



**Colorado Northwestern  
Community College**

**Assessment of Student Learning  
Bi-Annual Report**

**Fall 2009-Spring 2011**

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## **Introduction**

The purpose of this report is to ensure that Colorado Northwestern Community College (CNCC, the College) is evaluating the effectiveness of its assessment program, and that it is reporting the results of academic assessment to all stakeholders associated with this institution. During Academic Years 2009-2011, the college continued to implement and improve its assessment of student learning process that was first initiated in the fall of 2001. This is the Assessment Committee's third bi-annual report. This 2012 report is for the purpose of reporting assessment results, and to help guide the committee's action in order to continue CNCC's focus on efforts to sustain and improve student learning and instruction at CNCC.

## **Assessment Committee's Mission**

The assessment committee has chosen the following mission: To improve student learning at CNCC through continuous, comprehensive, and meaningful assessment of student academic achievement. Starting in the AY2011-2012 this committee will work with CNCC's student success committee to ensure continuous, comprehensive, and meaningful assessment of student success. This committee's assessment mission is set forth in order to help CNCC reach its overall mission:

This mission is in conjunction with CNCC's over all Mission Statement to *"Prepare our students to achieve their educational, workplace, and personal goals,"* and CNCC's Vision Statement, *"Innovative teaching, outreach education, and continual assessment will ensure that our students have the skills to further their education, succeed at meaningful careers, and prosper in a complex and increasingly diverse world."*

## **Assessment Committee Goals**

1. Assess student academic achievement at the classroom, program, and institutional level to improve learning.
  - a. Continue to develop and improve measurable competencies for all courses, programs, and degrees.
  - b. Continue the collection and evaluation of assessment data. (Refer to the Assessment calendar.)
2. Sustain and promote a manageable assessment plan based on institutional values.
  - a. Continue to provide assessment training opportunities for faculty, staff, and administration.
  - b. Foster an institution-wide culture of assessment.
3. Develop and maintain a centralized data collection, analysis, and reporting process.
  - a. Support assessment efforts through institutional research office.
  - b. Create and maintain assessment web link with participation from each department/program.
  - c. Publish assessment results internally and for the local community.
4. Ensure CNCC assessment results impact institutional planning and budgeting.

### **Addressing the Challenges Identified in the Previous Bi-Annual report:**

The Assessment Committee continues to meet monthly throughout each academic year. Membership has increased and whenever possible we include faculty representation from each academic and vocational program. The committee continues to have representation from the Deans of Instruction from each campus and a representative from Institutional Research.

Much of the work of the committee during the past two years (2009-2011) has been dedicated to addressing the following challenges from the previous report:

### **The 2007-2009 Assessment Goals:**

1. **Challenge:** The assessment web pages need to be more inclusive to incorporate departmental or program pages, and must be updated regularly to reflect the current condition of assessment at CNCC.  
**Strategy:** to address this was to form a small committee (1 or 2 persons) to be chosen to update the Assessment web pages at least once per semester.
  - a. We did set up a small sub-committee to keep the web pages up-to-date, but with constant IT staff changes updating every semester became impossible. So during the spring semester of 2008 & 2009 the entire committee reviewed the web-site. We did not incorporate departmental or program pages. Identifying the need for a web-site committee did spur on assignments for other sub-committees. We set up sub-committees for the Test of Everyday Reasoning (TER), and assessment form completion compliance.
2. **Challenge** We need to continue to rotate committee leadership roles and responsibilities within this committee.  
**Strategy:** Coordinate with the deans to determine a rotation schedule for assessment committee chairs
  - a. The committee did not experience any changes in leadership during these two academic years due to faculty attrition. The Instructional Deans will continue to help to get a rotation going since they are fully aware of faculty loads and qualifications.
3. **Challenge** The formal assessment information must be used to affect institutional change at a budgetary as well as instructional level.  
**Strategy:** The Committee will ask department heads to show a tie-in to assessment on budget requests by including a section on the assessment form (C/D) to show budgetary implications.
  - a. The committee has recognized that this part of our assessment process is not working along with other concerns, so it was decided at the April 2011 meeting to request funds from Cabinet to join the HLC Assessment Academy in hopes of getting some guidance and advice on how to link all aspects of assessment together.
4. **Challenge** College-wide assessment of general education is progressing, but more work remains to be done in the assessment of communication skills institution-wide.  
**Strategy:** The Committee needs to continue to investigate ways to assess and report communication skills at the institutional level.
  - a. Investigation of “Writeplacer” and discussions on how to assess communication skills at the institutional level were unsuccessful. Again the committee is looking for help from the HLC Assessment Academy.

- b. Funding needs to increase to cover the cost of accuplacer testing which is increasing due to the write placer exam.
- 5. **Challenge** Additional adjunct faculty participation in the assessment process needs to occur.  
**Strategy:** The Committee will continue to work with administration as well as faculty chairs, on how we can improve assessment efforts at the adjunct level. Specifically adding assessment training with adjunct faculty training may help.
  - a. Program directors and assessment committee members did do some informal academic assessment training. This responsibility of training and reviewing the completed forms has fallen on program directors.
- 6. **Challenge** Assessment of skills needs to be linked to the assessment of goals for the programs or departments. Each assessment should show a close relation with the program goals.  
**Strategy:** Departments/programs will need to assess and report on their specific departmental goal.
  - a. Again, we have found problems with this area. Not all programs had identifiable program goals. The Dean of Instruction is working with them on this, and it is the committee's hope that the Academy will help us streamline this process.
- 7. **Challenge** Procure funds/budget to help in assessment training for new faculty  
**Strategy:** Continue to train full-time faculty on assessment and assessment reporting as early in the fall semester as feasible and request funds for outside training opportunities.
  - a. For these two academic years all of the assessment training is being accomplished through program directors and assessment committee members. The instructional deans are supplying the committee with new faculty member names and training is done in small groups as needed.
- 8. **Challenge** Course assessments, program goals, and college goals need a more clearly stated connection.  
**Strategy:** The committee will work with administration to see if they can help us find a way to combine and report these items

### **The Test of Everyday Reasoning (TER)**

#### Results of TER for AY 2010

The majority (60%) of exiting students improved their overall critical thinking scores. Of those the average total score increased by 18.17%. The overall trimmed mean total score increased by 8.7%. Figure 1 shows the average percentile change in each category of the TER.

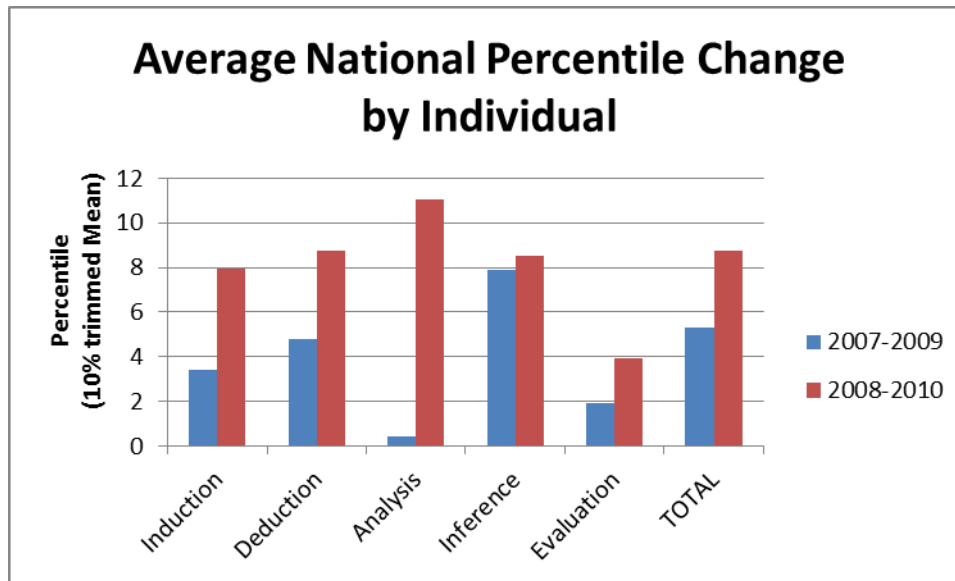


Figure 1: Average changes in percentile performance between entrance and exit of the students in the five categories of critical thinking tested by the TER compared by graduation year.

**AY2010--**Analysis of these scores indicates that students are showing improvements in all areas of critical thinking. The most growth was shown in their ability to use analysis to answer questions. The least improvement was in student’s ability to use evaluation to answer questions, followed by deductive reasoning.

*Recommendation:*

In the previous assessment report analysis and evaluation were noted as the areas needing most attention by our faculty. Now this current report implies that the training provided to faculty did impact student performance in a positive manner, at least with analysis reasoning. Evaluation skills were again shown to have only weak improvement for exiting students. In this report evaluation reasoning was shown to have the least improvement between students entering and exiting the college. This indicates that faculty training on how to include evaluation skills is needed in the upcoming academic year.

Previous recommendations included increasing the number of paired tests to a minimum of 70 to ensure an adequate sample size. Though the number of paired tests more than doubled from the previous report (53) the assessment committee is still concerned that this is not an adequate or random sample. The vast majority of paired results are from two CTE programs; nursing and dental hygiene. Therefore the TER is not providing adequate college wide data on critical thinking skills, or giving valuable information on how the college as a whole can adjust to meet our goal of increasing

critical thinking skills. These recurrent challenges have compelled the assessment committee to discontinue use of the TER. The assessment committee has identified alternative critical thinking assessments within CTE programs and general education and will develop these to provide meaningful reporting and recommendations.

### **The Student Opinion Survey (SOS)**

This survey was not administered between 2009 and 2011. The Student Success Committee and the Admissions and Records Office, however, have planned a re-introduction of the SOS during the Spring 2012 semester.

### **Student In-Class Evaluation Survey Data 2009-2011**

The student In-Class Evaluation was adopted as the source of information regarding student’s satisfaction with instruction for the college as a whole. This instrument is given to all students in each course that they take at CNCC near the end of the term, or at the completion of the course. In AY2010 the evaluation instrument was updated and modified. Questions were reorganized into groups of similar questions for better data collection. The numerical scale was also changed from a 0-4 scale [poor(0) – excellent (4)] to a 1-5 scale ([1 = Excellent, 2 = Very Good, 3 = Good, 4 = Fair, 5 = Poor] or [1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree]). This made it challenging to compare results from previous reports and conduct a longitudinal analysis.

The Student in-Class Evaluation of Instruction surveys for 2010-2011 show strong satisfaction with the quality of instruction at CNCC with 93-94% of respondents rating course quality and instruction at good or above. Students felt they had obtained skills presented in the course (85-86% agree or above) and that class time was well spent (83-87% agree or above) Consistent and strong presence of assessment within the classroom across disciplines and departments is evident by high rates of response indicating that students understand how they are being evaluated and that assessment strategies were well defined (87-90% agree or above)

Additional information from the survey showed that our median student age is 18-22 but is increasing, and the majority of respondents are enrolled full-time.

