### **Student Learning Assessment Committee**



## ANNUAL REPORT 2011-2012

October 2012

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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 2011 to May 2012.

#### **COMMITTEE COMPOSITION**

During the 2011-2012 academic year, the Student Learning Assessment Committee consisted of the following members:

Tom Morris Chair, Health and Wellness Facility

Coordinator/Faculty

Donna Garcia Director of Academic Affairs
Sabrina Gaskill English/Communications Faculty
Natalie Gillard Vice-President of Academic Affairs

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 Assistant/

**Adjunct Faculty** 

#### **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). All
faculty will receive a copy of the Student Learning Assessment
Guide for Faculty 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 August of each year, a revised Student Learning Assessment Guide for Faculty.

- 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 October of each year
  - b. providing all faculty with copies of the Student Learning Assessment Guide for Faculty each academic year
  - c. having at least one joint meeting with the Faculty Council every fall and spring semester
  - e. providing all adjunct and new faculty with assessment-related training and an assessment mentor
  - f. presenting information on assessment at every new student orientation and during each section of ACS 100 Student College Success class, including delivery of the brochure Student Guide to Learning Assessment
  - g. conducting a semi-annual Assessment Day to be held every fall and spring semesters. The semi-annual Assessment Day is a joint meeting between the committee and all full-time faculty used to discuss, update, and refine the assessment practices at the College.
- Objective 4 Oversee the implementation of the Student Learning Assessment Model and Student Learning Assessment Guide for Faculty so that faculty and staff will provide all the documents and reports specified in the Model and Guide within one week of the stated deadline.

## STUDENT LEARNING ASSESSMENT COMMITTEE ACTIVITIES 2011-2012

The Student Learning Assessment Committee completed "Year Four" (2011-2012) 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's on-site visit for accreditation, with emphasis on addressing student learning assessment at all three levels - course, program and institution. In order to continue this process, Mesalands Community College encourages program directors and lead 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 parties. They also represent the most deeply held values of the College. As such, they drive much of what occurs at Mesalands.

The following assessment-related changes at the institutional-level, program-level, and course-level, were instituted during the 2011-2012 academic year:

- 1. Revisited and rewrote the Mathematical Reasoning and Scientific Reasoning general education competency rubrics.
- 2. Fully implemented the *General Education Competency Reporting Schedule* across all delivery sites and delivery modes.
- Implemented ENG 299: Capstone Portfolio Course to capture general education competency attainment of students prior to their graduating with a degree.
- 4. Established an embedded assessment process in order to determine if the quality and quantity of student learning is similar across different educational sites and different delivery methods.
- 5. Attempted to improve the quality of the *Student Learning Assessment Program Reports* as measured by the *Student Learning Assessment Program Report Evaluation Rubric*.
- 6. Fully activated the links on the "Assessment" portion of the College's website.

#### COMMITTEE SELF-EDUCATION

The Student Learning Assessment Committee continued its ongoing self-education process during the fall 2011 and spring 2012 semesters. Committee members attended the New Mexico Higher Education Assessment and Retention Conference in February, 2012, as well as the Association for the Assessment of Learning in Higher Education Annual Conference in June, 2012. Ms. Gillard and Mr. Morris also attended the Higher Learning Commissions Annual Conference in Chicago, Illinois, on March 30-April 3, 2012.

## STUDENT LEARNING ASSESSMENT COMMITTEE GOALS 2012–2013

Student learning assessment is a living, breathing process that will mature and change as the College identifies the most effective and efficient methods of understanding, confirming and improving student learning. The 2012-2013 goals and objectives associated with this process are specific, measureable, attainable and relevant to those areas identified by the Higher Learning Commission's Accreditation Team during their Comprehensive Evaluation visit to Mesalands Community College.

Priorities	Goals	Objectives	Responsible Individual(s)
Continue assessment- related changes based on the Higher Learning	Advance a sustainability plan as initially developed at the November 2012,	Identify and develop a sustainability plan to continue the assessment related activities established in the Action Portfolio.	Student Learning Assessment Committee.
Commission's Academy for Assessment of Student Learning Action Portfolio/Student Learning Plan "Beyond the Basics: Reinventing Assessment at Mesalands Community College."  Academy for the Assessment of Student Learning Results Forum.	2. Develop an action plan to establish a plan → do → study → adjust cycle of assessment in Student Services.	Student Learning Assessment Committee, Vice President of Student Services, Student Services staff.	
	<ol> <li>Develop an action plan to establish a plan→do→study→adjust cycle of assessment for the precollegiate program.</li> </ol>	Student Learning Assessment Committee, Pre-Collegiate lead faculty, Director of Educational Services Center and full- time and adjunct faculty.	
		4. Develop an action plan to collect data from students completing their programs of study and their employers in order to assess how successful the College is at placing well-prepared graduates into the workforce and using this information to improve student learning.	Student Learning Assessment Committee, program directors/lead faculty and employers.

#### INSTITUTIONAL LEVEL ASSESSMENT

Direct measures of student learning assessment at the institutional level include, but are not limited to: COMPASS, CAAP and GEA testing, the capstone portfolio course (ENG 299), embedded assessments, and general education competency assessments based on the *General Education Competency Reporting Schedule*. Indirect measures of student learning include a number 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 following tables show 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 2011-2012 academic year (April 30, 2011 – March 31, 2012). The summer testing period was from April 30, 2011 – June 30, 2011, the fall testing period from July 1, 2011 – Oct 31, 2011 and the spring testing period was from Nov 1, 2011 – Mar 31, 2012.

	COMPASS SCORE SUMMARY 2011-2012 ACADEMIC YEAR												
	Pre- Algebra	Reading	Writing										
	Summer 2011												
N	39	77	2		70	68							
М	46.5	30.4	43.5		73.8	55.3							
SD	14.3	14.4	12.0		15.3	27.7							
			Fall 2011										
N	75	124	6		221	156							
М	34.9	28.2	36.5		73.9	59.7							
SD	13.2	14.6	6.9		17.5	28.6							
			Spring 2012	2									
N	59	126	2	1	113	114							
М	40.3	30.4	33	34	74.5	52.4							
SD	16.5	13.6	25.5		19.0	30.0							

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 COMPASS DISTRIBUTION SUMMARY 2011-2012 ACADEMIC YEAR											
COURSE	ABE	099/100	101/102	107	110	112	None				
Summer 2011											
Math	1	18	47	9	1	1					
English	5	37	26								
Reading		42					28				
			Fall 20	11							
Math	15	46	48	9	6						
English	16	94	46								
Reading		121					100				
			Spring 2	012							
Math	8	31	72	13	1	1					
English	16	56	42								
Reading		54					59				

Over the past 7 years, the percentage of students needing remedial reading classes has decreased slightly to about 53%, while the percentages of students needing remedial English (ABE, ENG 99/100) and remedial Math (ABE, MATH 99/100/101) has remained fairly constant at about 63% and 88%, respectively.

F	MESALANDS COMMUNITY COLLEGE PERCENTAGE OF STUDENTS NEEDING REMEDIATION 2005-2012 ACADEMIC YEARS											
	2005-06 2006-07 2007-08 2008-09 2009-10 2010-11 2011-12											
Math	86.7	88.3	89.0	87.5	86.6	89.9	87.5					
English	63.0	59.5	65.5	62.0	62.8	60.3	66.3					
Reading	53.4	64.5	59.9	58.3	52.9	51.5	53.7					

#### Collegiate Assessment of Academic Proficiency Testing (CAAP)

The CAAP test was administered to eight students, all who had petitioned to graduate, on October 28, 2011, as well as to forty-seven students on April 5, 2012. 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 laboratory science course 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 50<sup>th</sup> percentile nationally in any subject are awarded certificates of achievement from ACT. The following tables summarize these achievement results:

MESALANDS COMMUNITY COLLEGE CAAP CERTIFICATE AWARDS BY SUBJECT FALL 2011 AND SPRING 2012 SEMESTERS										
	Writing Math Reading Critical Science									
Number of Certificates Awarded	20	27	26	21	27					
Number of Students Participating	55	54	55	55	55					

MESALANDS COMMUNITY COLLEGE NUMBER OF STUDENTS RECEIVING CAAP CERTIFICATE AWARDS BY NUMBER OF SUB-TESTS SPRING 2012 SEMESTER											
Number of Students Participating	Number of StudentsTotal Sub-Number of CertificatesFive Sub-Four Sub-Three Sub-Two Sub-One Sub-										
55	274	121	12	3	5	11	12				

The CAAP results for the fall 2011 students was too small for ACT to complete a statistical analysis; however, the spring 2012 averages for each subject area compared to the corresponding national average are given in the following table:

MESALANDS COMMUNITY COLLEGE CAAP AVERAGES BY SUBJECT AREA SPRING 2012 SEMESTER										
Subject	Writing	Math	Reading	Critical Thinking	Science Reasoning					
MCC Avg.	60.2	54.8	59.5	59.3	58.7					
National Avg.	61.6	56.2	60.2	60.6	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 2012.

	CHANGES IN CAAP SCORES 2002–2012										
Mesalands Community				ı	ı	Year	ı	Γ	Γ	Τ	
Collinating College Mean Score as % of National Mean	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Writing	95.40	94.88	95.04	96.47	97.27	96.30	95.65	95.65	96.77	97.90	97.73
Math	103.2	99.82	102.1	99.47	98.25	99.82	96.98	103.2	102.4	101.4	97.51
Reading	98.36	95.40	94.88	97.35	95.70	97.85	97.35	99.00	98.51	98.34	98.84
Critical Thinking	96.90	94.07	98.02	98.84	95.22	97.04	97.05	95.89	97.03	98.02	97.85
Science Reasoning	99.50	95.93	97.80	97.95	97.97	97.29	98.65	97.47	100.2	98.48	99.15

#### General Education Assessment (GEA)

Eight students who petitioned to graduate took the General Education Assessment (GEA) on October 27, 2011. This assessment is completed for all graduates of the A.A. and A.A.S degrees awarded by the College. It was administered for the first time to the spring 2005 graduating class. The College rubrics are used to assess the GEA. 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:

			ANDS COM				
			AL EDUCAT FALL 2012				
Criteria		Excellent 4	Proficient 3	Adequate 2	Inadequate 1	Total	Average
CE1-1			4 (57%)	3 (43%)		7	2.6
CE1-2			5 (71%)	2 (29%)		7	2.7
CE1-3		2 (28%)	4 (57%)	1 (15%)		7	3.1
CE1-4		3 (43%)	3 (43%)	1 (15%)		7	3.3
CE1-5		1 (15%)	3 (43%)	1 (15%)	2 (29%)	7	2.4
CE2-1		1 (12%)	3 (38%)	4 (50%)		8	2.6
CE2-2		1 (12%)	3 (38%)	4 (50%)		8	2.6
CE2-3		1 (12%)	1 (12%)	4 (50%)	2 (25%)	8	2.1
CE2-4		1 (12%)	3 (38%)	4 (50%)		8	2.6
	Excellent 5	Proficient 4	Acceptable 3	Inadequate 2	Unacceptable 1		
CE3-1	6 (86%)				1 (15%)	7	4.4
CE3-2	2 (28%)	1 (15%)		2 (28%)	2 (28%)	7	2.9
CE3-3	4 (57%)		1 (15%)		2 (28%)	7	3.6
CE3-4	2(28%)				5(71%)	7	2.1
SQ4-1	1 (12%)		1 (12%)	2 (24%)	4 (50%)	8	2.0
SQ4-2		2 (25%)	1 (12%)	3 (38%)	2 (25%)	8	2.4
SQ4-3		1 (12%)		2 (24%)	5 (62%)	8	1.9
SQ4-4				1 (12%)	7 (88%)	8	1.1
SQ5-1		2 (25%)	4 (50%)	2 (25%)		8	3.0
SQ5-2	1 (12%)	3 (38%)	2 (25%)	2 (25%)		8	3.4
SQ5-3		2 (25%)	5 (62%)	1 (12%)		8	3.1
SQ5-4	1 (12%)	2 (25%)	4 (50%)	1 (12%)		8	3.4
SQ6-1		3 (38%)	1 (12%)	3 (38%)	1 (12%)	8	2.8
SQ6-2	7 (12%)	3 (38%)	2 (25%)	3 (38%)		8	3.0
SQ6-3		1 (12%)	4 (50%)	1 (12%)	2 (25%)	8	2.5
SQ6-4			7 (88%)	1 (12%)		8	2.9
Criteria		Excellent 4	Proficient 3	Adequate 2	Inadequate 1	Total	Average
CT7-1		1 (12%)	3 (38%)	4 (50%)		8	2.6
CT7-2		1 (12%)	3 (38%)	4 (50%)		8	2.6
CT7-3			3 (38%)	4 (50%)	1 (12%)	8	2.3
CT8-1							
CT8-2							
CT8-3							
CT9-1		1(14%)	5(71%)	1(14%)		7	3.0
CT9-2		1(14%)	5(71%)	1(14%)		7	3.0
CT9-3		1(14%)	5(71%)	1(14%)		7	3.0

CE1-1	Provides an organized speech with an appropriate introduction and conclusion
CE1-2	Provides main points that are well documented and 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
6Q4-1	Understands mathematical vocabulary
SQ4-2	Solves linear equations
SQ4-3	Graphs data and equations
6Q4-4	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

#### **ENG 299: Capstone Portfolio Course**

In an attempt to better assess general education competency attainment of graduating students, the College implemented ENG 299: Capstone Portfolio Course beginning the spring 2012 semester. The capstone course utilizes the College's rubrics to assess achievement of the general education competencies (writing, oral presentation, information technology, critical thinking, scientific and mathematical reasoning) using student artifacts. A portfolio reflecting best practices is submitted to a faculty committee for review and evaluation. This course must be completed during the student's last semester, prior to graduating with a degree.

The ENG 299 requirement replaced the College's General Education Assessment (GEA) as of the spring 2012 semester. The GEA was the College's attempt to measure general education competency attainment using a homegrown case scenario assessment tool. Student effort on the GEA was frequently poor since the results had no bearing on whether or not the student would graduate.

Measurement Tool: ENG 299 Capstone Portfolio

Course

General Education Objective(s): 1-5

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

"Adequate(2)"

#### **General Education Competency: Writing**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1		2	3	
• 1.1.2		2	3	
• 1.1.3		2	3	
• 1.2.1		2	3	
• 1.2.2		2	3	
• 1.2.3		2	3	
• 1.3.1		2	2	1
• 1.3.2		2	2	1
• 1.4.1		2	3	
• 1.4.2		4	1	

#### **General Education Competency: Writing**

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

#### **General Education Competency: Oral Presentation**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 2.1.1		1	2	
• 2.1.2		2	1	
• 2.1.3		2	1	
• 2.2.1	1		2	
• 2.2.2	1		2	
• 2.2.3	1	1	1	
• 2.3.1	1		2	
• 2.3.2	1	1	1	
• 2.3.3	1	1	1	
• 2.4.1	1	1	1	
• 2.4.2	1	2		
• 2.4.3	2	1		
• 2.5.1			1	2
• 2.5.2		1		2
• 2.5.3		1		

#### **General Education Competency: Oral Presentation**

Provides a well-organized speech with appropriate introduction and conclusion

- 2.1.1 Very well-organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

#### **General Education Competency: Information Technology**

Year	Pass (4)	Fail (1)
2011-2012		
• 3.1.1		
• 3.1.2		
• 3.1.3		
• 3.1.4	5	
• 3.1.5		
• 3.2.1	2	3
• 3.2.2		5
• 3.2.3	4	1
• 3.2.4	3	2
• 3.2.5		5
• 3.3.1	1	4
• 3.3.2		
• 3.3.3		5
• 3.4.1		5
• 3.4.2		5

#### **General Education Competency: Information Technology**

Demonstrates basic computer and operating skills

- 3.1.1 Access and change computer setting under Control Panel
- 3.1.2 Navigate file directory structures and paths
- 3.1.3 Perform file management tasks (select, copy, rename and/or delete files)
- 3.1.4 Create, save, open, and print a document from some application
- 3.1.5 Navigate and locate information from Windows Help

#### Performs core tasks of Microsoft Office applications

- 3.2.1 Format a document and how to use page layout, e.g., headers, footer, page breaks, bullets, etc.
- 3.2.2 Create tables, charts, graphs and/or formulas
- 3.2.3 Import and sort data and/or images in to a document and format them appropriately
- 3.2.4 Demonstrate techniques for copying, cutting and pasting text and/or images with a document
- 3.2.5 Review a document using tools: spelling, grammar, word count, and thesaurus

#### Uses a search engine to access, navigate and evaluate information on the internet

- 3.3.1 Retrieve information from an internet search engine
- 3.3.2 Evaluate and rank sources of information for validity
- 3.3.3 Select, copy and paste information retrieved from the internet College database

#### Uses email with appropriate etiquette

- 3.4.1 Open, create and/or send email with attachments
- 3.4.2 Demonstrates appropriate email etiquette

#### General Education Competency: Mathematical Reasoning

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 4.1.1	3		1	
• 4.1.2	3		1	
• 4.2.1	2	2		
• 4.2.2	2	2		
• 4.2.3				
• 4.3.1	1	3		
• 4.3.2	2	1	1	

#### **General Education Competency: Mathematical Reasoning**

Constructs and/or analyzes numerical or graphical representations of data

- 4.1.1 A correct solution using an appropriate strategy is given
- 4.1.2 Descriptions of the results are complete and coherent

Simplifies, evaluates, and/or solves various equations and/or formulas

- 4.2.1 Demonstrates complete understanding of the problems with correct solutions
- 4.2.2 Answers are interpreted correctly, with appropriate labels
- 4.2.3 Correctly identifies units and performs conversions

Formulates and communicates mathematical explanations

- 4.3.1 Gives a complete response with clear explanations
- 4.3.2 Communicates effectively to the intended audience; demonstrates complete understanding of the mathematical ideas and processes

#### **General Education Competency: Scientific Reasoning**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 5.1.1			1	2
• 5.1.2			1	2
• 5.2.1			2	1
• 5.3.1			2	1
• 5.4.1			1	2
• 5.5.1		1		2
• 5.5.2			1	2

#### **General Education Competency: Scientific Reasoning**

Problem is recognized and investigative question is formulated

- 5.1.1 Problem is recognized and explained in detail
- 5.1.2 Investigative question is clearly formulated

Reasonable, testable hypothesis is presented

5.2.1 Hypothesis is reasonable, clearly stated, and fully explains question

Prediction is formulated as logical consequence of the hypothesis

5.3.1 Prediction is logical and fully explained

Data/observations to test hypothesis are gathered or compiled

5.4.1 High quality date and /or high quantity of suitable data gathered and presented professionally (list or table)

Formulation of a conclusion

- 5.5.1 Conclusion is logical and well formulated
- 5.5.2 Conclusion explains in detail the degree of correctness of the hypothesis and identifies further avenues of testing, or formulates new hypothesis

#### PDSA CYCLE ANALYSIS

#### **Problem Area**

Students did not use or familiarize themselves with the rubrics prior to identifying and completing the artifacts. It is critical that students review the rubrics since they are scoring tools that identify specific expectations for the assignments. Rubrics divide the tasks into its component parts and provide a detailed description of what constitutes an acceptable or unacceptable level of performance for each of those parts. Using the rubrics in this manner will ensure that students are aware of how their exemplars are being assessed and allows them the ability to make changes to those artifacts so as to better demonstrate that they meet the learning objectives of the class.

#### Goal

Assist student in understanding and using the rubrics in order to ensure that their artifacts meet all the assessment criteria.

#### **Action Plan**

- Ask all faculty to explain what a rubric is and how it can be used to ensure that classroom assignments meets the stated criteria. This activity should be performed in all College courses as well as by the ENG 299 faculty to reinforce the importance and benefit of rubrics. Constant reinforcement is critical throughout the students' academic experience at the College.
- 2. Present students enrolled in ENG 299 examples of artifacts that meet all the general education competency "excellent" criteria.

#### Results

To be presented and analyzed in the 2012-2013 report.

#### **Problem Area**

Students had difficulty uploading their complete oral presentations onto Moodle. It was later discovered that Moodle will only support clips of less than 2 minutes which does not allow for sufficient time for students to demonstrate the competency.

#### Goal

Identify alternative methods that would allow students to upload much longer oral presentation clips to ensure the student adequate time to demonstrate attainment of the competency.

#### **Action Plan**

- 1. Investigate utilizing Facebook or YouTube for uploads.
- 2. Determine how this may relate to FERPA.
  - a. Identify whether or not we can "close" these clips to the public.

#### Results

To be presented and analyzed in the 2012-2013 report.

#### **Problem Area**

The students enrolled in courses at the prisons may have difficulty collecting and saving artifacts due to a number of foreseen and unforeseen constraints.

#### Goal

Identify what impediments the students enrolled in prison courses may encounter in terms of collection and storage of artifacts as well as other problems they may encounter with the requirements of the ENG 299 course in general.

#### **Action Plan**

- Convene meetings with all shareholders to identify possible hurdles faced by students enrolled in the prisons in terms of successful completion of ENG 299.
- Discuss possible solutions to those identified hurdles.
- 3) Identifying specific faculty who will require artifact assignments (lab science faculty will require scientific reasoning and critical thinking assignment). This will allow students the ability to immediately submit their work as an artifact.

#### Results

To be presented and analyzed in the 2012-2013 report.

#### Writing Across the Curriculum (WAC)<sup>1</sup>

Summary of 169 students that have not taken a previous ENG 102 class

	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	75 (45.2 %)	53 (31.9 %)	31 (18.7 %)	7 (4.2 %)	166	3.18	95.78		
1.1.2	69 (42.9 %)	52 (32.3 %)	28 (17.4 %)	12 (7.5 %)	161	3.11	92.55		
1.1.3	70 (42.9 %)	52 (31.9 %)	33 (20.2 %)	8 (4.9 %)	163	3.13	95.09		
1.2.1	74 (44.8 %)	50 (30.3 %)	34 (20.6 %)	7 (4.2 %)	165	3.16	95.76		
1.2.2	72 (44.4 %)	52 (32.1 %)	31 (19.1 %)	7 (4.3 %)	162	3.17	95.68		
1.2.3	71 (44.9 %)	49 (31 %)	32 (20.3 %)	6 (3.8 %)	158	3.17	96.20		
1.3.1	44 (36.1 %)	40 (32.8 %)	23 (18.9 %)	15 (12.3 %)	122	2.93	87.70		
1.3.2	41 (35.3 %)	42 (36.2 %)	20 (17.2 %)	13 (11.2 %)	116	2.96	88.79		
1.4.1	40 (24.5 %)	63 (38.7 %)	26 (16 %)	34 (20.9 %)	163	2.67	79.14		
1.4.2	47 (29.6 %)	57 (35.8 %)	25 (15.7 %)	30 (18.9 %)	159	2.76	81.13		

#### Summary of 156 students that have taken a previous ENG 102 class

<sup>&</sup>lt;sup>1</sup> The Writing Across the Curriculum 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. 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.

#### 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	95 (60.9 %)	41 (26.3 %)	17 (10.9 %)	3 (1.9 %)	156	3.46	98.08
1.1.2	79 (54.9 %)	43 (29.9 %)	19 (13.2 %)	3 (2.1 %)	144	3.38	97.92
1.1.3	83 (57.6 %)	40 (27.8 %)	18 (12.5 %)	3 (2.1 %)	144	3.41	97.92
1.2.1	88 (56.4 %)	45 (28.8 %)	20 (12.8 %)	3 (1.9 %)	156	3.40	98.08
1.2.2	82 (56.9 %)	38 (26.4 %)	21 (14.6 %)	3 (2.1 %)	144	3.38	97.92
1.2.3	75 (54 %)	42 (30.2 %)	21 (15.1 %)	1 (0.7 %)	139	3.37	99.28
1.3.1	72 (50.7 %)	29 (20.4 %)	21 (14.8 %)	20 (14.1 %)	142	3.08	85.92
1.3.2	67 (51.1 %)	31 (23.7 %)	17 (13 %)	16 (12.2 %)	131	3.14	87.79
1.4.1	76 (48.4 %)	61 (38.9 %)	17 (10.8 %)	3 (1.9 %)	157	3.34	98.09
1.4.2	66 (45.5 %)	64 (44.1 %)	13 (9 %)	2 (1.4 %)	145	3.34	98.62

- 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.

Summary: The College will continue to collect WAC data in the future in order to identify trends and gaps.

#### Embedded Assessments: ENG 104

The goal of the embedded assessment is to determine whether or not the quality and quantity of learning in ENG 104: English Composition and Research is the same between different education sites (dual enrollment versus main campus). An identical multiple choice exam was given during the same week at the end of the spring 2012 semester at four different dual enrollment sites (n=68) and one main campus site (n=10).

MESALANDS COMMUNITY COLLEGE ENG 104: ENGLISH COMPOSITION ASSESSMENT SPRING 2012 SEMESTER							
English Communication	Students should perform the following activities to meet the	Percent meeting the objective					
Objectives:	objectives:	Dual	Main				
Students will analyze and evaluate oral and written communication in terms of situation, audience, purpose, aesthetics, and diverse points of view.	Understand, appreciate, and critically evaluate a variety of written and spoken messages in order to make informed decisions.	78%	97%				
Students will express a primary purpose in a compelling statement and order supporting points logically and convincingly.	Organize their thinking to express their viewpoints clearly, concisely, and effectively.	79%	100%				
Students will use effective rhetorical strategies to persuade, inform, and engage.	Select and use the best means to deliver a particular message to a particular audience. Rhetorical strategies include but are not limited to modes (such as narration, description, and persuasion), genres (essays, web pages, reports, proposals), media and technology (PowerPoint, electronic writing), and graphics (charts, diagrams, formats).	93%	95%				
4.Students will employ writing and/or speaking processes such as planning, collaborating, organizing, composing, revising, and editing to create presentations using correct diction, syntax, grammar, and mechanics.	Use standard processes for generating documents or oral presentations independently and in groups.	94%	97%				
5. Students will integrate research correctly and ethically from credible sources to support the primary purpose of a communication.	Gather legitimate information to support ideas without plagiarizing, misinforming or distorting.	81%	92%				
Students will engage in reasoned civic discourse while recognizing the distinctions among opinions, facts, and inferences.	Negotiate civilly with others to accomplish goals and to function as responsible citizens.	72%	100%				

#### PDSA CYCLE ANALYSIS

#### **Problem Area**

It is highly questionable whether or not a multiple choice exam is a valid measure of whether or not students are accomplishing the New Mexico Higher Education Department (NMHED) Core Competencies Communication.

#### Goal

Construct a process that will accurately assess student attainment of the Core Competency based on some type of written assignment such as a critical or argumentative term paper.

#### **Action Plan**

The English lead faculty will be charged with constructing a more appropriate tool to assess attainment of the New Mexico Higher Education Department Core Communication Competency.

