective business plans despite the wealth of resources available.  This is unlikely to change because the majority of students who write unacceptable business plans simply fail to put forth the requisite effort.  Those who submit drafts and other work throughout the semester generally produce acceptable results.

The case analyses required in MGT 253 are good assessment tools but, unfortunately, both students who enrolled in the course during this assessment period failed to complete the case analyses.

## Goal

As always, there is a goal to continuously improve student writing and enhance broad critical thinking skills.

## Action Plan

In 2010-11, there will also be more opportunities for students to critique each other's writing.  There will also be continued use of online discussion posts in ECON 251 that require specific feedback based on the use of writing and reasoning skills.

## Results

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# BUSINESS OFFICE TECHNOLOGY
# 2009-2010

The Business Department at Mesalands Community College offers students a wide range of programs that award associate degrees. Associate of Applied Science degrees are awarded to students completing the degree plan requirements in our Business Administration and Business Office Technology program.

Advances in technology have increased the need for highly-skilled office employees who have the necessary training and confidence required to work with computer hardware and software, and office equipment. The Business Office Technology program has two options: General Office and Software Applications Specialist.

## Program Objectives/Competencies

Upon completion of the Business Associate Degree Programs:

1. The student will demonstrate proficiency in the software applications most often used by industry (i.e., word processing, spreadsheet applications, database management, and presentations).
2. The student will demonstrate the ability to create and present a final presentation with supportive documents.
3. The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipline.

## General Education Competencies

Upon completion of the Business Associate Degree Programs and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Business assessment plan is in its first year follows one Business cohort from first term (fall) through graduation.

**Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. The student will demonstrate proficiency in the software applications most often used by industry (i.e., word processing, spreadsheet applications, database management, and presentations). | • GEA results<br>• Exams<br>• CATs<br>• Pre/Post-Test | • CIS 101<br>• CIS 201<br>• CIS 202<br>• BUS 203<br>• BUS 110 |
| 2. The student will demonstrate the ability to create and present a final presentation with supportive documents. | • GEA results<br>• Exams<br>• CATs<br>• Pre/Post-Test | • ACS 100<br>• ENG 102<br>• ENG 104<br>• COM 102 |
| 3. The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipline. | • GEA results<br>• CATs<br>• Pre/Post-Test<br>• Oral Tests | • ACS 100<br>• ENG 102<br>• ENG 104<br>• COM 102<br>• MATH 101 |

## Program Objective Results

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:**    CIS 101 Final Exam (Integration)
**Program Objective:**    1
**Goal Results:**    100% pass rate; cut score is 70%

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 6 | 6 | 100% (mean=91%) |

**Measurement Tool:**    BUS 221 Final Presentation
**Program Objective:**    2
**Goal Results:**    100% pass rate; cut score is 70%

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 3 | 3 | 100% (mean=88%) |

**Measurement Tool:**    COM 102 Final Exam
**Program Objective:**    3
**Goal Results:**    100% pass rate; cut score is 70%

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 3 | 3 | 100% (mean=91%) |

## General Education Competencies Assessment Plan

General education competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication**<br>1. Present ideas in writing.<br>2. Present ideas orally according to standard usage.<br>3. Demonstrate application of information technology. | • GEA College Rubric<br>• CAAP<br>• CAT<br>• Class Presentations<br>• Exams | • ACS 100<br>• COM 102<br>• CIS 101<br>• ENG 102<br>• ENG 104<br>• Lab Science Elective<br>• Social Sciences/ Humanities Elective |

| Quantitative and Scientific Reasoning<br>4. Demonstrate mathematical principles.<br>5. Demonstrate scientific reasoning.<br>6. Apply scientific methods to the inquiry process. | • GEA College Rubric<br>• CAAP<br>• Exams<br>• Discussion Posts<br>• CATs<br>• Pre/Post-Test | • BUS 103<br>• MATH 101<br>• ACCT 110<br>• Lab Science Elective |
|---|---|---|
| Critical Thinking<br>7. Read and analyze complex ideas.<br>8. Locate, evaluate and apply research information.<br>9. Evaluate and present well-reasoned arguments. | • GEA College Rubric<br>• CAAP<br>• Research paper | • ACS 100<br>• CIS 101<br>• COM 102 |

## General Education Competencies Results

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

**Measurement Tool:**              GEA College Rubric
**General Education Objective(s):** 1, 2, 3
**Goal Results:**                  80% "excellent (4)", "proficient (3)" or "adequate (2)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010<br>• 1<br>• 2<br>• 3 | 1<br>1<br>1 | 0<br>1<br>1 | 100%(mean=2.25)<br>100%(mean=3.0)<br>100%(mean=4.00) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 4, 5, 6
**Goal Results:** 90% "excellent (5)","proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 1 | 0 | 0% (mean = 1.0) |
| • 5 | 1 | 1 | 100%(mean=3.5) |
| • 6 | 1 | 0 | 100%(mean=1.75) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 7, 8, 9
**Goal Results:** 80% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 1 | 1 | 100%(mean=3.75) |
| • 8 | 1 | 0 | 0%(mean=2.5) |
| • 9 | 1 | 1 | 100%(mean=3.25) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

**Measurement Tool:** ACT Collegiate Assessment of Academic Proficiency (CAAP)
**General Education Objective(s):** 1, 4-9
**Goal Results:** 50%
**Legend:** n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|---|---|---|---|---|---|
| 2009-2010 | 1(6%) | N/A | 1(6%) | 1(0%) | 1(4%) |

**Measurement Tool:**                               Writing Across the Curriculum
College Rubric –
COM 102 Post-Test

**General Education Objective(s):**    1
**Goal Results:**                                90% "Excellent(4)"/"Proficient(3)"/
"Adequate(2)"

**Legend:**                                      ENG 102(No ENG 102)

| Year | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
|---|---|---|---|---|
| 2009-2010<br>• 1.1.1<br>• 1.1.2<br>• 1.1.3 | | 1(0)<br><br>1(0)<br>1(0) | | |
| • 1.2.1<br>• 1.2.2<br>• 1.2.3 | | 1(0) | 1(0) | 1(0) |
| • 1.3.1<br>• 1.3.2 | | 1(0) | 1(0) | |
| • 1.4.1<br>• 1.4.2 | | | 1(0) | 1(0) |

<u>Provides a clear, concise thesis statement.</u>
1.1.1 Statement is clear and concise
1.1.2 Statement is well reasoned
1.1.3 Statement leads to plentiful additional discussion
<u>Provides supporting paragraphs which relate to the thesis.</u>
1.2.1 Supporting paragraphs are well reasoned
1.2.2 Supporting paragraphs clearly relate to the thesis
1.2.3 Supporting paragraphs are cohesive and logically developed
<u>Correctly incorporates outside sources.</u>
1.3.1 Provides relevant outside sources
1.3.2 Cites outside sources correctly
<u>Uses appropriate grammar, syntax, punctuation, and spelling.</u>
1.4.1 Writing is error free in all categories (sentence structure,
      punctuation, spelling and grammar).
1.4.2 Sentence structure and vocabulary are well developed and varied.

# PDSA CYCLE GOALS
## (2009-2010)

**ANALYSIS**

**Problem Area**

Although one student is not a sufficient sample, the particular student did poorly on the CAAP.  She was particularly nervous about the testing despite assurances that she would graduate regardless of the outcome.

**Goal**

As always, there is a goal to continuously improve student writing.

**Action Plan**

In 2010-11, there will be more interaction with the librarian on research methods and techniques so that students have more time to focus on the actual writing. There will also be more opportunities for students to critique each other's writing.

**Results**

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# BUILDING TRADES
# 2009-2010

The Building Trades program provides a broad education towards entry-level employment opportunities in the construction field. Beginning courses concentrate on basic techniques including carpentry, construction safety, blueprint reading and job site etiquette. Later, students participate in building a home from planning through completion phases. They also have the opportunity to learn sophisticated design skills in the new Computer Aide Design (CAD) laboratory. Internships with local contractors are available for students to gain experience in the field.

## Program Objectives/Competencies

Upon completion of the Building Trades Associate Degree Program:

1. The student will recognize and demonstrate basic knowledge of general construction industry practices and policies.
2. The student will illustrate knowledge of estimating, project scheduling, contract documents and payment acquisitions.
3. The student will demonstrate basic knowledge of financial management, project safety management and exemplify effective employee relations.
4. The student will demonstrate abilities and skills appropriate to basic general construction.
5. The student will recognize and apply basic construction theory and mathematical principles in application of building design and technique.
6. The student will recognize and exhibit positive employability characteristics.

## General Education Competencies

Upon completion of the Building Trades Associate Degree Program and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

## Overview

The Building Trades assessment plan is in its first year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every fall term and follows one Building Trades cohort from first term through graduation.

## Program Objectives Assessment Plan

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. The student will recognize and demonstrate basic knowledge of general construction industry practices and policies. | • National Center for Construction Education and Research (NCCER) Curriculum Written Tests<br>• NCCER Curriculum Performance Tests<br>• Pre/Post-Test<br>• Oral Tests | • BT 101<br>• BT 102<br>• BT 111<br>• BT 115<br>• BT 112<br>• BT 116<br>• BT 121<br>• BT 122<br>• BT 201<br>• BT 202<br>• BT 215<br>• BT 250<br>• BT 260 |
| 2. The student will illustrate knowledge of estimating, project scheduling, contract documents and payment acquisitions. | • Estimating Project<br>• NCCER Curriculum Written Tests<br>• NCCER Curriculum Performance Tests<br>• Pre/Post-Test<br>• Oral Tests | • BT 116<br>• BLAW 202<br>• BT 121<br>• BT 202<br>• BT 215<br>• BT 260 |
| 3. The student will demonstrate basic knowledge of financial management, project safety | • Project Management Portfolio<br>• NCCER Curriculum Written Tests | • BLAW 202<br>• BT 116<br>• BT 121<br>• BT 202 |

| | | |
|---|---|---|
| management and exemplify effective employee relations. | • NCCER Curriculum Performance Tests<br>• Pre/Post-Test<br>• Oral Tests | • BT 215<br>• BT 260<br>• Soc. Sci. Elective |
| 4. The student will demonstrate abilities and skills appropriate to basic general construction. | • Performance Profile<br>• NCCER Curriculum Written Tests<br>• NCCER Curriculum Performance Tests<br>• Pre/Post-Test<br>• Oral Tests | • BT 101<br>• BT 102<br>• BT 111<br>• BT 115<br>• BT 112<br>• BT 116<br>• BT 121<br>• BT 122<br>• BT 201<br>• BT 202<br>• BT 250 |
| 5. The student will recognize and apply basic construction theory and mathematical principles in application of building design and technique. | • Blueprint Evaluation<br>• NCCER Curriculum Written Tests<br>• NCCER Curriculum Performance Tests<br>• Pre/Post-Test<br>• Oral Tests | • ACS 100<br>• BT 111<br>• BT 115<br>• BT 112<br>• BT 116<br>• BT 121<br>• BT202<br>• BT 215<br>• BT 250<br>• MATH 101<br>• Science Elective |
| 6. The student will recognize and exhibit positive employability characteristics. | • Daily Contacts<br>• NCCER Curriculum Written Tests<br>• NCCER Curriculum Performance Tests<br>• Pre/Post-Test<br>• Oral Tests | • ACS 100<br>• BT 111<br>• BT 121<br>• BT 202<br>• BT 215<br>• BT 260<br>• COMM 102<br>• Soc. Sci. Elective |

**Program Objective Results**

This section presents the raw data results of those measurement tools identified in the second column above.

**Measurement Tool:**        NCCER Curriculum Written Exams\*
**Program Objective(s):**   1, 2, 3, 4, 5, and 6
**Goal Results:**          90% pass rate/70% cut score

| Reporting Period/Topic | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • Intro. To Building Trades | 9 | 6 | 67%  (Mean=71%) |
| • Construction Safety | 8 | 7 | 88%  (Mean=73%) |
| • Construction Technology I | 8 | 8 | 100% (Mean=86%) |
| • Construction Technology II | 9 | 6 | 67%  (Mean=71%) |
| • Construction Technology III | 2 | 2 | 100% (Mean=86%) |
| • Fundamentals of Framing | 8 | 8 | 100% (Mean=86%) |
| • Interior Finishing | 8 | 6 | 75%  (Mean=76%) |
| • Blueprint Interpretations | 8 | 7 | 88%  (Mean=79%) |
| • Project Management | 17 | 15 | 88%  (Mean=89%) |

\*These National Center for Construction Education and Research (NCCER) assessments evaluate the knowledge level of an individual in a specific craft area.

**Measurement Tool:**        NCCER Curriculum Performance Tests\*\*
**Program Objective(s):**   1, 2, 3, 4, 5, and 6
**Goal Results:**          90% pass rate/100% cut score

| Reporting Period/Topic | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • Intro. To Building Trades | 9 | 8 | 89%  (Mean=100%) |
| • Construction Safety | 8 | 7 | 88%  (Mean=100%) |
| • Construction Technology I | 8 | 8 | 100% (Mean=100%) |
| • Construction Technology II | 9 | 6 | 67%  (Mean=100%) |
| • Fundamentals of Framing | 8 | 8 | 100% (Mean=100%) |
| • Interior Finishing | 8 | 6 | 75%  (Mean=100%) |
| • Blueprint Interpretations | 8 | 7 | 88%  (Mean=100%) |

\*\*These National Center for Construction Education and Research (NCCER) assessments evaluate the skill level of an individual in a specific craft area.

**Measurement Tool:** Pre/Post Test
**Program Objective(s):** 1, 2, 3, 4, 5, and 6
**Goal Results:** 50% Improvement

| Reporting Period/Topic | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • Introduction to Building Trades | 9 | 6 | 69% |
| • Construction Safety | 8 | 6 | 71% |
| • Construction Technology I | 8 | 6 | 80% |
| • Construction Technology II | 9 | 6 | 68% |
| • Construction Technology III | 2 | 1 | 81% |
| • Fundamentals of Framing | 8 | 6 | 79% |
| • Interior Finishing | 8 | 6 | 75% |
| • Blueprint Interpretations | 8 | 6 | 78% |
| • Project Management | 17 | 14 | 85% |

**General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication**<br>1. Present ideas in writing.<br>2. Present ideas orally according to standard usage.<br>3. Demonstrate application of information technology. | • College Rubric<br>• Program-Specific Rubric<br>• GEA<br>• NCCER Curriculum Written Tests<br>• NCCER Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Estimating Project<br>• Project Management Portfolio<br>• Performance Profile<br>• Blueprint Evaluation<br>• Daily Contacts<br>• Class Presentations | • ACS 100<br>• BLAW 202<br>• BT 102<br>• BT 112<br>• BT 116<br>• BT 121<br>• BT 202<br>• BT 215<br>• BT 260<br>• COM 102<br>• CIS 101<br>• ENG 102<br>• Science Elective<br>• Social Science Elective |

| Quantitative and Scientific Reasoning<br>4. Demonstrate mathematical principles.<br>5. Demonstrate scientific reasoning.<br>6. Apply scientific methods to the inquiry process. | • College Rubric<br>• Program-Specific Rubric<br>• GEA | • BT 101<br>• BT 102<br>• BT 111<br>• BT 112<br>• BT 115<br>• BT 116<br>• BT 121<br>• BT 122<br>• BT 201<br>• BT 202<br>• BT 215<br>• BT 250<br>• MATH 101<br>• Lab Science Elective<br>• Social Science/Humanities Elective |
|---|---|---|
| Critical Thinking<br>7. Read and analyze complex ideas.<br>8. Locate, evaluate and apply research information.<br>9. Evaluate and present well-reasoned arguments. | • College Rubric<br>• Program-Specific Rubric<br>• GEA<br>• Estimating Project<br>• Project Management Portfolio<br>• Performance Profile<br>• Blueprint Evaluation<br>• Daily Contacts<br>• Class Presentations | • ACS 100<br>• BT 111<br>• BT 115<br>• BT 112<br>• BT 116<br>• BT 121<br>• BT202<br>• BT 215<br>• BT 250<br>• COMM 102<br>• MATH 101<br>• Lab Science Elective<br>• Social Science/Humanities Elective |

**General Education Competencies Results**

This section presents the general education competencies results.  The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool:**                    GEA College Rubric
**General Education Objective(s):**    1, 2, 3
**Goal Results:**                         100% "excellent (4)", "proficient (3)" or "adequate (2)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 1 | 1 | 1 | 100%(mean=2.17) |
| • 2 | 1 | 1 | 100%(mean=2.73) |
| • 3 | 1 | 1 | 66%(mean=2.31) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:**                    GEA College Rubric
**General Education Objective(s):**    4, 5, 6
**Goal Results:**                         100% "excellent (5)", "proficient (4)" or "acceptable (3)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 1 | 0 | 0% (mean=1.25) |
| • 5 | 1 | 1 | 100%(mean=3.25) |
| • 6 | 1 | 1 | 100%(mean=3.75) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:**                    GEA College Rubric
**General Education Objective(s):**    7, 8, 9
**Goal Results:**                         100% "excellent (5)", "proficient (4)" or "acceptable (3)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 1 | 1 | 100%(mean=3.5) |
| • 8 | 1 | 1 | 100%(mean=3.75) |
| • 9 | 1 | 1 | 100%(mean=3.5) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

**Measurement Tool:** ACT Collegiate Assessment of Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9

**Goal Results:** 50%

**Legend:** n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|------|---------|------|---------|-------------------|---------|
| 2009-2010 | 2(23%) | 1(54%) | 2(52%) | 2(37%) | 2(43%) |

## PDSA CYCLE GOALS
## (2009-2010)

### ANALYSIS

### Problem Area

Program objectives 1 and 5 suffered in the 2009-2010 semesters due to emphasis put on the completion of the Project House to meet the HUD grant time constraints.

