

Big Bend Community College  
General Education and Program Outcomes  
Annual Faculty Assessment Report



2012-2013

Ryann Leonard, Assessment Chair

## **Overview**

Big Bend Community College works hard to provide an environment where our students achieve and succeed in meeting whatever educational goals they set for themselves. Some students seek personal enrichment. Some desire to improve their job-related skills and some are seeking a degree so that they can transfer to a university or start a career. One way we can help students meet their goals is by engaging in continual assessment of our general education and program specific outcomes. The following report is a summary of progress over the past year.

The first part of the report is a review of our General Education Outcomes and related analysis. The second part of the report is a review of program specific outcomes related to our Professional Technical Programs. The third part of the report is our 2012 – 2013 completed plans for each academic and professional technical department.

## Part One: General Education Outcomes

Big Bend Community College believes that students who graduate from an academic pathway will demonstrate certain general education outcomes as part of their degree plan. These outcomes center on writing ability, mathematical reasoning, problem solving, interpretation of information, and culture. (See the General Education Outcomes listed below.)

There were two goals regarding general education outcomes. First, the last accreditation report included two recommendations related to assessment. Specifically, “The evaluators recommend that the college document enhancement of student learning achievement which is informed and guided by systematic assessment of student learning (4.B.2), that the college develop an effective, regular, and comprehensive system of assessment that documents student achievement of identified course, program, and degree learning outcomes. (4.A.3)”. To address this, at the Spring 2013 faculty in-service, most of the academic faculty reviewed their courses and listed the top 5 general education outcomes addressed within those courses (See Appendix A). The second goal was for faculty to tie the general education outcomes to their department and course level assessment outcomes. This is discussed more in Part Three of this report. While some faculty completed this goal in the 2012 – 2013 academic year, there will be more focus on this goal in the 2013 – 2014 academic year.

Related to the first goal is the question of whether students graduating from Big Bend Community College will actually encounter all of the general education outcomes intended by the college. In an attempt to address this question, the top 30 enrolled courses were identified and their corresponding data was extracted from the matrix developed at the Spring 2013 in-service. The top 30 enrolled courses were chosen with the belief that high enrollment in a course means that the course is part of most degrees completed. From the top 30 courses, 17 courses were included in the current analysis. The courses cover a good representation of distribution areas required for the degree (i.e., Humanities, Social Sciences, and Math/Science). The other 13 courses were excluded because they were pre-college level courses that did not count toward degree completion or were courses for which no outcome data was collected in Spring. The data appears to show that students will encounter the majority of the general education outcomes as they complete their transfer degree (See Table 1). The data also show that there are a few general education outcome criteria that students are less likely to be exposed to (e.g., 2.c. Understand geometrical concepts and 2.d. Work with numerical and algebraic relationships). If the top 30 courses are a true representation of the most likely encountered courses, then the data may indicate that graduates are not being exposed to all of the general education outcomes. We may want to reconsider whether some of the outcomes should truly remain on the list. Further, if the majority of students enroll in certain pre-college level courses (e.g., Math 94 - 98) then perhaps we should assign general education outcomes to

them and include them in the overall assessment of a student's degree. This might also address those lesser encountered outcome criteria.

## GENERAL EDUCATION OUTCOMES

### **1. Students will be able to write clearly and effectively.**

- 1.a. Clarity
- 1.b. Logical flow from point to point
- 1.c. Sound support of assertions
- 1.d. Creative or divergent thinking
- 1.e. Adhere to conventions of standard written English
- 1.f. Sources adhere to citation/reference formats

### **2. Students will be able to reason mathematically.**

- 2.a. Interpret information in graph form
- 2.b. Understand and use statistical information
- 2.c. Understand geometrical concepts
- 2.d. Work with numerical and algebraic relationships

### **3. Students will be able to solve problems combining and applying knowledge from multiple sources.**

- 3.a. Define the problem
- 3.b. Break it into steps
- 3.c. Draw logical conclusions
- 3.d. Generate multiple and diverse perspectives in trying to solve the problem
- 3.e. Recognize extraneous information
- 3.f. Follow directions and fulfill the expectations of the assignment

### **4. Students will be able to gather and interpret information.**

- 4.a. Distinguish between well-supported and unsupported claims
- 4.b. Make comparisons and draw contrasts
- 4.c. Recognize the points of an issue or claim
- 4.d. Access multiple sources of information

### **5. Students will be able to define and articulate personal, historical, global and workplace/community aspects of culture.**

- 5.a. Define and articulate an objective sense of personal culture as it relates to external cultures.
- 5.b. Define and articulate historical aspects of cultures using appropriate vocabulary and examples.
- 5.c. Define and articulate meaningful aspects of global cultures using appropriate vocabulary and examples.
- 5.d. Define and articulate concepts related to the culture of the workplace and community.

Table 1. Top 17\* Enrolled Academic College Level Transfer Courses and Top Gen Ed Outcomes Covered in Those Courses

	1. Write clearly and effectively.					2. Reason mathematically.					3. Solve problems combining and applying knowledge from multiple sources.					4. Gather and interpret information.					5. Define and articulate personal, historical, global and workplace/ community aspects of culture.			
	a	b	c	d	e	a	b	c	d	e	a	b	c	d	e	a	b	c	d	e	a	b	c	d
BIOL 100						5					3	4				1	2							
CHEM 161						5					1	2	3		4									
CHEM 121						3			4		1	5	2											
CJ 101			2	4							5					3				1				
CMST 220			1	2												3	4	5						
CSS 100	4					5					1					2					3			
ENGL 101	4	3	2		1	5																		
ENGL 102			3	2		1								4		5								
ENVS 100			5			3					1	4							2					
HIST 136		5			4							3							2			1		
MATH 141						2				1	3	4				5								
MATH 146						3	1			2		4				5								
POLS 202					5									4					3	2	1			
PSYC 100				2												1	3	4					5	
REL 201																		5		4	1	2		3
SOC 101	1															2					5	4	3	
SPAN 121		5																			3	1	2	5

Note: The top 30 enrolled courses were queried; however, 13 of the courses were either pre-college level or were college level courses for which no General Education data was collected. The goal for 2013- 2014 is to have General Education data for all courses, especially for the top 30 enrolled courses.

Additionally, numbers within the columns indicate the degree to which the outcome is believed to be covered in the course with 1 being the most addressed outcome in the course.

## **Part Two: Program Outcomes for Professional Technical Education Spring, 2012**

In conjunction with their Advisory Boards, our Professional Technical Faculty develop program outcomes that identify or state what the students are supposed to know or do when they graduate from the program. For the 2013-2014 academic year, the faculty will be working to identify and revise these outcomes so that they include student, course and program level outcomes. The current outcomes for each of our Professional Technical Programs is listed below.

The Outcomes are further labeled by the type of outcome they are – Program (PO), Course (CO), or Student Learning Outcome (SLO).