#### Results

To be presented and analyzed in the 2012-2013 report.

**Embedded Assessments: MATH 110** 

The goal of the embedded assessment is to determine whether or not the quality and quantity of learning in MATH 110: College Algebra is the same between different education sites (dual enrollment versus main campus). An identical exam was given during the same week at the end of the spring 2012 semester at one dual enrollment site (n=11) and one main campus site (n=21).

#### MESALANDS COMMUNITY COLLEGE MATH 110: COLLEGE ALGEBRA ASSESSMENT **SPRING 2012 SEMESTER** Percent meeting **Mathematics** Students should perform the following activities the objective Objectives: to meet the objectives: Dual Main 1. Students will • Sketch the graphs of linear, quadratic, higher-order construct and polynomial, rational, absolute value, exponential, logarithmic, and radical functions. analyze graphs and/or data sets. Construct graphs using a variety of techniques including plotting points, using properties of basic transformations of functions, and by using key 52% 61% characteristics of functions such as end behavior. intercepts and asymptotes. Determine the key features of a function such as domain/range, intercepts, and asymptotes. 2. Students will · Solve quadratic equations using techniques such as use and solve factoring, completing the square and square root method, and the quadratic formula. various kinds of · Solve equations using inverse operations for equations. powers/roots, exponents/logarithms and other 73% 67% arithmetic operations. • Use the equation of a function to determine its domain, to perform function operations, and to find the inverse of a function. 3. Students will Correctly use function notation and the vocabulary understand and associated with functions. Describe the implications of key features of a write function with respect to its graph and/or in relation to mathematical its real world context. explanations 55% 49% usina appropriate definitions and symbols. 4. Students will Apply the knowledge of functions to identify an appropriate type of function to solve application demonstrate problem solving problems. skills within the · Solve application problems including those requiring 64% 57% context of maximization or minimization of quadratic functions and exponential growth & decay problems. mathematical Interpret the results of application problems in terms applications.

of their real world context.

#### PDSA CYCLE ANALYSIS

#### **Problem Area**

The present assessment tool for Math 110 is not compatible with the Moodle platform utilized by the College distance education courses.

#### Goal

Convert the present math assessment tool to the Moodle platform.

#### **Action Plan**

The math lead faculty will be charged with investigating how the present embedded math assessment tool can be used on the Moodle platform.

#### Results

To be presented and analyzed in the 2012-2013 report.

#### **Effectiveness of Pre-Collegiate Course Work**

Academic Cycle 2011-2012	Number	C or better	% C or better
Students Completing ENG 102	219	188	86%
Completed pre-collegiate ENG in past year	19	12	63%
No pre-collegiate ENG in past year	200	176	88%
Students Completing MATH 107	135	79	59%
Completed pre-collegiate MATH in past year	33	18	55%
No pre-collegiate MATH in past year	102	61	60%

#### PDSA CYCLE ANALYSIS

#### **Problem Area**

This data represents the College's first attempt to evaluate the effectiveness of pre-collegiate course work in preparing students for future success in general education collegiate courses.

#### Goal

The Pre-collegiate Faculty and the Educational Services Center, which is responsible for administration of pre-collegiate course work, will begin establishing a plan→do→study→adjust cycle of assessment with the goal of improving its services with the ultimate goal of preparing students enrolled in the pre-collegiate classes for future success in their regular college courses.

#### **Action Plan**

Begin discussions with Director of Educational Services Center to establish the "plan" portion of the cycle of assessment.

#### Results

To be presented and analyzed in the 2012-2013 report.

#### **INSTITUTIONAL SURVEYS**

Mesalands Community College has, in the past, utilized a regular cycle of surveys (Student Opinion Survey, Withdrawing/Non-Returning Student Survey, Alumni Survey and others) which provided indirect measures of student learning, as well as some attitudinal data useful for assessment. However, because of significant changes involving personnel responsible for the administration, collection and data reduction of these surveys, no results have been reported over the course of the last several years.

#### PROGRAM LEVEL ASSESSMENT

#### **DEGREES AND CERTIFICATES GRANTED**

A comparison of the number of graduates in the various degree plans of the 2011-2012 academic year with the previous eight years follows:

A	SSOC	ATE (	OF AF	TS D	EGRE	ES			
Program	2003 -04	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12
Business Administration			3			2	1	5	2
Criminal Justice	1	2			1				1
Early Childhood Education		1	1	1	2	2	4	1	5
Elementary Education	5	1	6	3	2	2	1		3
Fine Arts			1		1		2		
General Studies			1				1		2
Human Services			1						
Liberal Arts									1
Paleontology				1			1	2	1
Pre-Dentistry			1						
Pre-Engineering	1				1				
Pre-Medical Arts	2							1	1
Secondary Education		1	2	1	2				
Social Work		2	2	2	1	5		1	
University Studies	3	3	4	5	2	2	4	7	5
ASSOCIA	ATE O	F APF 2004	PLIED 2005	SCIE 2006	NCE I	DEGR 2008	<b>EES</b>	2010	2011
Program	-04	-05	-06	-07	-08	-09	-10	-11	-12
Agricultural Business			1	2				3	
Animal Science	3			3	2	2	3	5	2
Automotive Technology	1	1			1		1		
Duilding Trades					ı			1	
Building Trades		·			1		1	1	2
Business Administration	7	'	7	3		3		4	2
Business Administration Business Office	7	-	7	3	1	3	1	·	
Business Administration		-	-	3	1	3	1	4	7
Business Administration Business Office Technology			-	3	1	-	1	4	7
Business Administration Business Office Technology Communications Computer Science			-		1	1	1 4	4	7
Business Administration Business Office Technology Communications			3	1	1	1	1 4	4	7
Business Administration Business Office Technology Communications Computer Science Diesel Technology			3	1 1	1 2	1	1 4	1 3	7 2
Business Administration Business Office Technology Communications Computer Science Diesel Technology Farrier Science	6		3 1 2	1 1 1	2	1 1	2	4 1 3 2	7 2 2
Business Administration Business Office Technology Communications Computer Science Diesel Technology Farrier Science General Studies	6		3 1 2	1 1 1	2	1 1	2	4 1 3 2	7 2 2 2 22
Business Administration Business Office Technology Communications Computer Science Diesel Technology Farrier Science General Studies Horticulture	6		3 1 2	1 1 1 4	2	1 1 4	2 3 12	4 1 3 2	7 2 2 2 22

OCCUPATIONAL CERTIFICATES										
Program	2003 -04	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	2010 - 11	2011 - 12	
Automotive Technology					1					
Building Trades				1		2	2			
Business Administration									1	
Commercial Truck Driving	13	21	16	29	48					
Computer/ Information Systems			8		18			29		
Corrections Officer								14		
Diesel Technology					1					
Equine Dentistry								6	1	
Farrier Science	3	1	1		6	3	3	7	3	
Fine Arts			3		3		1			
General Studies									1	
Horticulture									1	
Liberal Arts									3	
Metal Arts							1	1	2	
Nail Technology	3	1	2							
Pre-Nursing					2	7	2	2	6	
Wind Energy Technology						17	23		47	
Total Degrees and Certificates	52	34	70	60	108	70	93	132	144	

#### **COMPLETION RATES OF GENERAL EDUCATION CORE CLASSES**

The data below also includes dual enrollment of high school students taking classes through the College.

COMPLETION RATES OF GENERAL EDUCATION TRANSFER CLASSES 2007-2012 ACADEMIC YEARS												
Year	200	7-08	2008-09		2009-10		2010-11		2011-12			
Course	N	% C or better	N	% C or better	N	% C or better	N	% C or better	N	% C or better		
Area I: Communications												
ENG 102	187	86.63	258	81.78	205	78.05	221	80.54	220	87.27		
ENG 104	71	81.69	145	90.34	120	89.17	171	89.47	129	92.25		
COM 101	83	73.49	41	70.73	93	96.77	87	87.36	87	78.16		
COM 102	49	77.55	45	86.67	86	75.58	94	76.60	72	84.72		
Area II: Mathematics												
MATH 110	36	77.78	58	82.76	51	80.39	79	86.08	46	69.56		
STAT 213	16	87.5	16	68.75	17	94.11	7	42.86	28	92.86		
Area III: Laboratory Science												
BIOL 113	43	76.74	23	78.26	64	73.44	42	69.05	60	80.00		
CHEM 115	41	95.12	102	97.06	12	75.00	35	91.43	42	92.86		
CHEM 116	16	100.0	41	90.24	11	100.0	23	86.96	27	88.89		
GEOL 141	12	50.0	37	81.08	65	70.77	45	75.55	61	62.30		
GEOL 151	15	53.33	5	100.0	27	100.0	3	100.0	7	85.71		
PHYS 115	0	NA	0	NA	5	60.00	5	100.0	8	100.0		
PHYS 120	12	83.33	5	60.00	0	NA	24	29.17	5	100.0		
	Area IV: Social and Behavioral Science											
ANTH 101	20	55.00	17	82.35	5	60.00	8	50.00	11	100.0		
ECON 251	54	83.33	97	92.78	105	76.19	77	93.57	81	91.36		
ECON 252	10	40.00	19	52.63	7	85.71	24	58.33	31	67.74		
PSCI 102	41	100.0	90	88.89	77	96.10	85	89.41	93	91.40		
PSCI 202	11	90.91	17	100.0	32	96.88	33	84.85	29	86.21		
PSY 101	46	91.30	110	84.55	107	88.79	159	86.79	92	84.78		
SOC 101	29	96.55	50	94.00	48	89.58	44	88.64	44	93.18		
SOC 212	14	78.57	0	NA	16	56.25	12	100.0	1	100.0		
						d Fine Arts						
ART 101	62	80.65	31	54.84	109	55.96	77	71.43	98	72.45		
MUS 101	26	80.77	39	66.67	39	79.49	36	86.11	106	74.53		
HIST 101	23	95.65	26	92.31	58	96.55	50	84.00	37	89.19		
HIST 102	28	96.43	35	100.0	59	96.61	29	86.21	19	89.47		
HIST 121	11	90.91	10	70.00	7	57.14	8	100.0	5	40.00		
Total Number of Students Enrolled and Overall %C or Better Averages												
Totals	956	83.16	1317	85.12	1425	82.25	1478	82.81	1439	83.67		

## PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

#### **Observation**

It is important for the College to identify courses with high failure and/or drop-out rates. Up to this point in time, these trends have not been considered.

#### Goal

Identify courses with high failure and/or drop-out rates.

#### **Action**

SLAC will establish a process of identifying courses with high failure and/or drop-out rates.

#### **Results**

To be presented and analyzed in the 2012-2013 report.

## STUDENT LEARNING ASSESSMENT PROGRAM REPORTS

The purpose of program level assessment is to document how well students are accomplishing the program specific 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, thereby 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 and to use this information to improve learning.

## STUDENT LEARNING ASSESSMENT PROGRAM REPORT ASSOCIATE OF APPLIED SCIENCE – GENERAL STUDIES 2011-2012

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.

Students who have had applicable training, previous vocational or military experience may petition for college credit by submitting an Experiential Learning Portfolio. Up to 18 college credits may be awarded toward the Associate of Applied Science Degree in General Studies. Credit is awarded only if appropriated experiential learning has occurred and is documented in the Experiential Learning Portfolio.

#### **General Education Competencies**

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

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical 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 third year and is addressed via the plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  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  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul><li>GEA College Rubric</li><li>CAAP</li></ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 104</li> <li>ENG 299</li> <li>Lab Science Elective</li> <li>Social Sciences/ Humanities Elective</li> </ul>
Mathematical and scientific reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	GEA College Rubric     CAAP	MATH 101     Lab Science Elective
Critical Thinking  7. Read and analyze complex ideas.  8. Locate, evaluate and apply research information.  9. Evaluate and present well-reasoned arguments.	GEA College Rubric     CAAP	<ul> <li>ACS 100</li> <li>Lab Science Elective</li> <li>Social Sciences/ Humanities Elective</li> </ul>

#### **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
2010-2011			
• 1	3	2	67%(mean=2.50)
• 2	3	3	100%(mean=2.93)
• 3	3	3	100%(mean=4.25)*
2009-2010			
• 1	2	2	100%(mean=3.125)
• 2	2	2	100%(mean=3.375)
• 3	2	1	50%(mean=3.5)*

<sup>1</sup> Present ideas in writing.

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
2010-2011			
• 4	3	0	0%(mean=1.25)
• 5	3	2	67%(mean=2.92)
• 6	3	2	67%(mean=3.08)
2009-2010			
• 4	2	0	0%(mean=2.125)
• 5	2	2	100%(mean=4.25)
• 6	2	2	100%(mean=4.0)

<sup>4</sup> Demonstrate mathematical principles.

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on a 5 point scale.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric Critical Thinking-Science Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	3	100%(mean=3.33)
• 8	3	3	100%(mean=2.67)
• 9	3	3	100%(mean=2.67)

- 7. Identify and gather information.
- 8. Analyze and evaluate information.
- 9. Synthesize and formulate conclusions.

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric Critical Thinking-English Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	3	100%(mean=3.00)
• 8	3	3	100%(mean=3.00)
• 9	3	3	100%(mean=3.00)

- 7. Identify and gather information.
- 8. Analyze and evaluate information.
- 9. Synthesize and formulate conclusions.

Measurement Tool:
General Education Objective(s):
Goal Results:

GEA College Rubric 7, 8, 9 100% "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
2011-2012	7(40.1%)	7(26.9%)	7(42.6%)	7(36.9%)	7(42.7%)
2010-2011	4(24.5%)	N/A	4(21.5%)	3(13%)	3(13%)
2009-2010	2(89%)	N/A	2(57%)	2(60%)	2(51%)

**General Education Objective(s):** 1-6

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

"Adequate(2)"

#### **General Education Competency: Writing**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012			. , ,	
• 1.1.1			2	
• 1.1.2			2	
• 1.1.3			2	
• 1.2.1			2	
• 1.2.2			2	
• 1.2.3			2	
• 1.3.1		1	1	
• 1.3.2		1	1	
• 1.4.1			2	
• 1.4.2		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

- <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

#### **General Education Competency: Oral Presentation**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 2.1.1			1	1
• 2.1.2		1		1
• 2.1.3			1	1
• 2.2.1			1	1
• 2.2.2			1	1
• 2.2.3			1	1
• 2.3.1			1	1
• 2.3.2			1	1
• 2.3.3			1	1
• 2.4.1			1	1
• 2.4.2		1		1
• 2.4.3		1		1
• 2.5.1			1	1
• 2.5.2		1		1
• 2.5.3		1		1

Provides a well-organized speech with appropriate introduction and conclusion

- 2.1.1 Very well-organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

<u>Provides main points that are well-documented, compelling, supported with facts, developed clearly and concisely, and focused on the topic</u>

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative

#### to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

#### **General Education Competency: Information Technology**

Year	Pass (4)	Fail (1)
2011-2012		
• 3.1.1		
• 3.1.2		
• 3.1.3		
• 3.1.4	2	
• 3.1.5		
• 3.2.1		2
• 3.2.2		2
• 3.2.3	2	
• 3.2.4	1	1
• 3.2.5		2
• 3.3.1		2
• 3.3.2		
• 3.3.3		2
• 3.4.1		2
• 3.4.2		2

Demonstrates basic computer and operating skills

- 3.1.1 Access and change computer setting under Control Panel 3.1.2 Navigate file directory structures and paths
- 3.1.3 Perform file management tasks (select, copy, rename and/or delete files)
- 3.1.4 Create, save, open, and print a document from some application
- 3.1.5 Navigate and locate information from Windows Help

#### Performs core tasks of Microsoft Office applications

- 3.2.1 Format a document and how to use page layout, e.g., headers, footer, page breaks, bullets, etc.
- 3.2.2 Create tables, charts, graphs and/or formulas
- 3.2.3 Import and sort data and/or images in to a document and format them appropriately
- 3.2.4 Demonstrate techniques for copying, cutting and pasting text and/or images with a document
- 3.2.5 Review a document using tools: spelling, grammar, word count, thesaurus

#### Uses a search engine to access, navigate and evaluate information on the internet

- 3.3.1 Retrieve information from an internet search engine
- 3.3.2 Evaluate and rank sources of information for validity
- 3.3.3 Select, copy and paste information retrieved from the internet College database

#### Uses email with appropriate etiquette

- 3.4.1 Open, create and/or send email with attachments
- 3.4.2 Demonstrates appropriate email etiquette

#### General Education Competency: Mathematical Reasoning

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 4.1.1	1			1
• 4.1.2	1			1
• 4.2.1		1		1
• 4.2.2		1		1
• 4.2.3				
• 4.3.1		1		1
• 4.3.2			1	1

Constructs and/or analyzes numerical or graphical representations of data

Simplifies, evaluates, and/or solves various equations and/or formulas

- 4.2.1 Demonstrates complete understanding of the problems with correct solutions
- 4.2.2 Answers are interpreted correctly, with appropriate labels
- 4.2.3 Correctly identifies units and performs conversions

Formulates and communicates mathematical explanations

- 4.3.1 Gives a complete response with clear explanations
- 4.3.2 Communicates effectively to the intended audience; demonstrates complete understanding of the mathematical ideas and processes

#### **General Education Competency: Scientific Reasoning**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 5.1.1				2
• 5.1.2				2
• 5.2.1				2
• 5.3.1				2
• 5.4.1				2
• 5.5.1				2
• 5.5.2				2

Problem is recognized and investigative question is formulated

- 5.1.1 Problem is recognized and explained in detail
- 5.1.2 Investigative question is clearly formulated

Reasonable, testable hypothesis is presented

5.2.1 Hypothesis is reasonable, clearly stated, and fully explains question

Prediction is formulated as logical consequence of the hypothesis

5.3.1 Prediction is logical and fully explained

Data/observations to test hypothesis are gathered or compiled

5.4.1 High quality date and /or high quantity of suitable data gathered and presented professionally (list or table) Formulation of a conclusion

5.5.1 Conclusion is logical and well formulated

5.5.2 Conclusion explains in detail the degree of correctness of the hypothesis and identifies further avenues of testing, or formulates new hypothesis

<sup>4.1.1</sup> A correct solution using an appropriate strategy is given

<sup>4.1.2</sup> Descriptions of the results are complete and coherent

# PDSA CYCLE RESULTS (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

No results reported. Action plan was not implemented.

# PDSA CYCLE RESULTS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

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

#### Goal

Collect data based on General Education Competency Reporting Schedule.

#### **Action Plan**

- 1. Lead faculty member will identify students enrolled in AAS General Studies Program.
- 2. Lead faculty member will identify courses that those students are enrolled in.
- 3. Lead faculty will contact instructors of those courses in order to collect data based on *General Education Competency Reporting Schedule*.

#### Results

A small amount of data was collected and reported on as it relates to the assessment of learning of students enrolled in the AAS General Studies degree program. That data is presented in this report.

# PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

#### **Problem Area**

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

#### Goal

Identify a more effective process of collecting both formative and summative assessment data on students enrolled in the AAS General Studies degree program.

#### **Action Plan**

1. Discuss possible solutions to the process of collecting both formative and summative assessment data on students enrolled in the AAS General Studies degree program with the Student Learning Assessment Committee.

#### **Results**

To be discussed in the 2012-2013 Report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT ANIMAL SCIENCE 2011-2012

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.
- 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**

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:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical and Scientific Reasoning).
- 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 third year and is addressed via a 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 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.	<ul> <li>Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Class projects</li> <li>Essays</li> <li>Class Presentations</li> </ul>	• ANSC 100 • RGSC 100 • ANSC 150 • ANSC 170 • ANSC 245 • ANSC 230 • ANSC 151 • ANSC 224 • ANSC 275 • ANSC 255
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.	<ul> <li>Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Class projects</li> <li>Essays</li> <li>Class Presentations</li> </ul>	• ANSC 100 • RGSC 100 • ANSC 141 • ANSC 150 • ANSC 170 • ANSC 245 • ANSC 230 • ANSC 151 • ANSC 224 • ANSC 275 • ANSC 255
3.	The student will apply sound financial and management practices as well as principles utilized in the agricultural industry	<ul> <li>Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Class projects</li> <li>Essays</li> <li>Class Presentations</li> </ul>	• ACS 100 • ANSC 100 • ABM 162 • ANSC 170 • ABM 264 • ANSC 245 • ANSC 230 • ABM 265 • ANSC 224 • ANSC 275 • BUS 221 • ANSC 255

	T. F : 0:	r <u> </u>	11100 100
4.	The Equine Science	Tests	• ANSC 100
	student will	• CATs	• RGSC 100
	demonstrate a broad-	Pre/Post-Test	◆ABM 162
	based understanding of	Oral Tests	• ANSC 150
	biological and	Class projects	• ANSC 170
	management principles	• Essays	● ABM 264
	and develop the ability	Lab's	• ANSC 245
	to incorporate the use	Class Presentations	• ANSC 230
	of these principles into		• ANSC 151
	the horse industry		• ANSC 224
	along with aptitude to		• ANSC 275
	critically evaluate		7.11.00 27.0
	industry issues.		
5.	1110 2001 00101100	<ul><li>Tests</li></ul>	• ANSC 100
	student will	• CATs	• RGSC 100
	demonstrate a broad-	<ul><li>Pre/Post-Test</li></ul>	◆ABM 162
	based understanding of	Oral Tests	• ANSC 150
	biological and	Class projects	• ANSC 170
	management principles	• Essays	● ABM 264
	and develop the ability	• Lab's	• ANSC 245
	to incorporate the use	Class Presentations	• ANSC 230
	of these principles into		• ABM 265
	the beef cattle industry		• ANSC 275
	along with aptitude to		• ANSC 255
	critically evaluate		ANGC 233
1	industry issues.		

# **Program Objective Results**

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

Measurement Tool:Written ExamProgram Objective(s):1, 2, 3, 4, 5Goal Results:75% pass rate

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010 ANSC 100	11	10	91%
2009-2010 ANSC 270	3	3	100%
2010-2011 ANSC 100	10	9	90%(Mean=82.5%)
2010-2011 RGSC 100	7	7	100%(Mean=86.3%)
2010-2011 ANSC 150	2	2	100%(Mean=90.0%)
2010-2011 ANSC 170	2	2	100%(Mean=92.0%)
2010-2011 ANSC 224	12	10	83%(Mean=84.6%)
2010-2011 ANSC 230	6	4	66.6%(Mean=76.5%)

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011 ANSC 245	5	5	100%(Mean=96.2%)
2010-2011 ANSC 255	5	5	100%(Mean=83.4%)
2010-2011 ANSC 270	3	3	100%(Mean=88.0%)
2010-2011 ANSC 275	11	11	100%(Mean=84.2%)
2010-2011 ANSC 285	3	3	100%(Mean=90.0%)
2011-2012 ANSC 100	5	5	100%(Mean=90.2%)
2011-2012 RGSC 100	8	8	100%(Mean=81.8%)
2011-2012 ANSC 150	18	16	88%(Mean=77.1%)
2011-2012 ANSC 170	8	8	100%(Mean=89.9%)
2011-2012 ANSC 190	2	2	100%(Mean=91.5%)
2011-2012 ANSC 224	4	4	100%(Mean=93.0%)
2011-2012 ANSC 230	10	8	80%(Mean=83.5%)
2011-2012 ANSC 245	8	8	100%(Mean=81.9%)
2011-2012 ANSC 255	5	5	100%(Mean=85.8%)
2011-2012 ANSC 270	5	5	100%(Mean=84.2%)
2011-2012 ANSC 275	6	6	100%(Mean=84.3%)
2011-2012 ANSC 285	1	1	100%(Mean=91.0%)

Measurement Tool:Project PaperProgram Objective(s):1, 2, 3, 4, 5Goal Results:75% pass rate;

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	8	8	100%
2010-2011 ANSC 100	10	8	80%(Mean=78.5%)
2010-2011 RGSC 100	7	7	100%(Mean=81.0%)
2010-2011 ANSC 150	2	2	100%(Mean=88.0%)
2010-2011 ANSC 170	2	2	100%(Mean=95.0%)
2010-2011 ANSC 224	12	9	75%(Mean=80.6%)
2010-2011 ANSC 230	6	5	83.3%Mean=82.0%)
2010-2011 ANSC 245	5	5	100%(Mean=96.2%)
2010-2011 ANSC 255	5	5	100%(Mean=83.4%)
2010-2011 ANSC 270	3	3	100%(Mean=90.0%)
2010-2011 ANSC 275	11	11	100%(Mean=80.0%)
2010-2011 ANSC 285	3	3	100%(Mean=91.0%)
2011-2012 ANSC 100	5	5	100%(Mean=86.0%)
2011-2012 RGSC 100	8	7	87.5%(Mean=82.1%)
2011-2012 ANSC 150	18	16	88.9%(Mean=82.3%)
2011-2012 ANSC 170	8	8	100%(Mean=92.0%)
2011-2012 ANSC 190	2	2	100%(Mean=91.5%)
2011-2012 ANSC 224	4	4	100%(Mean=91.0%)
2011-2012 ANSC 230	10	8	80%Mean=82.0%)

Reporting Period	# of Students Attempting	# Passing	% Passing
2011-2012 ANSC 245	8	8	100%(Mean=84.5%)
2011-2012 ANSC 255	5	5	100%(Mean=86.0%)
2011-2012 ANSC 270	5	5	100%(Mean=85.0%)
2011-2012 ANSC 275	6	6	100%(Mean=85.0%)
2011-2012 ANSC 285	1	1	100%(Mean=91.0%)

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%
2011-2012	8	8	100%(Mean=89.9%)

Measurement Tool: Meat Animal/Carcass Evaluation Class

Exercise - ANSC 270

Program Objective(s): 2

Goal Results: 75% pass rate

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	3	3	100%
2010-2011	3	3	100%(Mean=84.7%)
2011-2012	5	5	100%(Mean=85.0%)

Measurement Tool: Equine Management Project- ANSC 224

Program Objective(s): 4

**Goal Results:** 75% pass rate;

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011	12	10	83.3%(Mean=80.9%)
2011-2012	4	4	100%(Mean=91.0%)

**Measurement Tool:** Beef Production Project- ANSC 255

Program Objective(s): 5

**Goal Results:** 75% pass rate;

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011	5	5	100%(Mean=79.0%)
2011-2012	5	5	100%(Mean=86.0%)

# **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  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>CATs</li> <li>Class Presentation</li> <li>Class Writing Assignment</li> </ul>	<ul> <li>ACS 100</li> <li>ANSC 100</li> <li>RGSC 100</li> <li>ANSC 141</li> <li>ANSC 150</li> <li>ANSC 170</li> <li>ANSC 245</li> <li>ANSC 230</li> <li>ANSC 151</li> <li>ANSC 224</li> <li>ANSC 275</li> <li>ANSC 255</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>Lab Sciences</li> </ul>
Mathematical and Scientific Reasoning  4. Demonstrate mathematical principles.  5. Demonstrate scientific reasoning.  6. Apply scientific methods to the inquiry process.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Class Exercises</li> <li>Class Examinations</li> </ul>	<ul> <li>ANSC 100</li> <li>RGSC 100</li> <li>ANSC 141</li> <li>ANSC 150</li> <li>ANSC 170</li> <li>ANSC 245</li> <li>ANSC 230</li> <li>ANSC 151</li> <li>ANSC 224</li> <li>ANSC 275</li> <li>ANSC 255</li> <li>Lab Sciences</li> </ul>

Critical Thinking  7. Read and analyze complex ideas.  8. Locate, evaluate and apply research information.  9. Evaluate and present well-reasoned arguments.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Class Exercises</li> <li>Class Examinations</li> </ul>	<ul> <li>ACS 100</li> <li>ANSC 100</li> <li>RGSC 100</li> <li>ANSC 141</li> <li>ANSC 150</li> <li>ANSC 170</li> <li>ANSC 245</li> <li>ANSC 230</li> <li>ANSC 151</li> <li>ANSC 224</li> <li>ANSC 275</li> <li>ANSC 255</li> <li>Lab Sciences</li> <li>Social Sciences/</li> </ul>
		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

100% "excellent (4)", "proficient **Goal Results:** 

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing % Passing	
2009-2010			
• 1	1	1	100%(mean=3.25)
• 2	1	1	100%(mean=2.6)
• 3	1	1	100%(mean=4.0)
2010-2011			
• 1	6	6	100%(mean=2.50)
• 2	6	6	100%(mean=2.83)
• 3	6	6	100%(mean=4.50)*

<sup>1</sup> Present ideas in writing.