### Goal

The goal for the 2010-2011 academic year is to increase the pass rate to 90% and the cut score to 70% for all classes relevant to program objectives 1 and 5.

### Action Plan

Consistent classroom time will be given proper priority along with "hands on" jobsite training.

### Results

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# DIESEL TECHNOLOGY
# 2009-2010

Mesalands Community College's Diesel Technology program prepares the student to enter a vast diesel service and repair field as an entry level technician. Upon completion of the program, career opportunities may include entry level positions such as service technician (in the following fields; diesel powered trucks, construction, agriculture, generators, boat/ships, or plant maintenance), specialist, service advisor, service dispatcher, terminal dispatcher, parts sales advisor, and sales representative.

## Program Objectives/Competencies

Upon completion of the Diesel Technology Associate Degree Program:

1. Demonstrate knowledge of class eight truck mechanical components and systems based on Automotive Service Excellence (ASE) standards.

2. Demonstrate knowledge of class eight truck electrical and electronic components and systems based on ASE standards.

3. Application of class eight truck mechanical systems repair skills based on industry standards.

4. Application of class eight truck electrical and electronic systems repair skills based on industry standards.

## General Education Competencies

Upon completion of the Diesel Technology Associate Degree Program and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Diesel Technology assessment plan is in its second year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every fall term and follows one Diesel Technology cohort from first term through graduation.

**Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. Demonstrate knowledge of class eight truck mechanical components and systems based on Automotive Service Excellence (ASE) standards. | • CAT<br>• Pre/Post-Test<br>• ASE based Test | • DMT 155<br>• DMT 156<br>• DMT 157<br>• DMT 165<br>• DMT 169<br>• DMT 275<br>• DMT 276<br>• DMT 277<br>• DMT 278<br>• DMT 280<br>• DMT 286<br>• DMT 287 |
| 2. Demonstrate knowledge of class eight truck electrical and electronic components and systems based on ASE standards. | • CAT<br>• Pre/Post-Test<br>• ASE Based Test | • DMT 166<br>• DMT 167<br>• DMT 168<br>• DMT 285 |
| 3. Application of class eight truck mechanical systems repair skills based on industry standards. | • CAT<br>• Pre/Post-Test<br>• ASE Based Test | • DMT 155<br>• DMT 156<br>• DMT 157<br>• DMT 165<br>• DMT 169<br>• DMT 275<br>• DMT 276<br>• DMT 277<br>• DMT 278<br>• DMT 280<br>• DMT 286<br>• DMT 287 |

| | | | |
|---|---|---|---|
| 4. Application of class eight truck electrical and electronic systems repair skills based on industry standards. | • CAT<br>• Pre/Post-Test<br>• ASE Based Test | • DMT 166<br>• DMT 167<br>• DMT 168<br>• DMT 285 | |

**Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:** CAT
**Program Objective(s):** 1, 2, 3, 4
**Results:** Students biggest concern is the need for more and newer equipment to train on.

**Measurement Tool:** Pre/post Test
**Program Objective(s):** 1, 2, 3, 4
**Goal Results:** 50% improvement

| Reporting Period | Course | # Students Attempting | Pre-Test Mean | Post-Test Mean/# of Students Achieving the Goal |
|---|---|---|---|---|
| 2009-2010 | DMT 166 | 6 | 50% | 53%/3 |
| | DMT 167 | 6 | 43% | 76%/5 |
| | DMT 168 | 6 | 12% | 50%/2 |
| | DMT 275 | 4 | 40% | 85%/4 |
| | DMT 276 | 4 | 35% | 85%/4 |
| | DMT 277 | 4 | 25% | 77%/4 |
| | DMT 280 | 4 | 30% | 70%4 |
| | DMT 285 | 6 | 41% | 75%/5 |

**Measurement Tool:**        ASE Based Test
**Program Objective(s):**   1, 2, 3, 4
**Goal Results:**           70% pass rate/cut score

| Reporting Period | Course | Category | #Attempting/ # Achieving | %Achieving/ % Class Mean |
|---|---|---|---|---|
| 2009-2010 | DMT 166 | Electric/ Electronic Systems (T6) | 5/2 | 40%/66% |
| | DMT 167 | Electric/ Electronic Systems (T6) | 5/2 | 40%/66% |
| | | | 5/2 | 40%/66% |
| | DMT 168 | Electric/ Electronic Systems (T6) | | |
| | | | 4/3 | 75%/68% |
| | DMT 275 | Brakes (T4) | | |
| | | | 4/3 | 75%/68% |
| | DMT 276 | Brakes (T4) | | |
| | | | 4/4 | 100%/83% |
| | DMT 277 | Suspension and Steering (T5) | | |
| | DMT 280 | Heating, Ventilation, Air Conditioning (T7) | 4/3 | 75%/65% |
| | DMT 285 | Electric/ Electronic Systems (T6) | 5/2 | 40%/66% |

## General Education Competencies Assessment Plan

General education competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication** <br> 1. Present ideas in writing. <br> 2. Present ideas orally according to standard usage. <br> 3. Demonstrate application of information technology. | • GEA College Rubrics <br> • CAAP | • ACS 100 <br> • COM 102 <br> • CIS 101 <br> • ENG 102 <br> • Lab Science Elective <br> • Social Sciences/ Humanities Elective |
| **Quantitative and Scientific Reasoning** <br> 4. Demonstrate mathematical principles. <br> 5. Demonstrate scientific reasoning. <br> 6. Apply scientific methods to the inquiry process. | • GEA College Rubrics <br> • CAAP | • Lab Science Elective |
| **Critical Thinking** <br> 7. Read and analyze complex ideas. <br> 8. Locate, evaluate and apply research information. <br> 9. Evaluate and present well-reasoned arguments. | • GEA College Rubrics <br> • CAAP | • ACS 100 <br> • Lab Science Elective <br> • Social Sciences/ Humanities Elective |

**General Education Competencies Results**

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program

*No data was collected in the Diesel Program for the General Education Competencies.*

**PDSA CYCLE RESULTS**
**(2009-2010)**

**ANALYSIS**

**Problem Area**

This program needs newer training equipment to train and work on.

**Goal**

The goal is to continue to work with the budget available, donations, and to compete in Ford/AAA and SkillsUSA programs to update and add to the training equipment.

**Action Plan**

The Diesel Instructor will meet with the Dean of Instructional Service to discuss needs and available budget. Also the Diesel Instructor with meet with industry partners for donations and will continue to compete in SkillsUSA and Ford/AAA to make more partners for possible.

**Results**

To be presented.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
## EARLY CHILDHOOD
## 2009-2010

What early childhood professionals know and can do significantly influence children's development, learning, and success in school.  Since the period of early childhood spans the first eight years of a child's life, these early care and education professionals are being prepared to work in varied settings that include child care centers, family child care homes, Head Start, early intervention programs, public and private schools through third grade, preschools, and family support programs.  Professionals may refer to themselves as teachers, educational assistants, assistant teachers, teacher aides, caregivers, or providers.  In the final analysis, they all teach and they all provide care.

### Program Objectives/Competencies

Upon completion of the Early Childhood Associate Degree Program:

1. The student will incorporate understanding of developmental stages, processes, and theories of growth, development, and learning into developmentally appropriate practice.

2. The student will demonstrate knowledge of relevant content for young children and developmentally appropriate ways of integrating content into teaching and learning experiences for children from birth through age eight.

3. The student will demonstrate effective written and oral communication skills when working with children, families, and early care, education, and family support professionals.

### General Education Competencies

Upon completion of the Early Childhood Associate Degree Program and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Early Childhood assessment plan is in its second year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every fall term and follows one Early Childhood cohort from first term through graduation.

**Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. The student will incorporate understanding of developmental stages, processes, and theories of growth, development, and learning into developmentally appropriate practice. | • CAT<br><br>• Pre/Post-Test<br><br>• Course Projects<br><br>• Written Tests over Course Content | • ECE 103<br>• ECE 104<br>• ECE 106<br>• ECE 107<br>• ECE 109<br>• ECE 111<br>• ECE 112<br>• ECE 113<br>• ECE 114<br>• ECE 115<br>• ECE 265 |
| 2. The student will demonstrate knowledge of relevant content for young children and developmentally appropriate ways of integrating content into teaching and learning experiences for children from birth through age eight. | • Written Tests over Course Content<br><br>• CAT<br><br>• Pre/Post-Test<br><br>• Course Projects | • ECE 103<br>• ECE 104<br>• ECE 106<br>• ECE 107<br>• ECE 109<br>• ECE 111<br>• ECE 112<br>• ECE 113<br>• ECE 114<br>• ECE 115<br>• ECE 265 |

| | | | | |
|---|---|---|---|---|
| 3. The student will demonstrate effective written and oral communication skills when working with children, families, early care, education, and family support professionals. | • Written Tests Over Course Content<br><br>• Oral and Written Projects<br><br>• GEA<br><br>• CAAP | • ECE 103<br>• ECE 104<br>• ECE 106<br>• ECE 107<br>• ECE 109<br>• ECE 111<br>• ECE 112<br>• ECE 113<br>• ECE 114<br>• ECE 115<br>• ECE 265 | | |

## Program Objective Results

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:**         **Course Project**

**Program Objectives:**       1,2,3
**Goal:**                     70% Pass Rate

| Course Project<br>2009-2010 | | | | |
|---|---|---|---|---|
| **Course** | **Project** | **# of Students Attempting** | **# Passing** | **% Passing** |
| **ECE 103** | **Paper** | **10** | **10** | **100%(Mean=91%)** |
| **ECE 104** | **Paper** | **15** | **12** | **80%(Mean=67.9%)** |
| **ECE 106** | **Interview** | **3** | **3** | **100%(Mean=93%)** |
| **ECE 107** | **Assessment** | **17** | **15** | **88%(Mean=77.2%)** |
| **ECE 109** | **Teaching** | **13** | **12** | **92% (Mean=86%)** |
| **ECE 111** | **Teaching** | **13** | **13** | **100%(Mean=86%)** |
| **ECE 112** | **Practicum** | **13** | **12** | **92%(Mean=87%)** |
| **ECE 113** | **Paper** | **2** | **2** | **100%(Mean=91%)** |
| **ECE 114** | **Teaching** | **16** | **15** | **94%(Mean=90%)** |
| **ECE 115** | **Practicum** | **16** | **15** | **94%(Mean=85%)** |
| **ECE 265** | **Paper** | **4** | **4** | **100%(Mean=90%)** |

**Measurement Tool:**          Written Tests Over Course Content
**Program Objectives:**      1,2,3
**Goal:**                     70% Pass Rate

| Written Tests 2009-2010 | | | |
|---|---|---|---|
| **Course** | **# of Students Attempting** | **# Passing** | **% Passing** |
| ECE 103 | 10 | 10 | 100% (Mean=91%) |
| ECE 104 | 15 | 12 | 80%(Mean=67.9%) |
| ECE 106 | 3 | 3 | 100%(Mean=93%) |
| ECE 107 | 17 | 15 | 88%(Mean=77.2%) |
| ECE 109 | 13 | 12 | 92% (Mean=86%) |
| ECE 111 | 13 | 13 | 100%(Mean=86%) |
| ECE 112 | 13 | 12 | 92%(Mean=87%) |
| ECE 113 | 2 | 2 | 100%(Mean=91%) |
| ECE 114 | 16 | 15 | 94%(Mean=90%) |
| ECE 115 | 16 | 15 | 94%(Mean=85%) |
| ECE 265 | 4 | 4 | 100%(Mean=90%) |

**General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.  The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| **General Education Competencies** | **Measurement Tools** | **Courses In Which Program Objectives Are Presented and/or Measured** |
|---|---|---|
| **Communication**<br>1. Present ideas in writing<br>2. Present ideas orally according to standard usage.<br>3. Demonstrate application of information technology. | • GEA College Rubric<br>• CAAP<br>• CAT<br>• Class Presentations | • ECE 103<br>• ECE 104<br>• ECE 106<br>• ECE 107<br>• ECE 109<br>• ECE 111<br>• ECE 112<br>• ECE 113<br>• ECE 114<br>• ECE 115<br>• ECE 265 |

| Quantitative and Scientific Reasoning<br>4. Demonstrate mathematical principles.<br>5. Demonstrate scientific reasoning.<br>6. Apply scientific methods to the inquiry process. | • GEA College Rubric<br>• CAAP<br>• Laboratory Exercise<br>• Laboratory Report | • MATH 107<br>• MATH 110<br>• MATH 261<br>• Required Science Classes |
|---|---|---|
| Critical Thinking<br>7. Read and analyze complex ideas.<br>8. Locate, evaluate, and apply research information.<br>9. Evaluate and present well-reasoned arguments. | • GEA College Rubric<br>• CAAP<br>• Laboratory Exercise | • ECE 103<br>• ECE 104<br>• ECE 106<br>• ECE 107<br>• ECE 109<br>• ECE 111<br>• ECE 112<br>• ECE 113<br>• ECE 114<br>• ECE 115<br>• ECE 265 |

## General Education Competencies Results

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool:** GEA College Rubric

**General Education Objectives:** 1, 2, 3
**Goal Results:** 80% "excellent (4)", "proficient (3)" or "adequate (2)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010<br>• 1<br>• 2<br>• 3 | 1<br>1<br>1 | 1<br>1<br>1 | 100% (mean=3.0)<br>100% (mean=3.0)<br>100% (mean=3.75) |

1. Present ideas in writing.
2. Present ideas orally according to standard usage.
3. Demonstrate application of information technology.

**Measurement Tool:** GEA College Rubric

**General Education Objectives:** 4, 5, 6

**Goal Results:** 80% "excellent (5)","proficient (4)" or "acceptable (3)'

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 1 | 0 | 0% (mean=1.0) |
| • 5 | 1 | 1 | 100% (mean=4.75) |
| • 6 | 1 | 1 | 100% (mean=3.5) |

4. Demonstrate mathematical principles.
5. Demonstrate scientific reasoning.
6. Apply scientific methods to the inquiry process.

**Measurement Tool:** GEA College Rubric

**General Education Objectives:** 7, 8, 9

**Goal Results:** 80% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 1 | 1 | 100% (mean=4.5) |
| • 8 | 1 | 1 | 100% (mean=3.75) |
| • 9 | 1 | 1 | 100% (mean=3.5) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments.

**Measurement Tool:** ACT Collegiate Assessment of Academic Proficiency (CAAP)

**General Education Objectives:** 1, 4-9

**Goal Results:** 50%

**Legend:** n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|---|---|---|---|---|---|
| 2009-2010 | 1(39%) | | 1 (53%) | | |

**Measurement Tool:** Writing Across the Curriculum College Rubric

**General Education Objective(s):** 1

**Goal Results:** 90% "Excellent (4)", "Proficient (3)", or "Adequate (2)"

**Legend:** ENG 102(No ENG 102)

| Year | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
|---|---|---|---|---|
| 2009-2010 1.1.1 1.1.2 1.1.3 | 16 | 16(23) | 1(5) | |
| 1.2.1 1.2.2 1.2.3 | 18(6) | 12(15) | 3(7) | |
| 1.3.1 1.3.2 | 6 | 21(18) | 5(8) | 1(2) |
| 1.4.1 1.4.2 | 16(1) | 15(13) | 2(13) | (1) |

Provides a clear, concise thesis statement.

1.1.1 Statement is clear and concise

1.1.2 Statement is well reasoned

1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.

1.2.1 Supporting paragraphs are well reasoned

1.2.2 Supporting paragraphs clearly relate to the thesis

1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources.

1.3.1 Provides relevant outside sources

1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling.

1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).