#### Summary of results

- Overall Course Content was: 1 = Excellent, 2 = Very Good, 3 = Good, 4 = Fair, 5 = Poor

	Average Score	Percent responding good or above	Responses
<i>Previous report</i> <sup>a</sup>	2.06	90	3179
AY 2010	1.94	93	1695
AY 2011	1.88	94	1886

- I would recommend this instructor to other students: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree

	Average Score	Percent responding agree or above	Responses
<i>Previous report</i> <sup>b</sup>	NA	NA	NA
AY 2010	1.63	86	1678
AY 2011	1.57	87	1870

- The methods being used for evaluating my work are understandable: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree

	Average Score	Percent responding agree or above	Responses
<i>Previous report</i>	1.65	90	3174
AY 2010	1.67	87	1695
AY 2011	1.66	88	1885

- The goals of this course and assessment strategies were well defined: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree

	Average Score	Percent responding agree or above	Responses
<i>Previous report</i>	1.41 <sup>a</sup>	NA <sup>c</sup>	3174
AY 2010	1.61	90	1695
AY 2011	1.62	89	1885

- At the end of this course, I feel I have obtained the skills presented: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree

	Average Score	Percent responding agree or above	Responses
<i>Previous report</i> <sup>b</sup>	NA	NA	NA
AY 2010	1.71	86	1695
AY 2011	1.71	85	1885

- Classroom time is well spent: 1 = Strongly Agree, 2 = Agree, 3 = Neutral, 4 = Disagree, 5 = Strongly Disagree

	Average Score	Percent responding good or above	Responses
<i>Previous report</i> <sup>b</sup>	NA	NA	NA
AY 2010	1.71	83	1678
AY 2011	1.62	87	1870

- My age is: 1 = <18, 2 = 18-22, 3 = 23-27, 4 = 28-32, 5 = >32

	Average Score	Percent responding 18-22	Responses
<i>Previous report</i> <sup>a</sup>	2.56	74	3174
AY 2010	2.49	64	1668



AY 2011	2.57	63	1853
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- I am enrolled for: 1 = less than 12 credits, 2 = 12 or more credits

	Average Score	Percent responding 12+	Responses
<i>Previous report</i> <sup>b</sup>	NA	92	3174
AY 2010	1.85	85	1653
AY 2011	1.84	84	1829

- My class standing is: 1 = Freshman, 2 = Sophomore

	Average Score	Percent Sophomore	Responses
<i>Previous report</i> <sup>c</sup>	NA	NA	NA
AY 2010	1.45	45	1642
AY 2011	1.46	45	1830

Notes

a-scores adjusted from previous report to match current scoring format

b-new question as of AY 2010

c-previous data cannot be used due to change in scoring format

Recommendation:

High student understanding of assessment and evaluation criteria indicates success in the training of faculty in assessment methods and supports further professional development of new faculty. In the modification of the evaluation instrument in AY 2009 some questions were dropped or modified, and reorganized into sections. It is apparent through this analysis that it is important to keep the same evaluation scales when appropriate to allow long-term longitudinal evaluation of trends. With the adoption of the new scales the assessment committee needs to make recommendations on satisfactory benchmarks in these evaluations to help program directors and faculty more effectively utilize the data.

Scheduling of computer labs for administration has been identified as a challenge by faculty to completing these surveys.

**Program/Department Reports**

Reports were collected from the following programs: Arts & Sciences (Craig and Rangely), Automotive Technology, Aviation Maintenance Technology, Business, Cosmetology, Dental Hygiene, Developmental Studies, Equine Science, Natural Resources, and Nursing.

Arts and Sciences-Craig-Assessment Summary AY 2010 & AY 2011

*Assessment 2010*

*Communication:*

MAT 103: 80% of students in the class were assessed as successful in working effectively with others and communicating necessary information on topics assigned.

English 122: 15 out of 16 students were effective in communicating their subject matter in research papers, with only one falling below (80%) successful rates in 10 subcategories (Effective cover page, outline & abstract, focus on thesis, introduction, structure development, logical support, use of sources, bibliography, conclusion, and grammatical correctness).

Sociology 102: 90% of all students worked as a group to research a topic given by the instructor, then presented an informative and interesting 25 minute presentation to peers and instructor.

We learned from these efforts the importance of working with the students to ensure they don't procrastinate; also, it is important to stress eye contact when presenting material.

#### *Critical Thinking:*

Mat 103: Second year nursing students needed to pass drug measurement tests with 100%. No room for error in those measurements! This is a good measure of interpreting graphical data (math) and integrating that knowledge into everyday language.

PSY 217: 75% of students achieved acceptable or superior knowledge about researching and following APA guidelines. It is important in Psychology to be able to observe, analyze, research and write in APA.

Overall, in 2010, we worked at selecting assessment measures and methods that were useful to us in planning how to teach material more effectively.

#### *Assessment 2011*

MAR 103: (critical thinking) Second-year nursing students again were given drug measurement tests, with 100% success required.

Success in 2<sup>nd</sup> year nursing students knowledge/retention of drug calculation skills, so this test is chosen to track retention of necessary calculation skills for future success in employment.

SOC 102: (critical thinking) 90% of all students worked as a group to research a topic given by the instructor, then present 20 min of interesting information to peers and instructor. Each student will grade each member of their groups and turn in the grade with their justification.

ENG 122: (Communication) Students will give a brief oral report on research project; 95% of students completed this satisfactorily.

ENG 122 (Critical thinking): Students wrote a (min.) 10 page research paper analyzing and developing their topic, with the 10 subcategories above, with an 87% success rate.

Faculty members tend to continue the assessment projects which they have been using; this gives us more consistent and meaningful data to work with. Conclusions we have formed concern the importance of giving students clear instruction and reminders about projects that they are working on,

and re-emphasizing the principles of successful analysis and of successful communication.

In the last two years, our assessment has not revealed budgetary needs, and so has had little impact on our spending.

Arts and Sciences Rangly Assessment Summary AY2010 & AY2011

*AY2010*

What was assessed:

Departmental faculty assessed students Critical Thinking, Communication skills, and program related goals through a variety of methods. 6 of 8 full time faculty reported with 80% completing reporting of results:

Critical thinking was specifically reported on in the following courses:

ENG 121, ENG 122, PHI 112, HWE 100, BIO 111, 201, 204, MAT 090

Communication Skills were specifically reported on in the following courses:

ENG 122, PHI 112, HWE 100, BIO 111, 201, 204, MAT 090

Additionally, specialized program goals were specifically reported on in the following courses:

MAT 090-Students will understand the meaning of mathematical symbols, translate English sentences into mathematical equations, and to solve real world problems

MAT 090- To teach a level of critical thinking that will allow the student to solve practical equations involving, fractional operations, graphing, solving simple algebraic equations, and solving real world applications using the above tools.

BIO 111- Presentation of tabular data as graph; Identification of experimental components and their importance

ENG 122- Develop and complete a formal academic research project.-data not reported

*AY2011*

What was assessed:

Departmental faculty assessed students Critical Thinking, Communication skills, and program related goals through a variety of methods. 8 of 8 full time faculty reported with again 80% completing reporting of results:

Critical thinking was specifically reported on in the following courses:

ENG 030, 060, 090, 121, 122, PHI 112, HWE 100, BIO 111, 202, 204, MAT 090, 121

Communication Skills were specifically reported on in the following courses:  
ENG 121, 122 REA 090, HWE 100, BIO 111, 202, 204, MAT 090, 120

Additionally, specialized program goals were specifically reported on in the following courses:

REA 090- Reading Comprehension

BIO 111- Presentation of tabular data as graph; Identification of experimental components and their importance

ENG 122- Develop and complete a formal academic research project.-data not reported

#### *Overall summary of assessment AY2010-2011*

A wide variety of assessment methods are being utilized to assess student learning within program and institutionally defined goals. All returning instructors are reporting on the same assessment strategies over multiple semesters and/or years, using the gained information to make sometimes significant changes to the pedagogy of their courses. It is apparent through the individual reports that results are being utilized to plan changes in future courses. Importantly, these changes are being assessed for their efficacy in subsequent courses. Additionally it was noted in some reports that when little information is gained by assessments that impact pedagogy, instructors are moving onto new or different assessment methods to determine if changes in other aspects of their courses or instruction are needed.

Due to a failure of 20% of reports being fully completed after the planning process it is apparent that more detailed oversight by the program director is needed to ensure that the faculty's results are reported externally through completion of the reporting process. Many of the reports included longitudinal comparisons linking previous changes affects student learning in the next course. This aspect of our utilization of assessment data to effect meaningful changes that can then be measured must be maintained and expanded to 100% of reporting where appropriate.

#### *Budgetary implications*

A large amount of modification in pedagogy and content have occurred these two years due to the assessment of student learning through these processes, and those not formally reported, have not required budgetary changes. Instruction is consistently being modified with the end goal of improving student learning in relation to institutional and program goals. Assessments through the departmental CDP process have been the driving force of budgetary change within the Rangely Arts and Sciences from AY 2008-present.

#### *Automotive Technology Assessment Summary 2009/10 – 2010/11*

##### *Customer Communication Skills Assessment Report*

In 2009-2010, Automotive Students were assessed on their ability to demonstrate their use of skills by communicating with the customer as to the concerns and symptoms the vehicle was brought in for. Research through computer based information and verbally through parts department or vendor source for pricing to compile complete estimated work order, turned in to service advisor or directly to customer and explaining cost of parts labor and details of repair procedure required to correct symptom of a customer's vehicle. Communicating with either service advisor or customer to follow up on customer satisfaction is all part of this course.

All Students were able to pass chapter tests and final for this course confirming they have retained 70% of written materials from curriculum text or web based services as well as verbal lecture and theory with 80% of them doing so with ease and confidence.

#### *Critical Thinking Skills Assessment Report*

In 2010-2011, Students were asses on their critical thinking skills and will be able to diagnose problems or concerns through steps of deductive reasoning and trained diagnostic procedures to be followed enabling a technician to determine problem, cause and required repair to correct drivetrain related component symptom and problem.

All Students were able to complete their assigned hands on task with 80% of them doing so with proficiency. This confirms they are able to apply critical thinking skills they have learned.

#### *Impact on Curriculum or Budget*

The first two years we had changes in Curriculum, this was due circumstances beyond our control as the Automotive Service and Repair Text Book being a Fourth Edition was no longer available in the second year or our program. Fortunately our publisher offered to wave the cost of books for those students who had just purchased a book the semester before and now needed the Fifth Edition Text book.

Budget however has been an ongoing struggle for a new program sill in need of required shop equipment and tooling. It has made challenges to overcome not having all equipment needed.