<sup>2</sup> Present ideas orally according to standard usage.3 Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

Measurement Tool:GEA College RubricGeneral Education Objective(s):4, 5, 6Goal Results:100% "excellent (5)", "proficient

(4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010			
• 4	3	0	0% (mean = 1.75)
• 5	3	3	100%(mean=3.92)
• 6	3	1	33%(mean=2.75)
2010-2011			
• 4	6	0	0%(mean=1.21)
• 5	6	5	83%(mean=3.54)
• 6	6	5	83%(mean=3.39)

<sup>4</sup> Demonstrate mathematical principles.

Measurement Tool:GEA College RubricGeneral 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)

<sup>7.</sup> Read and analyze complex ideas.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric Critical Thinking-Science Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	6	6	100%(mean=2.67)
• 8	6	6	100%(mean=2.83)
• 9	6	6	100%(mean=2.67)
2011-2012			
• 7	12	12	100%(mean=2.75)
• 8	12	11	92%(mean=2.67)
• 9	12	11	92%(mean=2.67)

<sup>7.</sup> Identify and gather information.

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric Critical Thinking-English Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	6	6	100%(mean=3.00)
• 8	6	6	100%(mean=3.00)
• 9	6	6	100%(mean=3.00)
2011-2012			
• 7	12	12	100%(mean=2.75)
• 8	12	11	92%(mean=2.67)
• 9	12	11	92%(mean=2.67)

<sup>7.</sup> Identify and gather information.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

**Measurement Tool:** Writing Across the Curriculum

College Rubric

**General Education Objective(s):** 

**Goal Results:** 

90% "Excellent"/"Proficient"/

"Adequate"

ENG 102(No ENG 102) Legend:

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011		, ,	, ,	, ,
• 1.1.1	2(1)	2(2)	(14)	(2)
• 1.1.2	2 2	2(3)	(14)	(2)
• 1.1.3		2(6)	(10)	(3)
• 1.2.1	2(1) 2 3	1(5)	1(10)	(3)
• 1.2.2	2	2(6)	(12)	(1)
• 1.2.3		1(6)	(11)	(2)
• 1.3.1	4(2)	(10)	(7)	
• 1.3.2	3(4)	1(12)	(3)	
• 1.4.1		4(11)	(7)	(1)
• 1.4.2		4(11)	(7)	(1)
2011-2012				
• 1.1.1	4(1)	4(4)	(5)	(2)
• 1.1.2	4	4(6)	(4)	(2)
• 1.1.3	4	4(6)	(4)	(2)
• 1.2.1	4(1)	4(4)	(5)	(2)
• 1.2.2	4(1)	4(4)	(5)	(2)
• 1.2.3	4	4(6)	(5)	(1)
• 1.3.1	4	4(5)	(6)	(1)
• 1.3.2	4(1)	4(4)	(5)	(2)
• 1.4.1	4	4(6)	(4)	(2) (2)
• 1.4.2	4	4(6)	(4)	(2)

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: General Education Objective(s): Goal Results:** 

Critical Thinking College Rubric 90% "Excellent(4)"/"Proficient(3)"/ "Adequate(2)" Laboratory Science(No Lab Sci)

### Legend:

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 6.1.1	2(2)	(4)	(13)	(2)
• 6.1.2	2(2)	(4)	(13)	(2)
• 6.1.3	1(1)	(5)	(15)	(1)
• 6.2.1	1(1)	1(5)	(14)	(1)
• 6.2.2	2(3)	(7)	(11)	
• 6.2.3	2(3)	(5)	(12)	(1)
• 6.3.1	2(1)	(4)	(13)	(3)
• 6.3.2	2(2)	(6)	(12)	(1)
• 6.3.3	2(2)	(5)	(13)	(1)
2011-2012				
• 6.1.1	4(2)	2(3)	(7)	(2)
• 6.1.2	4(2)	2(3)	(7)	(2)
• 6.1.3	4(1)	2(4)	(7)	(2)
• 6.2.1	4(1)	2(5)	(6)	(2)
• 6.2.2	4(2)	2(3)	(7)	(2)
• 6.2.3	3(2)	2(5)	(6)	(2)
• 6.3.1	4(1)	2(5)	(6)	(2)
• 6.3.2	4(2)	2(3)	(7)	(2)
• 6.3.3	4(2)	2(3)	(7)	(2)

Identify and gather

6.1.1 Asks insightful questions

6.1.2 Critiques content

6.1.3 Examines inconsistencies

#### Analyze and evaluate

6.2.1 Analyzes and evaluates thoroughly

6.2.2 Uses reasonable judgment
6.2.3 Critically discriminates between good and bad information

Synthesize and formulate conclusion
6.3.1 Discusses issues thoroughly and argues succinctly

6.3.2 Assimilates information

6.3.3 Justifies conclusion

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
2011-2012	2(21%)	2(45.5%)	2(41%)	2(43%)	2(50%)
2010-2011	7(39.6%)	1(54%)	7(30.7%)	7(32.4%)	7(43%)
2009-2010	2(23%)	1(85%)	3(33%)	2(31%)	2(36%)

General Education Objective(s): 1-6

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

"Adequate(2)"

#### **General Education Competency: Writing**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1			1	
• 1.1.2			1	
• 1.1.3			1	
• 1.2.1			1	
• 1.2.2			1	
• 1.2.3			1	
• 1.3.1				1
• 1.3.2				1
• 1.4.1			1	
• 1.4.2		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

#### **General Education Competency: Oral Presentation**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 2.1.1				1
• 2.1.2				1
• 2.1.3				1
• 2.2.1				1
• 2.2.2				1
• 2.2.3				1
• 2.3.1				1
• 2.3.2				1
• 2.3.3				1
• 2.4.1				1
• 2.4.2				1
• 2.4.3				1
• 2.5.1				1
• 2.5.2				1
• 2.5.3				

Provides a well-organized speech with appropriate introduction and conclusion

- 2.1.1 Very well-organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

<u>Provides main points that are well-documented, compelling, supported with facts, developed clearly and concisely, and focused on the topic</u>

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English with correct mechanics (pronunciation, sentence structure and grammar) relative

#### to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

#### **General Education Competency: Information Technology**

Year	Pass (4)	Fail (1)
2011-2012		
• 3.1.1		
• 3.1.2		
• 3.1.3		
• 3.1.4	1	
• 3.1.5		
• 3.2.1	1	
• 3.2.2		1
• 3.2.3	1	
• 3.2.4	1	1
• 3.2.5		1
• 3.3.1	1	
• 3.3.2		
• 3.3.3		1
• 3.4.1		1
• 3.4.2		1

Demonstrates basic computer and operating skills

- 3.1.1 Access and change computer setting under Control Panel 3.1.2 Navigate file directory structures and paths
- 3.1.3 Perform file management tasks (select, copy, rename and/or delete files)
- 3.1.4 Create, save, open, and print a document from some application
- 3.1.5 Navigate and locate information from Windows Help

#### Performs core tasks of Microsoft Office applications

- 3.2.1 Format a document and how to use page layout, e.g., headers, footer, page breaks, bullets, etc.
- 3.2.2 Create tables, charts, graphs and/or formulas
- 3.2.3 Import and sort data and/or images in to a document and format them appropriately
- 3.2.4 Demonstrate techniques for copying, cutting and pasting text and/or images with a document
- 3.2.5 Review a document using tools: spelling, grammar, word count, thesaurus

#### Uses a search engine to access, navigate and evaluate information on the internet

- 3.3.1 Retrieve information from an internet search engine
- 3.3.2 Evaluate and rank sources of information for validity
- 3.3.3 Select, copy and paste information retrieved from the internet College database

#### Uses email with appropriate etiquette

- 3.4.1 Open, create and/or send email with attachments
- 3.4.2 Demonstrates appropriate email etiquette

#### **General Education Competency: Mathematical Reasoning**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 4.1.1	1			
• 4.1.2	1			
• 4.2.1	1			
• 4.2.2	1			
• 4.2.3				
• 4.3.1		1		
• 4.3.2		1		

Constructs and/or analyzes numerical or graphical representations of data

- 4.1.1 A correct solution using an appropriate strategy is given
- 4.1.2 Descriptions of the results are complete and coherent

Simplifies, evaluates, and/or solves various equations and/or formulas

- 4.2.1 Demonstrates complete understanding of the problems with correct solutions
- 4.2.2 Answers are interpreted correctly, with appropriate labels
- 4.2.3 Correctly identifies units and performs conversions

Formulates and communicates mathematical explanations

- 4.3.1 Gives a complete response with clear explanations
- 4.3.2 Communicates effectively to the intended audience; demonstrates complete understanding of the mathematical ideas and processes

#### **General Education Competency: Scientific Reasoning**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 5.1.1				1
• 5.1.2				1
• 5.2.1			1	
• 5.3.1			1	
• 5.4.1				1
• 5.5.1				1
• 5.5.2				1

Problem is recognized and investigative question is formulated

- 5.1.1 Problem is recognized and explained in detail
- 5.1.2 Investigative question is clearly formulated

Reasonable, testable hypothesis is presented

5.2.1 Hypothesis is reasonable, clearly stated, and fully explains question

Prediction is formulated as logical consequence of the hypothesis

5.3.1 Prediction is logical and fully explained

Data/observations to test hypothesis are gathered or compiled

- 5.4.1 High quality date and or high quantity of suitable data gathered and presented professionally (list or table) Formulation of a conclusion
- 5.5.1 Conclusion is logical and well formulated
- 5.5.2 Conclusion explains in detail the degree of correctness of the hypothesis and identifies further avenues of testing, or formulates new hypothesis

# PDSA CYCLE RESULTS (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

After completing the necessary reporting, it seems even more critical that a capstone class is needed for assessment of graduating students. My data set grew this year, which is a positive, but closing the loop, and implementing changes is a slow process. I feel that we as a college are moving in the correct direction though. In regards, to assessment and improving our teaching baseline, I need to personally increase my standards when it comes to grading. I feel that I have improved, but I must be more stringent in the future to prepare my students for the university atmosphere.

# PDSA CYCLE RESULTS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

Need more precise and number of assessment tools.

#### Goal

Continue to 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 by October 2011.

#### Results

No Capstone class at this time. Through the STEM grant I may have an opportunity to expand the Animal Science Department. This news is welcome, and hopefully, these improvements will be reflected in futures reports. I feel that we as a college, are moving in the correct direction, and in regards, to assessment and improving our teaching baseline, I need to continually increase my standards when it comes to grading stringency. I feel that I have improved, but I must do more to continue to challenge students and prepare them for the university atmosphere.

# PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

#### **Problem Area**

A never-ending need for more precise assessment tools. I would also like to expand laboratory opportunities (hands on learning) within the Animal Science Department.

#### Goal

To provide a more comprehensive learning atmosphere by implementing more hands on learning opportunities.

#### **Action Plan**

Work within our STEM grant to increase learning opportunities. Through the new STEM grant I may have an opportunity to expand the Animal Science Department. This news is welcome, and hopefully, these improvements will be reflected in futures reports. I feel that we as a college, are moving in the correct direction, and in regards, to assessment and improving our teaching baseline, I need to continually increase my standards when it comes to student expectations. I feel that I have improved, but I must do more to continue to challenge students and prepare them for the university and/or private industry.

#### Results

To be reported in the 2012/2013 assessment reporting cycle.

#### STUDENT LEARNING ASSESSMENT PROGRAM REPORT BUSINESS ADMINISTRATION 2011-2012

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 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, critical thinking and problem solving skills.

#### **Program Objectives**

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:

 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 (Mathematical 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 Administration assessment plan is in its third year and follows one Business cohort from first semester (fall) through graduation.

### **Program Objectives Assessment Plan**

All program objectives 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
The student will demonstrate proficiency in public speaking and interpersonal communication.	<ul><li>GEA results</li><li>Course exams</li><li>CATs</li><li>Pre/Post-Tests</li><li>Speeches</li></ul>	• ACS 100 • BUS 221
2. The student will demonstrate the ability to create and present a final presentation with supportive documents.	<ul> <li>GEA results</li> <li>Course exams</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Research papers</li> <li>Case analyses</li> <li>Business Plan</li> </ul>	<ul> <li>ACS 100</li> <li>ENG 102</li> <li>ENG 104</li> <li>COM 102</li> <li>BUS 221</li> <li>MGT 113</li> </ul>
3. The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipline.	<ul><li>GEA results</li><li>Course exams</li><li>CATs</li><li>Pre/Post-Test</li><li>Case analyses</li></ul>	<ul> <li>ACS 100</li> <li>MGT 253</li> <li>ENG 102</li> <li>ENG 104</li> <li>ECON 251</li> <li>ECON 252</li> </ul>
4. The student will demonstrate the ability to conduct an environmental scan.	<ul> <li>GEA results</li> <li>Course exams</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Case analyses</li> <li>Business Plan</li> </ul>	<ul><li>MGT 253</li><li>MGT 113</li><li>BUS 101</li></ul>

### **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:** 90% pass rate; cut score is 75%<sup>2</sup>

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	3	3	100% (mean = 88%)
2010-2011	7	7	100% (mean = 95%)
2011-2012	9	9	100% (mean=86.6%)

Measurement Tool: MGT 115 Business Plan

Program Objective: 2

**Goal Results:** 70% pass rate; cut score is 70%<sup>3</sup>

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	9	6	67% (mean = 78%)
2010-2011	15	13	87% (mean = 84%)
2011-2012	18	10	56%(mean=75.8%)

Measurement Tool: ECON 252 Final Exam

Program Objective: 3

Goal Results: 70% pass rate; cut score is 70%<sup>4</sup>

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	10	10	100% (mean = 85%)
2010-2011	6	6	100% (mean = 89%)
2011-2012	11	11	100%(mean=91.2%)

<sup>2</sup> After evaluation of the first year's results, adjustments were made to reflect more realistic expectations. BUS 221 Final Presentation pass rate goal was lowered from one hundred percent to ninety percent and the cut score was raised from seventy percent to seventy-five percent.

score was raised from seventy percent to seventy-five percent.

Pass rate goal lowered from one hundred percent to seventy percent; cut score unchanged.

<sup>&</sup>lt;sup>4</sup> Pass rate goal lowered from one hundred percent to seventy percent; cut score unchanged.

Measurement Tool: MGT 115 Business Plan

Program Objective: 4

**Goal Results:** 70% pass rate; cut score is 70%<sup>5</sup>

Reporting Period	# of Students Attempting	# Passing	% Passing
2009-2010	9	6	67% (mean = 78%)
2010-2011	15	13	87% (mean = 84%)
2011-2012	18	10	56% (mean=75.8%)

### **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 general education competencies are presented and/or measured:

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

<sup>&</sup>lt;sup>5</sup> Pass rate goal lowered from one hundred percent to seventy percent; cut score unchanged.

-

8. Locate, evaluate and	• ECON 251
apply research	• ECON 252
information.	
9. Evaluate and present	
well-reasoned	
arguments.	

#### **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.

**GEA College Rubric Measurement Tool:** 

**General Education Objective(s):** 1, 2, 3

**Goal Results:** 80% "excellent (4)", "proficient

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	2	2	100%(mean=3.00)
• 2	3	3	100%(mean=2.67)
• 3	2	2	100%(mean=5.00)*
2009-2010			
• 1	4	4	100%(mean=3.13)
• 2	4	4	100%(mean=3.32)
• 3	4	4	100%(mean=4.50)*

Present ideas in writing.
 Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on a 5 point scale.

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

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	3	2	67%(mean=3.0)
• 5	3	2	67%(mean=3.58)
• 6	3	2	67%(mean=3.50)
2009-2010			
• 4	4	1	25% (mean=1.78)
• 5	4	3	75%(mean=3.84)
• 6	4	4	100%(mean=3.67)

<sup>4</sup> Demonstrate mathematical principles.

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric Critical Thinking-Science Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	2	67%(mean=3.00)
• 8	3	2	67%(mean=3.00)
• 9	3	3	100%(mean=2.00)

<sup>7.</sup> Identify and gather information.

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric Critical Thinking-English Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	3	2	67%(mean=2.67)
• 8	3	2	67%(mean=2.67)
• 9	3	2	67%(mean=2.67)

<sup>7.</sup> Identify and gather information.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

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.

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
2011-12	5(64.4%)	5(61%)	5(50%)	5(52.2%)	5(56%)
2010-11	6(66%)	5(70%)	6(60%)	6(70.8%)	6(82.3%)
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)		

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

## 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

## <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

- 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 RESULTS (2010-2011)

#### **ANALYSIS**

### **Problem Area**

The last report stated that the failure of many students to write business plans "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." Once again, this was true. The results, however, regressed.

### Goal

During 2010-11, more effective organization (e.g., detailed calendars and chapter summaries) was expected to and did, in fact, create more time for writing assignments and critical discussions on current business topics.

#### **Action Plan**

In 2011-2012, there was more emphasis on using technology to provide immediate feedback on homework assignments via Aplia and CourseMate.

#### Results

After increasing from sixty-seven to eight-seven percent, the success rate on business plans fell all the way to 56 percent. This is somewhat misleading, however, because the majority of the failures were within a few points of the passing rate. All failed attempts resulted primarily from a lack of effort.

Even though there were exercises focusing on the financial section of the business plan, the most consistent weakness in the business plans was a failure to create a pro forma Statement of Cash Flows or other acceptable financial plan. Part of the problem undoubtedly stemmed from poor attendance and participation. Some of the absences were excused due to student activities but many of the absences were not excused and students simply chose to miss class even though attendance and participation was twenty percent of each student's final grade.

The lower rate of success may be in large part to a different student population. Both the mean age and academic experience of the students attempting business plans was lower in 2011-12 than in 2010-2011. Also, two of the students were not native speakers of English.

The case analyses required in the capstone course MGT 253 (Business Policy) were among the best that have been submitted in recent history. Students averaged 90% on the thirteen cases that were completed by five students (Two students submitted one incomplete case.). Students successfully completed environmental scans. Students followed instructions and successfully analyzed various opportunities and challenges facing three different companies. Students were able to identify mistakes by the companies and propose feasible recommendations.

In 2011-2012, results stemming from the use of technology to provide immediate feedback on homework assignments via Aplia and CourseMate was mixed. Aplia proved particularly effective in ACCT 111 but presented a few glitches in ACCT 210. In general, however, the use of immediate-feedback technology was positive and well-received by students. Not only were problem areas more apparent before class meetings but students will be able to develop improved critical thinking skills through interactive decision-making exercises. Also, classroom discussions were more focused and productive.

# PDSA CYCLE GOALS (2011-2012)

### **ANALYSIS**

### **Problem Area**

Many students fail to complete acceptable business plans. In general, the students that submit rough drafts and attend class and do adequate research are able to construct suitable plans. However, there will be renewed attempts to encourage improved students participation.

### Goal

Continuously improve student writing and critical thinking is a constant goal. Improving financial statements is a specific goal for the upcoming cycle.

### **Action Plan**

In 2012-13, there will also be more step-by-step exercises focused on the individual elements of a cash flow statement.

#### Results

To be presented and analyzed in 2012-2013 report.

### STUDENT LEARNING ASSESSMENT PROGRAM REPORT BUSINESS OFFICE TECHNOLOGY 2011-2012

The Business Department at Mesalands Community College offers students a wide range of programs that award associate degrees. The Associate of Applied Science degree is awarded to students completing the degree plan requirements in the 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**

Upon completion of the Business Office Technology Associate of Applied Science 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 Office Technology Associate of Applied Science Degree Programs and in addition to the above mentioned program objectives:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical and Scientific Reasoning).
- 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 third year and follows one Business cohort from first semester (fall) through graduation.

### **Program Objectives Assessment Plan**

All program objectives 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, databa management, and presentations).	7 1 10/1 001 1001	<ul><li>CIS 101</li><li>CIS 201</li><li>CIS 202</li><li>BUS 203</li><li>BUS 110</li></ul>
The student will demonstrate the abile to create and preservation with supportive documents.	ot a • CATs • Pre/Post-Test	• ACS 100 • ENG 102 • ENG 104 • COM 102
The student will demonstrate the critical thinking skills necessary to be employable in his or her selected discipling.	<ul><li>Pre/Post-Test</li><li>Oral Tests</li></ul>	<ul><li>ACS 100</li><li>ENG 102</li><li>ENG 104</li><li>COM 102</li><li>MATH 101</li></ul>

### **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%)
2010-2011	20	20	100% (mean = 93.75%)
2011-2012	4	4	100% (mean=96.25%)

**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%)
2010-2011	7	7	100% (mean = 95%)
2011-2012	9	9	100% (mean = 86.6%)

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%)
2010-2011	N/A		
2011-2012	N/A		

### **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 general education competencies are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication  1. Present ideas in writing. 2. Present ideas orally according to standard usage. 3. Demonstrate application of information technology.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>CATs</li> <li>Class Presentations</li> <li>Exams</li> </ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 104</li> <li>Lab Science Elective</li> <li>Social Sciences/ Humanities Elective</li> </ul>
Mathematical and Scientific Reasoning  4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Exams</li> <li>Discussion Posts</li> <li>CATs</li> <li>Pre/Post-Test</li> </ul>	BUS 103     MATH 101     ACCT 110     Lab Science Elective
Critical Thinking  7. Read and analyze complex ideas.  8. Locate, evaluate and apply research information.  9. Evaluate and present well-reasoned arguments.	<ul><li>GEA College Rubric</li><li>CAAP</li><li>Research paper</li></ul>	• ACS 100 • CIS 101 • 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.

**GEA College Rubric Measurement Tool: General Education Objective(s):** 1, 2, 3

80% "excellent (4)", "proficient **Goal Results:** (3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2011-2012			
• 1	1	1	100%(mean=3.25)
• 2	1	1	100%(mean=2.00)
• 3	1	1	100%(mean=2.00)*
2009-2010			
• 1	1	0	100%(mean=2.25)
• 2	1	1	100%(mean=3.0)
• 3	1	1	100%(mean=4.00)

<sup>1</sup> Present ideas in writing.

**GEA College Rubric Measurement Tool: General Education Objective(s):** 4, 5, 6

90% "excellent (5)", "proficient (4)" **Goal Results:** or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2011-2012			
• 4	1	0	0% (mean = 1.0)
• 5	1	1	100%(mean=3.00)
• 6	1	1	100%(mean=3.00)
2009-2010			
• 4	1	0	0% (mean = 1.0)
• 5	1	1	100%(mean=3.5)
• 6	1	0	100%(mean=1.75)

<sup>4</sup> Demonstrate mathematical principles. 5 Demonstrate scientific reasoning.

<sup>2</sup> Present ideas orally according to standard usage.3 Demonstrate application of information technology.

<sup>\*</sup>Based on 5-point scale.

<sup>6</sup> 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
2011-2012			
• 7	1	1	100%(mean=3.33)
• 8	N/A	N/A	N/A
• 9	1	1	100%(mean=3.25)
2009-2010			
• 7	1	1	100%(mean=3.75)
• 8	1	0	0%(mean=2.5)
• 9	1	1	100%(mean=4.00)

<sup>7.</sup> Read and analyze complex ideas.

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
2011-2012	1(21%)	1(10%)	1(70%)	1(75%)	1(71%)
2010-2011	2(22%)	N/A	2(32.5%)	2(28.5%)	2(20.5%)
2009-2010	1(6%)	N/A	1(6%)	1(0%)	1(4%)

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

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		1(0)		
• 1.1.2		1(0)		
• 1.1.3		1(0)		
• 1.2.1				1(0)
• 1.2.2		1(0)		
• 1.2.3			1(0)	
• 1.3.1		1(0)		
• 1.3.2			1(0)	
• 1.4.1				1(0)
• 1.4.2			1(0)	

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 RESULTS (2010-2011)

### **Analysis**

#### **Problem Area**

Many students still struggle with time management in the online CIS 101 course despite detailed schedules and frequent messages regarding progress or lack of it.

#### Goal

As with the Business Administration program, more effective organization (e.g., detailed calendars and chapter summaries) did, in fact, create more time for writing assignments and critical discussions on current business topics.

### **Action Plan**

In 2011-12, there will be increased focus on research methods and techniques borrowed from colleagues at the New Mexico Statewide Articulation meetings.

### Results

The previous action plan called for increased use of assignments requiring outside research.

The CIS 101 final exam was again an integration exercise. Although the number of students who tested was considerably fewer, the students who attempted the final easily met the passing standard, in contrast to the previous cycle during which at least two students barely surpassed the standard.

The final presentations in BUS 221 were again markedly better than the initial presentations. Students also showed consistent improvement from one speech to the next. Each student was again required to actively participate in peer review and students were graded on improvement. This method again proved effective. Also, the research that each student did on a company of their choice was impressive and enlightening in many cases. Students, thus, demonstrated the ability to discern between meaningful and trivial information as it related to researching companies during the interview process.

## PDSA CYCLE GOALS (based on 2011-2012 data)

#### **ANALYSIS**

### **Problem Area**

Many students enter the program lacking skills that are often taken for granted. Some students, for example, are not punctual. Others try to covertly send text messages in class although the use of cell phones in the classroom is prohibited.