1.4.2 Sentence structure and vocabulary are well developed and varied.

# PDSA CYCLE GOALS
## (2009-2010)

## ANALYSIS

### Problem Area

Students need to continue to work on writing and communication skills.  We work on those in class projects, but the GEA and CAAP scores show that more practice or supervision is needed in these areas.  I will continue to have all of my classes write more and present orally more.  This will also enhance the College's Writing Across the Curriculum emphasis.

I want to make sure that my Early Childhood students exit my program with skills that will not only enable them to be employed now, but  that they will also be prepared to continue on with their higher education goals.

### Goal

Every program student will research an early childhood topic, according to the class that they are enrolled in, and will present both an oral and written report using criteria outlined in our GEA Rubric.  These will be evaluated by the Rubric and given back to the student for personal assessment.

### Action

Give each student the assignment.  Set up a conference after completion with each student to discuss areas in need of improvement.

### Results

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# FARRIER SCIENCE
# 2009-2010

Farrier Science is primarily a self-employed field; therefore, farriers must be knowledgeable and skilled in all facets of the business. The Farrier Science degree program offers hands-on experience in horsemanship, trimming and shoeing, forging and welding. Instruction in anatomy and physiology, business management, and other aspects of horseshoeing are provided in the classroom. The degree program also offers an in-depth study of therapeutic and pathological shoeing, including the physiology, forging and application of shoes.

## Program Objectives/Competencies

Upon completion of an Associates Degree in Farrier Science students will:

1. Apply knowledge of the anatomy and physiology of the equine limb as it relates to a sound horse according to American Farriers Association (A.F.A.) standards.
2. Perform and defend keg shoe modifications according to A.F.A. standards or veterinary prescription.
3. Identify equine gaits and gait faults according to A.F.A. standards or veterinary prescription.
4. Identify pathological conditions of the equine limb and successfully apply the appropriate therapeutic shoeing technique according to A.F.A. standards or veterinary prescription.

## General Education Competencies

Upon completion of the Associates Degree in Farrier Science and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Farrier Science assessment program is based upon the American Farriers Association certification program and is designed to assess trimming and shoeing skills. In addition to testing these "hands-on" aspects of competency, the program includes written examinations designed to test comprehension of equine anatomy, physiology, and biomechanics.

The Farrier Science assessment plan is in its second year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every fall term and follows one Farrier Science cohort from first term through graduation.

**Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. Apply knowledge of the anatomy and physiology of the equine limb as it relates to a sound horse according to American Farriers Association (A.F.A.) standards. | • A.F.A. Curriculum Written Tests<br>• A.F.A. Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests | • ANSC 151<br>• FAS 111<br>• FAS 121<br>• FAS 112<br>• FAS 223<br>• FAS 224 |
| 2. Perform and defend keg shoe modifications according to A.F.A. standards or veterinary prescription. | • A.F.A. Curriculum Written Tests<br>• A.F.A. Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• LAB Practicals | • FAS 121<br>• FAS 131<br>• FAS 122<br>• FAS 132<br>• FAS 223<br>• FAS 233<br>• FAS 224 |
| 3. Identify equine gaits and gait faults according to A.F.A. standards or veterinary prescription. | • Lab Practicals<br>• A.F.A. Curriculum Written Tests<br>• A.F.A. Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests | • FAS 111<br>• FAS 112<br>• FAS 223<br>• FAS 224 |

| 4. Identify pathological conditions of the equine limb and successfully apply the appropriate therapeutic shoeing technique according to A.F.A. standards or veterinary prescription. | • Lab Practical<br>• A.F.A. Curriculum Written Tests<br>• A.F.A. Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests | • FAS 223<br>• FAS 233<br>• FAS 253<br>• FAS 224<br>• FAS 289 |
|---|---|---|

**Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:**       A.F.A. Certified Farrier Exam
**Program Objective(s):**       1
**Goal Results:**       100% pass rate

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 5 | 3 | 60% |

**Measurement Tool:**       A.F.A. Certified Farrier Exam
**Program Objective(s):**       2
**Goal Results:**       100% pass rate

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 5 | 4 | 80% |

**Measurement Tool:**       A.F.A. Certified Farrier Exam
**Program Objective(s):**       4
**Goal Results:**       100% pass rate

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 5 | 5 | 100% |

**Measurement Tool:** A.F.A. Certified Farrier Exam
**Program Objective(s):** 1-4
**Goal Results:** 100% pass rate

| Year | # of Students Tested | # of Students Passing on First Attempt | # of Students Retested | # of Students Passing Upon Retest | Total # of Students Passing | Total % of Students Passing |
|---|---|---|---|---|---|---|
| 2009-2010 | 5 | 4 | N/A | | 4 | 80% |
| 2008-2009 | 5 | 4 | N/A | | 4 | 80% |

**General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication**<br>1. Present ideas in writing.<br>2. Present ideas orally according to standard usage.<br>3. Demonstrate application of information technology. | • GEA College Rubric<br>• CAAP | • ACS 100<br>• COM 102<br>• CIS 101<br>• ENG 102<br>• Lab Science Elective<br>• Social Sciences/ Humanities Elective |
| **Quantitative and Scientific Reasoning**<br>4. Demonstrate mathematical principles.<br>5. Demonstrate scientific reasoning.<br>6. Apply scientific methods to the inquiry process. | • GEA College Rubric<br>• CAAP | • Lab Science Elective |

| Critical Thinking | • GEA College Rubric | • ACS 100 |
|---|---|---|
| 7. Read and analyze complex ideas.<br>8. Locate, evaluate and apply research information.<br>9. Evaluate and present well-reasoned arguments. | • CAAP | • Lab Science Elective<br>• Social Sciences/ Humanities Elective |

## General Education Competencies Results

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

| | |
|---|---|
| **Measurement Tool:** | ACT Collegiate Assessment of Academic Proficiency (CAAP) |
| **General Education Objective(s):** | 1, 4-9 |
| **Goal Results:** | 50% |
| **Legend:** | n (Mean Score) |

| Year | Writing | Math | Reading | Critical Thinking | Science |
|---|---|---|---|---|---|
| 2009-2010 | 1(39%) | N/A | 2(33%) | 1(25%) | 1(21%) |

| | |
|---|---|
| **Measurement Tool:** | GEA College Rubric |
| **General Education Objective(s):** | 1, 2, 3 |
| **Goal Results:** | 100% "excellent (4)", "proficient (3)" or "adequate (2)" |

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 1 | 4 | 3 | 75%(mean=2.18) |
| • 2 | 4 | 4 | 100%(mean=2.45) |
| • 3 | 4 | 4 | 100%(mean=2.87) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:**                GEA College Rubric
**General Education Objective(s):**    4, 5, 6
**Goal Results:**                    100% "excellent (5)", "proficient
                                     (4)", or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 4 | 0 | 0% (mean = 1.5) |
| • 5 | 5 | 2 | 40% (mean=2.8) |
| • 6 | 5 | 3 | 60% (mean=3.25) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:**                GEA College Rubric
**General Education Objective(s):**    7, 8, 9
**Goal Results:**                    100% "excellent (5)", "proficient
                                     (4)", or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 5 | 3 | 60%(mean=2.7) |
| • 8 | 5 | 3 | 60%(mean=2.85) |
| • 9 | 5 | 2 | 40%(mean=2.75) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

# PDSA CYCLE GOALS
# (2009-2010)

## ANALYSIS

## Action Plan

Stress functions of five sensitive structures of the equine digit. Allow more distributed practice on square toes and clips.

## Results

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# FINE ARTS
# 2009-2010

Contemporary artists need strong practical technical proficiency so they can convey conceptual ideas through visual material reality. The Fine Arts program emphasizes the important aesthetic correlation of appropriate media manipulation with manifestation of a desired affective outcome. The program offers hands-on creative experience with a variety of media applications to visual problem solving including: bronze casting, fabrication with a variety of materials, carving, drawing and painting. There is an equal emphasis upon student development of appropriate technical manipulation, individual creative initiative and conceptual awareness and intent.

Bronze sculpture has a strong tradition in Mesalands' foundry; however, other media options are strongly pursued. Exploration in combining several media is encouraged.

## Program Objectives/Competencies

Upon successful completion of the Fine Arts Degree Program:

1. The student will demonstrate the ability to produce fine art by demonstration of technical skills in 2D and/or 3D medium.
2. The student will demonstrate the ability to defend projects using fine art criteria.
3. The student will demonstrate the ability to produce an idiosyncratic body of work for self promotion.

## General Education Competencies

Upon completion of the Fine Arts Degree Program and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

## Overview

The Fine Arts assessment plan is in its second year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every other fall term and follows one Fine Arts cohort from first term through graduation.

## Program Objectives Assessment Plan

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. The student will demonstrate the ability to produce fine art by demonstration of technical skills in 2D and/or 3D medium. | • Capstone Projects<br>• Capstone Art Show<br>• CAT<br>• Pre/Post-Test | • ART 105<br>• ART 112<br>• ART 113<br>• ART 114<br>• ART 202<br>• ART 203<br>• ART 204<br>• ART 205<br>• ART 215<br>• ART 222<br>• ART 225<br>• ART 230<br>• ART 293 |
| 2. The student will demonstrate the ability to defend projects using fine art criteria. | • Capstone Projects<br>• Capstone Art Show<br>• CAT<br>• Pre/Post-Test<br>• Oral Defense<br>• Critiques | • ART 101<br>• ART 103<br>• ART 104<br>• ART 105<br>• ART 112<br>• ART 113<br>• ART 114<br>• ART 202<br>• ART 203<br>• ART 204<br>• ART 205<br>• ART 215<br>• ART 222<br>• ART 225<br>• ART 230<br>• ART 261<br>• ART 293 |

| 3. The student will demonstrate the ability to produce an idiosyncratic body of work for self promotion. | • Capstone Projects<br>• Capstone Art Show<br>• Completion of course requirements for Fine Arts degree plan<br>• CAT<br>• Pre/Post-Test | • ART 103<br>• ART 104<br>• ART 105<br>• ART 112<br>• ART 113<br>• ART 114<br>• ART 202<br>• ART 203<br>• ART 204<br>• ART 205<br>• ART 215<br>• ART 222<br>• ART 225<br>• ART 230<br>• ART 293 |
|---|---|---|

**Program Objective Results**

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:** Senior Capstone Show – Rubric*
**Program Objective(s):** 1, 2, 3
**Goal Results:** 100% pass rate; cut score is 80%

| Criteria | Excellent 5 | Proficient 4 | Acceptable 3 | Inadequate 2 | Unacceptable 1 |
|---|---|---|---|---|---|
| Demonstrate idiosyncratic and technical skills with chosen media. | Student can independently complete high quality projects. | Student successfully meets expectations independently most of the time. Shows some independent initiative. | Student makes satisfactory progress towards established criteria for completed project… needs personal guidance. | Student makes insufficient progress toward completing establishes criteria for project. | Student does not attempt or demonstrate minimal skills to complete project. |

| Year | n | Media Used | Defense | Creativity | Craftsmanship | Deadlines |
|---|---|---|---|---|---|---|
| 2009-2010 | 2 | 2D and 3D | 4 | 4.5 | 4.5 | 4 |

\*Each graduate must execute senior capstone show before graduation. The show will include past capstone projects for previous classes as well as work completed in last semester. Student will present defense of the work.

## General Education Competencies Assessment Plan

General education competencies are measured with multiple tools.
The following **<u>Curriculum Map</u>** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication**<br>1. Present ideas in writing.<br>2. Present ideas orally according to standard usage.<br>3. Demonstrate application of information technology. | • GEA College Rubric<br>• CAAP<br>• Writing Across the Curriculum | • ACS 100<br>• CIS 101<br>• COM 102<br>• ENG 102<br>• Lab Science Elective<br>• Social/Behavioral Science<br>• Humanities/Fines Arts Elective<br>• ART 101 |
| **Quantitative and Scientific Reasoning**<br>4. Demonstrate mathematical principles.<br>5. Demonstrate scientific reasoning.<br>6. Apply scientific methods to the inquiry process. | • GEA College Rubric<br>• CAAP | • Lab Science Elective |
| **Critical Thinking**<br>7. Read and analyze complex ideas.<br>8. Locate, evaluate and apply research information.<br>9. Evaluate and present well-reasoned arguments. | • GEA College Rubric<br>• CAAP<br>• Capstone Project | • ACS 100<br>• Lab Science Elective<br>• Social Sciences/Humanities Elective<br>• ART 100<br>• ART 103<br>• ART 104 |

## General Education Competencies Results

This section presents the general education competencies results.  The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the academic course of study.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 1, 2, 3
**Goal Results:** 100% "excellent (4)", "proficient (3)" or "adequate (2)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 1 | 1 | 0 | 0%(mean=1.75) |
| • 2 | 1 | 0 | 0%(mean=2.4) |
| • 3 | 1 | 0 | 0%(mean=1.64) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 4, 5, 6
**Goal Results:** 100% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 1 | 0 | 0% (mean=2.0) |
| • 5 | 1 | 1 | 100%(mean=4.5) |
| • 6 | 1 | 0 | 0%(mean=2.0) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:**                      GEA College Rubric
**General Education Objective(s):**   7, 8, 9
**Goal Results:**                      100% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 1 | 1 | 100%(mean=4.5) |
| • 8 | 1 | 0 | 0%(mean=2.0) |
| • 9 | 1 | 1 | 100%(mean=3.0) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

**Measurement Tool:**                      ACT Collegiate Assessment of Academic Proficiency (CAAP)
**General Education Objective(s):**   1, 4-9
**Goal Results:**                      50%
**Legend:**                         n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|---|---|---|---|---|---|
| 2009-2010 | N/A | 1(66%) | N/A | N/A | N/A |

**Measurement Tool:**                      Writing Across the Curriculum College Rubric
**General Education Objective(s):**   1
**Goal Results:**                      90% "Excellent(4)"/"Proficient(3)"/ "Adequate(2)"
**Legend:**                         ENG 102(No ENG 102)

| Year | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
|---|---|---|---|---|
| 2009-2010 | | | | |
| • 1.1.1 | 3(3) | 2 | (7) | |
| • 1.1.2 | 3(3) | 2 | (7) | |
| • 1.1.3 | 3(3) | 2 | (7) | |
| • 1.2.1 | 3(3) | 2(6) | | (1) |
| • 1.2.2 | 3(3) | 2(6) | | (1) |
| • 1.2.3 | 3(3) | 2(6) | | (1) |
| • 1.3.1 | 2(3) | 1 | 1(2) | 1(5) |
| • 1.3.2 | 2(3) | 1 | 1(2) | 1(5) |
| • 1.4.1 | 2(3) | 2(7) | | 1(1) |
| • 1.4.2 | 2(3) | 2(7) | | 1(1) |

Provides a clear, concise thesis statement.
1.1.1 Statement is clear and concise
1.1.2 Statement is well reasoned
1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.
1.2.1 Supporting paragraphs are well reasoned
1.2.2 Supporting paragraphs clearly relate to the thesis
1.2.3 Supporting paragraphs are cohesive and logically developed
Correctly incorporates outside sources.
1.3.1 Provides relevant outside sources
1.3.2 Cites outside sources correctly
Uses appropriate grammar, syntax, punctuation, and spelling.
1.4.1 Writing is error free in all categories (sentence structure,
       punctuation, spelling and grammar).
1.4.2 Sentence structure and vocabulary are well developed and varied.


**PDSA CYCLE GOALS**
**(2009-2010)**

**ANALYSIS**

**Problem Area**

Students are uncomfortable doing critiques in front of an audience.
Attendance is the main problem in getting students to compete work.

**Goal**

Make students more comfortable doing critiques with continued emphasis on
critiques and personal performance.  Encourage students to attend classes so
they can achieve deadlines for finishing work.

**Action Plan**

Increase the number of class critiques students are required to participate in.
Make attendance 10% of final grade.

**Results**

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# NATURAL SCIENCES
# 2009-2010

The Natural Science program at Mesalands Community College provides educational options in either paleontology or geology.

The option in paleontology provides a primary education in the earth and biological sciences with an emphasis on paleontology. Students will be exposed to the fundamentals of geology, biology, and paleontology. The paleontology option emphasizes practical knowledge of fossils through field trips and laboratory work. Courses take advantage of the rich natural resources of the mesalands country of eastern New Mexico, a high technology science laboratory, and the College's paleontology museum, the Mesalands Dinosaur Museum. The Paleontology option emphasizes fossils, particularly their collection and study.

The option in geology provides a primary education in the natural sciences. Students will be exposed to the fundamentals of geology, biology, and computer science. The geology program emphasizes practical knowledge through field trips and laboratory work. Courses take advantage of the rich natural resources of the mesa country of eastern New Mexico, a state-of-the-art, computer-interactive science laboratory, and the College's natural history museum, the Mesalands Dinosaur Museum.