If one were to assess the impact on the on the learning outcomes due the lack of standard shop equipment and tooling that was needed but was not available due a shortage in budget, it would be one of a negative impact.

#### *Aviation Maintenance Technology Assessment Summary for AY2010-2011*

##### *Goals of the Assessment Plan:*

The AMT Program goal is to continuously improve student performance in critical subject areas. The AMT communication goals concern technical writing skills: students will be able to follow written instructions from lab assignments and manuals; and students will be effective technical writers in the field. Our critical thinking goals are, again, career related; students will be able to classify parts systematically and be able to use standard classification systems to identify parts; and students will apply efficient troubleshooting techniques to find the cause of a problem.

##### *Procedures:*

**Program:** As a measure of program effectiveness, we track student scores on the Federal Aviation Administration exit exams. We also track questions missed in subject areas, and note how many students miss questions in a given subject area. If two or more students miss a question from the same subject, we place additional instructional emphasis on that subject, and change our method of testing, so that students must provide more detailed proof of mastery. (Unfortunately, this year one student failed an exam—the first in ten years.)

Student	General	Airframe	Powerplant
1	Taken in 2010	Taken in 2010	93%
2	83%	87%	88%
3	87%	90%	May2012
4	90%	97%	May 2012
5	92%	91%	May 2012
6	80%	May 2012	May 2012
7	68%	May 2012	May 2012
Average	83.3%	91.25%	90.5%
Passed	6 students	4 students	2 students
Failed	1 student	0 students	0 students

**Communication:** It is essential that students have the ability to clearly describe their work in a standard format. The assignments we have selected include technical writing in one of three standard formats: (1) composing an aircraft log entry describing work or inspection results; (2) completing an FAA Form 337 to describe a major repair or alteration; or (3) reporting the results of research on the Airworthiness Directives on a particular aircraft, engine, or component. Assignments are scored on a standardized rubric to evaluate proficiency in six areas: spelling, legibility, punctuation, clarity of expression (sentence structure/phraseology), inclusion of all required content, and conformity to the approved format.

Overall, students did very well with spelling, format, and inclusion of all required content. On the other hand, expressing the content with clarity is a greater challenge for them. As a result, we assign log entries several times in each class to increase practice.

For non-technical writing practice, students are assigned a short summary-response essay in which they summarize the main points and ideas in an article from an aircraft maintenance journal or website; then, formulate a response that considers the importance or relationship to aviation maintenance. Essays are scored using a standardized rubric: following written instructions, spelling, punctuation, proofreading, summary of the key points, organization, and appropriate conclusion/response.

	Poor	Fair	Good
Followed instructions	1	-	6
Spelling	3	1	3
Punctuation	2	-	5
Proofreading	1	4	2
Summary of content	1	2	4
Organization	1	2	4
Conclusion	1	1	5

To assess listening and reading skills, we evaluate select assignments that require the student to follow a sequence of instructions. Using a rubric, the scoring of student work is based on completing of all the steps of the task, completing them in sequence, and completing them accurately. Results are from two courses: AMT 105 and AMT 202.

	No	Yes
Completed all steps	1	13
Completed in sequence	2	12
Completed accurately	2	12

**Critical Thinking:** Two critical thinking skills that are valuable to aircraft mechanics are the ability to classify components and to efficiently troubleshoot equipment to identify the cause of a problem or fault.

For the classification assessment, students are given ten pieces of hardware, and they must generate the correct part number and the codified size. Students are also presented ten part numbers, and must describe the hardware characteristics. Scoring is based on the number of correct answers. (If less than 70% correct, the assignment is repeated until that standard is met.)

All students met the competency on the first attempt.

To assess troubleshooting skills, students are assigned a practical project of locating and diagnosing the cause of a problem/fault/malfunction; then, they must write a report which identifies the problem, lists the sequence of steps they followed to locate the problem, and records test results (or evidence) to verify the cause. The assignment is scored on a standardized rubric that shows how well students follow proven diagnosis procedures. The student will: 1) verify that the described malfunction exists; 2) identify the paths that could influence/cause the malfunction through observation and research; 3) narrow focus to the critical path, by testing; 4) provide evidence from observations and testing to identify the cause of the fault.

All students followed the procedures and located the cause of the problem.

#### *Business, Accounting, Banking and Finance Assessment Summary AY2010 & AY2011*

##### *Assessment 2009 – 2010*

Business and Accounting students were assessed in the areas of creating a business plan and in applying math concepts to accounting problems. An area that is determined where students struggle with is speaking in front of their peers. Another problem is that if students did not complete or try to work on homework, they would struggle with some of the math concepts when presented accounting problems on exams. It was determined to continue with having students speak in front of the class and stress the importance of homework in applying concepts to exams.

##### *Assessment 2010 – 2011*

Business and accounting students were assessed in the areas of researching lawsuits and summarizing the results of the lawsuit for homework problems. The business plan creation and presentation were continued with for the current year. Students still struggle with speaking in front of peers but this event should become easier with more practice.

All of the aforementioned assessments were events that occurred regularly during the class period. There is not any kind of budget implications or problems with the events as they are not extras or something special that was created.





Responder 3 - 3.0

Responder 3 - 3.0

For the National Board Exam the results were as follows:

- 2010 Students testing - 22 Students Passing – 22 Courses below National Average – 0
- 2011 Students testing – 25 Students Passing - 25 Courses below National Average – 0

For the CRDTS Clinical Exam the results were as follows:

- 2010 Students testing – 22 Students Passing – 21 Topics below Regional Average – 0
- 2011 Students testing – 25 Students Passing – 25 Topics below Regional Average – 0

*Impact on Curriculum or Budget*

For this two year reporting period there were no changes in the curriculum needed other than some minor adjustments in the Medical Emergency Course. In the previous period (2007-09), Board results indicated a need for significant change in the Clinical Curriculum.....Periodontal Probing and Case Presentation both had new objectives written and new Process Evaluations were developed. Results from the Clinical exam the following year indicated that we were (and still are) performing above the Regional average for these two topics. Based on student outcomes, we believe our Assessment Plan is working as intended.

Developmental Studies Assessment Summary AY2010 & AY2011

*AY2009-10*

Critical Thinking:

1. REA 090.301ff: No results from TABE testing because the test results, which were mailed off, were not returned to the instructor. Instructor will get a key to score the TABE herself.
2. ENG 090.101: No results turned in by instructor.

Communication Skills:

1. ENG 030-060-090.101:
  - a. 030: 100% of completers achieved a B or higher.
  - b. 060: 57% of completers achieved a B or higher and completed ENG 090.
  - c. 090: 100% of completers achieved a C or higher; 42% achieved a B or higher and exited early. No students failed any of these sections.
2. ENG 090.301: During Fall 2009, overall, 2 students received a “good” ranking on their essays; 5 students received an “adequate” ranking; and 4 students received a poor. During Spring 2010, overall, 1 student received a “good” ranking on her essay; 3 students received an “adequate” ranking; and 2 students received a poor (the essay would not have let them pass into ENG 121). Between 33% and 36% of the students in each of the classes wrote a final essay that should not have let them pass into ENG 121.

Program Goal:

No data was collected on percentage of ENG 090 completers who passed ENG 121 with a C or higher.

### *AY2010-11*

#### Critical Thinking:

1. REA 090.301ff: No results from TABE testing because the test results, which were mailed off, were not returned to the instructor. Instructor was not able to get a key to score the TABE herself.
2. ENG 303-060-090.101: No results turned in by instructor.

#### Communication Skills:

1. ENG 090.301: 100% of completers (15 of 23) received a good or adequate in purpose, organization, and development on the WritePlacer, and 93% were good or adequate in complete sentences, surpassing the 75% goal. Overall, five essays were ranked “good,” seven essays were “adequate,” and three essays were “poor.” Results of the WritePlacer showed 20% of students wrote an essay that would not have let them into ENG 121. Although this number is too high, it is a considerable improvement over the 33% and 36% who wrote such an essay the previous year.
2. ENG 030-060-090.101: No results turned in by instructor.

#### Program Goal:

Of fifteen ENG 090 completers in the two semesters, five have taken ENG 121. Two earned A's, and three earned C's. A percentage can't be determined until more of the ENG 090 graduates have completed the next course. Data was not collected on MAT 090 graduates.

#### *Overall summary of assessment*

In communications skills, students are reaching the instructors' goals. However, in the areas of critical thinking and program goal, instructor failure to report or follow-up and/or assessment tool failure leaves the department with no picture of how well students are learning. In addition, lack of opportunity to meet to discuss assessment within our department has made coordinating department-wide assessment more difficult.

#### *Budgetary implications*

The assessments during AY2010 and AY2011 had pedagogical implications, but there were no budgetary implications, based on the information collected. Had the percentages of DS enrollees (rather than just tracking the completers) who successfully completed college-level math or English been tracked, the results of that assessment may have led to the budgetary requests that are now being made as the department rebuilds the ENG and MAT curricula. What that means, however, is that the program assessment needs to be changed from merely looking at whether developmental students are prepared for college-level work to including retention figures from the initial enrollments.

### *Equine Assessment Summary AY2010-2011*

#### *Assessment 2010*

#### Communication Skills:

EQM 153 Equine Evaluation: The student will have the ability to discuss and explain the relationship between conformational flaws, training, performance and the various injuries that may result.

Why? To ensure that students can communicate effectively with the public or in a client relationship within the equine industry in regard to the conformation and balance of a horse with regards to training, performance and potential for injury.

(100%) Students were able to explain the “phases of the stride” and understand the relationship between conformation, training, performance and potential for injury based on the flaws.

The lecture portion combined with the visual/hands-on assessment of various horses used to teach the students was an effective method. The curriculum will remain the same with use of lecture materials and actual horses.

**Critical Thinking:**

EQM 153 Equine Evaluation: The student will have the ability to determine conformational flaws that may lead to injury of a horse based on visual assessment and knowledge.

Why? The student will be able to evaluate the conformation of a horse and determine potential for performance as well as potential for injury.

(100%) Students were able to identify the various conformational flaws on various horses and discuss where the possible injury would take place based on the location of the flaw.

The lecture portion combined with the visual/hands-on assessment of various horses used to teach the students was an effective method. The curriculum will remain the same with use of lecture materials and actual horses.

*Assessment 2011*

**Communication Skills:**

EQM 103 Management Practicum I: The student will have the ability to discuss and explain the basic care and handling of a herd of horses within a facility.

Why? To ensure that students can communicate effectively with the public or in a client relationship within the equine industry in regard to the daily care and management of a horse facility.

(100%) Students were able to understand and explain the basic care and handling of a herd of horses within a facility. Students were able to determine signs of healthy horses and sick horses. Students demonstrated a de-worming technique as scheduled.

Students were able to demonstrate daily health care and facility management.

The daily hands-on barn portion of caring for an individual horse combined with the lecture portion and demonstrations used to teach the students was an effective method. The curriculum will remain the same with daily hands-on care of actual horses and the use of lecture materials and demonstrations.