### Goal

To provide tangible steps for improving student professionalism through syllabi and other documentation. Evaluation will focus on punctuality, respect, appropriateness of discussion contributions, and ability to communicate effectively with others. Although these skills have been assessed previously, there will be more specific instruction of desirable and undesirable workplace behaviors.

#### **Action Plan**

In 2012-2013, there will be stricter and more specific plans regarding student professionalism. One colleague at the New Mexico Statewide Articulation meetings indicated that she drops any student using a cell phone in class a letter grade when final grades are calculated. Although this is a severe punishment, she states this policy clearly in her syllabi and tests students over their comprehension of the policy. She reports that cell phone use has decreased from numerous instances per semester to only one or two. Forfeiture of attendance points for the day on which texting occurred has not proven satisfactorily effective, so a similar policy to the loss of a letter grade will be considered.

### **Results**

To be presented and analyzed in 2012-2013 report.

### STUDENT LEARNING ASSESSMENT PROGRAM REPORT EARLY CHILDHOOD EDUCATION 2011-2012

What early childhood professionals know and do can 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**

Upon completion of the Early Childhood Education Associate Degree Program:

- 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.
- 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 Education Associate Degree Program and in addition to the above mentioned program objectives:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical 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 Education assessment plan is in its third year and is addressed via the plan → do → study → adjust cycle that begins every fall semester and follows one Early Childhood cohort from first semester through graduation.

### **Program Objectives Assessment Plan**

All program objectives 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.	<ul> <li>CATs</li> <li>Pre/Post-Test</li> <li>Course Projects</li> <li>Written Tests over Course Content</li> </ul>	•ECE 103 •ECE 104 •ECE 106 •ECE 107 •ECE 109 •ECE 111 •ECE 112 •ECE 113 •ECE 114 •ECE 115 •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.	<ul> <li>Written Tests over Course Content</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Course Projects</li> </ul>	•ECE 103 •ECE 104 •ECE 106 •ECE 107 •ECE 109 •ECE 111 •ECE 112 •ECE 113 •ECE 114 •ECE 115 •ECE 265

The student will demonstrate effective	Written Tests Over     Course Content	•ECE 103 •ECE 104
written and oral	Course Content	•ECE 106
communication skills	<ul> <li>Oral and Written</li> </ul>	•ECE 107
when working with	Projects	•ECE 109
children, families, early		•ECE 111
care, education, and	●GEA	●ECE 112
family support professionals.	CAAD	●ECE 113
professionals.	•CAAP	◆ECE 114
		◆ECE 115
		●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 2009-2010				
Course	Project	# of Students Attempting	# Passing	% Passing
ECE 103	Paper	10	10	100%(Mean=91%)
ECE 104	Paper	15	12	80%(Mean=68%)
ECE 106	Interview	3	3	100%(Mean=93%)
ECE 107	Assessment	17	15	88%(Mean=77%)
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%)

Course Project 2010-2011				
Course	Project	# of Students Attempting	# Passing	% Passing
ECE 104	Paper	15	13	87% (Mean 73%)
ECE 106	Interview	12	9	75% (Mean 69%)
ECE 113	Paper	12	9	75% (Mean 63%)
ECE 265	Paper	15	13	87% (Mean 78%)
		Course Proj 2011-2012		
Course Project # of Students Attempting # Passing % Passing				
	1.0,000	Attempting	" I dooning	70 Fassing
ECE 104	Paper	Attempting 19	14	74% (Mean 66%)
ECE 104 ECE 107	-			•
	Paper	19	14	74% (Mean 66%)
ECE 107	Paper Assessment	19 8	14 7	74% (Mean 66%) 88% (Mean 84%)
ECE 107 ECE 109	Paper Assessment Teaching	19 8 11	14 7 9	74% (Mean 66%) 88% (Mean 84%) 82% (Mean 80%)
ECE 107 ECE 109 ECE 111	Paper Assessment Teaching Teaching	19 8 11 13	14 7 9 12	74% (Mean 66%) 88% (Mean 84%) 82% (Mean 80%) 92% (Mean 91%)

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%)	
ECE 106	3	3	100%(Mean=93%)	
ECE 107	17	15	88%(Mean=77%)	
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%)	

Written Tests 2010-2011			
Course	# of Students Attempting	# Passing	% Passing
ECE 104	15	13	87% (Mean 64%)
ECE 106	12	10	75% (Mean 73%)
ECE 113	12	9	75% (Mean 65%)
ECE 265	15	13	87% (Mean 87%)
		n Tests -2012	
Course	# of Students Attempting	# Passing	% Passing
ECE 104	10		
LOL 104	19	14	68% (Mean 56%)
ECE 107	19 8	14 7	68% (Mean 56%) 88% (Mean 76%)
ECE 107	8	7	88% (Mean 76%)
ECE 107 ECE 109	8 11	7 9	88% (Mean 76%) 82% (Mean 79%)
ECE 107 ECE 109 ECE 111	8 11 13	7 9 12	88% (Mean 76%) 82% (Mean 79%) 92% (Mean 83%)

Measurement Tool: Pre/Post Tests

Program Objectives: 1,2

Goal: 50% Improvement

Pre-Test/Post Test Results 2010-2011				
Course	Pre-Test	Post-Test	Percent	
			Improvement	
ECE 104	40%	61%	53%	
ECE 106	45%	77%	71%	
ECE 113	38%	65%	71%	
ECE 265	51%	67%	31%	
	Pre-Test/F	Post Test Resul	ts	
	2011	-2012		
Course	Pre-Test	Post-Test	Percent	
			Improvement	
ECE 104	40%	61%	53%	
ECE 107	38%	58%	53%	
ECE 109	42%	64%	52%	
ECE 111	48%	85%	77%	
ECE 112	52%	77%	48%	
ECE 114	47%	66%	40%	
ECE 115	55%	82%	49%	

### **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 general education competencies are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which General Education Competencies Are Presented and/or Measured
Communication 1. Writing 2. Oral Presentation 3. Information Technology	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>CATs</li> <li>Class Presentations</li> <li>Writing Across Curriculum Rubric</li> <li>Critical Thinking Rubric</li> <li>Oral Presentation Rubric</li> </ul>	<ul> <li>ECE 103</li> <li>ECE 104</li> <li>ECE 106</li> <li>ECE 107</li> <li>ECE 109</li> <li>ECE 111</li> <li>ECE 112</li> <li>ECE 113</li> <li>ECE 114</li> <li>ECE 115</li> <li>ECE 265</li> <li>ENG 102</li> <li>ENG 104</li> <li>COM 102</li> </ul>
<ul> <li>Mathematical and Scientific Reasoning</li> <li>4. Demonstrate mathematical principles.</li> <li>5. Demonstrate scientific reasoning.</li> <li>6. Apply scientific methods to the inquiry process.</li> </ul>	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Laboratory Exercise</li> <li>Laboratory Report</li> </ul>	<ul> <li>MATH 107</li> <li>MATH 110</li> <li>MATH 261</li> <li>Required Science Classes</li> </ul>
Critical Thinking  7. Read and analyze complex ideas.  8. Locate, evaluate and apply research information.  9. Evaluate and present well-reasoned arguments.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Laboratory Exercise</li> </ul>	<ul> <li>ECE 103</li> <li>ECE 104</li> <li>ECE 106</li> <li>ECE 107</li> <li>ECE 109</li> <li>ECE 111</li> <li>ECE 112</li> <li>ECE 113</li> <li>ECE 114</li> <li>ECE 115</li> <li>ECE 265</li> <li>Required Science Classes</li> </ul>

### **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
2011-2012			
• 1	2	2	100% (mean=2.7)
• 2	2	2	100% (mean=2.6)
• 3	2	2	100% (mean=3.5)
2009-2010			
• 1	1	1	100% (mean=3.0)
• 2	1	1	100% (mean=3.0)
• 3	1	1	100% (mean=3.75)

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
2011-2012			
• 4	2	2	100% (mean=3.3)
• 5	2	1	50% (mean=2.1)
• 6	2	2	100% (mean=3.5)
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
2011-2012			
• 7	2	2	100% (mean=3.6)
• 8	N/A	N/A	N/A
• 9	2	2	100% (mean=3.5)
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%)		

Writing Across the Curriculum **Measurement Tool:** 

College Rubric

**General Education Objective(s):** 

**Goal Results:** 90% "Excellent (4)", "Proficient

(3)", or "Adequate (2)"

ENG 102(No ENG 102) Legend:

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)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
1.4.1 1.4.2	16(1)	15(13)	2(13)	(1)
2010-2011				
• 1.1.1	6	20 (5)	3 (3)	
• 1.1.2	6	20 (5)	3 (3)	
• 1.1.3	6	20 (5)	3 (3)	
• 1.2.1	7	16 (3)	6 (4)	
• 1.2.2	7	16 (3)	6 (4)	
• 1.2.3	7	16 (3)	6 (4)	
• 1.3.1	5	3 (1)	9 (4)	2 (3)
• 1.3.2	5	3 (1)	9 (4)	2 (3)
• 1.4.1	5	21 (3)	3 (5)	
• 1.4.2	5	21 (3)	3 (5)	
Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1	26 (2)	24 (4)	4 (3)	1
• 1.1.2	26 (2)	24 (4)	4 (3)	1
• 1.1.3	26 (2)	24 (4)	4 (2)	1
	20 (2)	24 (4)	4 (3)	I
• 1.2.1	28 (1)	24 (4)	3 (2)	1
<ul><li>1.2.1</li><li>1.2.2</li></ul>		` ′		
	28 (1)	24 (5)	3 (2)	1
• 1.2.2	28 (1) 28 (1)	24 (5) 24 (5)	3 (2) 3 (2)	1
<ul><li>1.2.2</li><li>1.2.3</li></ul>	28 (1) 28 (1) 28 (1)	24 (5) 24 (5) 24 (5)	3 (2) 3 (2) 3 (2)	1 1 1
<ul><li>1.2.2</li><li>1.2.3</li><li>1.3.1</li></ul>	28 (1) 28 (1) 28 (1) 24 (3)	24 (5) 24 (5) 24 (5) 19 (2)	3 (2) 3 (2) 3 (2) 9 (2)	1 1 1 3 (2)

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: General Education Objective(s): Goal Results:** 

Oral Presentation College Rubric 90% "Excellent(4)"/"Proficient(3)"/ "Adequate(2)" COMM 102(No COMM 102)

Legend:

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 2.1.1	2	7		
• 2.1.2	2	7		
• 2.1.3	2	7		
• 2.2.1	1	7	1	
• 2.2.2	1	7	1	
• 2.2.3	1	7	1	
• 2.3.1	5	3	1	
• 2.3.2	5	3	1	
• 2.3.3	5	3	1	
• 2.4.1	7	2		
• 2.4.2	7	2		
• 2.4.3	7	2		
• 2.5.1	1		8	
• 2.5.2	1		8	
• 2.5.3	1		8	
Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
<b>Year</b> 2011-2012	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
				_
2011-2012	(4)	(3)	(2)	_
2011-2012 • 2.1.1	1	21	2	_
2011-2012 • 2.1.1 • 2.1.2	1 1	21 21	2 2	_
2011-2012 • 2.1.1 • 2.1.2 • 2.1.3	1 1 1	21 21 21	2 2 2	_
2011-2012 • 2.1.1 • 2.1.2 • 2.1.3 • 2.2.1	1 1 1 9	21 21 21 21 14	2 2 2 2	_
2011-2012	1 1 1 9 9	21 21 21 21 14 14	2 2 2 2 1 1	_
2011-2012	1 1 1 9 9	21 21 21 21 14 14 14	2 2 2 1 1 1	_
2011-2012	1 1 1 9 9 9	21 21 21 21 14 14 14	2 2 2 1 1 1 6	_
2011-2012	1 1 1 9 9 9 9 4 4	21 21 21 14 14 14 14 14	2 2 2 1 1 1 6 6	_
2011-2012	1 1 1 9 9 9 4 4 4	21 21 21 14 14 14 14 14 14	2 2 2 1 1 1 6 6	_
2011-2012	1 1 1 9 9 9 4 4 4 7	21 21 21 14 14 14 14 14 14 17	2 2 2 1 1 1 6 6	_
2011-2012  • 2.1.1  • 2.1.2  • 2.1.3  • 2.2.1  • 2.2.2  • 2.2.3  • 2.3.1  • 2.3.2  • 2.3.3  • 2.4.1  • 2.4.2  • 2.4.3	1 1 1 9 9 9 4 4 4 7 7	21 21 21 14 14 14 14 14 14 17	2 2 2 1 1 1 6 6	_
2011-2012	1 1 1 9 9 9 9 4 4 4 7 7	21 21 21 14 14 14 14 14 17 17	2 2 2 1 1 1 6 6 6	(1)

Provides a well-organized speech with appropriate introduction and conclusion 2.1.1 Very well-organized

- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative

### to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience 2.4.3 Tone is respectful and civil

- Provides appropriate handouts and/or visual aids
  2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

## PDSA CYCLE RESULTS (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

I did have the students research an early childhood topic and present a written report. But, due to time constraints, I only did the oral presentation in one class. I also didn't have individual conferences with each student due to time restraints also.

# PDSA CYCLE RESULTS (2010-2011)

### **ANALYSIS**

### **Problem Area**

Students need more work on communication, both in writing and oral presentations. GEA and CAAP scores show that students need more help in these communication areas. After analyzing the results of my classes this year, I have also determined that my students need more direction in studying for tests and getting work turned in on time. This reflects not only on their success in college, but also reflects on their employment skills.

### Goal

I want to make sure that my Early Childhood Education students exit my program with skills that will not only enable them to be employed now, but will also prepare them to be successful in their pursuit of higher education. I want them to be able to continue with their bachelor's program and also be successful in taking state standardized exams.

I will continue with my goal that every program student will research an early childhood topic and will present both an oral and written report using criteria outlined in our GEA Rubrics. I will also add in the element of Critical Thinking using the Critical Thinking Rubric also.

In order to make this a learning experience, I will plan to give feedback on these presentations.

### Action

Present the Rubrics to each student. Discuss how they will be evaluated. Give the assignment to each student. Set up a conference after completion with each student to discuss areas in need of improvement. I will also give more clear expectations of when assignments are due, and go over consequences of not meeting those deadlines.

### Results

The oral and written rubrics were given to the students in the classes where they were evaluated. The scores on the rubrics improved. I still didn't have a chance to talk to the students about their scores because of the end of the semester. I set this as a new goal for next year. I worked on each syllabus and tried to clarify the grading criteria, so students would know exactly how grades would be calculated. I still need to stress the importance of reading and understanding this information.

### PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

### **Problem Area**

Students continue to need more work on communication, both in writing and oral presentations. This is indicated by GEA and CAAP scores. I also realized that students are not reading and interpreting their syllabus that explains what work is due, when it is due, and how their grades are calculated. I need to work on clarification of this for the next cycle of classes. I also realized that because of the number of classes that are required in Early Childhood and the time frame to fit them all in, some of the first semester students had to take classes they didn't have the background for.

#### Goal

Many Early Childhood students come into the program already employed in the field. I need to continue to work with them to have them further advance their education and be ready to advance to the next level of education. I would like to see many of the students continue to work on their bachelor's degree. Work is being done to collaborate with other colleges to help students fulfill this need.

I will continue with my goal that every program student will research topics in early childhood and present information both orally and written. Our GEA rubrics outline the criteria for these. I would like to add in the element of critical thinking using the Critical Thinking Rubric also. In order to make this a learning experience, I will plan to give feedback on these presentations. I need to set the due date earlier in the semester, so there is time to give feedback.

### **Action**

Devote more time to the syllabus in the beginning of the semester. Let students know how attendance and participation calculate into their final grade. Go over point system that I use for each class and make sure students understand what is required of them. Present the grading rubrics to each student and let them know how they are going to be evaluated. I did that this year, and oral presentation scores improved. Make time to discuss results with each student, but having due date earlier in the semester. Continue to have students write and present.

### Results

To be presented and analyzed in 2012-2013 report.

### STUDENT LEARNING ASSESSMENT PROGRAM REPORT FARRIER SCIENCE 2011-2012

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**

Upon completion of an Associate's Degree in Farrier Science students will:

- 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.
- 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:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical and Scientific Reasoning).
- 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 Professional Farriers Association (A.F.A.) 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 third year and is addressed via a plan→do→study→adjust cycle that begins every fall semester and follows one Farrier Science cohort from first semester through graduation.

### **Program Objectives Assessment Plan**

All program objectives 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.	<ul> <li>A.F.A. Curriculum Written Tests</li> <li>A.F.A. Curriculum Performance Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> </ul>	<ul> <li>ANSC 151</li> <li>FAS 111</li> <li>FAS 121</li> <li>FAS 112</li> <li>FAS 223</li> <li>FAS 224</li> </ul>
Perform and defend keg shoe modifications according to A.F.A. standards or veterinary prescription.	<ul> <li>A.F.A. Curriculum Written Tests</li> <li>A.F.A. Curriculum Performance Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>LAB Practicals</li> </ul>	<ul> <li>FAS 121</li> <li>FAS 131</li> <li>FAS 122</li> <li>FAS 132</li> <li>FAS 223</li> <li>FAS 233</li> <li>FAS 224</li> </ul>
Identify equine gaits and gait faults according to A.F.A. standards or veterinary prescription.	<ul> <li>Lab Practicals</li> <li>A.F.A. Curriculum Written Tests</li> <li>A.F.A. Curriculum Performance Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> </ul>	<ul><li>FAS 111</li><li>FAS 112</li><li>FAS 223</li><li>FAS 224</li></ul>

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

### **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
2011-2012	3	2	67%
2010-2011	2	2	100%
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
2011-2012	3	2	67%
2010-2011	2	2	100%
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
2011-2012	3	2	67%
2010-2011	2	2	100%
2009-2010	5	5	100%

**Measurement Tool:** A.F.A. Certified Farrier Exam

Program Objective(s): 1-4

Goal Results: 70 % 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
2011-2012	3	2	N/A		2	67%
2010-2011	2	2	N/A		2	100%
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 general education competencies are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which General Education Competencies Are Presented and/or Measured
Communication 1. Writing. 2. Oral Presentation. 3. Information technology.	<ul><li>GEA</li><li>College Rubrics</li><li>CAAP</li><li>Writing Rubric</li><li>ENG 299</li></ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>Lab Science Elective</li> <li>Social Sciences/ Humanities Elective</li> <li>FAS 111, 112, 223, 289</li> </ul>
Mathematical and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	<ul> <li>GEA</li> <li>College Rubrics</li> <li>CAAP</li> <li>Critical Thinking Rubric</li> <li>ENG 299</li> </ul>	<ul><li>Lab Science Elective</li><li>FAS 121, 122, 253, 224</li></ul>

Critical Thinking 7. Read and analyze complex ideas. 8. Locate, evaluate and apply research information. 9. Evaluate and present well-reasoned arguments.	<ul> <li>GEA</li> <li>College Rubrics</li> <li>CAAP</li> <li>Critical Thinking Rubric</li> <li>ENG 299</li> </ul>	<ul> <li>ACS 100</li> <li>Lab Science Elective</li> <li>Social Sciences/ Humanities Elective</li> <li>FAS 233, 289</li> </ul>
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### **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

ANSC 151

General Education Objective(s):1

Goal Results: 90% "Excellent"/"Proficient"/ "Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1	1(1)	1(1)	(3)	1
• 1.1.2	1(1)	1(2)	(2)	1
• 1.1.3	1(1)	1(1)	(3)	1
• 1.2.1	1(1)	1(2)	(2)	1
• 1.2.2	1(1)	1(1)	(3)	1
• 1.2.3	1(1)	1(1)	(3)	1
• 1.3.1	NA			
• 1.3.2	NA			
• 1.4.1	1(1)	1(1)	(3)	1
• 1.4.2	2	1(2)	(2)	1
2010-2011				
• 1.1.1	4(1)	3(4)	(2)	
• 1.1.2	2(2)	4(2)	1(3)	
• 1.1.3	1(1)	5(3)	1(3)	
• 1.2.1	2	4(4)	1(3)	
• 1.2.2	4	3(4)	(3)	
• 1.2.3	3	4(5)	2	

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
• 1.3.1	NA			
• 1.3.2	NA			
• 1.4.1	1	4(3)	2(4)	
• 1.4.2	2	4(3)	1(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

Measurement Tool: Oral Presentation College Rubric FAS 112

General Education Objective(s):2

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

"Adequate(2)"

Legend: COMM 102(No COMM 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 2.1.1	(3)	(2)	(4)	
• 2.1.2		(5)	(4)	
• 2.1.3	(2)	(3)	(4)	
• 2.2.1		(5)	(4)	
• 2.2.2	(3)	(2)	(4)	
• 2.2.3	(3)	(4)	(2)	
• 2.3.1	(4)	(3)	(2)	
• 2.3.2	(4)	(5)		
• 2.3.3	NA			
• 2.4.1	(4)	(6)		
• 2.4.2	(4)	(6)		
• 2.4.3	(4)	(4)	(1)	
• 2.5.1	NA			
• 2.5.2	NA			
• 2.5.3	(3)	(2)	(4)	

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 2.1.1	1	5(5)	2(1)	
• 2.1.2		5(4)	3(2)	
• 2.1.3	3	2(4)	3(2)	
• 2.2.1		6(3)	2(3)	
• 2.2.2	1	6(3)	1(3)	
• 2.2.3	2	5(4)	(3)	
• 2.3.1	2	6(2)	(4)	
• 2.3.2	4	4(4)	(2)	
• 2.3.3	NA			
• 2.4.1	1(1)	7(5)		
• 2.4.2	2(1)	6(5)		
• 2.4.3	6(2)	2(3)	(1)	
• 2.5.1	NA			
• 2.5.2	NA			
• 2.5.3	2(1)	6(4)	(1)	

<u>Provides a well-organized speech with appropriate introduction and conclusion</u> 2.1.1 Very well-organized

- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative

#### to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

### Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

Critical Thinking College Rubric **Measurement Tool:** 

**FAS 122** 

General Education Objective(s):6

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

"Adequate(2)"

Legend: Laboratory Science(No Lab Sci)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 6.1.1	1(2)	(2)	(4)	
• 6.1.2	1(2)	(2)	(4)	
• 6.1.3	1(2)	(2)	(4)	
• 6.2.1	1	(4)	(4)	
• 6.2.2	1(3)	(5)		
• 6.2.3	1(3)	(5)	1	
• 6.3.1		1(4)	(4)	
• 6.3.2	1	(6)	(2)	
• 6.3.3	1(2)	(3)	(3)	
Voar	Excellent	Proficient	Adequate	Inadequate
Year			Adequate (2)	Inadequate (1)
<b>Year</b> 2010-2011	Excellent	Proficient		
	Excellent	Proficient		
2010-2011	Excellent (4)	Proficient (3)	(2)	
2010-2011 • 6.1.1	Excellent (4)	Proficient (3)	1(4)	
2010-2011 • 6.1.1 • 6.1.2	(4)	4(4) 4(6)	1(4) 1(2)	
2010-2011 • 6.1.1 • 6.1.2 • 6.1.3	1 1 1	4(4) 4(6) 4(6)	1(4) 1(2) 1(2)	
2010-2011 • 6.1.1 • 6.1.2 • 6.1.3 • 6.2.1	1 1 1 2	4(4) 4(6) 4(6) 2(7)	1(4) 1(2) 1(2) 2(1)	
2010-2011 • 6.1.1 • 6.1.2 • 6.1.3 • 6.2.1 • 6.2.2	1 1 1 2 2(3)	4(4) 4(6) 4(6) 2(7) 2(5)	1(4) 1(2) 1(2) 2(1) 2	
2010-2011  • 6.1.1  • 6.1.2  • 6.1.3  • 6.2.1  • 6.2.2  • 6.2.3	1 1 1 2 2(3)	4(4) 4(6) 4(6) 2(7) 2(5) 3(7)	1(4) 1(2) 1(2) 2(1) 2	

### Identify and gather

- 6.1.1 Asks insightful questions
- 6.1.2 Critiques content
- 6.1.3 Examines inconsistencies

#### Analyze and evaluate

- 6.2.1 Analyzes and evaluates thoroughly
- 6.2.2 Uses reasonable judgment
- 6.2.3 Critically discriminates between good and bad information Synthesize and formulate conclusion

- 6.3.1 Discusses issues thoroughly and argues succinctly
- 6.3.2 Assimilates information
- 6.3.3 Justifies conclusion

**ACT Collegiate Assessment of Measurement Tool:** 

Academic Proficiency (CAAP)

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

Legend: n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2011-2012	2(4.5%)	2(35%)	2(27%)	2(11%)	2(7.5%)
2010-2011	1(48%)	N/A	1(33%)	1(56%)	1(13%)
2009-2010	1(39%)	N/A	2(33%)	1(25%)	1(21%)

**GEA College Rubric Measurement Tool:** 

General Education Objective(s): 1, 2, 3

100% "excellent (4)", "proficient (3)" or "adequate (2)" **Goal Results:** 

Reporting Period	# of Students Attempting	# Passing	% Passing
2011-2012			
• 1	1	1	100%(mean=2.2)
• 2	1	1	100%(mean=2.0)
• 3	1	0	0%(mean=2.3)*
2010-2011			
• 1	1	1	100%(mean=2.40)
• 2	1	0	0%(mean=1.75)
• 3	1	1	100%(mean=5.00)*
2009-2010			
• 1	4	3	75%(mean=2.18)
• 2	4	4	100% (mean=2.45)
• 3	4	4	100%(mean=2.87)*

<sup>1</sup> Present ideas in writing.

<sup>2</sup> Present ideas orally according to standard usage.3 Demonstrate application of information technology.

**GEA College Rubric Measurement Tool:** 

4, 5, 6 General Education Objective(s):

100% "excellent (5)", "proficient (4)", or "acceptable (3)" **Goal Results:** 

Reporting Period	# of Students Attempting	# Passing	% Passing
2011-2012			
• 4	1	0	0%(mean=1.25)
• 5	1	1	100%(mean=3.0)
• 6	1	1	100%(mean=3.75)
2010-2011			
• 4	1	0	0%(mean=1.50)
• 5	1	0	0%(mean=2.50)
• 6	1	0	0%(mean=2.25)
2009-2010			
• 4	4	0	0% (mean = 1.5)
• 5	5	2	40% (mean=2.8)
• 6	5	3	60% (mean=3.25)

<sup>4</sup> Demonstrate mathematical principles.

**GEA College Rubric Measurement Tool:** 

**General Education Objective(s):** 7, 8, 9

100% "excellent (5)", "proficient **Goal Results:** (4)", or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2011-2012			
• 7	1	1	100%(mean=3.0)
• 8	N/A	N/A	N/A
• 9	1	1	100%(mean=3.0)
2009-2010			
• 7	5	3	100%(mean=2.7)
• 8	5	3	60%(mean=2.85)
• 9	5	2	40%(mean=2.75)

<sup>7.</sup> Read and analyze complex ideas.