## Program Objectives/Competencies

Upon completion of the Natural Sciences Associate Degree Program:

1. The student will demonstrate an in-depth understanding of the concepts and associated geological processes of the Theory of Plate Tectonics.

2. The student will identify common minerals and rocks, and explain their genesis and the environments in which they form.

3. The student will demonstrate an understanding of geological time and the principles of stratigraphy.

4. The student will correctly apply appropriate field and laboratory techniques to successfully complete assigned projects.

5. The student will demonstrate the skills to conduct and present a scientific research project under guidance of the instructor.

In addition, upon completion of the Natural Sciences Associate Degree Program with option Paleontology

6. The student will demonstrate an understanding of anatomical structures and their function in the principal groups of invertebrates and vertebrates.

7. The student will demonstrate a broad-based understanding of the components of the Theory of Evolution.

8. The student will demonstrate an understanding of the principles of museum displays and collections, and of conservation and curation of natural history specimens.

In addition, upon completion of the Natural Sciences Associate Degree Program with option Geology

9. The student will demonstrate an understanding of the genesis, occurrence, and exploitation of geological resources (mineral, energy, water).

10. The student will demonstrate an understanding of the nature of geological hazards, and demonstrate the ability to evaluate such hazards.

**General Education Competencies**

Upon completion of the Natural Sciences Associate Degree Program and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).

2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).

3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Natural Sciences assessment plan is in its first year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every fall term and follows one Natural Sciences cohort from first term through graduation.

**Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools.
The following **<u>Curriculum Map</u>** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. The student will demonstrate an in-depth understanding of the concepts and associated geological processes of the Theory of Plate Tectonics. | • Laboratory Exercise<br>• Pre/Post-Test<br>• Faculty-prepared Examination | • GEOL 151<br>• GEOL 152 |
| 2. The student will identify common minerals and rocks, and explain their genesis and the environments in which they form. | • Laboratory Exercise<br>• Pre/Post-Test<br>• Faculty-prepared Examination | • GEOL 151<br>• GEOL 152<br>• GEOL 190<br>• GEOL 290<br>• GEOL 293 |
| 3. The student will demonstrate an understanding of geological time and the principles of stratigraphy | • Laboratory Exercise<br>• Pre/Post-Test<br>• Faculty-prepared Examination | • GEOL 151<br>• GEOL 152<br>• GEOL 210 |
| 4. The student will correctly apply appropriate field and laboratory techniques to successfully complete assigned projects. | • Laboratory Exercise<br>• Field Exercise<br>• Program-specific Rubrics<br>• Capstone Project | • GEOL 118<br>• GEOL 120<br>• GEOL 122<br>• GEOL 190<br>• GEOL 290<br>• GEOL 293 |
| 5. The student will demonstrate the skills to conduct and present a scientific research project under guidance of the instructor. | • Capstone Project<br>• Scientific Report<br>• Oral Presentations | • GEOL 190<br>• GEOL 290<br>• GEOL 289 |

| | | |
|---|---|---|
| 6. The paleontology student will demonstrate an understanding of anatomical structures and their function in the principal groups of invertebrates and vertebrates. | • Laboratory Exercise<br>• Pre/Post-Test<br>• Faculty-prepared Examination<br>• Class Presentations | • GEOL 152<br>• GEOL 120<br>• GEOL 210<br>• GEOL 289<br>• GEOL 293<br>• GEOL 293K<br>• BIOL 113<br>• BIOL 250 |
| 7. The paleontology student will demonstrate a broad-based understanding of the components of the Theory of Evolution. | • Class Presentations<br>• Laboratory Exercise<br>• Pre/Post-Test<br>• Faculty-prepared Examination | • BIOL 113<br>• GEOL 141<br>• GEOL 152<br>• GEOL 210 |
| 8. The paleontology student will demonstrate knowledge of the principles of museum displays and collections, and of conservation and curation of natural history specimens. | • Faculty-prepared Examination<br>• Pre/Post-Test<br>• Class Assignment<br>• Museum and Laboratory Projects | • GEOL 105<br>• GEOL 190<br>• GEOL 290<br>• GEOL 289 |
| 9. The geology student will demonstrate an understanding of the genesis, occurrence, and exploitation of geological resources (mineral, energy, water). | • Faculty-prepared Examination<br>• Pre/Post-Test | • GEOL 141<br>• GEOL 151<br>• GEOL 230 |
| 10. The geology student will demonstrate an understanding of the nature of geological hazards, and demonstrate the ability to evaluate such hazards. | • Faculty-prepared Examination<br>• Pre/Post-Test<br>• Laboratory Exercise<br>• Case Study | • GEOL 141<br>• GEOL 151<br>• GEOL 230 |

## Program Objective Results

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:**                   Laboratory Exercise "Seafloor Spreading",
                                               GEOL 152

**Program Objective(s):**       1

**Goal Results:**                       100% pass rate; cut score is 80%

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 4 | 3 | 75% (mean=83%) |

**Measurement Tool:**                   Laboratory Exercise "Relative Dating",
                                             GEOL 152

**Program Objective(s):**       3

**Goal Results:**                       80% pass rate; cut score is 75%

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 4 | 4 | 100% (mean=83.5%) |

## General Education Competencies Assessment Plan

General education competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication** <br> 1. Present ideas in writing. <br> 2. Present ideas orally according to standard usage. <br> 3. Demonstrate application of information technology. | • GEA College Rubric <br> • CAAP <br> • CAT <br> • Class Presentation | • ACS 100 <br> • GEOL 105 <br> • GEOL 151 <br> • GEOL 152 <br> • GEOL 210 <br> • GEOL 230 <br> • GEOL 190 <br> • GEOL 290 <br> • GEOL 293 <br> • COM 102 <br> • CIS 101 <br> • ENG 102 <br> • ENG 104 <br> • Lab Science Elective <br> • Social Sciences/ Humanities Elective |
| **Quantitative and Scientific Reasoning** <br> 4. Demonstrate mathematical principles. <br> 5. Demonstrate scientific reasoning. <br> 6. Apply scientific methods to the inquiry process. | • GEA College Rubric <br> • CAAP <br> • Laboratory Exercise <br> • Laboratory Report | • GEOL 151 <br> • GEOL 152 <br> • GEOL 190 <br> • GEOL 210 <br> • GEOL 230 <br> • GEOL 289 <br> • GEOL 290 <br> • BIOL 113 <br> • BIOL 250 <br> • Lab Science Elective |
| **Critical Thinking** <br> 7. Read and analyze complex ideas. <br> 8. Locate, evaluate and apply research information. <br> 9. Evaluate and present well-reasoned arguments. | • GEA College Rubric <br> • CAAP <br> • Capstone Project <br> • Laboratory Exercise | • ACS 100 <br> • GEOL 151 <br> • GEOL 152 <br> • GEOL 190 <br> • GEOL 210 <br> • GEOL 230 <br> • GEOL 289 <br> • GEOL 290 <br> • BIOL 113 <br> • BIOL 250 <br> • Lab Science Elective <br> • Social Sciences/ Humanities Elective |

## General Education Competencies Results

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool <u>each</u> time the specific competency was evaluated during the program.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 1, 2, 3
**Goal Results:** 80% "excellent (4)" or "proficient (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 1 | 1 | 1 | 100%(mean=3.0) |
| • 2 | 1 | 1 | 100%(mean=3.6) |
| • 3 | 1 | 1 | 100%(mean=4.25) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 4, 5, 6
**Goal Results:** 90% "excellent (5)" or "proficient (4)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 1 | 0 | 0% (mean = 2.5) |
| • 5 | 1 | 1 | 100%(mean=4.5) |
| • 6 | 1 | 1 | 100%(mean=5.0) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:** GEA College Rubric
**General Education Objective(s):** 7, 8, 9
**Goal Results:** 80% "excellent (5)" or "proficient (4)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 1 | 1 | 100%(mean=4.75) |
| • 8 | 1 | 0 | 0%(mean=3.0) |
| • 9 | 1 | 0 | 0%(mean=2.5) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments

**Measurement Tool:** ACT Collegiate Assessment of Academic Proficiency (CAAP)
**General Education Objective(s):** 1, 4-9
**Goal Results:** 50%
**Legend:** n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|------|---------|------|---------|-------------------|---------|
| 2009-2010 | 1(80%) | 1(30%) | 1(94%) | 1(83%) | 1(79%) |

## PDSA CYCLE GOALS
## (2009-2010)

### ANALYSIS

### Problem Area

Students have few opportunities to learn how to undertake the step-by-step procedure in scientific research, and how to produce a scientific paper, other than during a capstone project in their last term. Research and scientific writing skills are acquired by continuing practice. Due to time constraints, individual supervision by the faculty proved difficult to achieve.

### Goal

Each program student will at the end of the fall semester 2010 produce one scientific paper which presents his/her original research, written and formatted according to the standards of an established scientific journal.

### Action Plan

The program faculty will determine a 2 hour period per week during which he and all program students meet in the lab. This time will be dedicated to research and writing under guidance of the faculty.

### Results

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# TECHNICAL AND PROFESSIONAL WRITING
# 2009-2010

The Technical and Professional Writing Occupational Certificate program provides students with a selection of courses designed to enhance professional opportunities in a variety of communication fields. The program is intended to develop written, verbal, and digital communication skills to advance students in their fields of study. Taken alone, the Certificate serves as a basis for entry level positions in administrative or communication industries. Students will participate in a capstone project to create a deliverable product to illustrate their technical and professional communication skills.

## Program Objectives/Competencies

Upon completion of the Technical and Professional Writing Occupational Certificate program:

1. The student will write in an academic style (MLA, APA, Chicago) that can be utilized across the curriculum.
2. The student will create a comprehensive technical communication project that is measurable by current technical communication standards.
3. The student will utilize computer and emerging technology to produce technical communication products that are measurable by current standards.

## Overview

The Technical and Professional Writing assessment plan is in its first year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every fall term and follows one Technical and Professional Writing cohort from first term through graduation.

## Program Objectives Assessment Plan

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| 1. The student will write in an academic style (MLA, APA, Chicago) that can be utilized across the curriculum. | • Formal essays<br>• Grant proposals<br>• Technical communication projects<br>• Pre/Post-Test | • ENG 102<br>• ENG 104<br>• ENG 268<br>• ENG 293 |
| 2. The student will create a comprehensive technical communication project that is measurable by current technical communication standards. | • Technical communication projects<br>• Capstone project<br>• Grant proposal<br>• Formal essays | • ENG 168<br>• ENG 233<br>• ENG 268<br>• ENG 293 |
| 3. The student will utilize computer and emerging technology to produce technical communication products that are measurable by current standards. | • Technical communication projects<br>• Capstone project<br>• Formal essays | • ENG 168<br>• ENG 233<br>• ENG 293 |

## Program Objective Results

This section presents the results of those measurement tools identified in the second column above.

**Measurement Tool:**     Research Project
**Program Objective(s):**     1, 2, 3,
**Goal Results:**     70% pass rate

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 1 | 1 | 100%<br>(mean=95%) |

**Measurement Tool:**          Four Technical Communication Projects
**Program Objective(s):**     1, 2, 3
**Goal Results:**             70% pass rate

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 1 | 1 | 100% (mean=92%) |

**Measurement Tool:**          Grant Proposal
**Program Objective(s):**     1, 2
**Goal Results:**             90% "Average" or "Above Average"**

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | 1 | 1 | 100% (mean=90%) |

**Measurement Tool:**          Writing Across the Curriculum College Rubric
**Program Objective(s):**     1, 2, 3
**Goal Results:**             90% "Excellent"/"Proficient"/"Adequate"
**Legend:**                   ENG 102(No ENG 102)

| Year | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
|---|---|---|---|---|
| 2009-2010 | | | | |
| • 1.1.1 | 8 | 6 | 5 | |
| • 1.1.2 | 8 | 6 | 5 | |
| • 1.1.3 | 8 | 6 | 5 | |
| • 1.2.1 | 7 | 8 | 4 | |
| • 1.2.2 | 7 | 8 | 4 | |
| • 1.2.3 | 7 | 8 | 4 | |
| • 1.3.1 | 8 | 9 | | 2 |
| • 1.3.2 | 8 | 8 | | |
| • 1.4.1 | 5 | 11 | 2 | 1 |
| • 1.4.2 | 6 | 10 | 3 | |

Provides a clear, concise thesis statement.
1.1.1 Statement is clear and concise
1.1.2 Statement is well reasoned
1.1.3 Statement leads to plentiful additional discussion
Provides supporting paragraphs which relate to the thesis.
1.2.1 Supporting paragraphs are well reasoned
1.2.2 Supporting paragraphs clearly relate to the thesis
1.2.3 Supporting paragraphs are cohesive and logically developed
Correctly incorporates outside sources.
1.3.1 Provides relevant outside sources
1.3.2 Cites outside sources correctly

<u>Uses appropriate grammar, syntax, punctuation, and spelling.</u>
1.4.1 Writing is error free in all categories (sentence structure,
       punctuation, spelling and grammar).
1.4.2 Sentence structure and vocabulary are well developed and varied.


## PDSA CYCLE GOALS
## (2009-2010)

**ANALYSIS**

**Problem Area**

This program needs more marketing efforts to improve enrollment. I would like to see the program advertised through the state of New Mexico because it is unique to the state.

**Goal**

The goal is to market the program in at least three paper or electronic sources in the next year.

**Action Plan**

The English Instructor will meet with the Public Relations Director to plan marketing strategies after Cabinet has approved.

**Results**

To be presented and analyzed in 2010-2011 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT
# WIND ENERGY TECHNOLOGY
# 2009-2010

The Wind Energy Technology program at Mesalands Community College offers training to meet the growing demand for trained and qualified wind energy technicians that provide maintenance on the turbines. The Associate of Applied Science Degree in Wind Energy Technology at Mesalands Community College provides instruction in wind turbine technology, turbine placement and construction, turbine operations and maintenance, monitoring and communications technology, tower safety mechanical systems, electrical theory, power generation and distribution, hydraulics, and digital electronics. Students in these programs will be prepared for rewarding and profitable careers in this growing field.

## Program Objectives/Competencies

Upon completion of the Wind Energy Technology Associate of Applied Science Degree Program:

1. The student will identify electrical, mechanical, and hydraulic components found within various styles and vintages of wind machines, and demonstrate an understanding of their functions and maintenance requirements.
2. The student will differentiate between the various workplace positions of wind power facility team members, and describe the duties and responsibilities of each, including those relating to site construction and continuous operation.
3. The student will authoritatively discuss the market realities and future potential of wind energy technology and the employment opportunities it represents.
4. The student will discuss the basic advantages and disadvantages of modern renewable energy technologies, and compare them to extant non-renewable methods of energy production and conservation.
5. The student will demonstrate a functional understanding of numerous electrical concepts and components, including AC/DC theory and its application within electronic subsystems and power generation technologies.
6. The student will thoroughly demonstrate a complete understanding of workplace safety concepts and practices within the wind industry, including electrical safety, tool safety, Lock-Out/Tag Out, Personal Protective Equipment selection and use, Adult CPR, and Basic First Aid.

**General Education Competencies**

Upon completion of the Wind Energy Technology Associate of Applied Science Degree Program and in addition to the above mentioned program objectives/competencies:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Quantitative and Scientific Reasoning).
3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

**Overview**

The Wind Energy Technology assessment plan is in its first year and is addressed via the Plan→Do→Study→Adjust Cycle that begins every fall term and follows one Wind Energy Technology cohort from first term through graduation.