**Critical Thinking:**

EQM 103 Management Practicum I: The student will have the ability to determine what is required for effective management of the health and daily care of horses. When vaccinations and de-worming are required. Students will be able to decide how to manage a barn with sick horses and reduce cross contamination.

Why? The student will be able to be able to manage an equine facility and maintain the daily care and health of a herd of horses.

(100%) Students demonstrated an understanding of the importance between daily care, vaccinations, de-worming and facility management concepts in relationship to keeping horses healthy.

The daily hands-on barn portion of caring for an individual horse combined with the lecture portion and demonstrations used to teach the students was an effective method. The curriculum will remain the same with daily hands-on care of actual horses and the use of lecture materials and demonstrations.

Massage Therapy Assessment Summary AY2010-AY2011

No summary is available. The massage therapy director was a part-time adjunct during those two years and did not receive any training in program assessment, so she didn't report the assessments she did in class.

Natural Resource Programs Assessment Summary AY2010-AY2011

Natural Resource Programs consist of Natural Resource Ecology and Management degrees, Marine Science degrees, NPS Seasonal Law Enforcement Academy, Outdoor Leadership degree, and Park Ranger degree.

*AY2009-10*

Critical Thinking:

No data was collected

Communication Skills:

No data was collected

Program Goal:

The Natural Resource programs were updated or created in AY2009-10, the programs will start with freshman classes in AY2010-11.

*AY2010-11*

Critical Thinking:

1. NPS Seasonal Law Enforcement Academy: The pretest scores ranged with 60 as the lowest and 84 as the highest, for 17 students 9 scores in 60s, 6 scores in 70s and 2 scores in the 80s. The post test scores ranged from 92 to 100 percent, for 17 students 5 scores were 100, 8 scores were 96 and 4 scores were 92. There were 5 students with perfect scores and 12 students with scores in the 90s. Many students entered the class with limited previous knowledge about firearms safety or use. The students improved their knowledge as their high (90s to 100s scores) in the post test. This is the first Academy taking the pre and post firearms test. Additional data is necessary to determine future plans.
2. ENV 101: The student will understand the steps and application of the scientific method. The student will be able to perform the steps in scientific method to various environmental applications; includes research skills, observation skills, data collection and analysis, and summary. This is the first ENV 101 class taking the pre and post tests. Additional data is necessary to determine future plans.

Communication Skills:

1. NPS Seasonal Law Enforcement Academy: The pretest scores ranged with 60 as the lowest and 84 as the highest, for 17 students 9 scores in 60s, 6 scores in 70s and 2 scores in the 80s. The post test scores ranged from 92 to 100 percent, for 17 students 5 scores were 100, 8 scores were 96 and 4 scores were 92. There were 5 students with perfect scores and 12 students with scores in the 90s. Many students entered the

class with limited previous knowledge about firearms safety or use. The students improved their knowledge as their high (90s to 100s scores) in the post test. This is the first Academy taking the pre and post firearms test. Additional data is necessary to determine future plans.

2. ENV 101: The student will have the communication skills necessary for effective listening, speaking, reading, and writing. The student will have the ability to discuss and explain the meaning and implications of 'sustainable development'. This will evaluate the student's broad understanding of environmental science and today's issues and their ability to communicate effectively with the public. The lecture portion combined with the labs and field studies used to teach the students were effective methods. This is the first ENV 101 class taking the pre and post tests. Additional data is necessary to determine future plans.

#### NRE/NPS Programs Goal:

NPS Seasonal Law Enforcement Academy: Of the 20 Academy students in Fall 2010 17 were completers and of the 20 Academy students, in Spring 2011 17/20, and Summer 2011 12/20 ( first FLETA accredited Academy) were completers. Starting Summer of 2011, the Federal Law Enforcement Training Accreditation (FLETA) will set and enforce all the NPS Seasonal Law Enforcement Academies standards. Therefore, new assessment strategies may be needed. Statistical analysis can't be determined until more of graduates have completed Academies.

ENV 101: Fall 2010 students grades were 7 A's, 6 B's, 3 C's, 5 D's and 0 F's. Spring 2011 grades were 9 A's, 11 B's, 1 C, 1 D and 0 F's.

Statistical analysis can't be determined until more ENV 101 courses have been completed.

#### *Overall summary of assessment:*

From testing, lab reports, presentations, field studies and instructor evaluation results the students are reaching the instructors' goals in both communication skills and critical thinking. However, the new NRE/NPS program director was given minimal training on CNCC's assessments forms and their uses - leading to a lack of understanding on how to fill-out or use the forms effectively for assessment purposes. Hence, training other NRE/NPS instructors is also limited since it is the program director's duty to train their instructors. Yes, assessment is happening, but not necessarily from the A/B, C/D forms strategy. More in depth training and/or a new assessment system is needed to meet CNCC's goals of student learning assessment.

#### *Nursing Program Assessment Summary AY2010 – 2011*

The nursing curriculum is organized and leveled, increasing in difficulty and complexity. The progression is from simple to complex, with each course continuing to build upon the philosophical constructs and eight key concepts including: the individual, environment, health, nursing practice, caring interventions, professionalism, and teaching/learning. These concepts guide the development of the nursing program's curriculum, organizing framework, and Student Learning Outcomes (SLOs). All Course Competencies (theory, laboratory, and clinical) are designed to move the student toward achievement of the SLOs. Aggregated evaluation findings that inform program decision making are used to maintain or improve achievement of the SLOs.

First-year courses emphasize fundamental assessment techniques, professional communication, and fundamental skills. Emphasis is on care of stable clients and clients with basic health care needs. Second-year courses place emphasis on more complex clients, those in critical and acute care settings. This progression requires more complex assessment skills and places stronger emphasis on independent nursing intervention and evaluation. Formative and summative evaluations in both the classroom and clinical areas measure progress and achievement of Course Competencies. Satisfactory achievement of the Course Competencies leads the learner toward achievement of the SLOs at the time of graduation.

Evaluation methodologies are varied, reflect established professional and practice competencies, and measure the achievement of student learning and program outcomes. Achievement of theory competencies is evaluated using tests, oral presentations, and written assignments. Faculty members develop test questions using a variety of sources such as test banks and NCLEX-RN preparatory materials that reflect the incorporation of professional and practice competencies. Written assignments are graded using rubrics. Laboratory competencies are evaluated using the critical elements of skills check-offs. A Clinical Evaluation Tool is used to evaluate student progress toward meeting clinical competencies for each course. Both formative and summative clinical evaluations are completed. In addition, written assignments, including case study assignments and patient history, are used to evaluate student progress toward meeting course clinical competencies. A grading rubric is used to determine student grades for each of these assignments. In all courses, students must successfully pass the theory, lab, and clinical components of the course, and satisfactorily complete an Assessment Technologies Incorporated (ATI) content unit standardized test, where applicable.

Evaluation of SLOs is also evaluated in explicit Program Outcomes. The Nursing Program Outcomes are also assessed and evaluated by the data collected from program completion rates, student performance on the RN Exit Exam, NCLEX-RN first attempt pass rates, program satisfaction ratings, and job placement rates. Data is collected through RN Exit Exam (ATI Comprehensive Predictor) summary reports, NCSBN NCLEX-RN reports, a Student Exit Survey, a Graduate follow-up Survey (VE-135), and an Employer Survey. Data supporting assessment and evaluation of the Program Outcomes is found in the following tables.

#### *RN Exit Exam*

One example of how the CNCC Nursing Program is using aggregated evaluation findings to inform program decisions is the addition of an explicit Program Outcome related to the expected performance on the RN Exit Exam (ATI Comprehensive Predictor). Beginning in spring 2009, CNCC began tracking this data with the expected level of achievement that 85% of the students will successfully score at or above the National average. Following an unsatisfactory first time pass rate on the NCLEX-RN in both 2007 and 2008, the faculty began to use ATI resources throughout the nursing curriculum and implemented remediation following proctored content mastery unit examinations. Table 1 demonstrates the improved scores on the RN Exit Exam following integration of ATI resources and content into the curriculum.

Table 1. RN Exit Exam (ATI Comprehensive Predictor) Summary

Year	Test	National Mean	Program Mean (ADN)	Students Scoring at or above national mean	Students Scoring at or above program mean
2011	Comp Predictor	68.7	68.1	83.3%	83.3%
2010	Comp Predictor	71	71.2	78.9%	78.9%
2009	Comp Predictor	72.2	72.5	77.8%	77.8%
2008	Comp Predictor	64.7	65.5	29.2%	25%

*Performance on licensure exam (NCLEX-RN):* The Expected Level of Achievement established for graduate performance on the licensure examination (NCLEX-RN) is at or above the national mean.

Table 2. CNCC NCLEX-RN First Time Pass Rates

Evaluation Period	CNCC Pass Rate	National Mean (ADN)	State Mean
4/10 – 9/10	14/16 = 88%	86.5	88.1
4/ 09 – 3/10	16/18 = 89%	85.4	89.3
4/08 - 3/09	11/24 = 46%	85.5	79.5
4/07 – 3/08	18/23 = 78%	85.5	88.1
4/06 – 3/07	21/22 = 95%	88.0	83.8

CNCC met or exceeded the benchmark set for licensure pass rates except in the years 2007-2008. The failure to meet the established benchmark of meeting or exceeding the national mean on the NCLEX-RN during this period was concerning to the Nursing Program and the CSBON. With support of the CSBON, a plan to improve pass rates resulted in changes beginning in 2009 with improvements noted in the 2009-2010 pass rates. The plan implemented changes to admission standards, integrated standardized testing to establish ongoing competency, examined teaching and learning strategies and assessment methods, and created the opportunity for students to participate in a formal NCLEX-RN review course (Virtual-ATI).

*Program satisfaction:* The Expected Level of Achievement for Program satisfaction is that 80% of graduates will moderately to strongly agree with the statement of overall satisfaction as measured on the Student Exit Evaluation.

Table 3. Student Report of Overall Satisfaction with the CNCC Nursing Program

Statement	2010	2011
Overall, I am satisfied with the CNCC Nursing Program.	12/16 (75%) Strongly agree	3/18 (17%) Strongly agree
	2/16 (13%) Moderately agree	8/18 (44%) Moderately agree
	1/16 (6%) Slightly agree	6/18 (33%) Slightly agree
	1/16 (6%) Moderately disagree	1/18 (6%) Strongly disagree

For the graduating class of 2011, 61% reported that they “moderately to strongly agreed” with the statement of satisfaction with the CNCC Nursing Program compared to 88% the previous year. During the spring semester debrief faculty meeting, this was discussed. Many of the student comments regarding this outcome revealed ‘dissatisfaction’ with lab and classroom resources and a ‘sense of disorganization’. The move to the new campus is expected to dramatically enhance the learning environment. Disorganization may be attributed to a change in leadership and appointment of a new DNEP in spring, 2010, preparation for accreditation, and the move. Ongoing evaluation is needed and is demonstrated in the Program Systematic Plan of Evaluation.