### **Accounting Outcomes for Students completing an Associate Degree**

1. Graduates of the program will be successfully employed in an accounting or accounting-related position. (PO)
2. Graduates of the program will know how to apply related accounting knowledge such as taxation, payroll, and proper application of Generally Accepted Accounting Principles (GAAP) in performing accounting/bookkeeping functions/work. (SLO)

### **Automotive Technology Program Outcomes for Students completing an Associate Degree**

1. Graduates of the program will be employed in transportation or transportation related field. (PO)
2. Graduates of the program will be prepared to successfully pass the ASE exams. (PO)
3. Graduates of the program understand and apply safe working practices and properly handle hazardous materials. (SLO)

### **Aviation Outcomes Program Outcomes for Students completing an Associate Degree**

1. Students who successfully complete stage 3, shall obtain a FAA Private Pilot Certificate.
2. Students who successfully complete stage 6, shall obtain a FAA Instrument Pilot Certificate.
3. Students who successfully complete stage 7, shall obtain a FAA Commercial Pilot Certificate.

### **Aviation Maintenance Technology for Students completing an Associate Degree**

1. Graduates of the AMT program will be able to meet or exceed the knowledge levels as outlined in the Code of Federal Regulations Title 14 Part 147 Appendix A, B, C, and D for General, Airframe, and Powerplant. (SLO)
2. Graduates of the AMT program will be able to successfully complete a FAA Written, Oral, and Practical certification exam to the level outlined in the Code of Federal Regulations Title 14 Part 147 Appendix A, B, C, and D for General, Airframe, and Powerplant. (PO)
3. Graduates of the AMT program will be able to successfully get and hold a job or continue their education. (PO)

### **Business Information Management for Students completing an Associate Degree**

1. Exhibit initiative, dependability, integrity, and a high-quality work ethic. (SLO)
2. Be an MOS certified user of the current version of MS Office (CO)
3. Write, speak, and present information effectively (SLO)
4. Identify the interpersonal and ethical attributes needed for success in the profession (SLO)

### **Commercial Driver's License Outcomes**

1. Students, who successfully complete the program, will have the skills to be employed in the trucking industry.
2. Students, who successfully complete the program, will have obtained the skills to pass the State CDL Exam. (PO)

### **Early Childhood Education Program Outcomes for Students completing an Associate Degree**

1. Understand how children acquire language and creative expression and develop physically, cognitively and socially. (SLO)
2. Establish an environment that provides learning experiences to meet children's needs, abilities and interests. (SLO)
3. Observe and assess what children know and can do in order to plan and provide curriculum that meets their developmental needs. (SLO)
4. Develop strong relationships with families and work collaboratively with agencies/organizations to meet children's needs and to encourage the community's involvement with early care and education. (SLO)
5. Establish and maintain an environment that ensures children's safety, health and nourishment. (SLO)
6. Establish supportive relationships with children and guide them as individuals and as part of a group. (SLO)
7. Establish, implement, evaluate and analyze an early care and education setting. (SLO)
8. Serve children and families in a professional manner and participate in the community as a representative of early care and education. (SLO)

### **Industrial Systems Technology Program Outcomes for Students completing an Associate Degree**

1. Graduates of the program will be gainfully employed in a position related to Industrial Systems.
2. Graduates of the program will be able to safely apply sound maintenance procedures to related industrial equipment. (SLO)

### **Medical Assistant Outcomes for Students completing an Associate Degree**

Upon completion of the Medical Assistant Program, the student will demonstrate the following competencies and be qualified to perform the proper duties under the supervision of a delegator:

1. Demonstrate clear, effective communications with patients and members of the healthcare team in a variety of structured settings. (SLO)
2. Demonstrate cultural competency when caring for patients experiencing selected health deviations. (SLO)
3. Prioritize, organize, and complete assignments in a timely manner as directed by the delegator. (SLO)
4. Demonstrate professional behavior consistent with standards of performance appropriate to the Medical Assistant. (SLO)
5. Consistently communicate information in the clinical setting in a relevant, concise, accurate, and clear manner. (SLO)
6. Develop teaching materials and conduct patient teaching within defined role. (SLO)
7. Demonstrate delegated skills and procedures with the highest standard of competency. (SLO)
8. Deliver a sound professional attitude and demonstrate professional behavior when caring for patients and working with your delegator as well as other healthcare professional at all times. (SLO)



**Nursing Outcomes for Students completing the Associate Degree**

1. Communicate effectively to deliver relevant, accurate and complete information to patients, families, and the healthcare team. (SLO)
2. Deliver safe and effective physical, psychosocial, cultural, and spiritual care to the whole person in a variety of settings. (SLO)
3. Plan, initiate, and evaluate patient teaching including assessment of current knowledge, use of appropriate materials and techniques. (SLO)
4. Demonstrate clinical decision-making from a theoretical knowledge base utilizing the nursing process to develop patient care plans that ensure safe, effective care in a variety of settings. (SLO)
5. Assume responsibility and accountability in the practice of registered nursing as defined by the professional standards and codes of nursing. (SLO)
6. Participate as a member of the healthcare team for educational and institutional growth. (SLO)

**Welding Program Outcomes for Students completing an Associate Degree**

1. Graduates of the program demonstrate safe shop practice by safely using basic tools and equipment. (SLO)
2. Graduates of the program demonstrate competent cutting procedures and correct operation of equipment. (SLO)
3. Graduates of the program apply a variety of welding techniques competently. (SLO)
4. Graduates of the program display knowledge of welding information. (PO)

### **Part Three: Completed 2012-2013 Assessment Reports**

Included below are the annual assessment reports and narratives from each department on campus for the 2012 -2013 academic year. As you can see there are a variety of assessment outcomes, techniques, and ideas that take place across campus. These outcomes are focused specifically on assessing student learning, program success, and faculty curiosity regarding their students, courses and programs.

As part of the accreditation visit in 2012, our faculty has been tasked with enhancing their assessment outcomes. For 2013- 2014, our academic faculty has been asked to refine their assessment goals to more clearly include general education outcomes and professional technical faculty have been asked to identify student level learning outcomes in addition to their program level outcomes. For the 2013 – 2014 academic year these obligations will be more clearly incorporated into the annual assessment reports. Several of the departments have already begun the transition as evidenced in some of the 2012-2013 reports you read below. For 2013-2014 our hope is to more clearly identify which of our outcomes meet the requirements set forth by the accreditation council.

An additional change planned for the 2013-2014 year is a reformatting and simplification of the current assessment form to produce a more streamlined and consistent final product. This involves removal of the last two columns of our “box” form (“who discussed the results” and “use of results”) as it is felt that these columns are now redundant with the narrative that is also submitted with year-end results.

In preparation for the anticipated changes in 2013-2104 we wanted to assess the current state of the Academic Faculty’s use of the General Education Outcomes at BBCC similar to our assessment of Professional Technical Program Outcomes. Our General Education Outcomes consist of 5 primary outcomes with 24 specific criteria divided among the 5 outcomes. For the 2012-13 academic year, departments reported 30 assessments of the various outcomes and specific criteria. Out of those 30 reported assessments, 14 reported that specific benchmarks had been established for the assessments. Of those 14 benchmarked assessments, 11 reported successful achievement of the outcome, for an overall success rate of 79%.

Of the five Gen Ed outcomes, all were assessed at some level. Of the 24 specific criteria related to the five outcomes, 14 out of 24 criteria were explicitly assessed, or 58% of the criteria were assessed. While this still leaves 42% of the criteria without a clearly recorded assessment this year, this does represent the most thorough assessment of our Gen Ed outcomes that we have had recently. This is a good step in the direction of Gen Ed assessment.

The summary below is drawn from the assessment reports submitted by all instructional departments and programs. For further information on any of these results, see the department reports on the BBCC portal or in the Annual Assessment report.