**Program Objectives Assessment Plan**

All program objectives/exit competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| Program Objective | Measurement Tools | Courses In Which Program Objectives are Presented and/or Measured |
|---|---|---|
| 1. The student will identify electrical, mechanical, and hydraulic components found within various styles and vintages of wind machines, and demonstrate an understanding of their functions and maintenance requirements. | • Curriculum Written Tests<br>• Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Research Papers | • ACS 100<br>• AHS 118R<br>• WET 101<br>• WET 105<br>• WET 115<br>• WET 204<br>• WET 121<br>• WET 205<br>• WET 110<br>• WET 116<br>• WET 202<br>• WET 210<br>• WET 215<br>• WET 216 |

| | | |
|---|---|---|
| 2. The student will differentiate between the various workplace positions of wind power facility team members, and describe the duties and responsibilities of each, including those relating to site construction and continuous operation. | • Project<br>• Curriculum Written Tests<br>• Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Research Papers | • ACS 100<br>• AHS 118R<br>• WET 101<br>• WET 105<br>• WET 205<br>• WET 116<br>• WET 202<br>• WET 210<br>• WET 215 |
| 3. The student will authoritatively discuss the market realities and future potential of wind energy technology and the employment opportunities it represents. | • Curriculum Written Tests<br>• Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Research Papers | • ACS 100<br>• AHS 118R<br>• WET 101<br>• WET 105<br>• WET107<br>• WET 115<br>• WET 204<br>• WET 117<br>• WET 121<br>• WET 205<br>• WET 110<br>• WET 116<br>• WET 127<br>• WET 137<br>• WET 210<br>• WET 212<br>• WET 215<br>• WET 216 |
| 4. The student will discuss the basic advantages and disadvantages of modern renewable energy technologies, and compare them to extant non-renewable methods of energy production and conservation. | • Performance Profile<br>• Curriculum Written Tests<br>• Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Research Papers | • ACS 100<br>• AHS 118R<br>• WET 101<br>• WET 103<br>• WET 105<br>• WET 115<br>• CIS 101<br>• GEOL 141<br>• WET 205<br>• ENG 102<br>• MATH 107<br>• WET 212<br>• WET 215<br>• WET 216 |

| | | |
|---|---|---|
| 5. The student will demonstrate a functional understanding of numerous electrical concepts and components, including AC/DC theory and its application within electronic subsystems and power generation technologies. | • Curriculum Written Tests<br>• Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Research Papers | • ACS 100<br>• AHS 118R<br>• WET 101<br>• WET 103<br>• WET 105<br>• WET107<br>• WET 115<br>• CIS 101<br>• GEOL 141<br>• WET 204<br>• WET 117<br>• WET 121<br>• WET 205<br>• ENG 102<br>• MATH 107<br>• WET 110<br>• WET 116<br>• WET 127<br>• COM 102<br>• ENG 233<br>• WET 137<br>• WET 210<br>• WET 212<br>• WET 215<br>• WET 216 |
| 6. The student will thoroughly demonstrate a complete understanding of workplace safety concepts and practices within the wind industry, including electrical safety, tool safety, Lock-Out/Tag Out, Personal Protective Equipment selection and use, Adult CPR, and Basic First Aid. | • Curriculum Written Tests<br>• Curriculum Performance Tests<br>• CAT<br>• Pre/Post-Test<br>• Oral Tests<br>• Research Papers | • ACS 100<br>• AHS 118R<br>• WET 101<br>• WET 103<br>• WET 105<br>• WET107<br>• WET 115<br>• CIS 101<br>• GEOL 141<br>• WET 204<br>• WET 117<br>• WET 121<br>• WET 205<br>• ENG 102<br>• MATH 107<br>• WET 110<br>• WET 116<br>• WET 127<br>• COM 102 |

| | | • ENG 233 |
| | | • WET 137 |
| | | • WET 210 |
| | | • WET 212 |
| | | • WET 215 |
| | | • WET 216 |

**Program Objective Results**

This section presents the raw data results of those measurement tools identified in the second column above.

**Measurement Tool:** Pre/Post Test
**Program Objective(s):** 1
**Goal Results:** 50% Improvement
**Legend:** Score(n)

| Reporting Period/Topic | Pre-Test | Post-Test |
|---|---|---|
| 2009-2010 | | |
| • Introduction To Hydraulics | 54%(36) | 83%(34) |
| • Wind Turbine Mechanical Systems | | |
| • Introduction To Wind Energy | 63%(36) | 85%(34) |
| • Electrical Theory I | | |
| • Electrical Theory II | | |
| • Field Safety And Experience | | |
| • Wind Turbine Operation And Maintenance | | |
| • Introduction to Motors and Generators | | |
| • Power Generation And Distribution | | |
| • Wind Turbine Siting And Construction | | |
| • Monitoring And Communication Technology | | |
| • Wind Turbine Diagnosis And Repair | | |
| • Digital Electronics | | |

**General Education Competencies Assessment Plan**

General education competencies are measured with multiple tools.
The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

| General Education Competencies | Measurement Tools | Courses In Which Program Objectives Are Presented and/or Measured |
|---|---|---|
| **Communication** <br> 1. Present ideas in writing. <br> 2. Present ideas orally according to standard usage. <br> 3. Demonstrate application of information technology. | • GEA College Rubric <br> • CAAP <br> • CAT <br> • Class Presentation | • ACS 100 <br> • COM 102 <br> • CIS 101 <br> • ENG 102 <br> • ENG 233 <br> • GEOL 141 <br> • Social Sciences/HumanitiesElective |
| **Quantitative and Scientific Reasoning** <br> 4. Demonstrate mathematical principles. <br> 5. Demonstrate scientific reasoning. <br> 6. Apply scientific methods to the inquiry process. | • GEA College Rubric <br> • CAAP <br> • Laboratory Exercise <br> • Laboratory Report | • GEOL 141 <br> • MATH 107 |
| **Critical Thinking** <br> 7. Read and analyze complex ideas. <br> 8. Locate, evaluate and apply research information. <br> 9. Evaluate and present well-reasoned arguments. | • GEA College Rubric <br> • CAAP <br> • Capstone Project <br> • Laboratory Exercise | • ACS 100 <br> • ENG 102 <br> • ENG 233 <br> • GEOL 141 |

## General Education Competencies Results

This section presents the general education competencies results. The Mesalands Community College created rubrics were used as the measurement tool each time the specific competency was evaluated during the program.

**Measurement Tool:** Writing Across the Curriculum College Rubric-Research Paper: Wind Turbine Mechanical Systems

**General Education Objective(s):** 1

**Goal Results:** 90% "Excellent(4)"/"Proficient(3)"/ "Adequate(2)"

**Legend:** ENG 102(No ENG 102)

| Year | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
|------|------|------|------|------|
| 2009-2010<br>• 1.1.1<br>• 1.1.2<br>• 1.1.3 | 18(10)<br>18(10)<br>18(10) | | | |
| • 1.2.1<br>• 1.2.2<br>• 1.2.3 | 18(10)<br>18(10)<br>18(10) | | | |
| • 1.3.1<br>• 1.3.2 | 14(9)<br>14(9) | | | 4(1) |
| • 1.4.1<br>• 1.4.2 | 18(10)<br>18(10) | | | |

Provides a clear, concise thesis statement.
1.1.1 Statement is clear and concise
1.1.2 Statement is well reasoned
1.1.3 Statement leads to plentiful additional discussion
Provides supporting paragraphs which relate to the thesis.
1.2.1 Supporting paragraphs are well reasoned
1.2.2 Supporting paragraphs clearly relate to the thesis
1.2.3 Supporting paragraphs are cohesive and logically developed
Correctly incorporates outside sources.
1.3.1 Provides relevant outside sources
1.3.2 Cites outside sources correctly
Uses appropriate grammar, syntax, punctuation, and spelling.
1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).
1.4.2 Sentence structure and vocabulary are well developed and varied.

**Measurement Tool:**  Writing Across the Curriculum
College Rubric-Research Paper:
Hydraulics

**General Education Objective(s):**  1
**Goal Results:**  90% "Excellent(4)"/"Proficient(3)"/
"Adequate(2)"
**Legend:**  ENG 102(No ENG 102)

| Year | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
|---|---|---|---|---|
| 2009-2010 | | | | |
| • 1.1.1 | 19(9) | (1) | (1) | |
| • 1.1.2 | 19(8) | (1) | (1) | |
| • 1.1.3 | 19(8) | | (1) | |
| • 1.2.1 | 19(8) | (1) | (1) | |
| • 1.2.2 | 19(10) | | | |
| • 1.2.3 | 19(9) | (1) | | |
| • 1.3.1 | 16(9) | (1) | | |
| • 1.3.2 | 16(9) | (1) | | |
| • 1.4.1 | 17(8) | 2(2) | | |
| • 1.4.2 | 19(9) | (1) | | |

Provides a clear, concise thesis statement.
1.1.1 Statement is clear and concise
1.1.2 Statement is well reasoned
1.1.3 Statement leads to plentiful additional discussion
Provides supporting paragraphs which relate to the thesis.
1.2.1 Supporting paragraphs are well reasoned
1.2.2 Supporting paragraphs clearly relate to the thesis
1.2.3 Supporting paragraphs are cohesive and logically developed
Correctly incorporates outside sources.
1.3.1 Provides relevant outside sources
1.3.2 Cites outside sources correctly
Uses appropriate grammar, syntax, punctuation, and spelling.
1.4.1 Writing is error free in all categories (sentence structure,
punctuation, spelling and grammar).
1.4.2 Sentence structure and vocabulary are well developed and varied.

| Measurement Tool: | Writing Across the Curriculum College Rubric-Research Paper: Wind Turbine Sitting and Construction |
| --- | --- |
| **General Education Objective(s):** | 1 |
| **Goal Results:** | 90% "Excellent(4)"/"Proficient(3)"/"Adequate(2)" |
| **Legend:** | ENG 102(No ENG 102) |

| Year | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
| --- | --- | --- | --- | --- |
| 2009-2010 | | | | |
| • 1.1.1 | 14(2) | (1) | | |
| • 1.1.2 | 14(2) | (1) | | |
| • 1.1.3 | 14(2) | (1) | | |
| • 1.2.1 | 14(2) | (1) | | |
| • 1.2.2 | 14(2) | (1) | | |
| • 1.2.3 | 14(2) | (1) | | |
| • 1.3.1 | 6(1) | | | 8(2) |
| • 1.3.2 | 6(1) | | | |
| • 1.4.1 | 14(3) | | | |
| • 1.4.2 | 14(3) | | | |

Provides a clear, concise thesis statement.

1.1.1 Statement is clear and concise

1.1.2 Statement is well reasoned

1.1.3 Statement leads to plentiful additional discussion

Provides supporting paragraphs which relate to the thesis.

1.2.1 Supporting paragraphs are well reasoned

1.2.2 Supporting paragraphs clearly relate to the thesis

1.2.3 Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources.

1.3.1 Provides relevant outside sources

1.3.2 Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling.

1.4.1 Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).

1.4.2 Sentence structure and vocabulary are well developed and varied.

**Measurement Tool:**                         GEA College Rubric
**General Education Objective(s):**    1, 2, 3
**Goal Results:**                           100% "excellent (4)", "proficient (3)" or "adequate (2)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 1 | 21 | 16 | 76%(mean=3.09) |
| • 2 | 21 | 21 | 100%(mean=2.99) |
| • 3 | 21 | 13 | 62%(mean=4.52) |

1 Present ideas in writing.
2 Present ideas orally according to standard usage.
3 Demonstrate application of information technology.

**Measurement Tool:**                         GEA College Rubric
**General Education Objective(s):**    4, 5, 6
**Goal Results:**                           100% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 4 | 20 | 6 | 30% (mean=1.55) |
| • 5 | 21 | 12 | 57%(mean=2.94) |
| • 6 | 21 | 11 | 52%(mean=2.78) |

4 Demonstrate mathematical principles.
5 Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

**Measurement Tool:**                         GEA College Rubric
**General Education Objective(s):**    7, 8, 9
**Goal Results:**                           100% "excellent (5)", "proficient (4)" or "acceptable (3)"

| Reporting Period | # of Students Attempting | # Passing | % Passing |
|---|---|---|---|
| 2009-2010 | | | |
| • 7 | 20 | 11 | 55%(mean=2.84) |
| • 8 | 21 | 8 | 38%(mean=2.67) |
| • 9 | 20 | 17 | 85%(mean=3.36) |

7. Read and analyze complex ideas.
8. Locate, evaluate and apply research information.
9. Evaluate and present well-reasoned arguments.

**Measurement Tool:** ACT Collegiate Assessment of Academic Proficiency (CAAP)

**General Education Objective(s):** 1, 4-9

**Goal Results:** 50%

**Legend:** n (Mean Score)

| Year | Writing | Math | Reading | Critical Thinking | Science |
|------|---------|------|---------|-------------------|---------|
| 2009-2010 | 12(35.0%) | 1(90%) | 13(49.6%) | 18(41.5%) | 17(54.8%) |

## PDSA CYCLE GOALS
## (2009-2010)

### ANALYSIS

### Problem Area

Program objectives 1, 4, and 5 suffered in the 2009-2010 semesters due to a lack of educational material related specifically to Wind Energy Technology.

### Goal

The goal for 2010-2011 academic year is to provide students with current and specific educational material related to Wind Energy Technology.

### Action Plan

The plan of action is to review available material and purchase material specific to Wind Energy Technology.

### Results

To be presented and analyzed in 2010-2011 report.

# ASSESSING PROGRAM ASSESSMENT
## 2009-2010

Assessment can be defined as the process of determining the quality and quantity of student learning in order to make improvements (Bordon and Zak, 2001). It is critical that faculty members at Mesalands Community College meaningfully capture and document what they are teaching, what students are learning and how this information is improving the teaching-learning relationship. To that end, Mesalands Community College encourages lead instructors and faculty to take "ownership" of their respective programs and courses in terms of whether or not students are learning what faculty say they are learning as identified in the course objectives, program objectives and general education competencies. Effective assessment of student learning is a matter of commitment, not a matter of compliance. Mesalands Community College is dedicated to establishing a culture of assessment embedded in every aspect of the educational process.

In order to improve the plan→do→study→act cycle of program assessment at the College, the Student Learning Assessment Committee (SLAC) assesses program assessment on an annual basis. The goals of assessing the assessment are twofold. First, this report will give feedback to the faculty as to how they are doing in terms of assessment with the goal of helping them to continually improve the teaching-learning relationship both inside and outside the classroom. Second, this report will help the College identify how it is doing in terms of its own assessment efforts with the goal of attentively reshaping and meaningfully improving the continual process of student learning assessment.

This report focuses on how well programs are assessing both program objectives and general education competencies. Degree and certificate programs are required to complete a standardized report format documenting their annual assessment activities. Lead instructors and program directors are encouraged to modify their reports so as to better meet the individual needs and characteristics of their programs and make the report meaningful to all stakeholders. These reports are then reviewed by the Chair of the Student Learning Assessment Committee who uses the attached Student Learning Assessment Program Report Evaluation Rubric to evaluate each program report. Results of this evaluation are shared with the College during the August Assessment Day.

Generally speaking, SLAC would like to see a migration of programs from the left hand columns of the following rubrics to the right hand columns indicating more comprehensive and meaningful assessment efforts. It is SLACs goal to facilitate this migration.