*Program completion:* The Expected Level of Achievement established for Program completion is 80% of the students will complete their program within 18 months of the projected completion date. Based on the student population and the history of the Nursing Program, on average, 74% without readmits and 78% with readmits, of students complete the Nursing Program within 18 months of their projected completion date.

Table 4. Program Completion Rates

Year of Admission	# of students admitted	Completion rate without readmits	Completion rates with readmits
2010	24	n/a	n/a
2009	22	77%	77%
2008	23	70%	74%
2007	24	75%	83%

Since the inception of the Nursing Program, CNCC has typically admitted all students who applied. Many of the students met the minimum standards of the GPA requirement and admission testing. Subsequently, the attrition rate in the first and second semester averaged 25% in the years 2007-2009. Attrition in the first semester can be attributed to a variety of factors such as high course load, not understanding or being able to internalize the high expectations of nursing school and the Nursing Program, the rigor of the Nursing Program, and/or personal issues. Exit interviews conducted with students during this period revealed that 55.6% (10 of 18) of the students who left the program during the period of 2007-2009 did so because of academic and/or clinical failure while 44.4% (8 of 18) left for personal reasons or because they moved away from the area. Of the ten students who failed, five were eligible for readmission. However, only two successfully completed the program. One failed a second time, and one student decided to pursue a different career path.

In spring 2010, open enrollment was eliminated and a competitive admission process began as the pool of applicants deepened. It was the intent of the Nursing Program to establish standards for admission that would be good predictors of success not only for performance on NCLEX-RN, but for increasing the percentage of completers. Competitive admission standards were derived from similar nursing programs in the CCCS system. Beginning with the cohort entering fall 2010, tracking will take place to identify those criteria that best predict success for Program completion, as well as success on NCLEX-RN, in the CNCC Nursing Program.

The goal is to retain more students once selective admission is implemented in the admission cohort for fall, 2010. Thus far, it appears as though competitive admission and remediation procedures have improved previous first year attrition rates. For the cohort admitted in 2010, 21 of 24 students have successfully completed the first year. Exit interviews reveal one student failed clinical and is ineligible for readmission; one student withdrew for personal reasons in spring, 2011 and plans to return in spring, 2012; and one student withdrew citing a desire to follow a different career path. Program completion is therefore expected to meet the benchmark for this cohort.

*Job placement:* The Expected Level of Achievement for job placement rates is 90% of graduates will report being employed as a Registered Nurse within nine months of graduation as measured on the Graduate Follow Up Survey (VE-135).

Table 5. Job placement rates

Year of Graduation	Number of Students Graduated	Number Eligible to work as RN at time of survey	Job Placement Rate (VE 135)	Where students are employed
2010	19	17	100%	13 Colorado 1 Texas



				1 Utah 1 Wyoming 1 North Dakota
2009	18	17	100%	15 Colorado 1 Oregon 1 Wyoming

Job placement rates are high and consistently meet the established benchmark. However, anecdotal evidence from graduates of 2011 reveals that the job market is more competitive than expected and 2010 results revealed more students seeking employment in other states. Nursing faculty members recognize that one source of employment for graduates of the Nursing Program is the agencies used for clinical experiences, the majority of which are located in the Yampa River Valley area and on the Western Slope of Colorado. A plan to invite additional members from diverse health care agencies to join the Advisory Board began in spring, 2011 and will continue in the fall to gain insight into regional workforce needs. In addition, more detailed data regarding where graduates are seeking employment and how long it took to gain employment will be included in the Graduate Follow Up Survey in February, 2012.

### **Budget Implications**

As we progress through our assessment process, the college recognizes that the assessment of instruction has monetary implications that, in turn, drive institutional planning and budgeting. For this reason, the Assessment Committee recognized in our 2007-2009 Bi-Annual Report the importance of identifying and documenting budgetary needs identified through assessment efforts. However, the Assessment Committee soon realized that CNCC had no process in place for identifying or documenting a connection between assessment results, program goals, and budgetary needs. This makes it difficult to measure whether or not assessment results drive budget considerations. A new budget process was implemented at CNCC for AY 2010-2011, which included the submission of a Comprehensive Development Plans (CDP) by each program director, along with an annual budget proposal. This allowed program directors to determine program vision, set program goals, and determine budget priorities. While the new CDP and budget process was successful in assisting programs with identifying vision and goals, the process failed to directly link Assessment Forms C/D to either the CDP or the budget proposal. CDPs were thus modified for the 2012-2013 process to include direct references to assessment goals and provide a direct avenue through which budget awards can be linked. Specific budget implications for both assessment goals and program goals will now be documented and included in budget proposals submitted to senior administration. This serves as the first step in our efforts, and through participation in the Assessment Academy of Student Learning, the Assessment Committee will work with the Dean of Instruction during 2012-2013 to further revise the CDP and Assessment C/D form.

While it is difficult at this time to definitively determine if budgetary decisions for AY 10 or AY11 were a result of assessment data, budget requests from program directors and awards made by senior administration certainly indicate that CNCC supports the continual improvement of instruction. For example, over the past two years:

- \$60,000 was awarded to purchase state-of-the-art patient chairs for Dental Hygiene, providing students with the most advanced technology in the industry.
- \$25,350 was awarded to purchase upgraded equipment for the National Park Service Academy including fire equipment, an alcohol intoxicilizer, and an AED unit.
- \$5700 was awarded to Aviation Maintenance to upgrade a Magneto Bench Tester and specialized maintenance equipment.
- \$5500 for specialized equipment for Cosmetology to enhance student learning opportunities.
- \$6000 for equipment for state-of-the-art Emergency Medical Technology to serve the northwestern corner of the state.
- \$1600 was awarded to update physics equipment.
- \$6000 was awarded to Nursing faculty for professional development in curriculum design and effective teaching strategies.

Continuing our work to bridge the gap between assessment and budgetary processes will allow program directors and CNCC administrators to make decisions based on documented need. In our current climate of budget constraints, the CNCC Assessment Committee is dedicated to student learning and effective teaching, while maximizing resources.

## Conclusion

A great deal of work has been accomplished by this committee. During the next two years the goals of this committee are:

1. To complete the establishment of program-level assessments that contain skills and/or knowledge peculiar to each specific program or department by adding one program-specific goal to the two institutional goals already assessed. The Committee feels that completion of this goal will ready CNCC for its next NCA self-review cycle.
2. To bring the Web page up to date
3. CNCC's participation in the Assessment Academy program will allow our campuses to evaluate our assessment methods and measures against a variety of other programs and systems and thereby validate or refine our system to ensure the best possible assessment program in the context of both state and national measures.

Analysis and evaluation of the data collected over the past year has helped us to identify the following strengths and challenges in our assessment program.

## Strengths

- Colorado Northwestern has maintained two general education outcomes, critical thinking and communication, as priorities. The faculty have been given training and access to numerous resources in order to enhance their success in assessing these two outcomes. These two outcomes continue to be measured across all programs, general education as well as vocational.
- Each semester every academic program/department continue to analyze and/or modify:
  - student learning outcomes
  - measures to assess outcomes

- ways assessment data will be collected.
- Strong, viable assessment effort by faculty and administration.
- There is a central location for departmental and institutional assessment data, forms, and general information. All of this information is accessible through the assessment Web page linked via the CNCC home page.
- During both fall and spring semesters, each academic program/department continues to identify broad strengths, weaknesses, and strategies for improvement.
- The committee has published on the assessment Web site the general education matrix, which lists all departments and the classes taught, and identifies the objectives being used in these classes to target the two educational goals defined by the college as major priorities.
- The planning forms for departments have been revamped again to be more efficient, and less complicated to complete.
- The membership of the Assessment Committee is more broadly inclusive with representation from most programs/departments.
- Assessment efforts have been effectively coordinated among CNCC delivery sites and have addressed the challenge of long distances between campuses and service centers.
- Faculty have done a good job of responding to assessment results by indicating (on Forms A/B) how they will adjust their teaching methods/materials/curriculum to address areas that did not meet the stated goals.

## Challenges

- The College needs to collect and analyze data that proves students have improved critical thinking and communication skills.
- The institution needs to identify an appropriate assessment tool that provides valid data.
- The assessment process should determine whether or not changes in instruction resulted in improved student learning.
- Course assessments, program goals, and college goals need a more clearly stated connection.
- The assessment of skills needs to be linked to the assessment of goals for the programs or departments. Each assessment should show a close relation with the program goals.
- College-wide assessment of general education is progressing, but more work remains to be done in the assessment of communication skills institution-wide.
- The formal assessment information must be used to affect institutional change at a budgetary as well as instructional level.
- Additional adjunct faculty participation in the assessment process needs to occur.
- The College needs to continue rotating committee leadership roles and responsibilities within the Assessment Committee.
- The assessment Web pages need to be more inclusive to incorporate departmental or program pages, and must be updated regularly to reflect the current condition of assessment at CNCC.
- Current procedures require faculty to record measurable student learning and to indicate ways that they will address areas where student learning could be improved, but no formal, comprehensive system is in place to guarantee that teaching strategies have been changed or refocused.

## Strategies to Address Challenges

- Now that CNCC has been selected for admission to the HLC Assessment Academy, stakeholders will use the assistance of the Academy Advisor in addressing these challenges.
- The Committee will ask department heads to show a tie-in to assessment on budget requests by including a section on the assessment form (C/D) to show budgetary implications.
- The Committee will continue to investigate ways to assess and report communication skills at the institutional level.
- The Committee will continue to work with administration as well as faculty chairs in terms of improving assessment efforts at the adjunct level.
- Departments/programs will be asked to assess and report on their specific departmental goals.
- Assessment Committee members will continue to train full-time faculty on assessment and assessment reporting as early in the fall semester as feasible and request funds for outside training opportunities.
- Committee members will coordinate with the deans to determine a rotation schedule for Assessment Committee chairs.
- A small committee (1 or 2 persons) will be chosen to update the Assessment Web pages at least once per semester.
- Tentatively, the Committee will revise and refine the classroom assessment process and/or its accompanying reporting forms to reflect changes that faculty have made to their teaching/learning methodology, based upon results of their assessment plans. These actions are dependent upon the input received at the Assessment Academy meetings in June 2012.