#### **1. Students will be able to write clearly and effectively.**

##### **1.a. Clarity**

- English reports a detailed assessment of this outcome; the analysis was descriptive rather than quantitative.

##### **1.b. Logical flow from point to point**

- No specific assessment reported.

### **1.c. Sound support of assertions**

- Biology reports that 77% of students from two classes accomplished this outcome. The benchmark was 75% of students demonstrating the outcome successfully.
- English reports a detailed assessment of this outcome; the analysis was descriptive rather than quantitative.

### **1.d. Creative or divergent thinking**

- No specific assessment reported.

### **1.e. Adhere to conventions of standard written English**

- No specific assessment reported.

### **1.f. Sources adhere to citation/reference formats**

- English reports a detailed assessment of this outcome; the analysis was descriptive rather than quantitative.

## **2. Students will be able to reason mathematically.**

### **2.a. Interpret information in graph form**

- Biology reports that an average of 88% of students from different classes accomplished this outcome. The benchmark was 75% of students demonstrating the outcome successfully.
- Philosophy reports that 73% of students achieved this outcome, with a benchmark of 51%.
- Physics reports that 75% of students were able to graph data correctly, but only 48% of students were able to successfully make predictions based on that data. The benchmark was 75%; the benchmark was reached on the less complex part of the task, but results were lower on the more complex part of the task.

### **2.b. Understand and use statistical information**

- No specific assessment reported.

### **2.c. Understand geometrical concepts**

- No specific assessment reported.

### **2.d. Work with numerical and algebraic relationships**

- Biology reports that 77% of students from two classes accomplished this outcome. The benchmark was 75% of students demonstrating the outcome successfully.

## **3. Students will be able to solve problems combining and applying knowledge from multiple sources.**

- Psychology reports that an assessment of the difference between open book/open note tests and closed book/closed note testing showed little difference in students' ability to achieve this outcome successfully.

### **3.a. Define the problem**

- Chemistry reports an average score of 2.8 on a 4 point rubric on an assessment of this outcome.

### **3.b. Break it into steps**

- No specific assessment reported.

### **3.c. Draw logical conclusions**

- Biology reports that an average of 88% of students from different classes accomplished this outcome on a specific assessment. The benchmark was 75% of students demonstrating the outcome successfully.
- Biology reports that an average of 77% of students from different classes accomplished this outcome on a separate assessment. The benchmark was 75% of students demonstrating the outcome successfully.
- Chemistry reports an average score of 3.1 on a 4 point rubric on an assessment of this outcome.

- Psychology reports that students who completed weekly summaries of the course content performed better on this outcome, 74% vs 84%.

**3.d. Generate multiple and diverse perspectives in trying to solve the problem**

- Psychology reports that students who completed weekly summaries of the course content performed better on this outcome, 74% vs 84%.

**3.e. Recognize extraneous information**

- Biology reports that 77% of students from two classes accomplished this outcome. The benchmark was 75% of students demonstrating the outcome successfully.

**3.f. Follow directions and fulfill the expectations of the assignment**

- Music reports that 57% achieved this outcome, with a benchmark of 75%.
- Psychology reports that students who completed weekly summaries of the course content performed better on this outcome, 74% vs 84%.
- Sociology reports no difference in achievement of this outcome between students who used clicker technology in class and those who did not.

**4. Students will be able to gather and interpret information.**

- The Art department reports that 94% of students met this outcome; however, there was no further information reported on the details of this assessment, so it is difficult to summarize.
- History reports that 78% of students accomplished this outcome in multiple assessments across six course sections. The benchmark was 75%.

**4.a. Distinguish between well-supported and unsupported claims**

- No specific assessment reported.

**4.b. Make comparisons and draw contrasts**

- No specific assessment reported.

**4.c. Recognize the points of an issue or claim**

- Psychology reports that students increased performance on this outcome between 2012 and 2013, from 2.53 to 2.55 on a four point scale.

**4.d. Access multiple sources of information**

- Biology reports that 77% of students from two classes accomplished this outcome. The benchmark was 75% of students demonstrating the outcome successfully.
- Psychology reports that students who completed weekly summaries of the course content performed better on this outcome, 74% vs 84%.

**5. Students will be able to define and articulate personal, historical, global and workplace/community aspects of culture.**

**5.a. Define and articulate an objective sense of personal culture as it relates to external cultures.**

- No specific assessment reported.

**5.b. Define and articulate historical aspects of cultures using appropriate vocabulary and examples.**

- Spanish reports an assessment of this outcome with a benchmark of 75%.
  - Spanish 121 achieved 48% success
  - Spanish 122 achieved 58% success
  - Spanish 123 achieved 69% success

The assessment shows increasing competence by level, though no level reaches the benchmark.

**5.c. Define and articulate meaningful aspects of global cultures using appropriate vocabulary and examples.**

- Spanish reports an assessment of this outcome with a benchmark of 75%.

- Spanish 121 achieved 48% success
- Spanish 122 achieved 58% success
- Spanish 123 achieved 69% success

The assessment shows increasing competence by level, though no level reaches the benchmark.

- Religious Studies reports that 68% of students achieved this outcome; the benchmark was 51%.

**5.d. Define and articulate concepts related to the culture of the workplace and community.**

- No specific assessment reported.

**Accounting  
Assessment Plan 2012-2013**

<b>Program/Course</b>	<b>Outcome</b>	<b>Tools &amp; Instruments</b>	<b>Results</b>	<b>Who Discussed the Results</b>	<b>Use of Results</b>
Accounting Technician (Prof/Tech)	70% of students graduating from the Accounting Technician Program will be employed successfully. (PLO)	State Board Estimated Employment Report	80% of Accounting Tech students were employed—per the Estimated Employment Report	Accounting Faculty	Goal Met—continue to evaluate goal, tools, and results.
Accounting/Business	Students will know how to apply related accounting knowledge such as taxation, payroll, and proper application of GAAP in performing accounting/bookkeeping functions/work. (SLO)	Pre-Post Tests	<p>Full-time Accounting Faculty did not teach ACCT105 in the Winter 2013, which was the class designated for a pre-post test in 2012-2013.</p> <p>Other relevant assessment work was completed in BUS&amp;101. See results of this assessment work summarized in “Assessment Findings Worksheet #5” in our program Assessment Binder.</p>	Accounting Faculty	Outcome was not evaluated due to changes in teaching assignments of the Full-Time Faculty. However, this particular outcome is ideal and it will continue to be pursued and measured and evaluated as we move into the next academic year.

You are all good and we don't need to meet. You have at least one Student Level Outcome (SLO) and one Program Level Outcome (PLO) and the outcomes on assessment are tied to at least one Program Outcome. Great work! Keep it up.

# Annual Assessment Academic Year 2012-13 Accounting Technician

**OUTCOME 1: 70% of students graduating from the Accounting Technician Program will be employed successfully.**

- **What you did to assess your course**

The Accounting Technician (AT) program uses the Estimated Employment rates for completers of the AT program. The most current (2010-11) Estimated Employment Rates for the AT program were 80% as provided by the Data Linking for Outcomes Assessment. This information is provided by the State Board for Community and Technical Colleges which links Unemployment Insurance Data for WA, OR, ID, MT and AK.

- **What you expected to find.**

Students graduating from our AT program will be hired at a rate equal to or above the rate expressed in our desired outcome.