# MEASURES PROGRAM OBJECTIVES

| 1<br>No program objectives measured | 2<br>Some program objectives measured (<50%) | 3<br>Most program objectives measured (<100%) | 4<br>Measures all program objectives |
|---|---|---|---|
| | Animal Science<br>Natural Sciences<br>Wind Energy Technology | Automotive Technology | Business Administration<br>Business Office Technology<br>Building Trades<br>Diesel Technology<br>Early Childhood<br>Farrier Science<br>Fines Arts<br>Professional Writing |

## USES MULTIPLE MEASURES: PROGRAM OBJECTIVES

| 1<br>No measures | 2<br>One (1) measure | 3<br>Two (2) measures | 4<br>Three (3(triangulation)) or more measures |
|---|---|---|---|
| | Business Administration<br>Business Office Technology<br>Fine Arts<br>Natural Sciences<br>Wind Energy Technology | Animal Science<br>Automotive Technology<br>Diesel Technology<br>Early Childhood<br>Farrier Science<br>Professional Writing | Building Trades |

## MEASURES GENERAL EDUCATION COMPETENCY: COMMUNICATION-WRITING ACROSS THE CURRICULUM

| 1<br>No General Education Competency: Communication-Writing Across the Curriculum measured | 2 | 3 | 4<br>General Education Competency: Communication-Writing Across the Curriculum measured |
|---|---|---|---|
| AA General Studies<br>AAS General Studies<br>Animal Science<br>Automotive Technology<br>Building Trades<br>Diesel Technology<br>Farrier Science<br>Natural Sciences<br>University Studies | | | Business Administration<br>Business Office Technology<br>Early Childhood<br>Fine Arts<br>Wind Energy Technology |

# USES MULTIPLE MEASURES FOR GENERAL EDUCATION COMPETENCY: COMMUNICATION

| 1<br>No measures | 2<br>One (1) measure | 3<br>Two (2) measures | 4<br>Three (3(triangulation)) or more measures |
|---|---|---|---|
| Diesel Technology | Automotive Technology | AA General Studies<br>AAS General Studies<br>Animal Science<br>Building Trades<br>Farrier Science<br>Fine Arts<br>Natural Sciences<br>University Studies | Business Administration<br>Business Office Technology<br>Early Childhood<br>Wind Energy Technology |

## USES MULTIPLE MEASURES FOR GENERAL EDUCATION COMPETENCY: QUANTITATIVE AND SCIENTIFIC REASONING

| 1<br>No measures | 2<br>One (1) measure | 3<br>Two (2) measures | 4<br>Three (3(triangulation)) or more measures |
|---|---|---|---|
| Diesel Technology | AAS General Studies<br>Automotive Technology<br>Business Office Technology<br>Early Childhood<br>Farrier Science | AA General Studies<br>Animal Science<br>Business Administration<br>Building Trades<br>Fine Arts<br>Natural Sciences<br>University Studies<br>Wind Energy Technology | |

## USES MULTIPLE MEASURES FOR GENERAL EDUCATION COMPETENCY:
## CRITICAL THINKING

| 1<br>No measures | 2<br>One (1) measure | 3<br>Two (2) measures | 4<br>Three (3(triangulation)) or more measures |
|---|---|---|---|
| Diesel Technology | Automotive Technology<br>Fine Arts | AA General Studies<br>AAS General Studies<br>Animal Science<br>Building Trades<br>Business Administration<br>Business Office Technology<br>Early Childhood<br>Farrier Science<br>Natural Sciences<br>University Studies<br>Wind Energy Technology | |

## USES BOTH INTERNAL AND EXTERNAL SOURCES

| 1<br>No data | 2 | 3<br>Uses either internal data or external data | 4<br>Uses both internal data and external data |
|---|---|---|---|
| | | AA General Studies<br>AAS General Studies<br>Animal Science<br>Automotive Technology<br>Business Administration<br>Business Office Technology<br>Building Trades<br>Diesel Technology<br>Early Childhood<br>Farrier Science<br>Fine Arts<br>Natural Sciences<br>Professional Writing<br>University Studies<br>Wind Energy Technology | |

# HAS COMPLETE DATA SUMMARY

| 1<br>No data summary | 2<br>Minimal summary explaining little data | 3<br>Partial summary explaining some data | 4<br>Full data summary explaining who, what, where, when, how, why and to what extent |
|---|---|---|---|
|  | Animal Science<br>Automotive Technology<br>Diesel Technology<br>Farrier Science<br>Professional Writing | AA General Studies<br>AAS General Studies<br>Business Administration<br>Business Office Technology<br>Building Trades<br>Early Childhood<br>Fine Arts<br>Natural Sciences<br>University Studies<br>Wind Energy Technology |  |

# CHANGES TO CURRICULUM BASED ON DATA
## (CLOSING THE LOOP)

| 1<br>No changes made | 2<br>Changes made without data/changes based on anecdotal data | 3<br>Changes made based on empirical data | 4<br>Changes made based on empirical data with follow-up plans to measure effectiveness |
|---|---|---|---|
| | Animal Science<br>Automotive Technology<br>Diesel Technology<br>Farrier Science<br>Fine Arts<br>Wind Energy Technology | AA General Studies<br>AAS General Studies<br>Business Administration<br>Business Office Technology<br>Building Trades<br>Natural Sciences<br>Professional Writing<br>University Studies | Early Childhood |

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT EVALUATION RUBRIC
## MESALANDS COMMUNITY COLLEGE

| Evaluation Criteria | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| **Measures Program Objectives** | No program objectives measured. | Some program objectives measured. | Most program objectives measured. | All program objectives measured. |
| **Uses Multiple Measures: Program Objectives** | No measures. | One measure. | Two measures. | Three (triangulation) or more measures. |
| **Measures General Education Competency: Communication** | No communication competencies measured. | 1 of the communication competencies measured. | 2 of the communication competencies measured. | All 3 of the communication competencies measured. |
| **Measures General Education Competency: Quantitative and Scientific Reasoning** | No quantitative or scientific reasoning competencies measured. | 1 of the quantitative and/or scientific reasoning criteria measured. | 2 of the quantitative and/or scientific reasoning criteria measured. | All 3 of the quantitative and scientific reasoning criteria measured. |
| **Measures General Education Competency: Critical Thinking** | No critical thinking competencies measured. | 1 of the critical thinking criteria measured. | 2 of the critical thinking criteria measured. | All 3 of the critical thinking criteria measured. |
| **Uses Multiple Measures: General Education Competencies** | No measures. | One measure. | Two measures. | Three (triangulation) or more measures. |
| **Uses Both Internal and External Sources** | No data. |  | Uses either internal data or external data. | Uses both internal data and external data. |
| **Has Complete Data Summary** | No data summary. | Minimal summary explaining little data. | Partial summary explaining some data. | Full data summary explaining who, what, where, when, how, why and to what extent. |
| **Changes to Curriculum Based on Data (Closes the Loop)** | No changes made. | Changes made without data/changes based on anecdotal data. | Changes made based on empirical data. | Changes made based on empirical data with follow-up plans to measure effectiveness. |

# PDSA CYCLE GOALS
## (2009-2010)

## ANALYSIS

### Problem Area

Despite implementation of the Writing Across the Curriculum plan and collection of the data, very few programs reported data specific to their plan of study students.

### Goal

One hundred percent of programs will report on the general education competency of writing utilizing the Writing Across the Curriculum rubric.

### Action Plan

Lead instructors/program directors will be required to keep hard copies of their results as documented on the Writing Across the Curriculum rubric and to report this data using a standardized report format.  *Note: Faculty did submit assessment results on the general education competency of writing utilizing the Writing Across the Curriculum rubric.  This data was reported for the entire College but not broken down program-specifically.*

### Results

To be presented and analyzed in 2010-2011 report.

## ANALYSIS

### Problem Area

Assessment of the general education competencies – critical thinking will be implemented during the Spring 2011 semester.  This data will be collected both at a College-wide and program level.

### Goal

One hundred percent of programs will report on the general education competency – critical thinking utilizing the specific rubric that will be created during the Fall 2010 semester.

**Action Plan**

The Student Learning Assessment Committee will be responsible for creating the rubric as well as "rolling out" this plan to all full-time and adjunct faculty.

**Results**

To be presented and analyzed in 2010-2011 report.

# CLASSROOM LEVEL ASSESSMENT

## FEEDBACK-DRIVEN CHANGES RESULTING FROM PREVIOUS OFFERINGS

The Faculty Outcomes Assessment Form provides for data collection on how instructors are adapting their teaching in response to feedback from previous offerings of their course(s).  Feedback driven changes as a result of previous offerings is the first of four sections faculty respond to in completing the Faculty Outcomes Assessment Form.  Feedback from previous offerings is critical for faculty in terms of completing the continual feedback loop of student learning assessment.  Faculty report changes they are implementing as a result of changes indicated the last time they taught the course or feedback gained from other instructors who have taught the course.

Faculty completed their Faculty Outcomes Assessment Forms at the end of the summer, fall and spring semesters.  Of the 178 courses that reported on course assessment during the three semesters, 76 changes were implemented as a result of assessment feedback from previous course offerings.  The following table summarizes the results:

| FEEDBACK-DRIVEN CHANGES AS A RESULT OF PREVIOUS OFFERINGS 2009-2010 ACADEMIC YEAR | |
|---|---|
| **Category of Change** | **Number** |
| Course Content | 27 |
| Methodology | 13 |
| Class Environment | 13 |
| Exams | 7 |
| Distance Learning/Technology | 5 |
| Data and Self Assessment | 6 |
| Other | 5 |

**QUALITATIVE FEEDBACK FROM PREVIOUS OFFERINGS**

One of the objectives of the Student Learning Assessment Committee's institutional focus on student learning assessment is to incorporate qualitative measures into the semester assessment reports. Qualitative information assists the committee in putting meaning to the quantitative data collected from the faculty assessment reports. The following statements have been included to provide examples of qualitative information submitted by faculty on the Faculty Outcomes Assessment Form during the summer and fall 2009 and spring 2010 semesters:

- *I've changed the texts since the last time this summer course was offered on WebCT. I also offered this course in an eight week block instead of four weeks. I emailed students extensively during the course to help them with questions and concerns.*
- *This was the first time I taught this class, however I was able to tie in the lectures with on-site, hands-on training. Interaction with students on the job site reduced the number of written exams necessary to determine content learned.*
- *Chapter exercises as CATs cover comprehensively about 60% of the curriculum and increase the number of shorter labs (opportunity for group work).*
- *I increased the number of essays due to 1 per week and I implemented a weekly quiz.*
- *I chose to teach all of the chapters 7-12, I had been advised that this has not been traditionally done, but chose to anyway.*
- *I continued to try to give the students more practice in the pre-algebra problems. Some catch on very quickly and others need more practice.*
- *I tried to improve attendance and participation.*
- *I changed a few of the labs for the course.*
- *I continued to use a portfolio for the class. Students were required to collect a number of artifacts associated with the course to document their progress in the class.*
- *I updated the assignments and exams for this online course.*
- *I added a review assignment on factoring polynomials as the first half of the course makes use of these techniques*
- *I was using a different textbook from the last time I taught this course. The exams and assignments were changed to match the text.*
- *The quizzes and exams were updated from previous courses. Some new labs were done.*
- *Prior feedback results indicated all objectives were not met, and suggested changes that should be made. The changes I made were primarily to organize the lesson plan to accomplish the objectives, especially the ones that had been missed prior.*
- *I taught this course for the first time, However, I changed some of the topics from the previous instructor.*

- *I tried to give the students more practice in the pre-algebra problems. Some were able to improve quickly, while other struggled.*
- *I allowed those students who wished to work ahead and complete course early. Several took advantage of this opportunity and seemed to do well with this open approach.*
- *This fall I adjusted my course to better meet the expectations and parameters of a college level writing document, paying closer attention to proper citation. I have made no changes from this year to last in course content.*
- *I did work in an on-going problem solving group project focused on formulating and integrating multiple solutions to health care reform requiring students to employ macroeconomic concepts in the process.*
- *As a result of student feedback I focused on the Film Research Project as a single unit of study – rather than spreading it out over a longer period of time, intermixed with other assignments. Former students also recommended spending more time on this unit. I also created two new mini-lessons to include; "Imbedding A Youtube Video" and "citing digital media".*
- *I changed textbooks from last semester. This textbook is more challenging and some areas are a little more complicated than I would have liked. Overall, I think the new textbook was an improvement over the old one, which was more simplistic. I also added a few more group activities/projects and plan to add more next semester to help tie into the chapters.*

## CLASSROOM ASSESSMENT TECHNIQUES (CATS)

Mesalands Community College requires a minimum number of classroom assessment techniques (CATs) to be used in each course, based on the number of credit hours for each course. For one credit hour classes, a minimum of one CAT is required; for two credit hour classes, two CATs are required. For three or more credit hour classes, three or more CATs are required. Many instructors use several CATs throughout the semester to gain day to day feedback on student learning. It is each instructor's discretion as to which CATs are utilized in any course. The second section of the Faculty Outcomes Assessment Form provides data on the use of CATs.

Of the 178 courses/course sections that reported on course assessment during the summer and fall 2009 and spring 2010 semesters, 154 utilized CATs. In these 154 courses, 633 reported CATs were administered, providing immediate feedback for faculty to assess student learning within the classroom. The following table shows the data collected:

| USE OF CATs 2009-2010 ACADEMIC YEAR | | |
|---|---|---|
| **Number of Courses Reporting** | **Number of Courses in Which CATs Were Utilized** | **Number of Individual CATs Utilized** |
| 178 | 154* | 633 |

*Several directed or independent study courses did not report utilizing any CATs; additionally, data collectors did not count several courses as utilizing CATs due to the type of assessments provided.

The Faculty Outcomes Assessment Form also provides valuable data on changes that result from the use of CATs at the classroom level. Based on the data obtained from the Faculty Outcomes Assessment Form, 82 adjustments to courses were made as a result of the immediate feedback from the CATs. Adjustments to course content and methodology accounted for 59% of the changes. The following table categorizes the changes implemented from the use of CATs:

| FEEDBACK-DRIVEN CHANGES AS A RESULT OF CATs 2009-2010 ACADEMIC YEAR | |
|---|---|
| **Category of Change** | **Number** |
| Course Content | 29 |
| Methodology | 19 |
| Class Environment | 3 |
| Exams | 9 |
| Distance Learning/Technology | 9 |
| Data and Self Assessment | 4 |
| Other | 9 |

## QUALITATIVE RESULTS FROM UTILIZING CATS

As with feedback from previous offerings, the Student Learning Assessment Committee has provided the following statements from faculty regarding changes implemented during the 2009-2010 academic year from utilizing CATs:

- *Students are familiar with horses common to this area but have little or no knowledge of other types/breeds*
- *Comprehension check CATs at midterm and final revealed that the majority of students was poorly prepared. With the measures below, all but 2 students improved their grades in the final and tests, 5 of them significantly (between 15 and 20%).*

- *Mendelian Genetics seemed to be a particularly difficult subject. Due to the In-class activities concerning this subject, gaps in understanding were revealed and remedied.*
- *Almost all students had understood the concept of a cost-risk analysis and could apply this concept to a practical example. In the chapter assessments, students demonstrated a good body of knowledge*
- *The comprehensive nature of the CAT allows students to assess more complex concepts and numerous detailed aspects of a topic (chapter). In addition several were re-applications of skills trained in previous exercises.*
- *I learned a lot about the student learning styles. This helped me to tailor the lessons and teach lessons in different ways.*
- *I had them compare their first paragraph written at the first of the semester, and the one written at the end of the semester. They were able to evaluate their own writing and see improvement.*
- *I was able to see how the students were understanding the concepts. It let me know what they needed more help or practice on.*
- *The background knowledge probe revealed that some students had little previous knowledge of chemistry. The periodic table and equations assessments showed that students needed more practice learning the names and symbols of the elements.*
- *Students did better this year on polynomials than in previous years. It may have been a result of more class time (5 days a week) however I also introduced some new activities associated with the arithmetic of polynomials.*
- *Students in this online class are strongly encouraged to take sample tests for a self-assessment of their knowledge and skills. Those that do typically are more successful in the course.*
- *Most students were competent using the graphing calculator, so I spent less time at the beginning of the course on its use. The other assessments revealed that all students needed additional learning opportunities.*
- *Students had a good knowledge of the graphing calculator. We needed to spend additional time of techniques of differentiation as students had difficulty of determining which rule to apply first.*
- *For the Student Generated Test Question, I had 3 students of the 5 students in attendance pick "jargon - a profession specific language used by professionals," as their test question.*
- *This was a difficult class to teach due to the varying levels of skills. The CAT's assisted me to fine tune instruction to achieve desired results. I changed techniques three times to obtain results.*
- *Practice did seem to help the students improve. The CATS let me know what they need help on,*
- *This course was offered by internet with a live lab. Students had a more difficult time understanding some concepts.*

- *A number of students indicated that they would have liked to participate in more outdoor and free weight activities.*
- *The CATs allowed me to know what areas I needed to re-visit and explain more to my students. By re-visiting these areas, my students were able to better understand what was being explained or read.*
- *I found that my students really enjoy small group discussions; however, this format of informal learning groups is time intensive. Students wanted twenty minutes of private time before I moved on to the next group.*
- *They were particularly helpful in forcing students to examine their preconceived notions concerning relevant issues and then engage in fact – checking those notions.*
- *Muddiest point allowed me to see where students were having difficulties and why. Journals make the student follow the videos closer which make up for what would be lecture time in a live class.*
- *Students prefer pictures of where they are going with the assignments. If you can show them something they will rely on prior knowledge on how to complete the assignments. Many students had worked in Office 2003 and know how to do the basics. But Office 2007 has it own learning curve and that is what must be reached while teaching the class..*
- *After CATs were given, I noticed students were not coming to class prepared for lecture. They were not reading chapters prior to class or reviewing notes after class. The CATs allowed me to check for understanding during lectures and reviews in class.*
- *They are very effective in several ways. For getting a response from the students, for finding out how much they have learned, they are fun, they are a good means of learning what aspects of learning are easier or more difficult.*
- *I also found through muddiest point analysis that students find it hard to craft introductions and conclusions. I spent considerable time helping them learn not only to draw conclusions from the different ideas and concepts addressed/discussed in class, but also how to write conclusions that enhance their papers instead of just summarizing the main points. As I read over their final essays, I was pleased to see students taking risks with their conclusions.*
- *Students are more comfortable asking questions in class when the muddiest point is utilized. Index cards used to summarize chapters help students organize information and facilitate studying for exams. Student generated test questions help determine both strengths and weaknesses of student knowledge prior to the exam.*
- *The background knowledge probe allowed us to save time. By building upon the baseline of information provided by the students I could focus lessons on new material rather than rehashing material or ideas they had already mastered. Students reported that they appreciated the chance to work in small groups to remind each other of 'what they already knew'.*

## QUALITATIVE CHANGES FOR THE FUTURE
## FROM RESULTS OF UTILIZING CATS

The following statements have been included to provide a qualitative perspective of the changes faculty will make the next time they teach their course(s) as a result of utilizing CATs:

- *I plan to keep in touch with students through the messaging system to give them tips about the course.*
- *Emphasize that discussion forums are required.*
- *I will rearrange some of the topics to highlight the areas the students felt they gained the most benefit from.  These included financial, and relationships.*
- *Additional review lecture and exercises will be scheduled before the midterm.*
- *I plan to insert more math riddles to activate prior knowledge and increase higher order thinking skills*
- *I will continue to give them the concept check materials to reinforce skills learned.*
- *Students will be given a more structured workout routine that they will have to log and sign off on.*
- *An appropriate CAT will be included in the assignment package distributed to all enrolled students at the beginning of the semester.  A completed CAT will be required with the final exam and book critique.*
- *Add different varieties of music.*
- *Cover the rules and fundamentals sooner in the instruction process*
- *I plan to continue using the mathematics portfolio in some form. Nearly all students rated the usefulness of the portfolio quite highly and is a real benefit to those who put effort into it.*
- *I will try to encourage more students to make use of the sample tests and other resources that are available online.*
- *I plan to develop additional activities for the course*
- *I will continue to encourage students to make use of the online resources available*
- *I spent more time on differentiation and curve sketching*
- *I may need to review some basic properties of linear equations and their implications in the analysis of graphs.*
- *I anticipate offering more one-on-one instruction during the course*
- *Continue using the concept quizzes to see how students are progressing.*
- *The text should be changed as it does not contain assignments required for hands-on learning students.*
- *Additional review lecture and exercises will be scheduled before the midterm.*

- *I found some review exercises on the internet that will be useful for a summary of basic chemical reactions. I plan to use these the next time I teach the course.*
- *I plan to develop a website for the course to provide additional resources for students*
- *Outdoor and free weight activities are periodized into the WET fitness courses in future semesters.*
- *Reinforcement of basic software navigation skills.*
- *I will encourage discussion forum participation and will send reminder emails when forums are opened reminding students that participation is mandatory.*
- *The main change that was implemented this semester was slowing down and going through the chapters slower and with more class discussion. We also completed worksheets as a whole group.*
- *I will try to spend less time with each group and encourage group members to feel more confident in managing their own groups. Next offering I will use the consensagram less – I feel it is a faulty tool.*
- *I will simply continue to challenge students to base their perspectives on issues on as complete information as possible.*
- *I have found that students like shortcuts.  As a result I am using some MIT short video clips to reinforce points in that day's lesson.  Students seem to like these, and can also access them on the web.*
- *Just like last semester, I will try to spend less time with each individual group and encourage group members to feel more confident in presentations.*

## MEASURABLE COURSE OBJECTIVES (MCOs)

Measurable course objectives are stated on each individual course syllabus, which is distributed to students at the beginning of the course.  Each course has a minimum of two measurable objectives.  Of the reported measurable course objectives during the summer and fall 2009 and spring 2010 semesters, 141 changes will be made the next time the course is taught as a result of assessing the measurable course objectives.

The following data was compiled from feedback-driven changes that resulted from faculty assessing the measurable course objectives for each course reported in the third section of the Faculty Outcomes Assessment Form. Adjusting teaching through "course content" accounted for the majority of the reported changes (43%).  There were also many "no changes" reported by faculty that can be attributed to faculty achieving their goals for course objectives and being able to enhance student learning through a series of semester course assessments.  The following table categorizes the number and types of changes that were implemented:

| FEEDBACK-DRIVEN CHANGES AS A RESULT OF MCOs 2009-2010 ACADEMIC YEAR | |
|---|---|
| **Category of Change** | **Number** |
| Course Content | 16 |
| Methodology | 8 |
| Class Environment | 3 |
| Exams | 5 |
| Distance Learning/Technology | 1 |
| Data and Self Assessment | 1 |
| Other | 3 |

## QUALITATIVE CHANGES AS A RESULT OF ASSESSING COURSE OBJECTIVES

The following qualitative statements from the Faculty Outcomes Assessment Forms submitted by faculty have been included to provide greater meaning to the quantitative data collected by the committee from these forms:

- *I would like to offer a midterm exam next time I offer this class.*
- *I would like to include more Nuts and Bolts activities in the course than I did this semester.*
- *On-site, hands-on learning techniques will be increased.*
- *I may change to bronze instead of aluminum.*
- *This is a broad MCO presented beautifully in the text being used. Being able to interrelate the chapters to each other is a great teaching aid. I do not anticipate I would change at this time.*
- *I have a better understanding of the course, having taught it this one time, such that I can incorporate the interrelationship within the book better and utilize it in a more effective way.*
- *The class text book is outdated and not very useful.*
- *Next semester we need to work with horses earlier in the course before the weather becomes a factor. Try hands on projects with classroom assignments.*
- *Make an effort to find very broke horses for the student to learn to ride.*
- *Time constraints at the end of the semester prevented any extensive measures to improve the result or to restructure the teaching methods.*
- *More lab exercises and group projects will be included.*
- *I will redesign all labs and discuss theoretical aspects in exercises using hand specimens (rather than lectures).*

- *Continue the practice or oral presentations in as many ways as I can.*
- *Continue working on descriptive writing skills.*
- *I will continue to give additional worksheets on the pre-algebra concepts.*
- *Continue to include supplemental teaching materials.*
- *Break the students into groups based on their prior experiences.*
- *I plan to use more activities for this objective*
- *Students need more realistic activities for this objective*
- *I will try to encourage students to make use of the resources available online.*
- *I would like to get students to use a online graphing utility of some kind. I think it would help them with meeting this objective.*
- *Students should have an opportunity to compare and contrast point plotting and transformation of functions for rational, radical and exponential functions also. They found rational functions more difficult to analyze.*
- *Go over inter and intra personal communication more in depth*
- *Try to keep the students engaged in trying to improve their skills.*
- *I continually had to try different teaching techniques, such as group, supplemental handouts and assignments, and continuous review.*
- *A different text should be used. The text utilized in the regular Algebra course should be required as a supplemental text. Assignments are not adequate for students needing more guidance with hand-on work.*
- *The regular Algebra text should be used as a supplement to the WET Algebra text to provide more assignment material as well as more in-depth explanations.*
- *I would continue to interrelate with the Wind Technology department and encourage them to contribute applications that could be built on in on-going Wind classes.*
- *Need to redesign rubric to more closely reflect uniqueness of Pilates movements.*
- *Redesign rubric to better differentiate between Yoga vs. Pilates specifics.*
- *I plan to add some new labs to this course. Some additional supplies will be needed, but the cost should be minimal.*
- *I would like to use more group activities to get the students to work more with each other.*
- *Several students fell behind on the assignments for one reason or another. Students must be made aware the need to keep current with all their assignments.*
- *Additional review of Excel formulas and formatting.*
- *Additional review needed of terminology and concepts.*
- *Will encourage forum participation. Stress that even though chapter quizzes are open book, students should read chapter material before attempting quizzes.*

- *Students did take advantage of the opportunity to re-write and conference with me about their written work, and 98% of students were successful in achieving above average ratings on their essays*
- *By covering grammar usage, mechanics and punctuation use in context, the topic as been given ore power and the students report that they now begin to see the relationship between*
- *I simply hope to continue to maintain high expectations and provide students with multiple ways to meet those expectations.*
- *I would like to add additional tutorials for problem areas in the course.*
- *Next semester I want to have students redo exams, possibly up to three tries to see if this will enforce higher exam scores, with some of the students that struggled with exams.*
- *I need to spend more time exploring digital options for the presentation. Youtube video clips work well – only if the technology is running properly on the day of the presentation.  I will be exploring other options this summer as I plan for next year.*

## PRE-/POST-TESTS

Of the 178 courses reporting during the summer and fall 2009 and spring 2010 semesters, 154 courses utilized a pre-test and a post-test.  Each of these courses utilizes a pre-test and post-test to assess student knowledge and skills at the beginning and end of the course.  Faculty report their assessments in the fourth section of the Faculty Outcomes Assessment Form at the end of each semester.  The following table displays the statistics:

| USE OF PRE-TESTS AND POST-TESTS 2009-2010 ACADEMIC YEAR | | |
|---|---|---|
| **Number of Courses Reporting** | **Number of Pre-tests Given** | **Number of Post-tests Given** |
| 178 | 154 | 154 |

## QUALITATIVE CHANGES AS A RESULT OF THE PRE-TEST ANALYSIS

The following qualitative statements from faculty have been included to provide information about the types of changes faculty are making in their course(s) from analyzing their course pre-test:

- *Identification of interior construction materials became a priority. Actual "hands-on" installation increased understanding of techniques and material choices.*
- *Most students in the class have a background with horses.  Much of the basics the students already knew.*

- *The analysis of the low pre-test value of 31% revealed that the background in biology was low, and in particular in chemistry/biochemistry very low (average 22%, only in 3 students basic knowledge recognized; without these, average was 13%).*
- *The analysis of the pre-test revealed that the background in the topic cellular genetics was fairly high (average 53%), with only 3 students scoring high (over 70%.) and two significantly below (10%). The analysis did not justify particular measures.*
- *None. The pre-test average was by 5% higher as in the best former class, indicating that a very solid basis about environmental issues was present.*
- *Because all students scored reasonably well in 'Chemistry Basics', I kept the subject short with 2 hours. 3 students showed no familiarity at all with Plate Tectonics.*
- *The pre-test generally demonstrated a low range of knowledge in the subject matter and therefore, I made sure the to keep in contact with the students to ensure they were understanding the material.*
- *Most students knew very little chemistry at the beginning of the course so I tried to cover fundamental concepts as thoroughly as I could throughout the course.*
- *Analysis of the pre-test indicated a low level of Algebra preparation. Teaching had to be slowed to make up for the lower lever of understanding.*
- *The analysis of the pre-test revealed that the background in the topic of Mendelian Genetics as well a molecular Genetics was low (average 39%)*
- *The analysis of the pre-test revealed that the background in the topic of microbiological organisms was relatively low (average 53%), with only 3 students scoring high (over 75%.)  The analysis did not justify particular measures.*
- *All of the students had previously taken Chem 115 Introduction to Chemistry I so didn't make many changes due to the pre-test as I already knew their strengths and weaknesses.*
- *Three students had only rudimentary knowledge of even linear functions, so I needed to review a lot of the material.*
- *Average gain from pre-test to post-test was 41 points. Some students showed some weakness regarding concepts and terminology on post test.*
- *Average gain from pre-test to post-test was 27.25 points. Some students appear to be taking quizzes without preparing first. Will limit students to 2 attempts on chapter quizzes and stress reading text before taking quizzes.*
- *I used t the pre-test information to emphasize subject area that the students were low in or needed extra attention.*

- *Average gain from pre-test to post-test was 27.25 points. Some students appear to be taking quizzes without preparing first. Will limit students to 2 attempts on chapter quizzes and stress reading text before taking quizzes.*
- *After students took the pre-test, I observed students needed improvement in all areas of reading and vocabulary. Four students performed at the maximum level for the pre-test. Two students were able to move up to the next course level and two students had failed to course previously and had to complete before moving on.*
- *This test is organized into several categories, from the ethical use of sources to appropriate citations. Most students scored low on the pretest, but because of the organization of the test results into categories, I was able to address areas of concern for individual students. The pre-test indicated that students generally believe research is an information gathering process rather than an inquiry, problem solving process.*

The Faculty Outcomes Assessment Form also provides valuable data on changes that result from pre-test analysis by faculty. Faculty evaluate how well students score on the pre-test assessment to provide an opportunity early in the semester for adjustments to be made in a course. Analysis of the amount of improvement from the pre-test to the post-test by a class provides feedback for changes for the next offering of the course. There were 26 course adjustments made as a result of analyzing the pre-tests in 154 courses. The following table summarizes the data collected:

| FEEDBACK-DRIVEN CHANGES AS A RESULT OF PRE-TESTS 2009-2010 ACADEMIC YEAR | |
|---|---|
| **Category of Change** | **Number** |
| Course Content | 7 |
| Methodology | 5 |
| Class Environment | 8 |
| Exams | 0 |
| Distance Learning/Technology | 0 |
| Data and Self Assessment | 1 |
| Other | 5 |

**QUALITATIVE CHANGES AS A RESULT
OF PRE-/POST-TEST ANALYSIS**

As with the other qualitative data provided in this report, the following statements from faculty have been included to provide additional data regarding the types of changes faculty will make within their course(s) as a result of analyzing the results of their course pre-test and post-test:

- *Areas of study covered with "hands-on" learning showed considerably more progress than lecture only areas of study.*
- *More emphasis will be put on the molecular basis of Biology.*
- *I should develop a specific check-list of things they will be expected to know for the final exam.*
- *I plan to develop more activities for the class to do to illustrate applications of functions*
- *An additional text should be supplemented for slower students requiring more structure. Also, the students would require the text if they are going onto the intermediate course anyway.*
- *More emphasis will be put on the molecular basis of Genetics.*
- *More emphasis will be put on the chemical basis of Biology.*
- *I need to communicate better to the students what the expectations are for this online course. Too many are starting but putting too little effort into the class.*
- *Changes need to be made to the math course sequence in the wind energy program so the students in that program are prepared for this course.*
- *I plan to develop a website for the course to provide additional resources for students*
- *I will be changing the textbook for the fall semester and add some new activities/projects for the class*
- *More review of concepts and terminology.*
- *I will give a specific nuts-and-bolts test on items identified as weak areas in student writing such as; Properly citing research materials-The proper use of direct and indirect quotations-How to maintain the 'active' voice*
- *Will reevaluate questions used in the pre/post exams to make sure the complete course is covered.*

**Feedback Driven Changes in Student Learning - Classroom Level Assessment**

In an effort to effectively track changes made at the classroom level from assessing student learning, the Student Learning Assessment Committee, with the guidance of the faculty, developed the Faculty Change Form in August 2002. The form was developed with the College's conceptual model for assessment in mind, which is based on Alexander W. Astin's I-E-O model. The Faculty Change Form focuses more on changes made during the

semester while the Faculty Outcomes Assessment Form primarily reports changes that will be made next time the course is offered as a result of the various course assessments.

Most of the Faculty Change Assessment Forms were emailed to the secretary of the Student Learning Assessment Committee and then subsequently analyzed for this report. The greatest number of changes made during the fall and spring semesters involved changes to course content and methodology. The following table summarizes the results collected:

# FEEDBACK DRIVEN CHANGES IN STUDENT LEARNING – CLASSROOM LEVEL ASSESSMENT

## Faculty Changes Summary

## Academic Year 2009-2010

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| | Course Content | Methodology | Classroom Environment | Exams | Distance Learning/ Technology | Analysis of Assessment Data and Self | Other | Number of Changes Made |
| Previous Feedback | 27 | 13 | 13 | 7 | 5 | 6 | 5 | 76 |
| CAT's | 29 | 19 | 3 | 9 | 9 | 4 | 9 | 82 |
| MCO's | 16 | 8 | 3 | 5 | 1 | 1 | 3 | 37 |
| Pre-Test | 7 | 5 | 8 | 0 | 0 | 1 | 5 | 26 |
| Other | 12 | 5 | 1 | 1 | 2 | 0 | 11 | 32 |
| 2009-10 Totals | 91 | 50 | 28 | 22 | 17 | 12 | 33 | 253 |

# LIST OF APPENDICES

Mesalands Community College

Faculty Outcomes

Assessment Report

## Course Information

Instructor Name

Semester | Year | Date Submitted

Dept | Number | Section | Credits | Course Description

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## Feedback from Previous Offerings

If you have taught this course previously, what changes did you make, if any, this semester as a result of feedback *or* if someone else has taught this course before how did you adjust your curriculum based on the feedback results that they received?

Classify any changes you made *due to previous feedback* in the following categories:

Content:
Select...

Methodology:
Select...

Exams:
Select...

Environment:
Select...

Technology:
Select...

Assessment:
Select...

Other:

---

## Classroom Assessment Techniques (CATs)

What CATs were used this semester?                    how often?

What significant results did you have from CATs?

[ ]

Please describe any changes made this semester and/or anticipate making the next time this course is offered due to CATs:

[ ]

[ ]

Classify any changes you made *this semester due to* CATs in the following categories:

| Content: | Methodology: | Exams: |
|---|---|---|
| Select... | Select... | Select... |
| Environment: | Technology: | Assessment: |
| Select... | Select... | Select... |

Other:

[ ]

---

## Measurable Course Objectives (MCO's)

MCO Number: [ ]

Measurable course objective from the syllabus:

[ ]

How was this MCO assessed?

[ ]

[ ]

What results did you get and how do they compare with the course objective?