**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Arts & Sciences, Craig Campus Year 2009 - 2010

Program Goal: To teach and support problem-solving skills and improve written and oral communication.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
<b>Critical Thinking</b>  <b>MAT 103</b>		Success in 2 <sup>nd</sup> year nursing students knowledge/retention of drug calculation skills	<b>2<sup>nd</sup> year nursing students must pass with a 100%score a comprehensive test over subject matter covered in MAT 103 (coursework from 1<sup>st</sup> year)</b>  <b>When?</b> Test is administered during the 2 <sup>nd</sup> week of the fall semester		<b>Used Chapter 4 (exponential and logarithmic functions) exercises in class...group assignments with use of graphers</b>	This is a good measure of interpreting graphical data (math) and integrating that knowledge into everyday language (communication)
<b>Communication Skills</b> 85% of all students will work as a group and research a topic given by the instructor. These students will be able to			75% of students will achieve acceptable or superior knowledge about researching	This class had 80% of the students worked well as a group reached their	I learned from their presentations, but I also learned that the students	I learned that I need to put in my syllabi that the presenter must make eye

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
<p>present an informative and interesting 25 minute presentation to peers and instructor.</p> <p>Students will write an observation paper using research and APA format.</p> <p>Sociology 102 will be assessed. 90% of all students will work as a group and research a topic given by the instructor. These students will be able to present an informative and interesting 25 minute presentation to peers and instructor</p>	ENG 122	<p>Student papers.</p> <p>Each student will grade each member of their groups and turn in the grade with an explanation on why they gave this grade. Each student will answers questions from the instructor and their peers about their presentations.</p>	<p>and following APA guidelines.</p> <p><b>Why?</b> It is important in Psychology to be able to observe, analyze, research and write in APA.</p>	<p>required time. The groups gave very interesting presentation about their topics. They used many different forms of visuals, such as power point, TV/VCR, youtube, magazines, poster boards, and hand puppets</p>	<p>were procrastinators. Next semester, I will tell the groups that they must be on time the day of their presentations.</p>	<p>contact and not read all their research because they will lose their audience. I learned that I need to increase the amount of percentage that the presentations are worth.</p>

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
<p><b>Communication Skills:</b> ENG 122: Students will achieve a minimum grade of 80 on their term research paper. In particular, the uses of bibliography, effective writing, and conclusion will be over 80%.</p>	<p>PSY 217 ENG 121</p>	<p>Rubric measuring ten crucial components of a successful research paper, assessed by instructor.</p>	<p>Students will complete projects with 80% success rate, as measured by rubric, in those three areas.</p>	<p>Only 1 out of 16 students received less than an 80 on the paper. Only 1 received less than an 80 in effective writing, only 1 in bibliography/documentation, only 1 had an ineffective conclusion.</p>	<p>The one student who didn't perform successfully had a difficult semester, causing her to miss too much class.</p>	<p>Next year I plan to focus on bibliography, effective writing, and development support of the research papers.</p>





CRITICAL THINKING	ENG 122, 121	give a brief oral report on research project.	95% satisfactory completion.			strategies – it's working.	
	MAT 103	<p><b>Critical Thinking</b></p> <p><b>Students will be able to demonstrate critical thinking skills using math reasoning</b></p> <p><b>How? 2<sup>nd</sup> year nursing students must pass with a 100% a comprehensive test over subject matter covered in MAT 103</b></p> <p><b>When? administered during the 3-4th of the fall semester</b></p>		100% of students passed the nursing competency test they were being prepared for.	<p><b>Why?</b> Success in 2<sup>nd</sup> year nursing students knowledge/retention of drug calculation skills</p> <p>Chosen to track retention of necessary calculation skills for future success in employment</p>	None.	No budgetary implications.

<p><b>Critical Thinking Skills</b></p> <p><b>ENG 122</b></p>	<p>ENG 122, ENG 121</p>	<p>Students will demonstrate critical thinking by effectively researching and organizing a 10 pp. research paper, with documentation, bibliography, abstract, and outline. A rubric will make grades comparable.</p>	<p>85% of students will complete project with a grade of 88 or better.</p>	<p>87% completed with a grade of B or better.</p>	<p>The rubric seems to help by making it clearer to students what I am looking for in their research projects.</p>	<p>Add separate category on choice of sources – students have difficulty discriminating solid sources from internet garbage.</p>	<p>None.</p>
<p><b>Program Goal:</b></p> <p><b>Critical Thinking Skills:</b></p>	<p>Soc 102</p>	<p>Each group will have to use critical thinking steps to conduct research and use their knowledge to put all the research together and present a</p>	<p>Success in the presentation and in working together to present it.</p> <p>Instructor will stimulate by providing sample topics and goals as needed/</p>	<p>See above. Lysandra isn't here to finish up assessment.</p>		<p><b>How?</b> Instructor will time and read what the students turn in about each member.</p> <p><b>When?</b> They will present the Monday and Wednesday before finals</p>	

		concise and well rounded presentation					
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Submitted by: \_\_\_\_\_

Date: \_\_\_\_\_



**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

**Department or program** \_\_\_\_\_ **Rangely Arts and Sciences** \_\_\_\_\_ **Year** \_\_\_\_\_ **2009-2010** \_\_\_\_\_

**Program Goal:** \_\_\_\_\_ **Students are able to communicate effectively, think critically, and use appropriate technology** \_\_\_\_\_

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Students are able to think critically	MAT 090	JM	Improved skills in math problem solving; analysis of writing elements and mistakes; select valid evidence and integrate it with their ideas; students will appropriately interpret data and apply it to real life; apply the scientific method to everyday questions ; successful completion of capstone bacterial identification report	Departmental faculty assessed students Critical Thinking, Communication skills, and program related goals through a variety of methods. 6 of 8 full time faculty reported with 80% completing reporting of results:	A wide variety of assessment methods are being utilized to assess student learning within program and institutionally defined goals. All returning instructors are reporting on the same assessment strategies over multiple semesters and/or years, using the gained information to make sometimes significant changes to the pedagogy of their courses.	It is apparent through the individual reports that results are being utilized to plan changes in future courses. Importantly, these changes are being assessed for their efficacy in subsequent courses. Additionally it was noted in some reports that when little information is gained by assessments that impact pedagogy, instructors are moving onto new or different assessment methods to determine if changes in other aspects of their courses or instruction are needed.
	ENG 121	JW SR TW TW SR				
	ENG 122 HWE 100 BIO 111 BIO 204 ENG 030,060,090					

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Students are able to communicate effectively	MAT 090 ENG 090 HWE 100 BIO 111 BIO 204 ENG 030,060,090	JM LS SW TW SR	Improved oral and written communication of mathematics and the English language, and diet analysis; express data as tables and graphs; successful completion of capstone bacterial identification report	Too much information for repetition here, see individual forms.	Many of the reports included longitudinal comparisons linking previous changes affects student learning in the next course. Due to a failure of 20% of reports being fully completed after the planning process it is apparent that more detailed oversight by the program director is needed to ensure that the faculty's results are reported externally through completion of the reporting process.	our utilization of assessment data to effect meaningful changes that can then be measured must be maintained and expanded to 100% of reporting where appropriate.

**PLANNING (Form C - Complete at the start of each semester)**

**REPORTING (Form D - Complete before summer)**

<p>Students are able to use appropriate concepts and technologies in science</p>	<p>BIO 111 BIO 204</p>	<p>TW TW</p>	<p>Students will apply the scientific method to a variety of questions; students will be competent in aseptic technique and the use of microscopes</p>	<p>Students scored above last year in rationale, interpretation, identification and conclusions. However, scores decreased on application of aseptic technique and general techniques with 3/25 students in violation of safety rules during the capstone identification project. Communication of results, rationale, interpretation and conclusions all showed increases over last year. 19/25 students scored 80% or better in all of these categories.</p>	<p>Regardless, more obvious application of penalties for safety violations throughout the semester may reduce these mistakes. Incorporating a shorter report into unknown lab # 7 may be beneficial to help students familiarize themselves with the process and get early feedback.  Bio 111 The class was very weak in their overall ability to communicate data using graphs. There is no improvement if we separate the 3 categories out. There is a need for more lab time to be spent on the development of these skills.</p>	
<p>Students will be able to conduct and successfully write a research project</p>	<p>ENG 121</p>	<p>SR</p>	<p>85% of students will complete all 6 components with a minimum of C</p>			



**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Rangely Arts and Sciences Year 2010-2011

Program Goal: Students are able to communicate effectively, think critically, and use appropriate technology

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
Students are able to think critically	MAT 090 ENG 121 ENG 122 HWE 100 BIO 111 BIO 204 ENG 030,060,090	JM JW SR TW TW SR	Improved skills in math problem solving; analysis of writing elements and mistakes; select valid evidence and integrate it with their ideas; students will appropriately interpret data and apply it to real life; apply the scientific method to everyday questions ; successful completion of capstone bacterial identification report	See individual forms, too much information to include here.	individual reports indicate that results are being utilized to plan changes in future courses-this is confirmed when compared to last year.	it was noted in some reports that when little information is gained by assessments that impact pedagogy, instructors are moving onto new or different assessment methods to determine if changes in other aspects of their courses or instruction are needed.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
Students are able to communicate effectively	MAT 090 ENG 090 HWE 100 BIO 111 BIO 204 ENG 030,060,090	JM LS SW TW SR	Improved oral and written communication of mathematics and the English language, and diet analysis; express data as tables and graphs; successful completion of capstone bacterial identification report			Due to a failure of 20% of reports being fully completed after the planning process it is apparent that more detailed oversight by the program director is needed to ensure that the faculty's results are reported externally through completion of the reporting process.
Students are able to use appropriate concepts and technologies in science	BIO 111 BIO 204	TW TW	Students will apply the scientific method to a variety of questions; students will be competent in aseptic technique and the use of microscopes			
Students will be able to conduct and successfully write a research project	ENG 121	SR	85% of students will complete all 6 components with a minimum of C			





**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Auto Tech Year 2010-2011

**Program Goal:** All Students taking Basic Auto Tech will be able to pass competency test related to each course, communicate with customer, analyze concern and resolve.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Critical Thinking: To enable students to analyze problem or concern with unit brought to student to correct concern.</b>	ASE120: Basic Auto Elec. ASE103: Auto Maint. ASE123: Batt. Start/Charg. ASE221: Auto Body Elec. ASE130:Gen.Eng. Diag. ASE130:Ign.Sys Diag. ASE134:Auto Emissions ASE150:UJ/Axle Service ASE231: Auto Computers ASE233: Fuel Inj./Exh. ASE235: Drivability ASE110: Brake I ASE210: Brake II ASE140: Steering/ Susp. ASE151: M.Trans/ Clutch ASE152: Diff./4WD ASE160: Eng. Removal ASE250: Automatic Trans	Section Finals, Chapter Test, NATEF correlated Task Sheets filled out and graded by Instructor on a Rubrics Scale	All Students are expected to pass all Finals, Chapter Test with a minimum of seventy percent, Hands on Task with a minimum eighty percent.	We graduated five students, in Basic Auto, spring 2011	All Students secured employment in the industry or continued on to advanced training.	NATEF Accreditation for 2012 being sought.	N/C

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Communication Skills: Communicate with Service Writer and Customer, fill out service reports</b>	ASE 102 and ASE103	Service reports prepared for students, graded on task sheet rubrics	Required to competently pass.				
<b>Program Goal: NATEF Accreditation</b>	All courses listed above are of NATEF standards and correlated to.	NATEF standards guidelines.	Excepted as accredited by fall 2012				

Submitted by: \_\_\_\_\_

Date: \_\_\_\_\_

## Colorado Northwestern Community College Assessment Plan

Department or program Aviation Maintenance Technology Year 2009-2010

Program Goal: 4A. AMT Students will perform at or above the national average on Federal Aviation Administration written exams.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete in the fall)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
AMT students will pass all FAA exams on their first attempt.	All AMT program courses	Lasergrade FAA exam results	Students will pass exams on the first attempt	Gen: 100% pass Airframe: 100% pass Powerplant: 100% pass		Maintain pre-test requirements
AMT students will perform at or above the national average on FAA written exams.	All program courses	Lasergrade FAA exam results	Students will achieve scores of 88% or better.	Gen: 62.5% above 88% Air: 87.5% above 88% PP: 75% above 88%		Review weak testing subjects & increase focus on those areas.