<sup>5</sup> Demonstrate scientific reasoning.
6 Apply scientific methods to the inquiry process.

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

**Measurement Tool: General Education Objective(s): Goal Results:** 

**GEA College Rubric** Critical Thinking-Science Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=2.00)
• 8	1	1	100%(mean=2.00)
• 9	1	1	100%(mean=2.00)

- 7. Identify and gather information.
- 8. Analyze and evaluate information.
  9. Synthesize and formulate conclusions.

**Measurement Tool:** General Education Objective(s): **Goal Results:** 

**GEA College Rubric** Critical Thinking-English Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=2.00)
• 8	1	1	100%(mean=3.00)
• 9	1	1	100%(mean=2.00)

- 7. Identify and gather information.
- 8. Analyze and evaluate information.
- 9. Synthesize and formulate conclusions.

# PDSA CYCLE RESULTS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

The A.F.A. Certified Farrier exam has been the most widely accepted industry standard for the last 25 years. In the last five years there has been a noticeable shift towards other standards. The reason for this is that the A.F.A. has undergone lots of inner turmoil and has lost most of its membership as farriers in general have moved towards alternatives to the A.F.A. Just in the last year they changed their grading procedure to if a student failed one portion of the test s/he automatically fails all sections. That means I do not get any feedback on the other areas because they are not even graded. I have come to the conclusion that the A.F.A. exams no longer serve the purpose of helping me evaluate student competency and I need to explore other alternatives. Another problem with the A.F.A. and is the main reason industry professionals are moving away from that organization is that they have failed to make changes as the horseshoeing industry has changed.

#### Goal

My goal for next year is to change to an alternative industry standard. I am working with Chris Gregory of Heartland Shoeing School in adopting a new Industry standard. If that does not prove to be functional I will look into the Brotherhood of Working Farriers certification exams.

#### Action

Implement new industry testing standards.

#### Results

The organization that I made contact with in regard to a new form of assessment was the Professional Farriers of America. They are under the leadership of Brian Quinsey, former CEO of the A.F.A. One of their stated goals was the education of future farriers. I made contact with Brian several times during the year to check up on how they were coming with their testing format for setting a standard of competency for farriers. Brian felt confident they would have the new tests in time for my students to take the tests. Unfortunately, they were unable to work out all of the bugs in time for my students to take the test. Fortunately for me, I had several students who wanted to go to Oklahoma and take the A.F.A. exam. They felt it was important for their careers to have some type of accreditation beyond an associate's degree from Mesalands to prove competency to future clients. Both students were able to make it all the way through the exam, so I

was able to get some feedback on program strengths and weaknesses. I will continue to look into alternative means of program assessment. I have several options beyond The Professional Farriers of America. I am an approved tester with the A.F.A. and I might be able to get them to make some changes with their testing format that would allow educators to better utilize the A.F.A. examinations for program evaluation. I have also been in contact with Chris Gregory of Heartland Horseshoeing School. In June 2012, he will be giving his students the FITS exam. He is also searching for some type of outside program assessment beyond the A.F.A. I will contact him after his students have taken the exam. If he is satisfied that the FITS is a better exam than the A.F.A., I will see if we can get a FITS exam here. I believe it is critical for the well-being of my program to have some type of program assessment and will continue to research the different venues for 2012-13. If I am unable to find a better alternative than the A.F.A. exam I will continue to use it.

# PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

#### **Problem Area**

In last years (2010-11) report, I stated that I was having difficult assessing program strengths and weaknesses from the A.F.A. exam and planned on changing to tests provided by The Professional Farriers of America. Unfortunately they were unable to work out all the bugs in time for the current year, so my students took the A.F.A. exam in Oklahoma. Feedback from the two students who took the A.F.A. exam in Oklahoma was good on the written. They reported the test as easy and that classroom work was adequate. They reported struggling on the shoe board however and felt inadequately prepared on that portion of the test. They were able to pass the exam, but failed in areas such as boxing and shaping of the shoe. I only had two of three students who graduated take the test, so I had a small test sample. In my results I put the student who did not take the exam as failing. The students who did take the exam were exceptional (above average) students.

#### Goal

My goal for 2012-13 will be to stress nuances of the shoe board portion of the test. In years past if students struggled in this area it was because they missed too much class or lack of effort on their part. This year I did not emphasize the shoe board as much as I have in the past, because it was a program strength in former years. As a result of less time spent in class and lab this year my students struggled. They understood the basic principles of the test and could make the modifications, but were lacking in some of the small things that testers look at. My failure was in believing that I could cut back on time spent on the shoe board portion and invest it on the written portion. I also started too late in the year in assigning their shoe board and by the time I realized there were deficiencies it was time for the test. As a consequence I was unable to make the necessary changes before they had to turn in their shoe boards for the exam.

#### **Action**

I need to go back to teaching and using the same time lines as in previous years on the shoe board. I took some shortcuts on the shoe board because it wasn't the major area of concern and spent more time on the written portion. They did better on the written, but struggled on the shoe board. I will stay with what I am doing preparing them for the written and go back to previous methods of preparing students on the shoe board.

#### **Results**

To be presented and analyzed in 2012-2013 report.

## STUDENT LEARNING ASSESSMENT PROGRAM REPORT FINE ARTS 2011-2012

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**

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:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical 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 third 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 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
The student will     demonstrate the ability     to produce fine art by     demonstration of     technical skills in 2D     and/or 3D medium.	<ul> <li>Capstone Projects</li> <li>Capstone Art Show</li> <li>Contracts</li> </ul>	• ART 105 • ART 112 • ART 113 • ART 114 • ART 160 • ART 203 • ART 204 • ART 205 • ART 215 • ART 222 • ART 225 • ART 230 • ART 293
The student will demonstrate the ability to defend projects using fine art criteria.	<ul> <li>Capstone Projects</li> <li>Pre/Post-Test</li> <li>Critiques</li> </ul>	• ART 101 • ART 103 • ART 104 • ART 105 • ART 112 • ART 113 • ART 114 • ART 160 • ART 203 • ART 204 • ART 205 • ART 215 • ART 222 • ART 225 • ART 230 • ART 293

3. The student will demonstrate the ability to produce an idiosyncratic body of work for self-promotion.	<ul><li>Capstone Projects</li><li>Capstone Art Show</li><li>Contracts</li></ul>	• ART 103 • ART 104 • ART 105 • ART 112 • ART 113 • ART 114 • ART 160 • ART 203 • ART 204 • ART 205 • ART 215 • ART 222 • ART 225
		• ART 230
		• ART 293

# **Program Objective Results**

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

**Academic Cycle 2011-12** 

Measurement Tool: Capstone Project for listed courses

Program Objective(s): 1, 2, 3

Goal Results: 60% or higher Faculty evaluated critique

Course	# of Students Attempting	# Succeeding
ART 101	20	14
ART 103	1	1
ART 104	4	3
ART 112	4	4
ART 113	3	2
ART 205	5	4
ART 215	7	7
ART 222	3	3
ART 225	9	8

**Academic Cycle 2011-12** 

Measurement Tool: Capstone Art Show for listed courses

Program Objective(s): 1, 3

Goal Results: 60% or higher Faculty evaluated critique

Course	# of Students Attempting	# Succeeding
ART 101	22	20
ART 103	1	1
ART 104	4	3
ART 112	4	4
ART 205	5	4
ART 215	7	7
ART 222	3	3
ART 225	9	7
ART 230	2	2
ART 293	1	1

**Academic Cycle 2011-12** 

Measurement Tool: Critiques for listed courses

Program Objective(s): 2

Goal Results: 60% or higher Faculty/student evaluated

critique

Course	# of Students Attempting	# Succeeding
ART 103	1	1
ART 104	4	3
ART 112	4	4
ART 113	3	2
ART 114	5	5
ART 205	5	4
ART 215	7	7
ART 222	3	3
ART 225	9	9
ART 230	2	2

Academic Cycle 2011-12

Measurement Tool 4: Pre-Test/Post Test Results for listed

courses

Program Objective(s): 2

Goal Results: 50% or higher passing score

Course	# of Students	Pre-test Average	Post-test Average	# Succeeding
ART 101	14	.36	8.1	14
ART 103	1	0	10	1

**Academic Cycle 2011-12** 

Measurement Tool 5: Contracts for listed courses

Program Objective(s): 1, 3

Goal Results: 60% or higher per student completion rate

Course	# of Students Attempting	# Fulfilling Contracts
ART 112	4	3
ART 113	3	2
ART 114	5	5
ART 205	5	4
ART 215	6	6
ART 222	3	3
ART 225	9	8
ART 230	4	4

### **Evaluation for Senior Capstone Show**

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. Grade is determined by rubric of 5-1 with 5 being excellent and 1 being unacceptable.

	# of students	Media Used	Defense	Creativity	Craftsmanship	Deadlines
2010-2011	1	2D and 3D	4	4.5	4.5	4
2011-2012	1	2D and 3D	4	5	3.5	3

# **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 general education competencies are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication 1. Writing. 2. Oral Presentation. 3. Information Technology.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Writing Across the Curriculum</li> </ul>	<ul> <li>ACS 100</li> <li>CIS 101</li> <li>COM 102</li> <li>ENG 102</li> <li>Lab Science Elective</li> <li>Social/Behavioral Science</li> <li>Humanities/Fines Arts Elective</li> <li>ART 101</li> </ul>
Mathematical and Scientific Reasoning  4. Demonstrate mathematical principles.  5. Demonstrate scientific reasoning.  6. Apply scientific methods to the inquiry process.	<ul><li>GEA College Rubric</li><li>CAAP</li></ul>	<ul><li>Lab Science Elective</li><li>MATH 110</li></ul>
Critical Thinking  7. Read and analyze ideas.  8. Locate, evaluate and apply research information.  9. Evaluate and present well -reasoned arguments.	<ul><li>GEA College Rubric</li><li>CAAP</li><li>Capstone Project</li></ul>	<ul> <li>ACS 100</li> <li>Lab Science Elective</li> <li>Social Sciences/Humanities Elective</li> <li>ART 101</li> <li>ART 103</li> <li>ART 104</li> </ul>

# **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 academic course of study.

Measurement Tool:GEA College RubricGeneral 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)"

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

4 Demonstrate mathematical principles.

5 Demonstrate scientific reasoning.

6 Apply scientific methods to the inquiry process.

Measurement Tool:GEA College RubricGeneral 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)
	Fyraallant	Desfisions	A -l 1 -	les a el a seconda
Vear	Excellent	Proficient	Adequate	Inadequate
Year	(4)	(3)	Adequate (2)	(1)
2010-2011	(4)	(3)	(2)	(1)
2010-2011 • 1.1.1	<b>(4)</b> 1(1)	<b>(3)</b> 6	2(2)	<b>(1)</b>
2010-2011 • 1.1.1 • 1.1.2	1(1) 1(1)	( <b>3</b> ) 6 6	2(2) 2(2)	1 1
2010-2011 • 1.1.1	1(1) 1(1) 1(1) 1(1)	6 6 7	2(2) 2(2) 2(2) 2(2)	1 1 0
2010-2011 • 1.1.1 • 1.1.2 • 1.1.3 • 1.2.1	1(1) 1(1) 1(1) 1(1)	6 6 7 6(0)	2(2) 2(2) 2(2) 2(2) 2(2)	1 1 0 1
2010-2011 • 1.1.1 • 1.1.2 • 1.1.3 • 1.2.1 • 1.2.2	1(1) 1(1) 1(1) 1(1) 1(1)	6 6 7 6(0) 7(0)	2(2) 2(2) 2(2) 2(2) 2(2) 1(2)	1 1 0 1 1
2010-2011 • 1.1.1 • 1.1.2 • 1.1.3 • 1.2.1	1(1) 1(1) 1(1) 1(1)	6 6 7 6(0)	2(2) 2(2) 2(2) 2(2) 2(2)	1 1 0 1
2010-2011  • 1.1.1  • 1.1.2  • 1.1.3  • 1.2.1  • 1.2.2  • 1.2.3	1(1) 1(1) 1(1) 1(1) 1(1) 1(1)	6 6 7 6(0) 7(0) 7(0)	2(2) 2(2) 2(2) 2(2) 2(2) 1(2) 2(2)	1 1 0 1 1 0
2010-2011	1(1) 1(1) 1(1) 1(1) 1(1) 1(1) 0(0)	6 6 7 6(0) 7(0) 7(0)	2(2) 2(2) 2(2) 2(2) 2(2) 1(2) 2(2) 3(1)	1 1 0 1 1 0 1 0
2010-2011	(4)  1(1) 1(1) 1(1) 1(1) 1(1) 1(1) 0(0) 0(0	6 6 7 6(0) 7(0) 7(0) 6 7	2(2) 2(2) 2(2) 2(2) 2(2) 1(2) 2(2) 3(1) 2(1)	1 1 0 1 1 0 1 1 0
2010-2011 • 1.1.1 • 1.1.2 • 1.1.3 • 1.2.1 • 1.2.2 • 1.2.3 • 1.3.1	1(1) 1(1) 1(1) 1(1) 1(1) 1(1) 0(0)	6 6 7 6(0) 7(0) 7(0)	2(2) 2(2) 2(2) 2(2) 2(2) 1(2) 2(2) 3(1)	1 1 0 1 1 0 1 0

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1	7(3)	10(5)	6(1)	2
• 1.1.2	7(2)	8(5)	8(1)	2
• 1.1.3	7(2)	9(4)	8(2)	1
• 1.2.1	7(4)	9(3)	8(1)	1
• 1.2.2	7(4)	11(3)	5(1)	2
• 1.2.3	8(4)	4(2)	7(2)	1
	Excellent	Proficient	Adequate	Inadequate
Year	(4)	(3)	(2)	(1)
• 1.3.1		(2)	11(2)	2(2)
• 1.3.2	6(6)	5	1	1
• 1.4.1	6(2)	10(4)	8(2)	2()
• 1.4.2	5(3)	9(3)	9(1)	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

<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 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 RESULTS (2010-2011)

#### **ANALYSIS**

2009-2010

#### **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

Four critiques were held. One of the four critiques had a written component which could be used to promote students' art work. Students do not like writing about their art. Attendance was not made 10% of the final grade as attending class should be expected. If attendance was poor, up to one letter grade (10%) was deducted from final grade instead. When students had poor attendance, it did not seem to matter to the students about overall grades or performance.

# PDSA CYCLE RESULTS (2011-2012)

#### **ANALYSIS**

#### 2010-2011

#### **Problem Area**

Students have trouble completing deadlines for assignments.

#### Goal

Encourage students to achieve deadlines for finishing work.

#### **Action Plan**

Break assignments into smaller pieces so students feel like they are accomplishing more and do not become overwhelmed.

#### Results

Whether or not assignments were smaller, students were not interested especially if attendance was poor. Students who were present normally, seems to retain more in smaller bits. Will try again.

# PDSA CYCLE GOALS (2012-2013)

#### **ANALYSIS**

2011-2012

#### **Problem Area**

Attendance is the basic problem. When students miss classes, they don't hear lectures, miss assignments and as a result, have trouble finishing assignments on time if at all.

#### Goal

Have students attend classes regularly to retain more in class work, lectures and verbally participate in class discussions.

#### **Action Plan**

Will give regular weekly quiz to encourage student attendance.

#### **Results**

To be presented and analyzed in 2012-2013 report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT NATURAL SCIENCES 2011-2012

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**

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:

- 1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical and Scientific Reasoning).
- 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 third 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 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 an in-depth understanding of the concepts and associated geological processes of the Theory of Plate Tectonics.	<ul><li>Laboratory Exercise</li><li>Pre/Post-Test</li><li>Faculty-prepared Examination</li></ul>	• GEOL 151 • GEOL 152
2) The student will identify common minerals and rocks, and explain their genesis and the environments in which they form.	<ul><li>Laboratory Exercise</li><li>Pre/Post-Test</li><li>Faculty-prepared Examination</li></ul>	<ul> <li>GEOL 151</li> <li>GEOL 152</li> <li>GEOL 190</li> <li>GEOL 290</li> <li>GEOL 293</li> </ul>
3) The student will demonstrate an understanding of geological time and the principles of stratigraphy	<ul><li>Laboratory Exercise</li><li>Pre/Post-Test</li><li>Faculty-prepared Examination</li></ul>	<ul><li>GEOL 151</li><li>GEOL 152</li><li>GEOL 210</li></ul>
4) The student will correctly apply appropriate field and laboratory techniques to successfully complete assigned projects.	<ul> <li>Laboratory Exercise</li> <li>Field Exercise</li> <li>Program-specific Rubrics</li> <li>Capstone Project</li> <li>Museum and Laboratory Projects</li> </ul>	<ul> <li>GEOL 118</li> <li>GEOL 120</li> <li>GEOL 122</li> <li>GEOL 190</li> <li>GEOL 290</li> <li>GEOL 293</li> <li>Museum volunteer activities</li> </ul>
5) The student will demonstrate the skills to conduct and present a scientific research project under guidance of the instructor.	<ul><li>Capstone Project</li><li>Scientific Report</li><li>Oral Presentations</li></ul>	<ul><li>GEOL 190</li><li>GEOL 290</li><li>GEOL 289</li></ul>

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

### **Program Objective Results**

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

Measurement Tool: Chapter Test "Plate Tectonics,"

**GEOL 151 Physical Geology** 

Program Objective(s): 1

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

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=87%)
2011-2012	2	2	100% (mean=83%)

Measurement Tool: Laboratory Exercise "Plate Boundaries of an

Unknown Ocean and Continent," GEOL 151 Physical Geology

Program Objective(s): 1

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

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=97%)

**Measurement Tool:** Laboratory Exercise "Plate Tectonics and the

Origin of Magma,"

**GEOL 151 Physical Geology** 

Program Objective(s): 1

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

Reporting Period	# of students attempting	# passing	% passing	
2010-2011	1	0	0% (mean=59%)	
Remark: The overall failure of the student is due to the last-minute-submission of				
an incomplete exercise. The completed parts of the exercise scored 77%.				
2011-2012	1	1	100% (mean=33%)	

Measurement Tool: Laboratory Exercise "Seafloor Spreading,"

GEOL 152 Historical Geology

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%)
2010-2011	1	1	100% (85%)
2011-2012	3	2	66.6% (66.6%)

**Measurement Tool:** 4 Laboratory Exercises (identification and

genesis of minerals, igneous, sedimentary and

metamorphic rocks)

**GEOL 151 Physical Geology** 

Program Objective(s): 2

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

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=97%)
2011-2012	2	2	100% (mean=94%)

**Measurement Tool:** Final Exam Section (relative dating,

unconformities)

**GEOL 151 Physical Geology** 

Program Objective(s): 3

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

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=100%)
2011-2012	2	1	50% (mean=86%)

Measurement Tool: Laboratory Exercise "Geological Time"

**GEOL 151 Physical Geology** 

Program Objective(s): 3

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

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=98%)
2011-2012	2	2	100% (mean=85%)

Measurement Tool: Laboratory Exercise "Relative Dating,"

**GEOL 152 Historical Geology** 

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%)
2010-2011	1	1	100% (mean=95%)
2011-2012	2	2	100% (mean=100%)

Measurement Tool: Practical Assignment: Construction of a

Storage Plaster Jacket

GEOL 105 Introduction to Museum Science

Program Objective(s): 4, 8

Goal Results: 100% pass rate; Pass/Fail

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%

**Measurement Tool:** Practical Assignment: Stabilization and

Preparation of Eocene Fish Slab

GEOL 105 Introduction to Museum Science

Program Objective(s): 4, 8

Goal Results: 100% pass rate; Pass/Fail according to criteria

defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	2	67%

Remarks: The failing student did not pass because he tried an inappropriate tool for this kind of preparation. Subsequently, he was given a second assignment which he passed.

**Measurement Tool:** Field exercise: Construction of a Field Plaster

Jacket

GEOL 120 Paleontology Field Exploration

Program Objective(s): 4

Goal Results: 100% pass rate; Pass/Fail according to criteria

defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	2	66%
2011-2012	0	0	N/A

**Measurement Tool:** Field Assignment: Retrieval of Fossil in

Sandstone Using Mechanical Tools

GEOL 120 Paleontology Field Exploration

(Summer 2010, 2011)

Museum Volunteer Activity (Fall 2011)

Program Objective(s): 4

Goal Results: 100% pass rate; Pass/Fail according to criteria

defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%
2011-2012	1	1	100%
(Summer)	Į.	Į.	100 /6
2011-2012 (Fall)	1	1	100%

Measurement Tool: Lab Exercise: Preparation of Fossil with Airtool

GEOL 120 Paleontology Field Exploration

Program Objective(s): 4

Goal Results: 100% pass rate; Pass/Fail according to criteria

defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%
2011-2012	1	1	100%

Measurement Tool: Lab Exercise: Reassembling of Fragmentary

Recovered Fossil

GEOL 120 Paleontology Field Exploration

Program Objective(s):

Goal Results: 100% pass rate; Pass/Fail according to criteria

defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%
2011-2012	1	1	100%

Measurement Tool: Field/Lab Assignment: Data Recording and

Storage during Fossil Recovery

GEOL 120 Paleontology Field Exploration

Program Objective(s): 4

Goal Results: 100% pass rate; cut rate is 90% according to

criteria defined in rubric

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100% (mean=97%)
2011-2012	1	1	100% (mean=90%)

**Measurement Tool:** Scientific Report/Practical Application:

"Construction of Identification Key for

Pennsylvanian Fern Leaves"

GEOL 189 Independent Study in Geoscience

Program Objective(s): 5

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

by project-specific criteria

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=100%)

Measurement Tool: Scientific Report: "Morphological Description of

Phytosaur Osteoderms"

GEOL 189 Independent Study in Geoscience

Program Objective(s):

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

criteria deemed acceptable in published

descriptions

Reporting Period	# of students attempting	# passing	% passing
2010-2011	1	1	100% (mean=90%)

**Measurement Tool:** Written Report "Scientific article summary"

GEOL 289 Independent Study in Geosciences

Program Objective(s): 5

Goal Results: 100% pass rate; pass/fail score according to

rubric score

Reporting Period	# of students attempting	# passing	% passing
2011-2012 (Fall)	3	3	100% (mean=100%)

**Measurement Tool:** Exercise "Scientific illustration"

GEOL 289 Independent Study in Geosciences

Program Objective(s): 5

**Goal Results:** 100% pass rate; pass/fail score measured by

criteria deemed acceptable in published

illustrations

Reporting Period	# of students attempting	# passing	% passing
2011-2012 (Spring)	3	2	66% (mean=66%)

**Measurement Tool:** Lab Exercise: Anatomy of Corals

GEOL 210 History of Life

Program Objective(s): 6

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

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	2	66% (mean=76%)

Measurement Tool: Oral Recapitulation (Evolutionary History and

Functional Interpretation of Anatomical Characters in Archosaurs [phytosaurs,

aetosaurs, basal dinosaurs])

GEOL 120 Paleontology Field Exploration

Program Objective(s): 6

Goal Results: 100% pass rate; Pass/Fail

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%
2011-2012	1	1	100%

Measurement Tool: Lab Exercise "Homology of Vertebrate

Forelimb"

BIOL 113 Introduction to Biology

Program Objective(s):

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

Reporting Period	# of students attempting	# passing	% passing
2011-2012	1	1	100% (mean=75%)

**Measurement Tool:** 2 chapter tests "Evolution of Populations;

**Evolution of Diversity**"

BIOL 113 Introduction to Biology

Program Objective(s): 7

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

Reporting Period	# of students attempting	# passing	% passing
2011-2012	1	1	100% (mean=80%)

**Measurement Tool:** Final Exam Section (Principles of Evolution)

GEOL 210 History of Life

Program Objective(s): 7

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

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100% (mean=88%)

Measurement Tool: Practical/Written Assignment: Condition Report

"Identification of Eocene fossil material for

display"

GEOL 105 Introduction to Museum Science

Program Objective(s): 8

Goal Results: 100% pass rate; Pass/Fail

Reporting Period	# of students attempting	# passing	% passing
2010-2011	3	3	100%

Measurement Tool: Practical/Written Assignment: Curation of

natural history specimens (process of

inventorying)

GEOL 105 Introduction to Museum Science

(Fall 2010)

GEOL 270 Invertebrate Paleontology (Spring

2011)

Program Objective(s): 8

Goal Results: 100% pass rate; Pass/Fail

Reporting Period	# of students attempting	# passing	% passing
2010-2011 (Fall)	3	3	100%
2010-2011 (Spring)	1	1	100%

Measurement Tool: Laboratory Exercise "Coal Property Evaluation"

GEOL 230 Environmental Geology

Program Objective(s): 9

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

Reporting Period	# of students attempting	# passing	% passing
2011-2012	1	1	100% (score 98%)

Measurement Tool: Laboratory Exercise "Volcanic Hazard

Assessment"

GEOL 151 Physical Geology

Program Objective(s): 10

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

Reporting Period	# of students attempting	# passing	% passing
2011-2012	2	1	50% (score 85%)

Remarks: The failing student scored 0% because of failure to submit exercise.

**Measurement Tool:** 3 Laboratory Exercises "Hazard Evaluation

(earthquakes, volcano, hurricane/tsunami)"

GEOL 230 Environmental Geology

Program Objective(s): 10

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

Reporting Period	# of students attempting	# passing	% passing
2011-2012	1	1	100% (cumulative score 94%)

# **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 &/OR MEASURED
Communication: 1. Present ideas in writing. 2. Present ideas orally according to standard usage. 3. Demonstrate application of information technology.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>CATs</li> <li>Class Presentation</li> </ul>	<ul> <li>ACS 100</li> <li>GEOL 105</li> <li>GEOL 151</li> <li>GEOL 210</li> <li>GEOL 230</li> <li>GEOL 290</li> <li>GEOL 293</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 104</li> <li>Lab Science Elective</li> <li>Soc. Sci./Humanities Elective</li> </ul>
Mathematical and Scientific Reasoning: 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Laboratory Exercise</li> <li>Laboratory Report</li> </ul>	<ul> <li>GEOL 151</li> <li>GEOL 152</li> <li>GEOL 190</li> <li>GEOL 210</li> <li>GEOL 230</li> <li>GEOL 289</li> <li>GEOL 290</li> <li>BIOL 113</li> <li>BIOL 250</li> <li>Lab Science Elective</li> </ul>

GENERAL EDUCATION COMPETENCIES	MEASUREMENT TOOLS	COURSES IN WHICH PROGRAM OBJECTIVES ARE PRESENTED &/OR MEASURED
Critical Thinking: 7. Read and analyze	GEA College Rubric     CAAB	• ACS 100
complex ideas.	<ul><li>CAAP</li><li>Capstone Project</li></ul>	<ul><li>GEOL 151</li><li>GEOL 152</li></ul>
8. Locate, evaluate and	Laboratory Exercise	• GEOL 190
apply research information.		• GEOL 210
Evaluate and present		<ul><li>GEOL 230</li><li>GEOL 289</li></ul>
well-reasoned		• GEOL 290
arguments.		• BIOL 113
		• BIOL 250
		Lab Science Elective
		Soc. Sci./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 80% "excellent (4)" or "proficient **Goal Results** (3)"

Reporting Period	# of students attempting	# passing	% passing
2010-2011			
• 1	1	1	100%(mean=2.50)
• 2	1	1	100%(mean=3.20)
• 3	1	1	100%(mean=4.00)*
2009-2010			
• 1	1	1	100%(mean=3.0)
• 2	1	1	100%(mean=3.6)
• 3	1	1	100%(mean=4.25)*

<sup>1</sup> Present ideas in writing.