- **What the results actually showed.**

The results showed that our graduates are being gainfully employed at a rate above our expected outcome.

- **What conclusions do you draw from these results.**

The students were all prepared for their first AT job. We will keep the program the same.

- **What changes (if any) you plan to make in your teaching as a result of the data.**

We plan to keep our teaching techniques the same.

- **What changes (if any) you plan to make in your assessment activities as a result of the data.**

We will keep our assessment activities the same for this outcome.

**OUTCOME 2: Students will know how to apply related accounting knowledge such as taxation, payroll, and proper application of GAAP in performing accounting/bookkeeping functions/work.**

- **What you did to assess your course**

The Accounting Technician (AT) program uses pre-post tests as tools to assess this outcome. A pre-test was given to establish a baseline for evaluating students' knowledge of a particular accounting related topic/function. Then a post-test was given to evaluate students' learning and comprehension of selected topics, all of which relate to the work and functions performed within the accounting and bookkeeping career fields.

- **What you expected to find.**

Students will be able to comprehend and apply applicable accounting knowledge to the work-related tasks that they would be expected to perform.

- **What the results actually showed.**

Unfortunately this outcome was not evaluated using pre-post tests during 2012-2013 due to changes in teaching assignments of the full-time faculty. At the beginning of the year, we had designated surveying students in our ACCT105 class during winter quarter 2013 for the pre-post tests. Thus, we do not have any new data to add to the results gathered in prior years.

- **What conclusions do you draw from these results.**

Due to not being able to administer the pre-post tests in 2012-2013, we are forced to rely solely on the results of prior years. The results of prior years' consistently indicate a pattern that the AT faculty are successfully helping students learn and apply related accounting knowledge.

- **What changes (if any) you plan to make in your teaching as a result of the data.**

Based upon prior years' results, faculty will dedicate more class time and more emphasis will be given to the teaching and learning and application of calculating Net Income.

- **What changes (if any) you plan to make in your assessment activities as a result of the data.**

We plan to implement and begin using a pre-post test in the ACCT&202 class during 2013-2014 so we can hopefully gather data from two different classes.



**Annual Assessment  
Academic Year 2012-2013  
Aviation Maintenance Technology**

DEPARTMENT	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	USE OF RESULTS (Changes made as result of findings.)
AMT – 1	90% AMT students who complete Airframe and/or Powerplant successfully pass the FAA Written, Oral and Practical Exams (PO, SLO)	Instructor Records	Of the 26 AMT students that completed the FAA exams, one student failed one of the three FAA written exams and one student failed one of the three Oral and Practical exams. Both students came back and successfully completed all FAA required Written, Oral and Practical Exams.	No change needed.
AMT – 2	Of all AMT students completing any FAA written exams, what is the subject matter codes that are most frequently missed. (SLO)	FAA Airmen knowledge test report	Identified 22 areas out of 274 which were missed by more than 60% of students.	Instructors have reviewed these areas and will enhance theory and lab instruction.

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one Student Level Outcome (SLO) and one Program Level Outcome (PLO) in your assessment and for the outcomes to be tied to at least some of your Program Outcomes. These outcomes above differ from your Program Outcomes. You might want to assess at least one stated Program Outcome for the 13-14 year. Good work. Keep it up!

**Big Bend Community College  
Aviation Maintenance Technology  
Assessment Summary**

**2012-2013**

It is the goal of the Aviation Maintenance Technology (AMT) program to have 90% of the AMT students who complete Airframe and/or Powerplant successfully pass the FAA Written, Oral, and Practical exams. Of the 26 AMT students that completed the FAA exams, one student failed the one of the three FAA written exams and one student failed one of the three Oral and Practical exams. Both students came back and successfully completed all FAA required Written, Oral and Practical Exams and all 26 students received FAA certification.

The AMT instructors also looked at the percentage of students completing the FAA written exams for find any subject areas that more the 60% of the students had trouble in. By reviewing the FAA written test results, and screening the subject codes we found that of the 274 different required subject areas only 22 were missed by more than 60% of the students. As a result of this finding the AMT instructors will enhance the theory and lab instruction in these areas.

With the continued surveillance that the FAA performs on our AMT program and the severity of what a mistake could mean the AMT instructors are continually assessing and making adjustments to the AMT program. The FAA approved and required curriculum manual, is on its 7 revision with the 8<sup>th</sup> revision currently in rewrite.

The AMT program developed a student self-paced program that has allowed our students to move through the program at a fast pace (6 qtrs.) or at a slower pace in order to fulfill other obligations that they may have. As a result of this, the majorities of our students receive certificates of accomplishment and enter the work force rather than stay to earn the AAS degree.

Safety continues to be one of our biggest concerns this academic year. We will strive to write our safety procedures to help assure the safety of our students.

**Annual Assessment  
Academic Year 2012-2013  
ART**

DEPARTMENT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	WHO DISCUSSED THE RESULTS?	USE OF RESULTS (changes made as a result of findings.)
Survey of Art I & II	80 % of students will pass with 3.0 or better  Students fulfill outcomes 4 & 5	Composite of scores based on studio projects and written work	24/32 >3.0  75%  30/32 > 2.0  94%	Rie and Fran Palkovic	Continue with more frequent exams and hands on projects

The students were given exams after each chapter instead of after several chapters. They seemed to do better collectively but some had personal issues that interfered with their success. The inclusion of studio projects to enhance course content was very well liked by students and they asked for more. (Please, sir, may I have some More?) I will be happy to oblige.

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one of your outcomes to be tied to a Gen Ed outcome. You have outcomes 4 & 5 listed but it would be nice to see sub-level assessment (5a, 5b, 5c, etc.). Good work. Keep it up!

**Annual Assessment  
Academic Year 2012-13  
Automotive Technology**

DEPARTMENT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	USE OF RESULTS (changes made as a result of findings.)
Automotive	75% of Automotive students who earned certificates or degrees or students with 45 credits or more with at least a 2.0 G.P.A. will be employed. (PLO)	Employment data	67% of students surveyed were employed. This figure may be the result of a very small sample (6) of returned surveys.	A larger sample may be needed to accurately gauge employment. A poll of our advisory council will give an indication of available jobs in the past year.
Automotive	75% of Automotive students enrolled in classes from one of the eight specialty areas will earn a certificate of completion. (PLO)	Student transcripts	More than 75% of automotive students completed classes above a 2.0 GPA, thus earning a certificate.	Maintain this goal.
Automotive	Work to increase the number of students who take the ASE certification exams. (PLO)	Student survey	There is no change to the difficulty of collecting data. Fees and travel for testing have increased due to online-based testing.	Continued increased exposure to ASE. Implement new student testing and certification.

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few sessions if you want to chat. We are looking for at least one Student Level Outcome (SLO) and one Program Level Outcome (PLO) in assessment and for the outcomes to be tied to at least some of your Program Outcomes. All of the outcomes listed above are PLO. You need some SLO. You have one on your Program Outcomes about safety education/ procedures. You could use that. Good work. Keep it up.

# **Annual Assessment**

## **Academic Year 2012-13**

### **Automotive Technology**

The three areas of focus of assessment for our automotive program included the following areas;

- “75% of program graduates or completers would be employed” The data showed that 67% of graduates were employed.
- “75% of the students enrolled would earn a certificate of completion” Our student completion of courses required for certificates was well above the 75% goal. We will print certificates when requested by students.
- “Work to increase the number of students who take the ASE certification exams.” Currently enrolled students were surveyed and there were only a few that were taking their certification exams.