Submitted by: Ray Gregg



**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Aviation Maintenance Technology Year 2010 - 2011

Program Goal: All students taking FAA written tests will pass the test on their first attempt; the class average will be above the national norm.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Critical Thinking:</b> 1) Students will classify materials by applying system principles.	AMT 105	Instructor records for the course.	100% of students will identify and classify ten parts correctly	71% of students achieved 100% scores. 29% achieved 75% scores.	This is a necessary skill. Early introduction in the curriculum is critical. Results are affected greatly by student preparation prior to entry in the AMT Program.	More frequent, shorter duration practice exercises.	None
<b>Communication Skills:</b> 1) Technical writing skills: students will complete AD compliance records accurately, with correct information, and with all necessary content.  2) Students will follow written instructions.	AMT 104 AMT 114 AMT 218  AMT 105 AMT 112 AMT 202	Instructor records for the course.  Instructor records for the course.	85% of students will complete the records accurately, completely, and provide correct information.  Students will read, understand, and follow written instructions.	AMT 104 – 29% achieved 100% in the three categories; 57% achieved 100% in two categories; 14% achieved 100% in one category.		More frequent practice.	None

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Program Goal:</b> <b>All students taking the FAA written exams will pass on their first attempt, and the class average will be above the national norm.</b>	End of summer semester and end of spring semester	Test proctor records kept by the Program Director	All students will pass the exams on their first attempt. Class average will be above the national norm for each test.		G = General Exam A = Airframe Exam P = Powerplant Exam		

Submitted by: \_\_\_\_\_

Date: \_\_\_\_\_



**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Aviation Technology Year 2009/2010

Program Goal: Students to pass FAA Written Knowledge Test on first attempt with an 80% aggregate pass rate.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
Fall 2008 Evaluate critical thinking in all areas of meteorology, navigation, flight planning, and application and understanding of Federal Aviation Regulations.	AVT 101 – Private Pilot Ground AVT 140- A/C Systems for Pilots AVT 105 – Aviation Meteorology	FAA Written Knowledge Test scores administered in-house through our LaserGrade testing Center	Scores of at least 80% passing on the first attempt	AVT 101 - AVT 140 AVT 105 -		
Spring 2009 Evaluate critical thinking in all areas of meteorology, navigation, flight planning, and application and understanding of Federal Aviation Regulations.	AVT 111 – Instrument Pilot Ground AVT 141 Aircraft Systems – Powerplants AVT 211 – Fundamentals of Instruction	FAA Written Knowledge Test scores administered in-house through our LaserGrade testing Center	Scores of at least 80% passing on the first attempt	AVT 111 – AVT 141 AVT 240 –		



**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Aviation Technology Year 2010/2011

Program Goal: To keep the students up to FAA standards and be able to deal with any inflight or ground problems or emergencies

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Critical Thinking: To enable the student to handle any and all problems and emergencies while in flight or on the ground</b>	Private Instrument commercial Flight and ground schools	All stage exams and end of course exams will be passed 80% or higher. 90 % of all check rides passed the first try.	Each student will pass all the stage exam and FAA knowledge exams with 80 percent or higher. 90% of all check rides passed the first try.				
<b>Communication Skills: To make sure all students understand and can read back all clearance's, weather reports and other information to ground and flight operations.</b>	Private pilot Commercial Pilot and Instrument pilot Flight and ground schools	The grades are showing improvement as well as the FAA knowledge exams	Student Grades will come up on Stage exams and FAA knowledge exams  The oral exam for the FAA check rids will improve.				

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Program Goal: To maintain student standards at or above 80% for all FAA knowledge and stage exams. To Make sure each student can read and understand all information needed for flight and ground operations</b>	Private Pilot, Instrument Pilot and Commercial Pilot ground and flight training.	The success rate of the knowledge exams and the first time pass rate of all FAA check rides will improve	90% first time pass rage on all FAA knowledge exams and check rides.				

Submitted by: \_\_\_\_\_

Date: \_\_\_\_\_





**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Business Year 2010-2011

**Program Goal:** By the end of the semester, students will be able to communicate by listening effectively, speaking, reading and writing at a level of at least 70% or higher. Students will be able to demonstrate the skills necessary for problem solving, critical thinking, and analysis of values at a level of at least 70% or higher.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Critical Thinking:</b> Logic with analyzing information	Legal Environment of Business	Form A/B	Students will learn research skills and applying information. 75% of students will receive a passing grade or above average grade in the areas of answering an essay question and analyze the information in determining the facts	Students were able to complete the necessary research to find the answer to certain homework essay problems. These problems were actual lawsuits and the students were able to research the problem and summarize the results of the lawsuit. The students received an 80 percent or better on the homework problems.	Students were able to complete the necessary research to find the answer to certain homework essay problems. These problems were actual lawsuits and the students were able to research the problem and summarize the results of the lawsuit.	None	None

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Communication Skills:</b> Written Communication	Business Communication and Report Writing	Form A/B	Improve written communication skills. 75% of all students will receive an acceptable or above average grade on their writing assignment in the areas of memo construction, grammar, and sentence completion in Business Communication and Report Writing.	Students created business memorandums which were written in proper format with complete sentence structure. Writing assignments by the end of the semester were receiving an 80 percent grade or better.	Students created business memorandums which were written in proper format with complete sentence structure.	None	None
<b>Program Goal:</b> By the end of the semester, students will be able to communicate by listening effectively, speaking, reading and writing at a level of at least 70% or higher.	Business Communication and Report Writing	Form A/B, Instructor	75% of all students will receive an acceptable or above average grade on their writing assignment in the areas of memo construction, grammar, and sentence completion in Business Communication and Report Writing.	In the business area, students need the ability to communicate effectively if they are going to succeed in the business field. The assignments chosen reflect the ability of the students	Try other courses for communication and/or critical think skills.	None	None
By the end of the semester, students will be able to demonstrate the skills necessary for problem solving, critical thinking, and analysis of values at a level of at least	Legal Environment of Business	Form A/B, Instructor	75% of students will receive a passing grade or above average grade in the areas of answering an essay question and analyze the information in	The logic or critical thinking skills that are required for employees are shown the assignment that was chosen.			

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
70% or higher.			determining the facts				

Submitted by: Kathy Powell

Date: October 14, 2011



**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Cosmetology Year 2009-2010  
 Program Goal: Business Plans

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Critical Thinking:</b> The student will produce a written business plans with all the requirements included in that plan.	All	Instructors developed a new plan for Business plan Assessments	80% of students will achieve a grade of 85% or above	10 students did the business plan, out of those 10 students, 9 students received a score of 85% or higher. One student received a score of 73%	This one student struggled with attendance which causes problems in other areas and overall.	Attendance is a very important part of the Cosmetology program, without it a student can't perform important skills required.	
<b>Communication Skills:</b> The student will have to communicate with real businesses and beauty suppliers to get real time prices and information.	All	Business plans graded according to the new format established	80% of students will achieve a grade of 85% or above	10 students did the business plan, out of those 10 students, 9 students received a score of 85% or higher. One student received a score of 73%	This one student struggled with attendance which causes problems in other areas and overall.	Attendance is a very important part of the Cosmetology program, without it a student can't perform important skills required.	

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete by Sept. 15)			
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/ Adjustments	Budgetary Implications
<b>Program Goal:</b> <b>Business Plan developed and graded.</b>							

Submitted by: Tracy Caddy

Date: 08/11/10

## Colorado Northwestern Community College Assessment Plan

Department or program Dental Hygiene Year 2009-2010

Program Goal: 4B. Graduating students will perform at or above the national average on their national and regional licensing exams.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete in the fall)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
Graduating students will perform at or above the national average on their national licensing exams.	All program courses	National Board Results	Students will perform at or above the national average in 8-10 categories	22 Students took the exam, 22 students passed the exam	This cohort demonstrated attitudinal and behavioral challenges. Entering GPA was .3 lower than average of past 5 years	Target curriculum review for subject(s) that are more than 1.5% below the National Average for 2 successive years
Graduating students will perform at or above the national average on their regional licensing exams.	All program courses	CRDTS/ADEX Hygiene Examination Results	Students will perform at or above the regional average in 8-10 categories	As of August 1 <sup>st</sup> , 22 students had taken the exam and 21 had passed. The Statistics from the 2010 exam will not be available until October. Assessment will take place once we have the data.	Statistics for this exam were not made available until January of 2011. The regional average for this exam was 87.5 and the CNCC average 88.6. Our students scored above the regional average on all categories with the exception of penalty points	Target curriculum review for topics that are more that 1.5% below the Regional Average for 2 successive years.

PLANNING (Form C - Complete in the fall)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments

**Submitted by: Mark Patterson**

No budgetary concerns at this time. We are still waiting (10-8-10) for CRDTS regional results to complete Form D. Results are usually sent to the schools at the end of October.

## Colorado Northwestern Community College Assessment Plan

Department or program Dental Hygiene Year 2010-2011

Program Goal: 4C. Graduating students will perform at or above the national average on their national and regional licensing exams.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete in the fall)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
Graduating students will perform at or above the national average on their national licensing exams.	All program courses	National Board Results	Students will perform at or above the national average in 8-10 categories	24 of 25 students passed the exam on the first attempt. The one student that failed passed the retest in July	Our program scored above the National Average on 8 of the 10 sections, on two sections we were .1 and .6 % below the National Average	Target for curriculum review any subject that is more than 1.5% below the National Average for 2 successive years
Graduating students will perform at or above the regional average on their regional licensing exams.	All program courses	CRDTS Dental Hygiene Examination Results	Students will perform at or above the regional average in 8-10 categories	24 of 25 students passed the exam on the first attempt. The one student that failed passed the retest in July.	Comparative data with the other programs in our region indicated that CNCC scored in the first quintile in seven out of eight areas evaluated.	Target for curriculum review any topic that is more than 1.5% below the regional Average for 2 successive years. No changes are indicated based on this year's results.