[ ]

[ ]

Please describe any changes made this semester and/or that you anticipate making the next time this course is offered due to this MCO:

[ ]

[ ]

Classify any changes you made *due to MCO's* in the following categories:

Content:                    Methodology:                  Exams:
Select...                   Select...                     Select...

Environment:                Technology:                   Assessment:
Select...                   Select...                     Select...

Other:

---

## Pre-Test/Post-Test Analysis

Please describe any changes you implemented this semester based on your analysis of the pre-test:

Provide a quantitative analysis of the results of your pre-test and post-test scores:

# of Students: [    ]     Pre-Test Ave: [    ]     Post-Test Ave: [    ]

Please provide some comments about your results:

Classify any changes you made *due to the pre-test* results in the following categories:

Content:                    Methodology:                  Exams:
Select...                   Select...                     Select...

Environment:                Technology:                   Assessment:
Select...                   Select...                     Select...

Other:

Please describe, if any, the changes you anticipate implementing the next time you teach this course as a result of your pre-test and/or post-test score analysis:

---

## Other Changes

If you have any changes to your course to report for some other reason, select them here:

Content:                    Methodology:                  Exams:
Select...                   Select...                     Select...

Environment:                Technology:                   Assessment:

Select...                    Select...                    Select...

Other:

[                                                          ]

Please provide some comments for your reasons for making these changes:

[                                                          ]

# Communication – Writing Rubric
## General Education Objective No. 1 - Presents ideas in writing.

| Criteria | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
|---|---|---|---|---|
| Provides a clear, concise thesis statement. | •Statement is clear and concise<br>•Statement is well reasoned<br>•Statement leads to plentiful additional discussion | •Statement is generally clear and concise<br>•Statement is mostly well reasoned<br>•Statement leads to enough additional discussion | •Statement is recognized by the reader<br>•Statement has some elements of reason<br>•Statement leads to some additional discussion | •Statement is not recognized by the reader<br>•Statement is not reasoned<br>•Statement does not lead to additional discussion |
| Provides supporting paragraphs which relate to the thesis. | •Supporting paragraphs are well reasoned<br>•Supporting paragraphs clearly relate to the thesis<br>•Supporting paragraphs are cohesive and logically developed. | •Supporting paragraphs contain mostly well reasoned content<br>•Supporting paragraphs often but not always relate to the thesis<br>•Supporting paragraphs demonstrate some cohesion and development. | •Supporting paragraphs contain some well reasoned content<br>•Supporting paragraphs relate to the thesis in some way<br>•Supporting paragraphs demonstrate a few elements of cohesion and development. | •Supporting paragraphs do not contain reasoned content<br>•Supporting paragraphs do not relate to the thesis<br>•Supporting paragraphs are neither cohesive nor unified |
| Correctly incorporates outside sources. | •Provides relevant outside sources<br>•Cites outside sources correctly | •Provides mostly relevant outside sources<br>•Cites outside sources, but no more than two errors | •Provides some relevant outside sources<br>•Cites outside sources with no more than three errors | •Provides irrelevant or no outside sources<br>•Cites outside sources with four or more errors |
| Uses appropriate grammar, syntax, punctuation, and spelling. | •Writing is error free in all categories (sentence structure, punctuation, spelling and grammar).<br>•Sentence structure and vocabulary are well developed and varied. | •Writing has errors in no more than one category (sentence structure, punctuation, spelling and grammar).<br>•Sentence structure and vocabulary are developed and varied. | •Writing has errors in no more than two categories (sentence structure, punctuation, spelling and grammar).<br>•Sentence structure and vocabulary are somewhat developed and varied. | •Writing has errors in three or more categories (sentence structure, punctuation, spelling and grammar).<br>•Sentence structure and vocabulary are not developed or varied |

# Communication – Public Speaking Rubric
## General Education Objective No. 2 - Present ideas <u>orally</u> according to standard usage.

| Criteria | Excellent (4) | Proficient (3) | Adequate (2) | Inadequate (1) |
|---|---|---|---|---|
| Provides a well organized speech with appropriate introduction and conclusion. | • Very well organized.<br>• Attention grabbing introduction.<br>• Convincing conclusion | • Well organized.<br>• Suitable introduction.<br>• Appropriate conclusion. | • Organized<br>• Has an introduction.<br>• Has a conclusion. | • Lacks organization<br>• Poor introduction<br>• Poor conclusion |
| Provides main points that are well-documented, compelling, supported with facts, developed clearly and concisely, and focused on the topic. | • All main points are well-documented and supported by numerous, compelling facts.<br>• Clearly and concisely presented.<br>• Remains focused on topic throughout entire presentation. | • All main points are documented and supported by fact.<br>• Clearly and concisely presented most of the time<br>• Remains focused on topic during most of presentation | • Main points somewhat supported.<br>• Clearly and concisely presented some of the time<br>• Remains focused on topic during some of presentation | • Little to no support of main points.<br>• Not clearly and/or concisely presented.<br>• Little to no focus on topic. |
| Uses appropriate gestures, movements and eye contact. | • Excellent gestures and eye contact.<br>• Conversational presentation.<br>• Utilize note cards appropriately. | • Appropriate level of gestures and eye contact.<br>• Somewhat conversational presentation.<br>• Moderately relies on note cards | • Some gestures and eye contact.<br>• Presentation rehearsed and mechanical<br>• Relies on note cards | • Little, if any, gestures and eye contact<br>• Presentation poorly delivered.<br>• Totally relies on note cards. |
| Speaks clearly and understandably using standard, edited English with correct mechanics (pronunciation, sentence structure and grammar) relative to audience. | • Excellent mechanics throughout.<br>• Very appropriate presentation relative to audience.<br>• Tone is respectful and civil. | • Few mechanical errors.<br>• Majority of presentation appropriate to audience.<br>• Tone is somewhat respectful and civil | • Some mechanical errors.<br>• Presentation inappropriate to some members of the audience.<br>• Neutral tone | • Many/ numerous mechanical errors.<br>• Inappropriate presentation relative to audience.<br>• Tone was disrespectful. |
| Provides appropriate handouts and/or visual aids. | • Provides entire audience with useful, presentation quality handouts<br>• Audiovisual aids contain appropriate amount of information.<br>• Grammatically correct material. | • Provides entire audience with handouts<br>• Most audiovisual aids contained appropriate amounts of information.<br>• Few grammatical errors. | • Provides majority of audience with handouts<br>• Audiovisual aids contained too much or too little information.<br>• Some grammatical errors. | • Did not provide audience with handouts<br>• No audiovisual aids.<br>• Many/ numerous grammatical errors. |

# Communication – Information Technology Holistic Rubric
## General Education Objective No. 3 - Demonstrates application of <u>Information Technology</u>.

| Criteria | Pass | Comments |
|---|---|---|
| Demonstrates basic computer and operating system skills | • Knows how to access and change computer settings under the Control Panel<br>• Understands file directory structures and paths<br>• Can perform file management tasks (select, copy, rename and/or delete files)<br>• Can create, save, open, and print a document from some application<br>• Knows how to navigate and locate information from Windows Help | |
| Performs core tasks of Microsoft Office applications | • Knows how to format a document and how to use page layout, e.g., headers, footers, page breaks, bullets, etc.<br>• Can create tables, charts, graphs and/or formulas<br>• Can import and sort data and/or images into a document and format them appropriately<br>• Knows techniques for copying, cutting and pasting text and/or images within a document<br>• Knows how to review a document using tools: spelling, grammar, word count, thesaurus | |
| Uses a search engine to access, navigate and evaluate information on the internet | • Can retrieve information from an internet search engine<br>• Knows how to evaluate and rank sources of information for reliability<br>• Can select, copy and paste information retrieved from the internet College databases | |
| Uses email with appropriate etiquette | • Can open, create and/or send email with attachments<br>• Demonstrates appropriate email etiquette | |

# REASON SCIENTIFICALLY AND QUANTITATIVELY

## General Education Objective No. 4 – Demonstrate Mathematical Principles

| | LEVELS OF ACHIEVEMENT | | | | | |
|---|---|---|---|---|---|---|
| Criteria | Excellent 5 | Proficient 4 | Acceptable 3 | Inadequate 2 | Unacceptable 1 | Student Score |
| Identify relevant data by;<br>a. extracting appropriate data from a problem containing extraneous data and/or<br>b. identifying appropriate data in a word problem | Successfully extract and identify data from more than 90% of the relevant problems. | Successfully extract and identify data from more than 80% of the relevant problems. | Successfully extract and identify data from more than 70% of the relevant problems. | Successfully extract and identify data from more than 60% of the relevant problems. | Successfully extract and identify data from less than 60% of the relevant problems. | |
| Select or develop representations appropriate to the problem which describe the data by;<br>a. arranging the data into a table or spreadsheet and/or<br>b. creating pictorial representations (bar graphs, or pie charts, or rectangular coordinate graphs, etc.) with or without technological assistance and/or<br>c. selecting or setting up an equation | Successfully select or develop representations for more than 90% of the relevant data sets. | Successfully select or develop representations for more than 80% of the relevant data sets. | Successfully select or develop representations for more than 70% of the relevant data sets. | Successfully select or develop representations for more than 60% of the relevant data sets. | Successfully select or develop representations for less than 60% of the relevant data sets. | |
| Obtain and describe results by;<br>a. obtaining correct mathematical results, with or without technological assistance, and<br>b. ascribing correct units and measures to results which could include writing an appropriate sentence interpreting the result | Successfully solve more than 90% of the relevant problems. | Successfully solve more than 80% of the relevant problems. | Successfully solve more than 70% of the relevant problems. | Successfully solve more than 60% of the relevant problems. | Successfully solve less than 60% of the relevant problems. | |
| Draw inferences from data by;<br>a. describing a trend indicated in a chart or graph, and making predictions based on that trend and/or<br>b. describing the important features of data presented in a table or spreadsheet, and making predictions based on that trend and/or<br>c. describing the important features of an equation or formula, and making predictions based on those features and/or<br>d. drawing qualitative conclusions about the original situation based on the quantitative results that were obtained | Successfully draw inferences from the data for more than 90% of the relevant problems. | Successfully draw inferences from the data for more than 80% of the relevant problems. | Successfully draw inferences from the data for more than 70% of the relevant problems. | Successfully draw inferences from the data for more than 60% of the relevant problems. | Successfully draw inferences from the data for less than 60% of the relevant problems. | |

# REASON SCIENTIFICALLY AND QUANTITATIVELY

## General Education Objective No. 5 – Demonstrate Scientific Reasoning

| Criteria | LEVELS OF ACHIEVEMENT | | | | | |
|---|---|---|---|---|---|---|
| | Excellent 5 | Proficient 4 | Acceptable 3 | Inadequate 2 | Unacceptable 1 | Student Score |
| **Separation of observations (data) and interpretations** | Distinguishes explicitly between observations and interpretations and presents each separately. | Distinguishes consistently between observations and interpretations, and presents each separately. | Distinguishes in most cases between observations and interpretations, and with some exceptions presents each separately. | Does rarely distinguish between observations and interpretations and presents them mixed together. | Presents little or no observations and interpretations. | |
| **Reasoning supported by using a variety of evidence** | Reasoning clearly supported using a multitude of facts, figures, and documented data. | Reasoning supported using a variety of facts, figures, and documented data. | Reasoning reasonably well supported using some facts, figures, or documented data. | Reasoning poorly supported using few facts, figures, or documented data. | Reasoning absent or unsupported by any documented facts or figures. | |
| **Interpretation and analysis of results** | Presents critical evaluation of results, including alternative explanations of results. | Presents well-conducted interpretation and analysis of results, may consider alternative explanations of results. | Presents reasonable interpretation and analysis of results. | Presents data analysis with minimal discussion or interpretation of results. | Presents results without interpretation, or does not state results. | |
| **Distinguishes well-supported from poorly supported scientific claims** | Distinguishes consistently between well- and poorly supported claims, justified by detailed discussion and well-formulated reasoning. | Distinguishes consistently between well- and poorly supported claims and presents valid reasoning. | Shows ability to distinguish between well- and poorly supported claims and attempts to present reasoning. | Shows some ability to distinguish between well- and poorly supported claims, but present little or no valid reasoning. | Consistently fails to distinguish between well- and poorly supported claims. | |

# REASON SCIENTIFICALLY AND QUANTITATIVELY

## General Education Objective No. 6 – Apply Scientific Methods to the Inquiry Process

| LEVELS OF ACHIEVEMENT | | | | | | |
|---|---|---|---|---|---|---|
| Criteria | Excellent 5 | Proficient 4 | Acceptable 3 | Inadequate 2 | Unacceptable 1 | Student Score |
| **Problem is recognized and investigative question is formulated** | Problem is recognized and essentials explained, investigative question is clearly formulated. | Problem is recognized, investigative question is formulated. | Problem is recognized, investigative is question outlined. | Parts of problem is recognized, investigative question is unclear or incomplete. | Problem is not recognized and/or investigative question misses the point or is not formulated. | |
| **Reasonable, testable hypothesis is presented** | Hypothesis is reasonable, clearly stated, and fully explains question. | Hypothesis is reasonable and answers question. | Hypothesis is reasonable, and addresses question. | Hypothesis does not answer question or is untestable. | No hypothesis is presented. | |
| **Prediction is formulated as logical consequence of the hypothesis** | Prediction is logical and fully explained. | Prediction is logical and well formulated. | Prediction is logical and reasonably outlined. | Prediction is unclear or illogical. | No prediction is formulated. | |
| **Formulation of a conclusion** | Conclusion is logical and well formulated, explains in details the degree of correctness of the hypothesis, clearly presents further avenues of testing or formulates new hypothesis | Conclusion is logical, explains the degree of correctness of the hypothesis, suggests further avenues of testing. | Conclusion is coherent, and addresses the degree of correctness of the hypothesis. | Conclusion is incoherent, and/or does not explain the degree of correctness of the hypothesis. | Conclusion not presented or is highly incoherent. | |

# CRITICAL THINKING

## General Education Objective No. 7 – Read and Analyze Complex Ideas

| Criteria | LEVELS OF ACHIEVEMENT | | | | | |
|---|---|---|---|---|---|---|
| | Excellent 5 | Proficient 4 | Acceptable 3 | Inadequate 2 | Unacceptable 1 | Student Score |
| **Analyzes and questions data validity** | Analyzes insightful questions | Asks insightful questions | Asks a variety of questions | Asks some questions | Fails to question data | |
| **Does not allow bias to affect results** | Refutes bias | Detects Bias | Recognizes bias | Observes some bias | Ignores bias | |
| **Interpretation and analysis of results** | Examines inconsistencies | Identifies inconsistencies | Recognizes inconsistencies | States some inconsistencies | Detects no inconsistencies | |
| **Distinguishes well-supported from poorly supported scientific claims** | Carefully examines and categorizes information for value | Examines information for value | Categorizes information types | Does not select valuable information sources | Does not provide sources | |

# CRITICAL THINKING

## General Education Objective No. 8 – Locate, Evaluate, and Apply Research Information

| Criteria | Excellent 5 | Proficient 4 | Acceptable 3 | Inadequate 2 | Unacceptable 1 | Student Score |
|---|---|---|---|---|---|---|
| **LEVELS OF ACHIEVEMENT** | | | | | | |
| **Develops and evaluates conclusions from research** | Formulates conclusions | Examines conclusions | Recognizes conclusions | Identifies some conclusions | Fails to draw conclusions | |
| **Develops and evaluates logical arguments within research** | Analyzes arguments | Categorizes arguments | Recognizes some arguments | Excludes some arguments | Sees no arguments | |
| **Comprehends and applies research data** | Synthesizes data | Carefully examines data | Evaluates data | Paraphrases data | Repeats data | |
| **Locates and applies research** | Provides substantial research | Includes abundant research | Includes adequate research | Includes little research | Omits research | |

# CRITICAL THINKING

## General Education Objective No. 9 – Evaluate and Present Well-Reasoned Arguments

| LEVELS OF ACHIEVEMENT | | | | | | |
|---|---|---|---|---|---|---|
| **Criteria** | **Excellent 5** | **Proficient 4** | **Acceptable 3** | **Inadequate 2** | **Unacceptable 1** | **Student Score** |
| **Provides strong arguments** | Argues succinctly | Argues clearly | Provides reasonable arguments | Misconstructs arguments | Omits Arguments | |
| **Identifies and presents issues** | Thoroughly discusses issues | Categorizes issues | Identifies issues | Generates issues | Misrepresents issues | |
| **Conclusions justified by arguments** | Thoroughly justifies conclusions | Clearly justifies conclusions | Adequately justifies conclusions | Inadequately justifies conclusion | Provides no justification for conclusions | |
| **Evaluates and utilizes information** | Synthesizes information | Evaluates information | Incorporates information | Overlooks some information | Excludes information | |