The automotive faculty is concerned about the employment data. It does not correlate to historical data. This could possibly be the result of the small volunteer survey return or perhaps other local factors. BBCC Auto graduates tend to try to remain in the area and a dip in employment openings could result in the lower percentage of employed graduates. Consulting the program advisory council may give us insight into employment trends in the area.

Automotive faculty feel that students who complete the automotive technology program with a degree would not benefit from the printing of completion certificates. However, certificates have been printed for those students who have requested them.

A new student testing program has been instituted by ASE and NATEF. The student tests have a yearly fee and twice a year access to testing. The tests may be proctored by someone on campus, scores are then immediately available and a color certificate printed that is electronically signed by ASE and can then be signed by the proctor or some other agent. This saves the student from driving to Spokane, Ellensburg, or Wenatchee for conventional ASE testing. Unlike conventional ASE certifications, the student certificates do not require work experience and have two-year expiration. Also, we have placed ASE more prominently in front of the students by means of literature, posters, and so forth. We will also have our own certifications added to our shop uniforms and discuss certification continually during the two years of instruction.

ASE is the National Institute for Automotive Service Excellence.

NATEF is the National Automotive Technicians Education Foundation.

**Annual Assessment**  
**Academic Year 2012-2013 Commercial Pilot**

DEPARTMENT	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	USE OF RESULTS (Changes made as result of findings.)
Commercial Pilot -1	Aviation students will have 90% pass rates on FAA Flight Checks.	Flight information on computer and in written records	95% pass rate on FAA Flight Checks	Findings used to upgrade training course outline every year.
Commercial Pilot - 2	Aviation students will have a 70% pass rate on FAA Knowledge Tests.	Knowledge test pass/fail rates and subject matter codes	93% pass rate on the FAA Knowledge Tests	Pass/fail rates and subject matter codes are used to determine which areas are problematic for students.
Commercial Pilot - 3	90% of Aviation students will pass the required ground school classes.	Grade records collected by each ground school instructor	99% pass rate in the required ground school classes	Gauge student knowledge of the Aviation Program's expectations and formulate solutions for positive outcomes.

I would like to chat for about 10 minutes. You have great program level outcomes but we need to define what is happening a bit more for students and outside stakeholders.

# Annual Assessment Notes

## Academic year 2012-2013

### Commercial Pilot

#### **#1 Flight Checks:**

Chief Pilot John Swedburg keeps track of the checkride pass/fail percentage through student records at the time of certification. This data is used by our Chief Pilot in determining trend information. In addition, he reviews the notes, the check sheets, and student folders for serious problems. If any are observed, the Training Course Outline (TCO) is changed to address those problems. Note that any changes in the TCO have to be approved by the FAA Flight Standards District Office (FSDO) in Spokane.

#### **#2 Knowledge Tests**

Since we administer the Knowledge test here on campus, we can keep track of the score and the subject matter codes of each test result. These are then used to find a percent of students who pass the test the first time. The subject matter codes are used to pinpoint which areas are problem areas for each respective ground school course. The instructor then uses the results to change or modify the lesson given to address those issues. We have a spread sheet available on a network drive which gives all flight instructors access to that information more easily and in real time.

#### **#3 Pass/Fail Rate for Required Ground School Classes**

The student is required to pass the appropriate ground school class in order to remain in the program. For first year students, the Pre-Flight, Private, Meteorology, and Theory of Flight classes must be passed the first year in order to be eligible for enrollment in the Commercial Course the second year. Second year classes include Instrument, Commercial and optional Certified Flight Instructor courses. These classes must be passed in accordance with our TCO in order for the student to achieve their pilot certificates.

**Annual Assessment  
Academic Year 2012-2013  
Business Education Division  
Business Information Management**

DEPARTMENT	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS
BIM-1	Lab course grades 12-13 will be remain level or improve over lab course grades 11-12. (CLO)	Checklists 11-12 and 12-13	Course grades remain level. 10/11 average grade = 3.38 11/12 average grade = 3.42 12/13 average grade = 3.40
BIM-2	The percentage of credits completed will improve in the lab courses (CLO)	Checklists 11-12 and 12-13	Fall 12: 87% completed at least 1 credit in a class (14% increase from Fall11) Winter13: 76% completed at least 1 credit in a class (2% increase from Winter 12) Spring13: 72% completed at least 1 credit in a class (4% increase from Spring12)
BIM-3	75% or more of BUS121 students will perform at a 2.0 or better (SLO)	Student grades	Summer12: 60% earned a 2.0 or better 3 of the 15 students did not attend and earned 0.0 Removing these students from the totals results in a 75% performing at 2.0 or better  Winter13: 36% earned a 2.0 or better 3 of the 22 students did not attend and earned 0.0 Removing these students from the totals results in a 42% performing at 2.0 or better

You are all good and we don't need to meet. You have at least one Student Level Outcome (SLO) and one Program Level Outcome (PLO) and the outcomes on assessment are tied to at least one Program Outcome. As we chatted in your office you have a good one for SLO with the MOS exam for 13-14 year. Great work! Keep it up.



**BIM-1:** Course grades remain level. Changes to the grading structure could change these results in 13-14. The minimum competency for all BIM Lab courses will increase from 1.5 to 2.0 beginning Fall13. Additionally, students will have only four, rather than six, testing attempts to meet the competency. This does not include the keyboarding courses because they are skill-based courses. We will measure this again in 13/14 to determine the effects of the grade structure changes. It is expected that the changes will result in higher grades for all lab courses (except keyboarding courses); however, it could also result in a larger drop rate.

**BIM-2:** The best improvement was in Fall12 with a 14% increase over Fall11. Winter13 had a 2% increase and Spring13 had a 4% increase. Fall quarter having higher success rates is a trend we see every year. The 12/13 rates are even higher increases over 10/11 which we felt was due to “at risk and reminder notices” sent by instructors. These were not sent in 10/11, but we returned to these in 12/13 to promote a higher completion rate. It appears to have worked.

To further improve these completion rates, we will change the BIM101-Basic Keyboarding course from variable credit to a 2-credit course with no option for partial credits. Students will be guided with due dates and competency expectations rather than allowing the self-paced environment, which often results in procrastination and students either earning partial credits or no credits at all. A trial of this model will be used in Summer13 with full implementation beginning Fall13. Additionally, five of the non-program courses will be offered online with hopes of improving the online enrollment as well as providing an alternative way for non-program students to get these courses with more flexibility as they are not using the evening and weekend lab hours. We will measure this again in 13/14.

**BIM-3:** Officially, the outcome was not met; however, once the “disappearing” and/or “no-show” students are removed from the calculation, Summer 12 met the goal of 75% earning a 2.0 or better. The three students who did earn grades lower than a 2.0 earned a 1.5, 1.7, and 1.9.

Unfortunately, Winter13 did not have the same results. Only 42% earned a 2.0 or better (after removing disappearing/no-shows). These are unexpected results as Winter13 was a regular 10-week quarter and Summer12 was a 5-week quarter. I would have thought the results for the two quarters would be the opposite. With that said, it should be noted that 7 of the students who did not earn the 2.0 had several missing assignments and quizzes throughout the quarter.