Submitted by: Mark Patterson





**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Developmental Studies Year 2009-10

**Program Goal:** The Developmental Studies Program at Colorado Northwestern Community College provides students with the academic instruction, preparation, and support to facilitate their educational, workplace, and personal goals.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
<b>Critical Thinking:</b> Students will summarize, analyze, and/or evaluate textual material.	REA 090.301, 302, 303, 304	TABE pre- and post-test results	Students who have attended for the entire semester will show an average increase of ¾ to 1 grade level in their reading comprehension skills on the TABE from pre- to post-test.	None	The results of the TABE were not returned to the instructor	Not an effective assessment since it depends on receiving the results from someone else. Next year, I will get a key for the TABE to score myself.
	ENG 090.101	Self-assessment	At least 75% of students will learn to assess their writing weaknesses and develop strategies to correct these weaknesses.			
<b>Communication Skills:</b> Students will produce a piece of writing with a clear purpose and adequately organized and developed ideas, using complete sentences.	ENG 030.101 ENG 060.101 ENG 090.101		100% enrolled students will complete their course placement curricula with a C or higher by the end of the semester; 75% will complete one sequential course with a C or higher by the end of the semester.	• One hundred percent of the <b>ENG030</b> students who remained enrolled at the College achieved a B or higher and/or completed second sequences course/exited early. • Fifty-seven percent of the <b>ENG060</b> students	No students failed any of the schoolhouse sections.	Effect on Learning: 1. Schoolhouse Write should be offered in the following combinations: ENG030/ENG060/ENG 090; 2. All students should be allowed to register at half semester.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
				<p>achieved a B or higher grade and completed a second sequence course.</p> <ul style="list-style-type: none"> <li>• Forty-two percent of the <b>ENG060</b> students achieved a B or higher grade and exited early.</li> <li>• One percent received a D but had excessive absences and missing work.</li> <li>• One hundred percent of the <b>ENG090</b> students exited early and/or received C or higher grades.</li> </ul>		
	ENG 090.301	Critical essay/ WritePlacer assessment	75% of students will achieve good or adequate on each of the following criteria: purpose/thesis, organization, development, and sentence usage.	<p><b>Fall 2009 (critical essay):</b></p> <ul style="list-style-type: none"> <li>• 73% of the students (8 of 11) had a purpose that was either good or adequate.</li> <li>• 64% of the students' essays (7 of 11) showed either good or adequate organization.</li> <li>• Only 45% of the students (5 of 11) had either good or adequate development.</li> <li>• 73% of the students (8 of 11) had a combined total of 3 or fewer fragments, comma splices, or run-on sentences.</li> </ul> <p><b>Spg 2010 (WritePlacer):</b></p> <ul style="list-style-type: none"> <li>• 100% of the students wrote an essay with a</li> </ul>	<p><b>Fall 2009:</b> Overall, 2 students received a “good” ranking on their essays; 5 students received an “adequate” ranking; and 4 students received a poor.</p> <p><b>Spring 2010:</b> Overall, 1 student received a “good” ranking on her essay; 3 students received an “adequate” ranking; and 2 students received a poor (the essay would not have let</p>	<p>I would like to try to do a final assessment 2 ways: using WritePlacer and using one of the critical essays. By comparing the results of both assessments, I hope to see how my students are actually performing.</p> <p>For AY 2011, I am going to continue to use this teaching process. I feel that I need to gather more information before I can adequately determine how my students are responding.</p>

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
				<p>purpose that was either good or adequate.</p> <ul style="list-style-type: none"> <li>• 83% of the students' essays (5 of 6) showed either good or adequate organization.</li> <li>• 100% of the students wrote an essay with either good or adequate development.</li> <li>• 33% of the students wrote an essay which demonstrated skillful control of sentence structure. The remaining 67% showed inconsistent control, which is still counted as the minimal adequate level, so 100% of the students showed adequate control or better.</li> </ul>	<p>them pass into ENG 121).</p> <p>Between 33% and 36% of the students in each of my classes wrote a final essay that should not have let them pass into ENG 121. However, during spring semester I was gone for 3 weeks, and the students struggled a great deal with the process I was teaching them</p>	
<p><b>Program Goal:</b> Students completing developmental courses will be successful in college entry courses.</p>	<p>ENG 090 MAT 090</p>	<p>IR—student grades in next higher required ENG or MAT courses.</p>	<p>75% of ENG 090 or MAT 090 graduates will pass the next program-required ENG or MAT course with a C or higher.</p>			



**Colorado Northwestern Community College**  
**Departmental Assessment of Student Learning**  
**(Forms C & D)**

Department or program Developmental Studies Year 2010-11

**Program Goal:** The Developmental Studies Program at Colorado Northwestern Community College provides students with the academic instruction, preparation, and support to facilitate their educational, workplace, and personal goals.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
<b>Critical Thinking:</b> Students will summarize, analyze, and/or evaluate textual material.	REA 090.301, 302	TABE pre- and post-test results	Students who have attended for the entire semester will show an average increase of ¾ to 1 grade level in their analytical reading comprehension skills on the TABE from pre- to post-test.	None	The results of the TABE were not returned to the instructor, and she didn't get a key to do it herself.	Not an effective assessment since it depends on receiving the results from someone else. Next year, I will use an instructor-made assessment.
<b>Communication Skills:</b> Students will produce a piece of writing with a clear purpose and adequately organized and developed ideas, using complete sentences.	ENG 090.301	Critical essay/ WritePlacer assessment	75% of students will achieve good or adequate on each of the following criteria: purpose/thesis, organization, development, and sentence usage.	100% of completers (15 of 23) received a good or adequate in purpose, organization, and development, and 93% were good or adequate in complete sentences, surpassing my 75% goal. <ul style="list-style-type: none"> <li>• 100% showed good or adequate purpose.</li> <li>• 100% showed good or adequate organization.</li> <li>• 80% showed adequate development; 20% had poor development.</li> <li>• 100% showed good or</li> </ul>	Results of Write Placer showed 20% of students wrote an essay that would not have let them into ENG 121. Although this number is higher than I want, it is a considerable improvement over the 33% and 36% who wrote such an essay the previous year.	I will continue to use this teaching process next year.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
				okay sentence structure. •Overall, 7 essays ranked “adequate”; and 3 essays ranked poor.		
<b>Program Goal:</b> Students completing developmental courses will be successful in college entry courses.	ENG 090 MAT 090	IR—student grades in next higher required ENG or MAT courses.	75% of ENG 090 or MAT 090 graduates will pass the next program-required ENG or MAT course with a C or higher.	Of fifteen ENG 090 completers in the two semesters, five have taken ENG 121. Two earned A’s, and three earned C’s. A percentage can’t be determined until more of the ENG 090 graduates have completed the next course.		



**Colorado Northwestern Community College**  
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Department or program GIS Year 09-10

Program Goal: Critical thinking

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
Increased communication skills, especially as it relates to geo-spatial knowledge	GIS 105	Dynamic and hard-copy map products	At least 80% scores at 80 % or above, last years data	85% scored 80% or above, a substantial increase	Altered previous assignment from suggested to required	Added 2 mid-project check-offs and still one student didn't complete the assignment. Will increase the check-off point value.
Increased critical thinking and problem-solving proficiency -- a Colorado Northwestern assessment goal	PHY 105	Pretest and posttest questions regarding thinking physics.	Students are expected to see a 30% increase in problem-solving abilities based upon results from the thinking physics exams	Sample-size (N) too small for valid paired-T but sum of scores was 25% higher than pre-test	Would be interesting to actually conduct valid statistical analysis. The metric I believe is sound.	Implement a guided approach to those learners that cannot create their own lab and then evaluate scores.



**Colorado Northwestern Community College**  
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Department or program Horsemanship & Horse Management Year 2009-2010

Program Goal: 100% of graduating students in this program will continue their education at a 4 year college or obtain work in this vocation.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
Learner will successfully be able to walk, trot, and canter a horse in both and English and Western Saddle while still maintaining control of the horse.	HTM 150: Basic Horsemanship & Equitation Skills ASC243: Intermediate Western Equitation Intermediate English Equitation	Clinical Evaluation	100% will be able to walk, trot, and canter/lope a horse in both an English and Western Saddle	100% of the students demonstrated the ability to walk, trot, and canter/lope a horse in both the English and Western Disciplines	Varying levels of ability were seen in the students.	Suggest having a scale to score the students on how well they can walk, trot, and canter/lope rather than just pass/fail.
Learner will be able to successfully identify the bones and muscles of a horse.	ASC 102: Introduction to Equine Science EQM 151: Horse Production EQM 158: Equine Reproduction EQM 153: Equine Evaluation	Horse Production & Equine Reproduction Exam Results	Students will be able to successfully identify at least 75% of the equine bones and muscles	100% of the students could identify the bones and muscles tested on.	Students were more prepared and performed better in EQM 151 after having the ASC 102 class	

<b>PLANNING (Form C - Complete at the start of each semester)</b>				<b>REPORTING (Form D - Complete before summer)</b>		
<b>Learning Outcomes</b> Upon completion of the program:	<b>Corresponding courses</b>	<b>Assessment Information Source</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Relevant Information</b>	<b>New Strategies/Adjustments</b>
Learner will successfully be able to green break a young, previously un-worked horse	HTM 155: Foal Training HTM 152: Basic Care & Training HTM 253: Specialized Training	Clinical Evaluation	100% of the students will be able to green break a young horse.	100% of the graduating students demonstrated the ability to green break a young horse		





**Colorado Northwestern Community College**  
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Department or program

**Power Plant Technology Program**

Year

**2009-2010**

**Program Goal:** The Power Plant Technology Program at CNCC provides students with the technical instruction to enable them to function as entry-level power plant employees.

**Note:** At the end of each year, submit a copy of the completed form to the Assessment Committee. Report any planning and budgeting implications of your assessment results to your dean and Assessment Committee so these can be incorporated into the annual report on assessment of student learning.

PLANNING (Form C - Complete at the start of each semester)				REPORTING (Form D - Complete before summer)		
Learning Outcomes Upon completion of the program:	Corresponding courses	Assessment Information Source	Expected Results	Actual Results	Relevant Information	New Strategies/Adjustments
<b>Critical Thinking:</b>						
<b>Students will demonstrate a comprehensive understanding how different systems in a Power Plant operate.</b>	ENT 250, PPT 215	Final exams (diagramming, labeling, & identifying system components)	Students will correctly label or identify 75% of system components.	85% of students – A	All students showed a comprehensive understanding of systems.	To recruit and retain more students. More hands on time with class, to have mechanical abilities also.
<b>Communication Skills:</b>						