<sup>2</sup> Present ideas orally according to standard usage.3 Demonstrate application of information technology.

Measurement Tool:Oral Presentation College RubricGeneral Education Objective(s):2Goal Results:90% "Excellent(4)"/"Proficient(3)"/<br/>"Adequate(2)"Legend:COMM 102(No COMM 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 2.1.1		2 (1)		
• 2.1.2	2		(1)	
• 2.1.3	1	1 (1)		
• 2.2.1	2	(1)		
• 2.2.2		1 (1)	1	
• 2.2.3	1 (1)	1		
• 2.3.1		2 (1)		
• 2.3.2	1	(1)	1	
• 2.3.3	N/A	N/A	N/A	N/A
• 2.4.1	1 (1)		1	
• 2.4.2	1 (1)	1		
• 2.4.3	2 (1)			
• 2.5.1	N/A	N/A	N/A	N/A
• 2.5.2	2 (1)			
• 2.5.3	N/A	N/A	N/A	N/A

Provides a well-organized speech with appropriate introduction and conclusion

- 2.1.1 Very well-organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative

to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

**Measurement Tool:** Oral Presentation College Rubric

GEOL 289, Spring 2012, "Oral synopsis

of a scientific article"

**General Education Objective(s):** 

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

"Adequate(2)"

Legend: COMM 102(No COMM 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 2.1.1	(2)	(1)		
• 2.1.2	n/a	n/a	n/a	n/a
• 2.1.3	n/a	n/a	n/a	n/a
• 2.2.1	n/a	n/a	n/a	n/a
• 2.2.2	(1)	(2)		
• 2.2.3	(3)			
• 2.3.1			(3)	
• 2.3.2		(2)	(1)	
• 2.3.3	n/a	n/a	n/a	n/a
• 2.4.1	(2)	(1)		
• 2.4.2	(3)			
• 2.4.3	(3)			
• 2.5.1	n/a	n/a	n/a	n/a
• 2.5.2	n/a	n/a	n/a	n/a
• 2.5.3	n/a	n/a	n/a	n/a

Provides a well-organized speech with appropriate introduction and conclusion

- 2.1.1 Very well-organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English with correct mechanics (pronunciation, sentence structure and grammar) relative

to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

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

Reporting Period	# of students attempting	# passing	% passing
2010-2011			
• 4	1	0	0%(mean=2.00)
• 5			0 /0(IIIeaII=2.00)
• 6			
2009-2010			
• 4	1	0	0% (mean = 2.5)
• 5	1	1	100%(mean=4.5)
• 6	1	1	100%(mean=5.0)

<sup>4</sup> Demonstrate mathematical principles.

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric 7, 8, 9 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)

<sup>7.</sup> Read and analyze complex ideas.

Measurement Tool:
General Education Objective(s):
Goal Results:

GEA College Rubric Critical Thinking-English Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=3.00)
• 8	1	1	100%(mean=3.00)
• 9	1	1	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

<sup>8.</sup> Locate, evaluate and apply research information.

<sup>9.</sup> Evaluate and present well-reasoned arguments

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

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
2010-11	2(80%)	2(85%)	2(72%)	2(84.5%)	2(78%)
2009-10	1(80%)	1(30%)	1(94%)	1(83%)	1(79%)

## PDSA CYCLE RESULTS (2009-2010)

## **Analysis**

#### **Problem Areas**

Objective 5: Research Methods – Scientific Writing

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 original research, written and formatted according to the standards of an established scientific journal.

#### **Action Plan**

Initially, the program faculty determined 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.

Practically, due to severe time constraints of the program instructor, the implementation of the action plan was postponed into spring semester 2011. However, only one program student actually participated in the framework of an independent research project (GEOL 289), while the other two program students could not because of time restrictions by non-academic jobs, in parts also because of other personal commitments.

## Results (Spring 2011)

- 1. An action plan on voluntary basis seems not practicable. In the future, I have to consider implementing the action plan in form of a class (GEOL 289), perhaps even mandatory for obtaining the degree.
- 2. The time frame of 2 hours per week is not enough to achieve the goals set within one semester. Either the time allocated must be extended, or the scope of the research project or the amount of writing has to be strictly cut down and adapted to the time available. In the student project, even double the amount of time as originally intended was not enough to bring the project to a complete finish.

- 3. The student, although having years of practical experience and skills and a well-above average knowledge in the field, needed much more guidance as anticipated. Without explicit cooperative work, rather than only giving instructions (research method) and intensive revisions of the writing (frequently up to two or three consecutive rewriting and corrections of the same paragraph or whole part), the student feels easily lost and becomes demotivated. Essentially, the instructor must be present and active all the time.
- 4. It is essential to explain the structure of a scientific paper in detail with examples.
- 5. The student was able to develop the overall structure and single steps of the project satisfactorily on his own account. However, the practical execution of each step needed intensive guidance. Once accomplished, the student was well able to apply (reproduce) the same step to a related question without the supervision of the instructor.
- 6. Writing proved the most time-consuming part for both student and instructor. Significant improvement took place only after (1) one week of explicit and detailed recapitulation of the anatomical terms and discipline-specific jargon, (2) discussion of examples from the literature, and (3) extensive practicing and revisions.

## PDSA CYCLE RESULTS (2010-2011)

#### **Analysis**

### **Problem Areas**

Objective 5: Research Methods (continued), Scientific Writing (continued)

## Action Plan (Fall 2011)

In Fall 2011, a class GEOL 289 Special Topics in Geosciences (2 credit hours) for students of the paleontology and geology option was designed and implemented to specifically address the problems identified with research methods and scientific writing. It includes structure and analysis of scientific literature, scientific method and research methodology, practical research projects that include scientific writing and illustration assignments, and presentation techniques. The class is planned to be continued each semester.

## Results (Fall 2011 to Spring 2012)

The first positive results are reported above (measurement tools "Scientific article summary" and "Scientific illustrations"). However, other important (and unexpected) deficiencies were detected during course assessment. These have to be taken into account and addressed in the future curriculum of GEOL 289, but will cost further time in an already time-constrained class:

- Student have low skills and cannot work without assistance in PowerPoint and any graphic software, although most had before or were taking concurrently CIS 101.
- 2. Students have no concept of the metric system when it comes to illustration scales and rescaling.
- 3. In summarizing the content of scientific articles it came frequently to (unintentional) plagiarism because students have difficulties to reword or condense passages, but rather copy them word by word.
- 4. Students have problems with proper citations, even after having taken ENG 102 before.

## PDSA CYCLE GOALS (2011-2012)

## **Analysis**

#### **Problem Area**

Objective 1 Plate Tectonics (s. measurement tools: Laboratory Exercises "Seafloor Spreading" and "Plate Tectonics and the Origin of Magma")

Unsatisfactory assessment outcomes in this objective result predominantly from two reasons:

- 1. Unfamiliarity of students with conversions between the imperial and the metric system (e.g., inches to cm), within the metric systems (e.g., km to m), and from map scales to real distances. This is not a program-specific problem, but the same observations applies to almost all students in science classes.'
- 2. Failure of the students to realize the genetic connections between processes at plate boundaries and type of volcanism (= volcanic rocks associated with such boundaries).

#### Goal

At the end of the spring semester 2013, the passing rate in all measurement tools used for objective 1 will be 100%.

#### **Action Plan (Spring 2012)**

The metric system will be the exclusive unit in activities in all class exercises. Throughout all exercises in program classes, a focus point will be have metrics (and conversions) in measurements of distance, surfaces, and volumes, and such components will be included in exercises where they not exist yet. Only metric units will be allowed even in class conversations.

Teaching the causal relationships between plate boundaries and volcanisms will be repeated and elaborated on in a different exercise in the plate tectonic section of GEOL 152 Historical Geology.

#### Results

To be presented in the 2012-2013 report.

## STUDENT LEARNING ASSESSMENT PROGRAM REPORT PRE-NURSING 2011-2012

The pre-nursing certificate enables students to fulfill the transfer requirements to enter two or four-year nursing programs at other institutions. Students take non-nursing academic courses in science, mathematics, and the humanities for possible matriculation into a professional nursing program. The courses taken will allow the student to build a foundation for nursing courses that will be completed after transfer to a professional nursing program.

## **General Education Competencies**

Upon completion of the Pre-Nursing Certificate:

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

#### Overview

The pre-nursing assessment plan is in its second year and is addressed via a plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  adjust cycle that begins every fall term and follows one prenursing cohort from 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  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul><li>College Rubrics</li><li>CAAP</li><li>ENG 299</li></ul>	<ul> <li>ACS 100</li> <li>AHS 103</li> <li>AHS 110</li> <li>BIOL 211</li> <li>BIOL 212</li> <li>BIOL 222</li> <li>COM 101</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>Lab Science Elective</li> <li>Social Sciences/ Humanities Elective</li> </ul>
Mathematical and scientific reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	<ul><li>College Rubrics</li><li>CAAP</li><li>ENG 299</li></ul>	<ul> <li>BIOL 211</li> <li>BIOL 212</li> <li>BIOL 222</li> <li>Lab Science Elective</li> <li>MATH 101</li> <li>PSY 101</li> <li>PSY104</li> </ul>
Critical Thinking 7. Read and analyze complex ideas. 8. Locate, evaluate and apply research information. 9. Evaluate and present well-reasoned arguments.	<ul><li>College Rubrics</li><li>CAAP</li><li>ENG 299</li></ul>	<ul> <li>BIOL 211</li> <li>BIOL 212</li> <li>BIOL 222</li> <li>Lab Science Elective</li> <li>PSY 101</li> <li>PSY104</li> <li>Social Sciences/ Humanities Elective</li> </ul>

## **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)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	1	1	100%(mean=2.75)
• 2	1	1	100%(mean=2.4)
• 3	1	1	100%(mean=5.0)*

<sup>1</sup> Present ideas in writing.

**Measurement Tool:** GEA College Rubric **General Education Objective(s):** 4, 5, 6

**Goal Results:** 90% "excellent (5)" or "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	1	1	100% (mean = 3.0)
• 5	1	1	100%(mean=3.5)
• 6	1	1	100%(mean=3.5)

<sup>4</sup> Demonstrate mathematical principles.

Measurement Tool:
General Education Objective(s):
Goal Results:

GEA College Rubric Critical Thinking-Science Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=3.0)
• 8	1	1	100%(mean=3.0)
• 9	1	1	100%(mean=3.0)

<sup>7.</sup> Identify and gather information.

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

Measurement Tool:
General Education Objective(s):
Goal Results:

GEA College Rubric Critical Thinking-English Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	1	1	100%(mean=3.00)
• 8	1	1	100%(mean=2.00)
• 9	1	1	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

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
2011-2012	2(38%)	2(41.5%)	2(49%)	2(49.5%)	2(45.5%)
2010-2011	1(6%)	1(31%)	1(39%)	1(19%)	1(21%)

General Education Objective(s): 1-6

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

"Adequate(2)"

## **General Education Competency: Writing**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1			1	
• 1.1.2			1	
• 1.1.3			1	
• 1.2.1			1	
• 1.2.2			1	
• 1.2.3			1	
• 1.3.1			1	
• 1.3.2			1	
• 1.4.1		1		
• 1.4.2		1		

Provides a clear, concise thesis statement

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

- 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

## **General Education Competency: Oral Presentation**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 2.1.1		1		
• 2.1.2		1		
• 2.1.3		1		
• 2.2.1	1			
• 2.2.2	1			
• 2.2.3	1			
• 2.3.1	1			
• 2.3.2	1			
• 2.3.3	1			
• 2.4.1	1			
• 2.4.2	1			
• 2.4.3	1			
• 2.5.1				1
• 2.5.2				1
• 2.5.3				

Provides a well-organized speech with appropriate introduction and conclusion

- 2.1.1 Very well-organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

Provides main points that are well-documented, compelling, supported with facts,

developed clearly and concisely, and focused on the topic

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English

with correct mechanics (pronunciation, sentence structure and grammar) relative

#### to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

## **General Education Competency: Information Technology**

Year	Pass (4)	Fail (1)
2011-2012		
• 3.1.1		
• 3.1.2		
• 3.1.3		
• 3.1.4	1	
• 3.1.5		
• 3.2.1	1	
• 3.2.2		1
• 3.2.3	1	
• 3.2.4	1	1
• 3.2.5		1
• 3.3.1		1
• 3.3.2		
• 3.3.3		1
• 3.4.1		1
• 3.4.2		1

Demonstrates basic computer and operating skills

- 3.1.1 Access and change computer setting under Control Panel
- 3.1.2 Navigate file directory structures and paths
- 3.1.3 Perform file management tasks (select, copy, rename and/or delete files)
- 3.1.4 Create, save, open, and print a document from some application
- 3.1.5 Navigate and locate information from Windows Help

Performs core tasks of Microsoft Office applications

- 3.2.1 Format a document and how to use page layout, e.g., headers, footer, page breaks, bullets, etc.
- 3.2.2 Create tables, charts, graphs and/or formulas
- 3.2.3 Import and sort data and/or images in to a document and format them appropriately
- 3.2.4 Demonstrate techniques for copying, cutting and pasting text and/or images with a document
- 3.2.5 Review a document using tools: spelling, grammar, word count, thesaurus

Uses a search engine to access, navigate and evaluate information on the internet

- 3.3.1 Retrieve information from an internet search engine
- 3.3.2 Evaluate and rank sources of information for validity
- 3.3.3 Select, copy and paste information retrieved from the internet College database

Uses email with appropriate etiquette

- 3.4.1 Open, create and/or send email with attachments
- 3.4.2 Demonstrates appropriate email etiquette

## **General Education Competency: Mathematical Reasoning**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 4.1.1	1			1
• 4.1.2	1			1
• 4.2.1		1		1
• 4.2.2		1		1
• 4.2.3				
• 4.3.1	1			
• 4.3.2	1			

Constructs and/or analyzes numerical or graphical representations of data 4.1.1 A correct solution using an appropriate strategy is given

- 4.1.2 Descriptions of the results are complete and coherent

Simplifies, evaluates, and/or solves various equations and/or formulas

- 4.2.1 Demonstrates complete understanding of the problems with correct solutions
- 4.2.2 Answers are interpreted correctly, with appropriate labels
- 4.2.3 Correctly identifies units and performs conversions

Formulates and communicates mathematical explanations

- 4.3.1 Gives a complete response with clear explanations
- 4.3.2 Communicates effectively to the intended audience; demonstrates complete understanding of the mathematical ideas and processes

## **General Education Competency: Scientific Reasoning**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 5.1.1				1
• 5.1.2				1
• 5.2.1				1
• 5.3.1				1
• 5.4.1				1
• 5.5.1				1
• 5.5.2				1

Problem is recognized and investigative question is formulated

- 5.1.1 Problem is recognized and explained in detail
- 5.1.2 Investigative question is clearly formulated

Reasonable, testable hypothesis is presented

5.2.1 Hypothesis is reasonable, clearly stated, and fully explains question

Prediction is formulated as logical consequence of the hypothesis

5.3.1 Prediction is logical and fully explained

Data/observations to test hypothesis are gathered or compiled

5.4.1 High quality date and /or high quantity of suitable data gathered and presented professionally (list or table)

Formulation of a conclusion

- 5.5.1 Conclusion is logical and well formulated
- 5.5.2 Conclusion explains in detail the degree of correctness of the hypothesis and identifies further avenues of testing, or formulates new hypothesis

## PDSA CYCLE RESULTS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

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

#### Goal

Collect data based on General Education Competency Reporting Schedule.

#### **Action Plan**

- 1. Lead faculty member will identify students enrolled in Pre-Nursing Program.
- 2. Lead faculty member will identify courses that those students are enrolled in.
- 3. Lead faculty will contact instructors of those courses in order to collect data based on *General Education Competency Reporting Schedule*.

#### Results

A small amount of data was collected and reported on as it relates to the assessment of learning of students enrolled in the Pre-Nursing program. That data is presented in this report.

The lead faculty member for the Pre-Nursing program was reassigned to other duties at the College; therefore, formative and summative data was not collected in time for this Program Report.

## PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

#### **Problem Area**

A continual lack of data (other than end of program data) to support whether or not general education competencies are being accomplished. This is related to the fact that the Pre-Nursing program lost its lead faculty member.

#### Goal

- 1. Identify a Pre-Nursing lead faculty.
- 2. Identify a more effective process of collecting both formative and summative assessment data on students enrolled in the Pre-Nursing program.

#### **Action Plan**

- 1. Identify a Pre-Nursing lead faculty.
- 2. Discuss possible solutions to the process of collecting both formative and summative assessment data on students enrolled in Pre-Nursing program with the Student Learning Assessment Committee.

#### Results

To be identified in the 2012-2013 Report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT TECHNICAL AND PROFESSIONAL WRITING 2011-2012

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**

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 third year and is addressed via the plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  adjust cycle that begins every fall semester and follows one Technical and Professional Writing cohort from first semester through graduation.

## **Program Objectives Assessment Plan**

All program objectives 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 &/OR MEASURED
1. The student will write in an academic style (MLA, APA, Chicago) that can be utilized across the curriculum.	<ul> <li>Formal essays</li> <li>Grant proposals</li> <li>Technical communication projects</li> <li>Pre/Post-Test</li> </ul>	<ul> <li>ENG 102</li> <li>ENG 104</li> <li>ENG 268</li> <li>ENG 293</li> </ul>
2. The student will create a comprehensive technical communication project that is measurable by current technical communication standards.	<ul> <li>Technical communication projects</li> <li>Capstone project</li> <li>Grant proposal</li> <li>Formal essays</li> </ul>	<ul><li>ENG 168</li><li>ENG 233</li><li>ENG 268</li><li>ENG 293</li></ul>
3. The student will utilize computer and emerging technology to produce technical communication products that are measurable by current standards.	<ul> <li>Technical communication projects</li> <li>Capstone project</li> <li>Formal essays</li> </ul>	<ul><li>ENG 168</li><li>ENG 233</li><li>ENG 293</li></ul>

## **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% (mean=95%)
2010-2011	1	1	100% (mean=95%)
2011-2012	24	21	87.5%(mean=81%)

<sup>\*2009-2010</sup> and 2012-2011 numbers reflect declared majors. 2011-2012 number reflects all students enrolled in ENG 104 regardless of declared major.

2011-2012: Most students passed the research project with a 70% or better if they attempted the project. I am very happy with their projects, and I don't know if the results are because I am a better teacher, or I have a different group of students.

Measurement Tool: Four Technical Communication Projects

Program Objective(s): 1, 2, 3

Goal Results: 70% pass rate

Reporting Period	# students attempting*	# passing	% passing
2009-2010	1	1	100% (mean=92%)
2010-2011	1	1	100%(mean=95%)
2011-2012	25	24	96% (mean=91%)

<sup>\*2009-2010</sup> and 2012-2011 numbers reflect declared majors. 2011-2012 number reflects all students enrolled in ENG 233 regardless of declared major.

Measurement Tool: Grant Proposal

Program Objective(s): 1, 2

**Goal Results:** 90% "Average" or "Above Average"\*\*

Reporting Period	# students attempting	# passing	% passing
2009-2010	1	1	100% (mean=90%)
2010-2011	N/A		
2011-2012	1	1	100% (mean=95%)

<sup>2011-2012:</sup> The student wrote an excellent grant for HUD. Between reading and responding to the text and writing the grant, I believe the student is now a proficient grant writer.

<sup>2010-2011:</sup> Student scores are due to strong writing skills. Only having one student presents difficulty in providing statistically significant data.

<sup>2010-2011:</sup> Student scores are due to strong writing and communications skills. Only having one student presents difficulty in providing statistically significant data.

<sup>2011-2012:</sup> Students who attempted the technical communication projects in ENG 233 did well. The students claim that they enjoy the variety of projects and the practical nature of the assignments.

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	
Year	Excellent	Proficient	Adequate	Inadequate
	(4)	(3)	(2)	(1)
2010-2011	0	0	4	
• 1.1.1	6 6	9 9	1 1	
• 1.1.2	6	9	I	
• 1.1.3				
• 1.2.1	8	7	1	
• 1.2.2	8	7	1	
• 1.2.3	8	7	1	
• 1.3.1	6	9	1	
• 1.3.2	6	9	1	
• 1.4.1	5	9		2
• 1.4.2	9	9		2
Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1	3	1	7	
• 1.1.2	3	1	7	
• 1.1.3	3	1	7	
• 1.2.1	3	1	7	
• 1.2.2	3 3 3	1	7	
• 1.2.3	3	1	7	

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
• 1.3.1	3	1	6	1
• 1.3.2	3	1	6	1
• 1.4.1	2	8	1	
• 1.4.2	2	8	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: General Education Objective(s): Goal Results:** 

Critical Thinking College Rubric

90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

Legend:

Laboratory Science(No Lab Sci)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 6.1.1	8	3	5	
• 6.1.2	8	3	5	
• 6.1.3	8	3	5	
• 6.2.1	8	3	5	
• 6.2.2	8	3	5	
• 6.2.3	8	3	5	
• 6.3.1	8	3	5	
• 6.3.2	8	3	5	
• 6.3.3	8	3	5	

#### Identify and gather

- 6.1.1 Asks insightful questions
- 6.1.2 Critiques content
- 6.1.3 Examines inconsistencies

#### Analyze and evaluate

- 6.2.1 Analyzes and evaluates thoroughly
- 6.2.2 Uses reasonable judgment
- 6.2.3 Critically discriminates between good and bad information

Synthesize and formulate conclusion

- 6.3.1 Discusses issues thoroughly and argues succinctly
- 6.3.2 Assimilates information
- 6.3.3 Justifies conclusion

## PDSA CYCLE RESULTS (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

The English Instructor met with the Public Relations Director and a flyer for the technical writing certificate was planned and completed. The flyer was posted around the Campus and also distributed to ENG 102, ENG 104, and COM 102 classes. The technical writing certificate was also placed on the Student Information System so that students were made aware of the certificate. Radio announcements concerning the certificate are pending.

## PDSA CYCLE GOALS (2010-2011)

## **Analysis**

#### **Problem Area**

Results of the marketing need to be assessed during the 2011-2012 academic year. The English Instructor would like the certificate to be included in two publications for additional marketing efforts.

#### Goal

Additional recruiting through advertising in publications is desirable. The Instructor will also track student enrollment in the certificate.

#### **Action Plan**

The English Instructor will meet with the Public Relations Director to plan additional marketing strategies after Cabinet has approved. The Instructor will also track student enrollment in the certificate.

#### Results

The English Instructor did not meet with Public Relations Director because after tracking enrollment for the Certificate program, it appeared that the program might not be healthy enough to continue advertising in the Catalog. If the College could offer all online programs, the Certificate would probably be worth pursuing on a marketing level.

## PDSA CYCLE GOALS (2011-2012)

## **Analysis**

#### **Problem Area**

The enrollment in the Certificate is not enough to continue advertising in the Catalog. After internal marketing efforts, the Certificate still lacks enrollment. External marketing efforts were not pursued due to the inability of the Certificate to be offered solely online.

#### Goal

Assess whether the Certificate should be continued in the College Catalog or if the program should be suspended until further investigation.

#### **Action Plan**

The English Instructor will discuss the Certificate program's viability with the Chair of the Assessment Committee and the Dean of Academic Affairs. A decision will be made whether to continue with the program or not. For the fall 2012 semester, it appears that only one student will be enrolled in the program.

#### Results

The results of these goals will be reported in the 2012-2013 plan.

## STUDENT LEARNING ASSESSMENT PROGRAM REPORT SOCIAL WORK 2011-2012

The Social Work Program provides the student with an introduction to the field of social work and the social welfare system, the human behavior content required of human services workers and social welfare policy analysis skills. The curriculum may serve as a preparatory foundation for those interested in continuing their study at the Bachelor of Social Work level.

## **Program Objectives/Competencies**

Upon completion of the Social Work Associate Degree Program:

- 1. Students will summarize knowledge of the history of social welfare, past and present.
- Students will recognize the National Association of Social Workers Code of Ethics and Preamble and discuss steps involved in becoming a member of the national organization.
- 3. Students will demonstrate written and oral communication skills necessary in the field for effective social work practice.

## **General Education Competencies**

Upon completion of the Social Work 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).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical and Scientific Reasoning).
- Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).

#### Overview

The Social Work assessment plan is in its second year and is addressed via a plan-do-study-adjust cycle that begins every fall term and follows one Social Work cohort from first term through graduation.

## **Program Objectives Assessment Plan**

All program objectives 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. Students will summarize knowledge of the history of social welfare, past and present.	<ul><li>Tests</li><li>CATs</li><li>Guest speakers</li><li>Research project</li></ul>	• SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 104/PSY 104
2. Students will recognize the National Association of Social Workers Code of Ethics and Preamble and discuss steps involved in becoming a member of the national organization.	<ul><li>Tests</li><li>CATs</li><li>Guest speakers</li><li>Research project</li></ul>	• SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 104/PSY 104
3. Students will demonstrate effective written and oral communication skills necessary in the field for effective social work practice.	<ul><li>Tests</li><li>CATs</li><li>Guest speakers</li><li>Research project</li></ul>	• SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 104/PSY 104

## **Program Objective Results**

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

Measurement Tool: Written Exam – SW 218

Program Objective(s): 1, 2, 3

**Goal Results:** 70% pass rate/ cut score

Reporting Period	# of Students Attempting	# Passing	% Passing
2011-2012	2	2	100%
2010-2011	6	6	100%

Measurement Tool: CAT- SW 218

Program Objective(s): 1, 2, 3

**Goal Results:** 100% pass rate;

All students were required to complete the CAT on lectures using Muddiest Point in order to identify students lecture topics that were not quite clear to them. We used as a wrap up at the end of the class period to help them understand better.