I started teaching this course as a flipped course in Summer12 and did again in Winter13. I will continue with the flipped course style in Winter14. The student feedback (and eventual success) of the Summer12 class was very good. It is this instructor’s hopes that the results for Winter13 are an anomaly and Winter14 will have better results. We will measure this again in 13/14.

## Biology Annual Assessment Academic Year 2012-13

Area	Outcome	Tools & Instruments	Results	Who Discussed the Results	Use of Results
Biology – 1	75% of students enrolled in BIOL& 241 or BIOL& 260 will state that BIOL& 211 prepared them very or moderately effectively for their current course.	Biology Student Assessment Survey collected at quarter's end in BIOL& 241 and BIOL& 260	98.0% of students enrolled in BIOL& 241 or BIOL& 260 stated that BIOL& 211 prepared them very or moderately effectively for their current course.	Barbara Jacobs and Kathleen Duvall	We will continue to make changes in curriculum to maintain this result.
Biology – 2	80% of students in BIOL& 241 or BIOL& 260 who completed BIOL& 211 at BBCC with a grade point of 2.0 or better, will achieve at least a 2.0 in those classes.	Compare database of BIOL& 211 grades to database of BIOL& 241 & BIOL& 260 grades.	78.2% of students in who successfully completed BIOL& 211 at BBCC, successfully completed BIOL& 241 or BIOL& 260. Of the students who did not successfully complete BIOL& 241 or BIOL& 260, 84.2 % repeated or received below a 2.5 in BIOL& 211.	Barbara Jacobs and Kathleen Duvall	Our BIOL& 211 students still fall below our benchmark of 80%; we have raised the success standards and are working to strengthen the learning skills of our BIOL& 211 students in order to increase our success rate.
Biology – 3	75% of students enrolled in Biology courses will achieve selected General Education Outcomes. <b>List SPECIFIC GEN ED NUMBERS HERE 3c, 1c, 2d, 4d, 3e.</b>	Selected assignments/ tests in selected biology courses.	Four classes were evaluated; 79%, 75%, 87%, and 89% of students achieved selected outcomes.	Barbara Jacobs and Kathleen Duvall	The Biology Dept. will continue to evaluate the abilities of our students on selected General Education Outcomes.
Biology - 4	Faculty members within Biology department will attend at least 2 professional development meetings or conferences per year <i>per department</i> , finances permitting (not 2 conferences per member but 2 conferences per department).	Verify through faculty travel records.	Two faculty members attended NWBIO 2013 in May 2013.	Barbara Jacobs and Kathleen Duvall	The Biology Dept. has achieved this outcome; we will continue to monitor this outcome on a rotating schedule.

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one of your outcomes to be tied to a Gen Ed outcome. In your narrative you discuss the outcomes covered. List them above (see suggestion) and for 13-14 have a bit more detail about the assignments or what specifically met the outcomes. Good work. Keep it up!

## Biology Department Annual Assessment 2012-2013 Narrative

The BBCC Biology Department provides courses and training for university and college transfer, for students transferring to a variety of professional-technical areas such as the BBCC Nursing Program, and to give students current and accurate information by keeping abreast of rapidly changing information and technology; further the Biology Department strives to give students a background that allows them to understand and assess biological issues as they affect society. To accomplish this overall mission, Biology Department faculty seek to (1) teach effectively and provide an environment conducive for learning, (2) develop and update courses and curriculum that become the content foundation of student future success in the biological sciences, (3) keep up with current trends and developments in science and instructional pedagogy, and (4) assess biology courses to accomplish and maintain our stated goals. The outcomes included in our Biology Department Annual Assessment 2011-2012 focus on these four points.

Biology Outcome 1, *"75% of students enrolled in BIOL&241 or BIOL&260 will state that BIOL&211 prepared them moderately or very effectively for their current course"*, and Biology Outcome 2, *"80% of students in BIOL&241 or BIOL&260 who completed BIOL&211 at BBCC with a grade point of 2.0 or better, will achieve at least a 2.0 in those classes."* focus on our goal to develop and update courses and curricula that provide a strong content foundation that helps students to succeed in future courses. 98% of students enrolled in BIOL& 241 or 260 stated that BIOL& 211 prepared them very effectively or moderately effectively for their current course. This exceptional result validates our goal to help students succeed. As we have tracked student grades in successive courses, 78.2% of students with BIOL&211 grades of 2.0 or more were successful in their next biology course, BIOL&241 or BIOL&260, up a bit from 77.7%. This year we offered regular SI sessions in all BIOL& 211 and regular chapter homework assignments designed to help students to master required course content in BIOL& 211. Further, some inverted instruction videos were made available. We will continue to extend our resources in the quest for higher student success.

Of the students that did not succeed in a higher level course, 73.7% achieved a 2.4 or less in BIOL&211, the prerequisite course, and 52.6% repeated BIOL&211 to earn the required 2.0 or above. These percentages accounted together represent 84.2% of the unsuccessful students in BIOL& 241 or 260. These students clearly struggle in BIOL& 211, continuing to struggle even when they repeat the course. Looking further at the successful students, 91.9% of students scoring a 2.5 or higher without repeating BIOL& 211 were successful in the later courses. It is most clear that repeating BIOL& 211 is not the best solution unless those students elevate their scores greatly above the minimum required 2.0 level.

Biology Outcome 3, *"75% of students enrolled in Biology courses will achieve selected General Education Outcomes,"* focuses on the larger picture of General Education Outcomes. Four classes were evaluated and three of the four classes met the 75% benchmark. Two BIOL& 100 classes were evaluated for the General Education Criteria: 2a. Interpret information in graph form. 3c. Draw logical conclusions. 87% of students in one section of BIOL& 100 and 89% of students in another section of BIOL& 100 achieved these selected criteria using Lab 1 Evolution as the selected assignment. Two BIOL& 242 classes were evaluated for the General Education Criteria: 3c. Draw logical conclusions 1c. Sound support of assertions, 2d. Work with numerical and algebraic relationships, 4d. Access multiple sources of

information, 3e. Recognize extraneous information. 79% of students in one section of BIOL& 242 and 75% of students in another section of BIOL& 242 achieved these selected criteria using a lab report in which students drew conclusions from data they generated in an experiment involving glomerular filtration and urine production. We will continue to monitor General Education Outcomes within our Biology courses.

For the coming year, the BIOL&241 and BIOL&242 instructor has restructured these two courses, using recorded prelab or prelecture videos and inverted instruction. She has adopted an interactive online textbook and will be using 3D software extensively in lecture and lab. Students will be able to work with this software on laptops in lab sessions.

Biology Outcome 4, *“Faculty members within Biology department will attend at least 2 professional development meetings or conferences per year per department, finances permitting (not 2 conferences per member but 2 conferences per department). This outcome allows members to keep abreast of current trends in biology education, sharing ideas on curriculum and course content,”* focuses on keeping up with current trends in science and technology, our course subject matter, and instructional pedagogy. Both Biology faculty members attended the NWBIO 2013 conference held in Pasco, Washington, last May. This outcome has become standard practice within the Biology Department; we plan to monitor it on a rotating-year basis.