Measurement Tool: CAT- Guest speaker SW 218

Program Objective(s): 1, 2, 3

**Goal Results:** 100% pass rate;

The guest speaker paper was graded as an essay paper with one hundred points possible. It was based on the agency and work done at that agency.

Reporting Period	# of Students Attempting	# Passing	% Passing
2011-2012	2	1	50%
2010-2011	6	5	83%

Measurement Tool: Research Project-SW 218 topics varied and

were open as long as it was within the

discipline of social work.

Program Objective(s): 1, 2, 3

Goal Results: 100% pass rate;

Reporting Period	# of Students Attempting	# Passing	% Passing
2011-2012	2	2	100%
2010-2011	6	6	100%

## **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 general education competencies are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which Program Objectives Are Presented and/or Measured
Communication  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>CATs</li> <li>Class Presentation</li> <li>Class Writing Assignment</li> </ul>	• ACS 100 • COM 102 • CIS 101 • ENG 104 • Lab Sciences • STAT 213 • SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 104
Mathematical and Scientific Reasoning  4. Demonstrate mathematical principles.  5. Demonstrate scientific reasoning.  6. Apply scientific methods to the inquiry process.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Class Exercises</li> <li>Class Examinations</li> </ul>	• ACS 100 • COM 102 • CIS 101 • ENG 104 • MATH 110 • Lab Sciences • STAT 213 • SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 104
Critical Thinking  7. Read and analyze complex ideas.  8. Locate, evaluate and apply research information.  9. Evaluate and present well-reasoned arguments.	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Class Exercises</li> <li>Class Examinations</li> </ul>	• ACS 100 • COM 102 • CIS 101 • ENG 104 • Lab Sciences • STAT 213 • MATH 110 • SW 218 • SW 290 • SOC 215 • PSCI 202 • ECE 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 <u>each</u> time the specific competency was evaluated during the program.

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)
2011-2012				
• 1.1.1	1	1		
• 1.1.2	1	1		
• 1.1.3	1	1		
• 1.2.1	1	1		
• 1.2.2	1	1		
• 1.2.3	1	1		
• 1.3.1	1		1	
• 1.3.2	1		1	
• 1.4.1	2			
• 1.4.2	2			

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

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	2	2	100%(mean=2.20)
• 2	2	2	100%(mean=2.80)
• 3	2	2	100%(mean=5.00)*

<sup>1</sup> Present ideas in writing.

Measurement Tool:
General Education Objective(s):
Goal Results:

GEA College Rubric 4, 5, 6 100% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 4	2	0	0%(mean=1.50)
• 5	2	2	100%(mean=3.87)
• 6	2	2	100%(mean=3.75)

<sup>4</sup> Demonstrate mathematical principles.

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric Critical Thinking-Science Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	2	2	100%(mean=3.50)
• 8	2	2	100%(mean=3.50)
• 9	2	2	100%(mean=3.00)

Identify and gather information.

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

<sup>8.</sup> Analyze and evaluate information.

<sup>9.</sup> Synthesize and formulate conclusions.

**GEA College Rubric Measurement Tool:** 

**General Education Objective(s):** Critical Thinking-English Eval. 100% "excellent (4)", "proficient **Goal Results:** 

(3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	T Passing   % Passing	
2010-2011			
• 7	2	2	100%(mean=3.00)
• 8	2	2	100%(mean=2.50)
• 9	2	2	100%(mean=3.00)

<sup>7.</sup> Identify and gather information.

**Measurement Tool: ACT Collegiate Assessment of** 

Academic Proficiency (CAAP)

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

Legend: n (Mean Score)

Year	Writing	Math	Reading	Critical Thinking	Science
2010-2011	1(14%)	N/A	1(12%)	1(6%)	1(21%)

<sup>8.</sup> Analyze and evaluate information.9. Synthesize and formulate conclusions.

## PDSA CYCLE RESULTS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

Students need more work in writing in the appropriate style according to their discipline. Students should be able to go on to the university level prepared to write at an accelerated pace and level according to their discipline and with an understanding in research.

Another issue is receiving data from Off-Campus programs in order to have a more complete overview and for reporting purposes.

#### Goal

I want to make sure students can write properly in a social work class and a social work employment environment.

I want to make sure I receive data on all students at all campuses taking social work courses.

#### **Action Plan**

We will bring in documentation templates from different social work agencies to practice the APA (America Psychological Association) style. We will also have writing assignments with APA (America Psychological Association) style requirements.

I will contact all Social Work Instructors letting them know I will need information on students enrolled in their social work courses.

#### Results

Students worked with several websites on citation and with the English Lead Faculty member and me to help learn proper citing in APA (American Psychological Association) style. Both students for the year completed research papers in the proper style with the proper formatting. Both students came away with better comprehension of APA (America Psychological Association) style writing.

## PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

#### **Problem Area**

There is an issue in receiving assessment data from off-campus programs in order to have a more complete overview and for reporting purposes.

We also need to implement appropriate practicum settings for SW 290 Internship. Students need to have true hands-on experience in the field to better prepare and make sure this is truly the avenue they wish to pursue in their college and career choice.

#### Goal

I want to make sure I receive data on all students at all campuses taking social work courses.

Meet with and establish relationships with different social work agencies that will sponsor students for their internship/practicum.

#### **Action Plan**

During visits to all sites, the chair of the Student Learning Assessment Committee and I will do thorough assessment training with instructors stressing the importance of sending data to all program instructors for the purposes of reporting outcomes in the program.

I will contact all Social Work Instructors letting them know I will need information on students enrolled in their social work courses.

I have and will continue to contact agencies in the field of social work to build a working relationship for practicum for students in the Social Work program so that their internships will be true social work experience with the hours required at this level for completion of course and program.

#### Results

To be reported in the 2012-2013 Report.

# STUDENT LEARNING ASSESSMENT PROGRAM REPORT ASSOCIATE OF ARTS - UNIVERSITY STUDIES 2011-12

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:

- Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
- Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical and scientific reasoning).
- 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 third year and is addressed via the plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  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  1. Present ideas in writing.  2. Present ideas orally according to standard usage.  3. Demonstrate application of information technology.	<ul><li>GEA College Rubric</li><li>CAAP</li></ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 299</li> <li>Lab Science Elective</li> <li>Social/Behavioral Science Elective</li> <li>Fine Arts/Humanities Elective</li> </ul>
Mathematical and scientific reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process.	GEA College Rubric     CAAP	ENG 299     MATH 110     Lab Science Elective
Critical Thinking 7. Read and analyze complex ideas. 8. Locate, evaluate and apply research information. 9. Evaluate and present well-reasoned arguments.	GEA College Rubric     CAAP	ACS 100     ENG 299     Lab Science Elective     Social/Behavioral     Science Elective     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 <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	
2011-2012				
• 1	1	1	100%(mean=2.75)	
• 2	1	1	100%(mean=2.50)	
• 3	1	1	100%(mean=5.00)*	
2010-2011				
• 1	5	4	80%(mean=2.75)	
• 2	• 2 5		100%(mean=3.85)	
• 3	5	5 5 100%(mean=4.		
2009-2010				
• 1	3	3	100%(mean=2.17)	
• 2	• 2 3 3		100%(mean=2.73)	
• 3	3	2 67%(mean=2.31)		

<sup>1</sup> Present ideas in writing.

**Measurement Tool:** GEA College Rubric **General Education Objective(s):** 4, 5, 6

Goal Results: 4, 5, 6

100% "excellent (5)", "proficient (4)" or "acceptable (3)"

Reporting Period	# of Students Attempting	# Passing	% Passing	
2011-2012				
• 4	1	0	0%(mean=1.00)	
• 5	1	1	100%(mean=2.50)	
• 6	1	0	0%(mean=2.25)	
2010-2011				
• 4	5	2	40%(mean=2.50)	
• 5	5	3	60%(mean=3.40)	
• 6	5	4	80%(mean=3.55)	
2009-2010				
• 4	3	1 33% (mean=		
• 5		3	100%(mean=4.08)	
• 6	0 0001		33%(mean=2.58)	

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

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

Measurement Tool:
General Education Objective(s):
Goal Results:

GEA College Rubric Critical Thinking-Science Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing	
2011-2012				
• 7	1	1	100%(mean=2.33)	
• 8	N/A	N/A	N/A	
• 9	1	1	100%(mean=3.00)	
2010-2011				
• 7	5	5	100%(mean=2.80)	
• 8	5	5	100%(mean=2.80)	
• 9	5	4	80%(mean=2.20)	

- 7. Identify and gather information.
- 8. Analyze and evaluate information.
- 9. Synthesize and formulate conclusions.

Measurement Tool:
General Education Objective(s):
Goal Results:

GEA College Rubric Critical Thinking-English Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	Reporting Period # of Students Attempting		% Passing
2010-2011			
• 7	5	5	100%(mean=3.00)
• 8	5	5	100%(mean=3.40)
• 9	5	5	100%(mean=3.00)

- 7. Identify and gather information.
- 8. Analyze and evaluate information.
- 9. Synthesize and formulate conclusions.

Measurement Tool:
General Education Objective(s):

**Goal Results:** 

GEA College Rubric

7, 8, 9

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
2011-12	2(74%)	2(52%)	2(70.5%)	2(76%)	2(70.5%)
2010-11	6(51.8%)	5(66.8%)	6(56%)	6(54.2%)	6(61%)
2009-10	3(29%)	2(85%)	3(26%)	3(27%)	3(31%)

General Education Objective(s): 1-6

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

"Adequate(2)"

## **General Education Competency: Writing**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012	, , ,	• •		
• 1.1.1		1		
• 1.1.2		1		
• 1.1.3		1		
• 1.2.1		1		
• 1.2.2		1		
• 1.2.3		1		
• 1.3.1		1		
• 1.3.2		1		
• 1.4.1		1		
• 1.4.2		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

## **General Education Competency: Oral Presentation**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 2.1.1			1	
• 2.1.2			1	
• 2.1.3		1		
• 2.2.1			1	
• 2.2.2			1	
• 2.2.3		1		
• 2.3.1			1	
• 2.3.2		1		
• 2.3.3		1		
• 2.4.1		1		1
• 2.4.2		1		1
• 2.4.3	1			1
• 2.5.1				1
• 2.5.2				1
• 2.5.3				

Provides a well-organized speech with appropriate introduction and conclusion

- 2.1.1 Very well-organized
- 2.1.2 Attention grabbing introduction
- 2.1.3 Convincing conclusion

<u>Provides main points that are well-documented, compelling, supported with facts, developed clearly and concisely, and focused on the topic</u>

- 2.2.1 All main points are well-documented and supported by numerous, compelling facts
- 2.2.1 Clearly and concisely presented
- 2.2.3 Remains focused on topic throughout entire presentation

Uses appropriate gestures, movements and eye contact

- 2.3.1 Excellent gestures and eye contact
- 2.3.2 Conversational presentation
- 2.3.3 Utilize note cards appropriately

Speaks clearly and understandably using standard, edited English with correct mechanics (pronunciation, sentence structure and grammar) relative

to audience

- 2.4.1 Excellent mechanics throughout
- 2.4.2 Very appropriate presentation relative to audience
- 2.4.3 Tone is respectful and civil

Provides appropriate handouts and/or visual aids

- 2.5.1 Provides entire audience with useful, presentation quality handouts
- 2.5.2 Handouts/audiovisual aids contain appropriate amount of information
- 2.5.3 Grammatically correct material

#### **General Education Competency: Information Technology**

Year	Pass (4)	Fail (1)
2011-2012		
• 3.1.1		
• 3.1.2		
• 3.1.3		
• 3.1.4	1	
• 3.1.5		
• 3.2.1		1
• 3.2.2		1
• 3.2.3		1
• 3.2.4		1
• 3.2.5		1
• 3.3.1		1
• 3.3.2		
• 3.3.3		1
• 3.4.1		1
• 3.4.2		1

Demonstrates basic computer and operating skills

- 3.1.1 Access and change computer setting under Control Panel 3.1.2 Navigate file directory structures and paths
- 3.1.3 Perform file management tasks (select, copy, rename and/or delete files)
- 3.1.4 Create, save, open, and print a document from some application
- 3.1.5 Navigate and locate information from Windows Help

#### Performs core tasks of Microsoft Office applications

- 3.2.1 Format a document and how to use page layout, e.g., headers, footer, page breaks, bullets, etc.
- 3.2.2 Create tables, charts, graphs and/or formulas
- 3.2.3 Import and sort data and/or images in to a document and format them appropriately
- 3.2.4 Demonstrate techniques for copying, cutting and pasting text and/or images with a document
- 3.2.5 Review a document using tools: spelling, grammar, word count, thesaurus

#### Uses a search engine to access, navigate and evaluate information on the internet

- 3.3.1 Retrieve information from an internet search engine
- 3.3.2 Evaluate and rank sources of information for validity
- 3.3.3 Select, copy and paste information retrieved from the internet College database

#### Uses email with appropriate etiquette

- 3.4.1 Open, create and/or send email with attachments
- 3.4.2 Demonstrates appropriate email etiquette

#### **General Education Competency: Mathematical Reasoning**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 4.1.1			1	
• 4.1.2			1	
• 4.2.1	1			
• 4.2.2	1			
• 4.2.3				
• 4.3.1		1		
• 4.3.2	1			

Constructs and/or analyzes numerical or graphical representations of data

Simplifies, evaluates, and/or solves various equations and/or formulas

- 4.2.1 Demonstrates complete understanding of the problems with correct solutions
- 4.2.2 Answers are interpreted correctly, with appropriate labels
- 4.2.3 Correctly identifies units and performs conversions

Formulates and communicates mathematical explanations

- 4.3.1 Gives a complete response with clear explanations
- 4.3.2 Communicates effectively to the intended audience; demonstrates complete understanding of the mathematical ideas and processes

#### **General Education Competency: Scientific Reasoning**

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 5.1.1			1	
• 5.1.2			1	
• 5.2.1			1	
• 5.3.1			1	
• 5.4.1			1	
• 5.5.1		1		
• 5.5.2			1	

Problem is recognized and investigative question is formulated

Reasonable, testable hypothesis is presented

5.2.1 Hypothesis is reasonable, clearly stated, and fully explains question

Prediction is formulated as logical consequence of the hypothesis

5.3.1 Prediction is logical and fully explained

Data/observations to test hypothesis are gathered or compiled

5.4.1 High quality date and /or high quantity of suitable data gathered and presented professionally (list or table) Formulation of a conclusion

5.5.1 Conclusion is logical and well formulated

5.5.2 Conclusion explains in detail the degree of correctness of the hypothesis and identifies further avenues of testing, or formulates new hypothesis

<sup>4.1.1</sup> A correct solution using an appropriate strategy is given

<sup>4.1.2</sup> Descriptions of the results are complete and coherent

<sup>5.1.1</sup> Problem is recognized and explained in detail

<sup>5.1.2</sup> Investigative question is clearly formulated

## PDSA CYCLE RESULTS (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**

No results reported. Action plan was not implemented.

## PDSA CYCLE RESULTS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

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

#### Goal

Collect data based on General Education Competency Reporting Schedule.

#### **Action Plan**

- 1. Lead faculty member will identify students enrolled in University Studies Program.
- 2. Lead faculty member will identify courses that those students are enrolled in.
- 3. Lead faculty will contact instructors of those courses in order to collect data based on *General Education Competency Reporting Schedule*.

#### Results

A small amount of data was collected and reported on as it relates to the assessment of learning of students enrolled in the AA-University Studies degree program. That data is presented in this report.

## PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

#### **Problem Area**

A continual lack of formative and summative assessment data to support whether or not general education competencies are being accomplished.

#### Goal

Identify a more effective process of collecting both formative and summative assessment data on students enrolled in the AA-University Studies degree program.

#### **Action Plan**

 Discuss possible solutions to the process of collecting both formative and summative assessment data on students enrolled in the AA-University Studies degree program with the Student Learning Assessment Committee.

#### Results

To be discussed in the 2012-2013 Report.

#### STUDENT LEARNING ASSESSMENT PROGRAM REPORT WIND ENERGY TECHNOLOGY 2011-2012

The Wind Energy Technology program at Mesalands Community College offers an educational program 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 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**

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:

- 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 (Mathematical and Scientific Reasoning).
- 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 third year and is addressed via a plan  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  adjust assessment cycle that begins every fall semester and follows one Wind Energy Technology cohort from first semester through graduation.

### **Program Objectives Assessment Plan**

All program objectives 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 identify electrical, mechanical, and hydraulic components found within various styles and vintages of wind machines, and demonstrate an understanding of their	<ul> <li>Written Tests</li> <li>Performance Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	<ul><li>WET 105</li><li>WET 204</li><li>WET 121</li><li>WET 205</li><li>WET 116</li></ul>
functions and maintenance requirements.		

	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.	<ul> <li>Project</li> <li>Written Tests</li> <li>Performance Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	• WET 101 • WET 202 • WET 210
1	The student will authoritatively discuss the market realities and future potential of wind energy technology and the employment opportunities it represents.	<ul> <li>Curriculum Written Tests</li> <li>Curriculum Performance Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	• WET 101 • WET 210
	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.	<ul> <li>Performance Profile</li> <li>Written Tests</li> <li>Performance Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	• WET 101 • WET 210
	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.	<ul> <li>Written Tests</li> <li>Performance Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	<ul> <li>WET 105</li> <li>WET 115</li> <li>WET 205</li> <li>WET 116</li> <li>WET 210</li> <li>WET 212</li> <li>WET 215</li> <li>WET 216</li> </ul>

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.	<ul> <li>Written Tests</li> <li>Performance Tests</li> <li>CATs</li> <li>Pre/Post-Test</li> <li>Oral Tests</li> <li>Research Papers</li> </ul>	<ul> <li>AHS 118R</li> <li>WET 105</li> <li>WET 204</li> <li>WET 221</li> <li>WET 205</li> <li>WET 110</li> <li>WET 116</li> <li>WET 212</li> <li>WET 215</li> <li>WET 216</li> <li>WET 140</li> <li>WET 141</li> <li>WET 240</li> <li>WET 241</li> </ul>
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### **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): 1-6

Goal Results: 50% Improvement

**Legend:** Score(n)

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

Reporting Period/Topic	Pre-Test	Post-Test
2010-2011		
Introduction To Hydraulics		
Wind Turbine Mechanical Systems		
Introduction To Wind Energy		
Electrical Theory I		
Electrical Theory II		
Field Safety And Experience		
<ul> <li>Wind Turbine Operation And Maintenance</li> </ul>		
<ul> <li>Introduction to Motors and Generators</li> </ul>		
<ul> <li>Power Generation And Distribution</li> </ul>		
Wind Turbine Siting And Construction	36%(24)	85%(24)
<ul> <li>Monitoring And Communication Technology</li> </ul>	0070(=1)	3075(21)
Wind Turbine Diagnosis And Repair	23%(25)	77%(25)
Digital Electronics	, ,	,
		<b>.</b> . <b>.</b> .
Reporting Period/Topic	Pre-Test	Post-Test
2011-2012		
2011-2012 • Introduction To Hydraulics	N/A	79.1%(9)
<ul><li>2011-2012</li><li>Introduction To Hydraulics</li><li>Wind Turbine Mechanical Systems</li></ul>		
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> </ul>	N/A	79.1%(9)
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> </ul>	N/A N/A	79.1%(9) 85.8%(9)
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> </ul>	N/A	79.1%(9)
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> </ul>	N/A N/A	79.1%(9) 85.8%(9)
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> </ul>	N/A N/A	79.1%(9) 85.8%(9)
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> </ul>	N/A N/A	79.1%(9) 85.8%(9)
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> </ul>	N/A N/A	79.1%(9) 85.8%(9)
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> <li>Wind Turbine Siting And Construction</li> </ul>	N/A N/A	79.1%(9) 85.8%(9)
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> <li>Wind Turbine Siting And Construction</li> <li>Monitoring And Communication Technology</li> </ul>	N/A N/A 90%(8) 36%(24)	79.1%(9) 85.8%(9) 77.3%(8) 85%(24)
<ul> <li>2011-2012</li> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> <li>Power Generation And Distribution</li> <li>Wind Turbine Siting And Construction</li> </ul>	N/A N/A 90%(8)	79.1%(9) 85.8%(9) 77.3%(8)

Measurement Tool: Research Paper

Program Objective(s): 1, 2, 5, 6 Goal Results: 70%

**Legend:** %passing (group mean)

Reporting Period/Topic	# of Students	_ #.	% Passing
itopotinig i onod/ropio	Attempting	Passing	/01 doomig
2011-2012			
Introduction To Hydraulics	9	9	100% (Mean=85%)
Wind Turbine Mechanical     Systems	9	9	100% (Mean= 85%)
Introduction To Wind     Energy			
Electrical Theory I	26	20	100% (Mean=84%)
Electrical Theory II     Field Sefety And	20	20	10070 (MOdi1-0170)
<ul> <li>Field Safety And Experience</li> </ul>			
Wind Turbine Operation     And Maintenance			
<ul> <li>Introduction to Motors and Generators</li> </ul>	26	23	88% (Mean=83%)
<ul> <li>Power Generation And Distribution</li> </ul>			
Wind Turbine Siting And Construction			
Monitoring And     Communication     Tacks along:			
<ul><li>Technology</li><li>Wind Turbine Diagnosis</li></ul>			
And Repair	19	13	68% (Mean=69%)
Digital Electronics	19	18	95%(Mean=90%)
	# of	#	
Reporting Period/Topic	Students Attempting	Passing	% Passing
2010-2011	0.0	00	4000/ /54 000/)
Introduction To Hydraulics	26	26	100% (Mean=96%)
<ul> <li>Wind Turbine Mechanical Systems</li> </ul>	24	24	100% (Mean= 97%)
<ul> <li>Introduction To Wind Energy</li> </ul>			
Electrical Theory I	26	24	92% (MEAN=78%)
Electrical Theory II	26	20	77% (MEAN=71%)
<ul> <li>Field Safety And Experience</li> </ul>			

<ul> <li>Wind Turbine Operation         And Maintenance     </li> <li>Introduction to Motors and         Generators     </li> <li>Power Generation And         Distribution     </li> <li>Wind Turbine Siting And</li> </ul>	26	23	88% (MEAN=83%)
Construction  Monitoring And Communication Technology  Wind Turbine Diagnosis And Repair  Digital Electronics	24	22	92% (Mean=86%)

**Measurement Tool:** Performance Tests

Program Objective(s): 1-6

**Goal Results:** 90% pass rate, 70% cut score

**Legend:** %passing (group mean)

Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2010-2011	26	26	100% (Maan-04%)
<ul> <li>Introduction To Hydraulics</li> <li>Wind Turbine Mechanical Systems</li> <li>Introduction To Wind</li> </ul>	26	26	100%(Mean=94%) 100%(Mean=95%)
<ul> <li>Energy</li> <li>Electrical Theory I</li> <li>Electrical Theory II</li> <li>Field Safety And Experience</li> <li>Wind Turbine Operation And Maintenance</li> <li>Introduction to Motors and Generators</li> </ul>	26	26	100%(Mean=97%)
<ul> <li>Power Generation And Distribution</li> <li>Wind Turbine Siting And Construction</li> <li>Monitoring And Communication Technology</li> </ul>	24	24	100%(Mean=98%)

<ul><li>Wind Turbine Diagnosis And Repair</li><li>Digital Electronics</li></ul>	24	24	100%(Mean=99%)
Reporting Period/Topic	# of Students Attempting	# Passing	% Passing
2011-2012			
Introduction To Hydraulics	9	9	100% (Mean=94%)
Wind Turbine Mechanical	9	9	100% (Mean=91%)
Systems			
Introduction To Wind			
Energy			
Electrical Theory I	8	8	100% (Mean=90%)
<ul><li> Electrical Theory II</li><li> Field Safety And</li></ul>			10070 (1110411 0070)
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	19	19	NA
And Repair			
Digital Electronics	18	16	89% (Mean=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 general education competencies are presented and/or measured:

General Education Competencies	Measurement Tools	Courses In Which General Education Competencies Are Presented and/or Measured
Communication  1. Writing 2. Oral Presentation 3. Information Technology	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>CATs</li> <li>Class Presentation</li> <li>Writing Across The Curriculum Rubric</li> <li>Oral Presentation Rubric</li> <li>Critical Thinking Rubric</li> </ul>	<ul> <li>ACS 100</li> <li>COM 102</li> <li>CIS 101</li> <li>ENG 102</li> <li>ENG 233</li> <li>ENG 299</li> <li>GEOL 141</li> </ul>
Mathematical and Scientific Reasoning 4. Demonstrate mathematical principles. 5. Demonstrate scientific reasoning. 6. Apply scientific methods to the inquiry process	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Capstone Project</li> <li>Laboratory Exercise</li> <li>Laboratory Report</li> <li>Writing Across The Curriculum Rubric</li> <li>Oral Presentation Rubric</li> <li>Critical Thinking Rubric</li> </ul>	• GEOL 141 • MATH 107 • ENG 299
Critical Thinking 7. Read and analyze complex ideas. 8. Locate, evaluate and apply research information. 9. Evaluate and present well-reasoned	<ul> <li>GEA College Rubric</li> <li>CAAP</li> <li>Capstone Project</li> <li>Laboratory Exercise</li> <li>Writing Across The Curriculum Rubric</li> <li>Oral Presentation Rubric</li> <li>Critical Thinking Rubric</li> </ul>	<ul><li>ACS 100</li><li>ENG 102</li><li>ENG 233</li><li>ENG 299</li><li>GEOL 141</li></ul>

### **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):
Goal Results:

1

90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

Legend:

ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1	4(9)	2(9)	2(9)	1(9)
• 1.1.2	4(9)	2(9)	2(9)	1(9)
• 1.1.3	4(9)	2(9)	2(9)	1(9)
• 1.2.1	5(9)	1(9)	3(9)	
• 1.2.2	5(9)	1(9)	3(9)	
• 1.2.3	5(9)	1(9)	3(9)	
• 1.3.1	5(9)	1(9)	2(9)	1(9)
• 1.3.2	5(9)	1(9)	2(9)	1(9)
• 1.4.1	3(9)	2(9)	1(9)	3(9)
• 1.4.2	3(9)	2(9)	1(9)	3(9)
Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
<b>Year</b> 2009-2010		Proficient (3)		
	<b>(4)</b> 18(10)			
2009-2010	18(10) 18(10)			
2009-2010 • 1.1.1	<b>(4)</b> 18(10)			
2009-2010 • 1.1.1 • 1.1.2	18(10) 18(10) 18(10) 18(10)			
2009-2010 • 1.1.1 • 1.1.2 • 1.1.3	18(10) 18(10) 18(10) 18(10) 18(10)			
2009-2010 • 1.1.1 • 1.1.2 • 1.1.3 • 1.2.1	18(10) 18(10) 18(10) 18(10) 18(10) 18(10)			
2009-2010 • 1.1.1 • 1.1.2 • 1.1.3 • 1.2.1 • 1.2.2	18(10) 18(10) 18(10) 18(10) 18(10) 18(10) 14(9)			
2009-2010  • 1.1.1  • 1.1.2  • 1.1.3  • 1.2.1  • 1.2.2  • 1.2.3	18(10) 18(10) 18(10) 18(10) 18(10) 18(10) 14(9) 14(9)			(1)
2009-2010  • 1.1.1  • 1.1.2  • 1.1.3  • 1.2.1  • 1.2.2  • 1.2.3  • 1.3.1	18(10) 18(10) 18(10) 18(10) 18(10) 18(10) 14(9)			(1)

Provides a clear, concise thesis statement.