**Annual Assessment  
Academic Year 2012-13  
COMMERCIAL DRIVER'S LICENSE**

DEPT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	USE OF RESULTS (changes made as a result of findings.)
CDL	75% of CDL students who earned a certificates or degrees or students with at least a 2.0 G.P.A. got employment (PLO)	Estimated employment rates SBCTC data 2010-11 obtained in Winter 2012	96% of CDL students were employed	Satisfied with results, continue to maintain relationships with industry partners that hire CDL students
CDL	85% of CDL of program completers will pass the State CDL Exam. (PLO)	DOL written test and DOL Skills Test with a DOL 3rd party.	100% of the CDL program completers have passed the State CDL Exam	Satisfied with results, continue to incorporate "up-to-date" industry standards to CDL students
CDL	Instruction prepared them for an entry-level employment in the transportation industry. (?)	CDL former student survey	Survey show that our instruction is adequate for entry-level employment	Satisfied with results but we will continue to incorporate "up-to-date" technology to CDL students
CDL	Equipment is adequate in the program (PLO)	CDL former student survey	Survey shows that our equipment is starting to get out dated	Will request newer equipment to keep our students up to date in the trucking industry

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one Student Level Outcome (SLO) and one Program Level Outcome (PLO) in your assessment and for the outcomes to be tied to at least some of your Program Outcomes. The (?) above is a possible SLO if you state the skills they needed and they report that they had those skills. This could be done in the narrative. Also you need a SLO in your Program Outcomes. Good work. Keep it up!

**Annual Assessment Submission  
Academic Year 2012-2013  
Chemistry**

DEPT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	WHO DISCUSSED THE RESULTS?	USE OF RESULTS (changes made as a result of findings.)
Chemistry 161/162	The class average will improve by 10 percentage points between the beginning of CHEM& 161 and the end of CHEM& 162	The Chemical Concepts Inventory test published in the Journal of Chemical Education.	The average score on the first day of class was 61%. Repeating the quiz in February the average score was 71%. The target was met but only by a thin margin. 22 students took both quizzes.	Lindsay Groce and Kathleen Duva	The class did better than the base group from the University of Wisconsin but overall the results are disappointing.
Chemistry 161/162/163	Class median on the American Chemical Society General Chemistry Examination will be at or above the national 50 <sup>th</sup> percentile.	ACS General Chemistry Examination administered as a (comprehensive over the full year) final exam at the end of CHEM& 163. This is a standardized exam for General Chemistry with a nationwide reporting base.	The median percentile was 55.5. The best score was at the 97 <sup>th</sup> percentile the lowest score was in the 13 <sup>th</sup> percentile. The number of students was 18.	Lindsay Groce and Kathleen Duvall	These results confirm that students completing the General Chemistry series have a better level of education than college students at large.

DEPT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	WHO DISCUSSED THE RESULTS?	USE OF RESULTS (changes made as a result of findings.)
Chemistry 121	A majority of students will have a combined score of 3 (proficient) or better	Selected question(s) from the Winter quarter final exam will be evaluated on a 4 point scale relating to selected criteria from the <i>Problem Solving</i> General Education	Average score from a limiting reactant problem on 22 exams was 2.8 for 3.a. and 3.1 for 3.b.  The target of 3 or better was not quite met.	Lindsay Groce and Kathleen Duvall	Will repeat this next year but with modifications.

You are all good and we don't need to meet. You have at least one of your outcomes tied to a Gen Ed outcome. My only suggestion would be for CHEM 121 that you specifically state that you are assessing Gen Ed outcome 3a & 3B. If you would like to include more that would be wonderful but not required! Great work! Keep it up.

# Annual Assessment Narrative

Academic Year 2012-13

## Chemistry

Chem 1 Narrative.

From the Journal of Chemical Education (JCE) website.

[The Chemical Concepts Inventory](#)\* (CCI) is a multiple choice instrument that can be used to indicate the level of chemistry misconceptions held by students. The inventory is a multiple choice instrument composed of one- and two-tiered non-mathematical conceptual questions (22 questions total). The questions are based on common commonly-observed student misconceptions about topics generally covered in the first semester of a college chemistry course. The inventory was administered to over 1400 students in a general chemistry course for science and engineering majors (all of whom have had a high school chemistry course) during the first week of a fall semester and repeated during the first week of the following spring semester. The average grade on the inventory was 45% (10 of 22) in the fall and 50% (11 of 22) the following spring.

The inventory indicates that many of our general chemistry students are not fluent with a significant portion of the concepts in general chemistry. They have difficulty with fundamental concepts concerning the properties and behavior of atoms and molecules. For example, after at least two semesters of high school chemistry and one semester of general chemistry, 47% of our students believe that the rust from a completely rusted iron nail weighs less than the nail it came from; 75% cannot distinguish between the properties of a single atom of sulfur and a sample of solid sulfur; and 65% believe that breaking chemical bonds gives off energy.

Please feel free to download this inventory and use it with your students.

Discussion:

This test was administered the first time on the second day of fall quarter (9/13/2012) in Chemistry 161. The second time was 7 weeks into winter quarter (2/17/2013). The test was given without warning. I chose this date to approximate one semester of learning for better comparison to the University of Wisconsin results. The university students improved from an initial average score of 45% to 50%. The BBCC students went from an initial average score of 61% to an average of 71%. The average scores were much higher for the 12/13 group than for the 11/12 group but the level of improvement was about the same.



The percentages reported compare the scores of the students taking the test the second time to the scores of the same students the first time. Sadly there were several students who scored lower on the second application of the test than the first. I don't know what to make of those who went down. I think it is possible that they figured the score would not be included in the grading scheme for the class, it was. I did not use the initial scores but did include the second round in the final grade calculation.

Chem 2 Narrative.

Description of the ACS exam:

The American Chemical Society General Chemistry Examination is the national standard used by more schools than any other. The statistical analysis of the results are compiled by the ACS exam institute at the University of Wisconsin. Coverage topics include: - atomic structure - molecular structure - stoichiometry - energetics / thermochemistry - states of matter and solutions - dynamics/kinetics - equilibrium - electrochemistry and redox - descriptive chemistry - experimental chemistry.

Discussion:

I am very happy to continue to use this exam. The results (55<sup>th</sup> percentile) validate that BBCC students are receiving a level of education somewhat better than the majority of college students in the United States. I am not aware of a better way to establish that my General Chemistry class is adequate and that student understanding of the material is acceptable.

Only two students ranked below the 25<sup>th</sup> percentile. Five of the 18 students scored above the 75<sup>th</sup> percentile. There is a strong correlation between grades and the ACS exam scores but not a direct connection. The ACS exam measures comprehension of the concepts that should be presented in a one year general chemistry class more than the ability to complete specific tasks. The exams I prepare are less concept based and more specific task oriented. Some students that do well on the local exams do not do as well on the national exam. Some students who may not perform as well on the BBCC exams will demonstrate better understanding of concepts on the ACS exam. It is a nice 'leveler' for the class.

### Chem 3 Narrative

Below is the General Education Outcome for problem solving and the rubric provided.

3. Students will be able to solve problems combining and applying knowledge from multiple sources.

Criteria:

- 3. a. Define the problem
- 3. b. Break it into steps
- 3. c. Draw logical conclusions
- 3. d. Generate multiple and diverse perspectives in trying to solve the problem
- 3. e. Recognize extraneous information
- 3. f. Follow directions and fulfill the expectations of the assignment

STUDENTS WILL BE ABLE TO SOLVE PROBLEMS COMBINING AND APPLYING KNOWLEDGE FROM MULTIPLE SOURCES						
Performance Area	Exemplary	Proficient	Developing	Emerging	Score	Comments
Defining the Problem	Student states the problem clearly and identifies underlying issues.	Student adequately defines the problem.	Student defines the problem somewhat adequately.	Student fails to identify the problem.		
Break it into steps	Student develops a clear, precise, and concise plan to solve the problem, with alternative strategies	Student develops an adequate plan	Student develops a marginal plan.	Student does not develop a coherent plan to solve the problem, or no plan is apparent.		