Provides supporting paragraphs which relate to the thesis.

<sup>1.1.1</sup> Statement is clear and concise

<sup>1.1.2</sup> Statement is well-reasoned

<sup>1.1.3</sup> Statement leads to plentiful additional discussion

<sup>1.2.1</sup> Supporting paragraphs are well-reasoned

<sup>1.2.2</sup> Supporting paragraphs clearly relate to the thesis

<sup>1.2.3</sup> Supporting paragraphs are cohesive and logically developed

Correctly incorporates outside sources.

<sup>1.3.1</sup> Provides relevant outside sources

<sup>1.3.2</sup> Cites outside sources correctly

Uses appropriate grammar, syntax, punctuation, and spelling.

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

<sup>1.4.2</sup> Sentence structure and vocabulary are well-developed and varied.

Writing Across the Curriculum **Measurement Tool:** 

College Rubric: Research Paper

WET 204 Introduction to

**Hydraulics** 

**General Education Objective(s):** 

90% "Excellent"/"Proficient"/ **Goal Results:** 

"Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1	4(9)	2(9)	2(9)	1(9)
• 1.1.2	4(9)	2(9)	2(9)	1(9)
• 1.1.3	4(9)	2(9)	2(9)	1(9)
• 1.2.1	5(9)	1(9)	3(9)	
• 1.2.2	5(9)	1(9)	3(9)	
• 1.2.3	5(9)	1(9)	3(9)	
• 1.3.1	5(9)	1(9)	2(9)	1(9)
• 1.3.2	5(9)	1(9)	2(9)	1(9)
• 1.4.1	3(9)	2(9)	1(9)	3(9)
• 1.4.2	3(9)	2(9)	1(9)	3(9)
Year	Excellent	Proficient	Adequate	Inadequate
	(4)	(3)	(2)	(1)
2010-2011				
• 1.1.1	10(16)			
• 1.1.2	10(16)			
• 1.1.3	10(16)			
• 1.2.1	10(16)			
• 1.2.2	10(16)			
• 1.2.3	10(16)			
• 1.3.1	6(10)	3(2)	1(1)	(3)
• 1.3.2	10(13)			(3)
• 1.4.1	9(15)	1		(1)
• 1.4.2	10(16)			
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: WET 205 Electrical Theory II

1

General Education Objective(s): Goal Results:

90% "Excellent(4)"/"Proficient(3)"/

"Adequate(2)"

Legend:

ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1	3(8)	2(8)	2(8)	1(8)
• 1.1.2	3(8)	2(8)	2(8)	1(8)
• 1.1.3	3(8)	2(8)	2(8)	1(8)
• 1.2.1	4(8)	1(8)	3(8)	
• 1.2.2	4(8)	1(8)	3(8)	
• 1.2.3	4(8)	1(8)	3(8)	
• 1.3.1	4(8)	1(8)	2(8)	1(8)
• 1.3.2	4(8)	1(8)	2(8)	1(8)
• 1.4.1	3(8)	1(8)	1(8)	3(8)
• 1.4.2	3(8)	1(8)	1(8)	3(8)
Year	Excellent	Proficient	Adequate	Inadequate
	(4)	(3)	(2)	(1)
2010-2011				
• 1.1.1	8(14)	(2)	1	
• 1.1.2	8(9)	(7)	1	
• 1.1.3	3(9)	4(3)	2(3)	(1)
• 1.2.1	6(9)	2(5)	1(2)	
• 1.2.2	7(15)	2	(1)	
• 1.2.3	4(7)	4(6)	1(3)	

• 1.3.1	6(10)	2(1)	(2)	1(3)
• 1.3.2	5(8)	3(4)	(1)	1(3)
• 1.4.1	2(8)	4(8)	3	
• 1.4.2	2(6)	5(10)	2	

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 WET 210 Wind Turbine Siting

and Construction

General Education Objective(s): 1

Goal Results: 90% "Excellent"/"Proficient"/

"Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent	Proficient	Adequate	Inadequate
	(4)	(3)	(2)	(1)
2010-2011				
• 1.1.1	20(3)		1	
• 1.1.2	20(3)		1	
• 1.1.3	20(3)		1	
• 1.2.1	20(3)		1	
• 1.2.2	20(3)		1	
• 1.2.3	20(3)		1	
• 1.3.1	16(2)		1	4(1)
• 1.3.2	17(2)			4(1)
• 1.4.1	17(3)	2	1	1
• 1.4.2	21(3)			
Year	Excellent	Proficient	Adequate	Inadequate
i eai	(4)	(3)	(2)	(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) 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: Writing Across the Curriculum College

Rubric: Research Paper

**WET 216 Digital Electronics** 

**General Education Objective(s):** 

Goal Results: Legend: 90% "Excellent"/"Proficient"/ "Adequate"

ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				, , ,
• 1.1.1	14(2)	6	(1)	1
• 1.1.2	15(1)	4(1)	2(1)	
• 1.1.3	15(1)	3(1)	2	1(1)
• 1.2.1	15(1)	1(1)	5(1)	
• 1.2.2	16(2)	3	1(1)	1
• 1.2.3	16(2)	2	3	(1)
• 1.3.1	18(1)			3(2)
• 1.3.2	17(1)	1		3(2)
• 1.4.1	7(1)	7(1)	5	2(1)
• 1.4.2	13(2)	5	3	(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 WET 212 Monitoring and **Communication Technology**

**General Education Objective(s):** 

**Goal Results:** 90% "Excellent"/"Proficient"/ "Adequate"

Legend: ENG 102(No ENG 102)

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2010-2011				
• 1.1.1	16(1)	4(1)	1(1)	
• 1.1.2	18(1)	2(1)	1	(1)
• 1.1.3	18(2)	2		1(1)
• 1.2.1	14(1)	6(1)		1(1)
• 1.2.2	18(1)	2(1)	1	(1)
• 1.2.3	18(1)	2(1)	(1)	1
• 1.3.1	20(3)			1
• 1.3.2	19(2)	1		1(1)
• 1.4.1	4(1)	9	7(1)	1(1)
• 1.4.2	14(1)	4(1)	2	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

**Measurement Tool:** Writing Across the Curriculum

College Rubric: Research Paper

WET 218 SCADA and

**Electronics of Wind Turbines** 

**General Education Objective(s):** 

**Goal Results:** 90% "Excellent"/"Proficient"/

> "Adequate" **ENG 102**

Legend:

Year	Excellent (4)	Proficient (3)	Adequate (2)	Inadequate (1)
2011-2012				
• 1.1.1	3	9	6	1
• 1.1.2	4	11	3	1
• 1.1.3	4	8	6	1
• 1.2.1	3	7	8	1
• 1.2.2	3	8	7	1
• 1.2.3	3	8	7	1
• 1.3.1	4	10	4	1
• 1.3.2	3	11	4	1
• 1.4.1	2	7	9	1
• 1.4.2	3	11	4	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

- <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

**Measurement Tool: GEA College Rubric** General Education Objective(s): 1, 2, 3

100% "excellent (4)", "proficient Goal Results:

(3)" or "adequate (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 1	21	19	90%(mean=2.20)
• 2	22	20	91%(mean=2.83)
• 3	21	14	67%(mean=3.88)*
2009-2010			
• 1	21	16	76%(mean=3.09)
• 2	21	21	100%(mean=2.99)
• 3	21	13	62%(mean=4.52)*

<sup>1</sup> Present ideas in writing.

**Measurement Tool: GEA College Rubric** 

**General Education Objective(s):** 4, 5, 6

100% "excellent (5)", "proficient **Goal Results:** (4)" or "acceptable (3)"

# of Students **Reporting Period** # Passing % Passing **Attempting** 2010-2011 21 5 24%(mean=1.53) • 4 21 18 86%(mean=2.88) 5 81%(mean=2.83) 21 17 • 6 2009-2010 20 6 30% (mean=1.55) • 4 21 12 57%(mean=2.94) 5 21 11 52%(mean=2.78) 6

<sup>2</sup> Present ideas orally according to standard usage.

<sup>3</sup> Demonstrate application of information technology.

<sup>\*</sup>Based on 5 point scale.

<sup>4</sup> Demonstrate mathematical principles.

<sup>5</sup> Demonstrate scientific reasoning.

<sup>6</sup> Apply scientific methods to the inquiry process.

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric Critical Thinking-Science Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	21	20	95%(mean=2.95)
• 8	21	19	90%(mean=3.05)
• 9	21	19	90%(mean=2.76)

- 7. Identify and gather information.
- 8. Analyze and evaluate information.
- 9. Synthesize and formulate conclusions.

Measurement Tool: General Education Objective(s): Goal Results: GEA College Rubric Critical Thinking-English Eval. 100% "excellent (4)", "proficient (3)" or "acceptable (2)"

Reporting Period	# of Students Attempting	# Passing	% Passing
2010-2011			
• 7	22	22	100%(mean=2.95)
• 8	22	22	100%(mean=3.0)
• 9	22	22	100%(mean=2.91)

- 7. Identify and gather information.
- 8. Analyze and evaluate information.
- 9. Synthesize and formulate conclusions.

Measurement Tool:
General Education Objective(s):
Goal Results:

GEA College Rubric 7, 8, 9

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
2011-2012	20(43.9%)	20(43.4%)	20(55.8%)	20(48.5%)	20(54.1%)
2010-2011	22(44.7%)	3(75.7%)	22(58.8%)	22(51.5%)	22(50%)
2009-2010	12(35.0%)	1(90%)	13(49.6%)	18(41.5%)	17(54.8%)

## PDSA CYCLE RESULTS (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

A review of the problem areas in objectives 1, 4, and 5 revealed the particular needs of current and specific educational material for the Wind Energy Technology program. A curriculum reconstruction was determined. Curriculum mapping was performed. Revamping was needed through the program curriculum. After review of possible textbooks, new textbooks were selected. Lesson plans, lab activities and syllabus are being revised to enhance the new material. The reconstruction will meet wind industry skill standards and a seal of approval from the American Wind Energy Association.

## PDSA CYCLE RESULTS (2010-2011)

#### **ANALYSIS**

#### **Problem Area**

Program objectives 1, 4, and 5 suffered in the 2010-2011 semesters due to a lack of balance between the classroom lectures and lab educational material.

Program objectives 2 and 3 experienced issues in 2010-2011 semesters due to a disconnection between education and real world activities.

Program objective 6 in 2010-2011 semesters encountered a deficient usage of the wind turbine for safety scenarios.

#### Goal

The goal for 2010-2011 academic year is to provide students with balance between the classroom lectures and lab educational material.

The goal for 2010-2011 academic year is to provide students with a connection between education and real world activities.

The goal for 2010-2011 academic year is to provide students using the wind turbine for safety scenarios.

#### **Action Plan**

The plan of action for program objectives 1, 4, and 5 is to evaluate each course in the Wind Energy Technology program. Restructure all courses which display an unbalance of classroom and lab material. Design a well balance class and lab instruction.

The plan of action for program objectives 2 and 3 is to assign a project in which the students will link college education to real world wind industry.

The plan of action for program objective 6 is to have each student involved in a simulated emergency scenario with the actual wind turbine.

#### Results

Program objectives 1 was met by analyzing and restructuring each course in which there was an unbalance identified between classroom and lab material. Lab material was reevaluated and restructured to meet the objectives of the individual courses.

Program objective 2 was met, by analyzing and restructuring course content to meet objective 2. Each student also has to research and discuss "real world industry" scenarios and link these to the ongoing training being received in the classroom, labs and climb courses.

Program objective 3 was met by requiring each student to research and explain "real world industry" scenarios and link these to the ongoing training being received in the classroom, labs and climb courses.

Program objective 4 was met by analyzing and restructuring each course in which there was an unbalance identified between classroom and lab material. Lab material was reevaluated and restructured to meet the objectives of the individual courses.

Program objective 5 was met by analyzing and restructuring each course in which there was an unbalance identified between classroom and lab material. Lab material was reevaluated and restructured to meet the objectives of the individual courses.

Program objective 6 was met by having students trained on the TracTel rescue system using the wind turbine. During each turbine climb, students are instructed in electrical safety, tool safety, Lock-Out/Tag-Out, personal protective equipment selection and use. Adult CPR and basic first aid are a core component of each degree-seeking students training.

## PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

#### **Area Describing Learning Improvements**

Although Program Objectives 1-6 have all been met during the 2011-2012 Cycle, the 68% result on the Wind Turbine Diagnosis and Repair is area of concern. This particular skill set is vital to students becoming eligible for promotion and showing their readiness for more responsibility so their skill here needs to be enhanced. The area is almost one of intuitive ability based on experience gained in the field but to enhance that ability more lab time on actual components brought to the labs from local wind farms has been allocated. Initial impressions seem to indicate that this is a positive effect.

#### Goal

This improvement will be assessed for the 2012-2013 period and the passing average of 75% will be goal.

#### **Action Plan**

This increased emphasis on turbine trouble shooting and repair will be a point of emphasis in the wind faculty course review and semester evaluations.

#### Results

Results from increased use of real wind and other industrial components in the lab and classroom will be reported in the 2012-2013 report.

#### **Additional Report of New Program**

In the spring and summer of 2012, and currently in the fall of 2012, in fulfillment of a New Mexico State Grant awarded to and naming the College as the New Mexico Wind Center of Excellence the wind program created an Occupational Certificate program of twenty one credit hours using the same technical courses and syllabi as is used in the degree program. The program delivers in one semester all the technical wind courses taught in the first year of the degree program. The program utilizes block programing requiring an accelerated pace to allow completion of this number of credit hours in one semester. In addition, this program does not require any general education courses and is strictly intended to provide an acceptable level of skills to allow graduates to enter the workforce after completion. Since there are no acceptance testing requirements for this program, like the College's normal use of the COMPASS exam the class has been able to utilize the IBEST grant to provide in class tutors to help students in the class, particularly those without a high school diploma or GED with the

intention that they pass their GED to attain the program Occupational Certificate. Four out of five of those students achieved their GED simultaneous with their wind certificate and the other student is in the process of completing all sections of his GED.

It would seem to be a goal to compare these outcomes between the regular degree program students and the one semester students, at least on the similar courses taught. For several factors this has not been a program goal:

- 1. The pace for the short program is 21 credit hours for one semester whereas, for the degree program student, that same 21 credit hours is over two semesters. In comparing the degree program and short program, the short program had a higher failure rate which is the case, and therefore, a higher dropout rate.
- 2. The program objectives are met for both classes but the Occupational Certificate students require a much higher degree of individual tutoring to achieve the objectives and there has been a somewhat higher failure rate. For the 33 students that started the one semester or short course program 85% received their Occupational Certificate. That may be indicative of the rate of content delivery. On the other hand the ability to provide training to students that are then capable of entering the job market upon course completion is more than meeting the original grant objective with regard to attrition.

# ASSESSING PROGRAM ASSESSMENT 2011-2012

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 ultimately improves the teaching-learning relationship. To that end, Mesalands Community College encourages 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  $\rightarrow$  do  $\rightarrow$  study  $\rightarrow$  adjust 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 and 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 faculty 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 more meaningful to all stakeholders. These reports are then reviewed by the Chair of the Student Learning Assessment Committee who uses the 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 SLAC's goal to facilitate this migration.

The following programs were discontinued beginning the 2011-2012 academic cycle:

- 1) Associate of Arts General Studies
- 2) Automotive Technology
- 3) Building Trades4) Diesel Technology

#### **MEASURES PROGRAM OBJECTIVES\***

1 No program objectives measured	2 Some program objectives measured (<50%)	3 Most program objectives measured (<100%)	4 Measures all program objectives
			Animal Science (S) Business Administration (S) Business Office Technology (S) Early Childhood (S) Farrier Science (S) Fine Arts (1) Natural Sciences (3) Professional Writing (S) Social Work (S) Wind Energy Technology (3)

#### **USES MULTIPLE MEASURES: PROGRAM OBJECTIVES\***

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
	Business Administration (S) Business Office Technology (S) Farrier Science (2) Natural Science (3)	Animal Science (3) Early Childhood (S) Wind Energy Technology (S)	Fine Arts (1) Professional Writing (S) Social Work (S)

#### **MEASURES GENERAL EDUCATION COMPETENCIES \***

### **Communication-Writing (Writing Across the Curriculum)**

1 No General Education Competency: Communication-Writing measured	2	3	4 General Education Competency: Communication-Writing measured
AAS General Studies (S) Natural Sciences (S)			Animal Science (S) Business Administration (1) Business Office Technology (1) Early Childhood (S) Farrier Science (S) Fine Arts (S) Pre-Nursing (1) Professional Writing (3) Social Work (1) University Studies (1) Wind Energy Technology (S)

#### **Communication-Oral Presentation**

1 No General Education Competency: Communication-Oral Presentation measured	2	3	4 General Education Competency: Communication-Oral Presentation measured
Business Administration (S) Fine Arts (S) Natural Sciences (4) Social Work (S) Wind Energy Technology (S)			AAS General Studies (1) Animal Science (1) Business Office Technology (1) Early Childhood (S) Farrier Science (S) Pre-Nursing (1) University Studies (1)

### **Communication-Information Technology**

1 No General Education Competency: Communication-Writing measured	2	3	4 General Education Competency: Communication-Writing measured
Business Administration (N) Fine Arts (N) Natural Sciences (N) Social Work (N) Wind Energy Technology (N)			AAS General Studies (N) Animal Science (N) Business Office Technology (N) Early Childhood (N) Farrier Science (N) Pre-Nursing (N) University Studies (N)

## **Critical Thinking**

1 No General Education Competency: Critical Thinking measured	2	3	4 General Education Competency: Critical Thinking measured
AAS General Studies (S) Fine Arts (S) Natural Sciences (S) Social Work (4)			Animal Science (S) Business Administration (1) Business Office Technology (1) Early Childhood (1) Farrier Science (S) Pre-Nursing (1) University Studies (1) Wind Energy Technology (1)

### **Mathematical Reasoning**

1 No General Education Competency: Mathematical Reasoning measured	2	3	4 General Education Competency: Mathematical Reasoning measured
Fine Arts (N) Natural Sciences (N) Social Work (N)			AAS General Studies (N) Animal Science (N) Business Administration (N) Business Office Technology (N) Early Childhood (N) Farrier Science (N) Pre-Nursing (N) University Studies (N) Wind Energy Technology (N)

## **Scientific Reasoning**

1 No General Education Competency: Scientific Reasoning measured	2	3	4 General Education Competency: Scientific Reasoning measured
Fine Arts (N) Natural Sciences (N)			AAS General Studies (N) Animal Science (N)
Social Work (N)			Business Administration (N) Business Office Technology (N) Early Childhood (N) Farrier Science (N)
			Pre-Nursing (N) University Studies (N) Wind Energy Technology (N)

## **USES MULTIPLE MEASURES FOR GENERAL EDUCATION COMPETENCY\***

## Writing

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
Natural Sciences (3)	Business Administration (3) Fine Arts (S) Social Work (3)	AAS General Studies (S) Business Office Technology (2) Pre-Nursing (S)	Animal Science (4) Early Childhood (3) Farrier Science (4) Wind Energy Technology (S) University Studies (3)

## **Oral Presentation**

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
Business Administration (2) Fine Arts (S) Natural Sciences (3) Social Work (2) Wind Energy Technology (2)	AAS General Studies (S) Animal Science (S) Business Office Technology (1) Pre-Nursing(N)	Farrier Science (S) Early Childhood (2) University Studies (2)	

## **Information Technology**

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
Business Administration (2) Fine Arts (S) Natural Sciences (2) Social Work (2) Wind Energy Technology (2)	AAS General Studies (S) Animal Science (S) Business Office Technology (1) Early Childhood (1) Farrier Science (S)	University Studies (2)	

## **Mathematical Reasoning**

1 No measures	1 2 3 Two (2) measures Two (2) measures		4 Three (3(triangulation)) or more measures
Fine Arts (S) Natural Sciences(3) Social Work (3)	Animal Science (3) Business Administration (3) Early Childhood (S) Wind Energy Technology (3)	AAS General Studies (2) Business Office Technology (2) Farrier Science (S) Pre-Nursing (S)	University Studies (3)

# **Scientific Reasoning**

1 No measures	2 One (1) measure	3 Two (2) measures	4 Three (3(triangulation)) or more measures
Fine Arts (S)	Animal Science (4)	AAS General Studies (S)	University Studies (S)
Social Work (4)	Business Administration (4)	Business Office Technology (2)	. ,
Natural Sciences (3)	Early Childhood (S)	Farrier Science (4)	
, ,	Wind Energy Technology (3)	Pre-Nursing (4)	

## **Critical Thinking**

1	2	3	4 Three (3(triangulation)) or more measures
No measures	One (1) measure	Two (2) measures	
Fine Arts (2) Natural Sciences (S) Social Work (N)	AAS General Studies (3) Business Administration (3) Early Childhood (3) Wind Energy Technology (3)	Business Office Technology (3) Pre-Nursing (N)	Animal Science (3) Farrier Science (3) University Studies (3)

## **USES BOTH INTERNAL AND EXTERNAL SOURCES\***

1 No data	2	3 Uses either internal data or external data	4 Uses both internal data and external data
		AAS General Studies (S) Animal Science (S) Business Administration (S) Business Office Technology (S) Early Childhood (S) Fine Arts (S) Natural Sciences (S) Pre-Nursing (S) Professional Writing (S) Social Work (S) University Studies (S) Wind Energy Technology (S)	Farrier Science (S)

## **HAS COMPLETE DATA SUMMARY\***

1 No data summary	2 Minimal summary explaining little data	3 Partial summary explaining some data	4 Full data summary explaining who, what, where, when, how, why and to what extent
	Animal Science (S) Business Administration (3) Business Office Technology (S) Fine Arts (S) Pre-Nursing (1) Professional Writing (S) Social Work (3) University Studies (1)	AAS General Studies (1) Early Childhood (S) Farrier Science (S)	Natural Sciences (1) Wind Energy Technology (3)

# CHANGES TO CURRICULUM BASED ON DATA (CLOSES THE LOOP)\*

1 No changes made	2 Changes made without data/changes based on anecdotal data	3 Changes made based on empirical data	4 Changes made based on empirical data with follow-up plans to measure effectiveness
AAS General Studies (S) Animal Science (2)	Business Office Technology (S) Fine Arts (S) Pre-Nursing (S) Professional Writing (S) University Studies (1)	Early Childhood (2) Farrier Science (S) Social Work (2) Wind Energy Technology (2)	Business Administration (3) Natural Sciences (S)

<sup>\*</sup>The number in parenthesis following the program title represents that column under which that specific program appeared last year. An "S" meaning "same" indicates that the program did not change columns from last year while an "N" indicates that the program is "new" to the chart and did not appear on it last year. As indicated earlier, SLAC would like to see a migration of programs from the left hand columns of the rubric to the right hand columns indicating more comprehensive and meaningful assessment efforts.

# 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. (<50%)	Most program objectives measured. (<100%)	All program objectives measured.
Uses Multiple Measures: Program Objectives	No measures.	One measure.	Two measures.	Three (triangulation) or more measures.
Measures General Education Competencies**	Not measured			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.

<sup>\*\*</sup>Assessment of the General Education Competencies is based on the General Education Competency Reporting Schedule.

# 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

Only 44% of programs (7 out of 16) reported program-specific Writing Across the Curriculum (WAC) data in their Student Learning Assessment Program Reports. This is difficult to explain since all faculty at the College are required to participate in the WAC initiative. A general education competency writing rubric was developed in order to facilitate the data collection in support of the WAC initiative.

#### **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**

Only 12% of programs (2 of 16) reported program-specific data on critical thinking competency attainment. After this goal was established, the SLAC decided to allow all faculty to assess either the general education competencies of critical thinking or oral presentation. Thirty-one percent (5 of 16) of programs reported oral presentation competency attainment. Having said that, only 44% of programs (7 of 16) reported program specific data on either critical thinking or oral presentation competency attainment in their Student Learning Assessment Reports.

# PDSA CYCLE GOALS (2011-2012)

#### **ANALYSIS**

#### **Problem Area**

Three years ago with the initiation of the updated Student Learning Assessment Program Reports, lead faculty and program directors were given a report format to assist in the generation of the individual program reports. This suggested report format was in response to faculty requests for directions on what they "needed to do."

#### Goal

Facilitate faculty to take more ownership of their program reports by encouraging them to modify, revise and rework them to more adequately reflect the unique characteristics and needs of the program with the ultimate goal of improving learning.

#### **Action Plan**

Discuss in detail the above mentioned goal at the spring 2013 Assessment Day.

#### Results

To be discussed and analyzed in the 2012-2013 Report.

### **CLASSROOM LEVEL ASSESSMENT**

The goal of faculty assessment of student leaning at the individual course level is to identify what has and has not worked at increasing learning in the classroom and how this information can be used in present and future classes to improve the teaching-learning relationship between faculty and students. Historically, Mesalands Community College required all faculty to complete a Faculty Outcomes Assessment Form. This form was the College's attempt to collect quantitative data regarding the students' performance on the courses' identified learning outcomes, i.e., course objectives.

The Faculty Outcomes Assessment Form was not well received by faculty. Faculty indicated that the Form was too time consuming to fill out while the information they were required to supply did not lead to improved student learning. Based on this feedback, the SLAC redesigned the Form to make it more user friendly, as well as provide more useful information that could be used to improve student learning, regardless of who was teaching the course in question. The new MCC Faculty Outcomes Assessment Narrative Form asks three questions:

- 1) Comment on any strategies you used in the course that improved student learning.
- 2) Comment on anything that was not successful in meeting your learning objectives.
- 3) What changes to this course would you recommend for yourself or another instructor to improve student learning the next time this course is offered?

Faculty complete the Mesalands Community College Faculty Outcomes Assessment Narrative Form for each class they teach at the end of the fall, spring and summer semesters.

Hard copies of completed forms are kept on file and made available to all College faculty teaching that specific course. The availability of these forms is identified in the *Student Learning Assessment Guide for Faculty*. Faculty are encouraged to review the information on these Forms with the goal of assisting them at improving student learning.