Draws Logical Conclusions	Conclusion is logical and easily understood, and is very well connected to the steps leading up to it.	Conclusion is logical and easily understood, but only marginally connected to the steps leading up to it.	Conclusion is logical but is poorly connected to the steps leading up to it.	Conclusion is not clearly logical.		
Generates Multiple and Diverse Perspectives in Trying to Solve the Problem	Problem-solving process clearly reflects multiple and diverse perspectives, thoroughly covering the topic.	Problem-solving process reflects multiple perspectives, but could be significantly more thorough.	Problem-solving process reflects more than one perspective, but is somewhat limited.	Problem-solving process reflects only one perspective.		
Recognizes Extraneous Information	All supporting information used is clearly related	Assignment uses information which could be construed as extraneous due to its being weakly integrated.	Focus of assignment is often questionable due to information which is not well integrated.	Frequent information is included in assignment which is clearly extraneous.		
Follows Directions and Fulfills the Expectations of the Assignment.	Finished work shows clear understanding of the assignment and clearly fulfills expectations stated in assignment prompt.	Finished work shows clear understanding of the assignment, but at times fails to fulfill expectations stated in assignment prompt.	Finished work shows minor to moderate misunderstanding of the assignment, and at times fails to fulfill expectations stated in assignment prompt.	Finished work shows clear and obvious misunderstanding of the assignment and frequently fails to fulfill expectations.		

This is the question from the Chemistry 121 final exam that I chose to analyze with respect to suboutcomes 3.a and 3.b

38. If 44.00 g of iron are reacted with 22.00 g of O<sub>2</sub>, how many grams of Fe<sub>2</sub>O<sub>3</sub> actually form according to the equation  $4 \text{ Fe} + 3 \text{ O}_2 \rightarrow 2 \text{ Fe}_2\text{O}_3$ ?

This is a modification of the rubric above specifically tailored to problem 38 from the final exam. I used numeric values for rating so that I could produce an average.

Rating	1	2	3	4
3. a. Define the problem	recognizes the need to start from mass	1 + incorporates mole ratio from balanced equation	1 + 2 + recognizes that this is a limiting reactant problem	Full set up of problem resulting in two masses
3. c. Draw logical conclusions	Does not draw a conclusion	Draws a conclusion based on some combination of masses calculated	Selects one mass but not the least	Select the least mass of product

This is my first try at using a Gen Ed rubric to evaluate student performance. It was an interesting experience. The raw data is contained in the table below.

Worksheet for 2013 assessment analysis

Exam number	3. a.	3. b.
1	4	4
2	1	2
3	1	2
4	1	2
5	4	4
6	1	2
7	3	4
8	1	1
9	1	2
10	4	4
11	1	1
12	4	4
13	4	4
14	4	4
15	4	4
16	4	4
17	4	3
18	1	4
19	3	2
20	4	4
21	4	4
22	3	4
Average	2.772727	3.136364

**Annual Assessment**  
**Academic Year 2012-13**  
**CMST&220**

	<b>OUTCOMES</b>	<b>TOOLS TO COLLECT DATA</b>	<b>RESULTS</b>	<b>USE OF RESULTS (Changes made as result of findings.)</b>
Speech #1	75% of students will increase by at least 5% in their overall performance scores from their first to last major speeches as rated by the instructor and class.	Instructor-created rubric evaluation form, applied to first and last speech, used by both instructor and students.	27 out of 46 students (58%) had an increase in performance  13 out of 46 (28%) students had at least a 5% increase in performance  7 out of 46 (15%) students had no change in performance  12 out of 47 (25%) students had a decrease in performance	<ol style="list-style-type: none"> <li>1. New rubric system will be developed that will be outcome based. 80% of students will be able to achieve a satisfactory level in meeting desired outcomes.</li> <li>2. Desired outcomes will be identified before the 2013-14 school year.</li> <li>3. Tools of collection of data will be developed before the 2013-14 academic year.</li> </ol>
Speech #2	90% of students will be able to rate 90% of the final speeches within a 10% range	Instructor-created rubric evaluation form, applied to first and last speech, used by both instructor and students.	All participating students (45 out of 46, or 98%) were able to rate 90% of the speeches within a 10% range of the instructor/class average.	Drop

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one of your outcomes to be tied to a Gen Ed outcome. In your 13-14 plan you outlined the basic public speaking skills. Could any of them be tied to Gen Ed? I think 3 (Organization, Clarity, Transitions) could be tied to Gen Ed 1a & 1b and 4 (Development and support) could be tied to Gen Ed 1c. Then you could discuss the Gen Ed in your narrative. Good work. Keep it up!

**Annual Assessment  
Academic Year 2012-13  
CMST&220**

**I have decided to completely restructure my assessment design. I want to tie my assessment strategies into the outcome objects of the CMST&220 course and the general education outcomes they directly support. I plan to use Canvas to assist in the gathering of data. These changes will occur before the 2013-14 academic year.**

**Changes for 2012-2013**

Change Everything!!!!!!

**Department: Computer Science**

**Annual Assessment**

**2012-2013**

<b>DEPARTMENT/ COURSE</b>	<b>OUTCOMES</b> (Include related Gen Ed Outcome-if any)	<b>TOOLS TO COLLECT DATA</b>	<b>RESULTS</b>	<b>WHO DISCUSSED THE RESULTS?</b>	<b>USE OF RESULTS</b> (changes made as a result of findings)
CS 101 Intro to Computer Science	1) At least 76% will succeed at C (2.0) or above  2) Students write at a college level	1) Institutional Research "Course Success Rates by Division" Annual Report  2) Student written assignments	1) 2012-2013 Percent Successful = 57%  2) N/A	<ul style="list-style-type: none"> <li>• Title V Director</li> <li>• Computer Science Instructor</li> <li>• Computer Science Instructional Designer</li> </ul>	1.1 Instructor attend online teaching workshops 1.2 Establish minimum of 6 mandatory classes each quarter in hybrid courses  2.1 Required written assignments for each chapter module
CS 104 Intro to Computer Hardware	1) At least 76% will succeed at C (2.0) or above	1) Institutional Research "Course Success Rates by Division" Annual Report	1) 2012-2013 Percent Successful = 76%	<ul style="list-style-type: none"> <li>• Title V Director</li> <li>• Computer Science Instructor</li> <li>• Computer Science Instructional Designer</li> </ul>	1.1 Instructor attend online teaching workshops
CS 105 Intro to Computer Operating Systems	2) Minimum of 10 students successfully pass MTA Operating Systems exam	1) Institutional Research "Course Success Rates by Division" Annual Report		<ul style="list-style-type: none"> <li>• Computer Science Instructional Designer</li> </ul>	2.1 Conduct pre and post-assessments to measure student proficiencies



(linked courses)	3) Students will be prepared for additional self-study for CompTIA A+ exam preparation	2) MTA Operating Systems exam results	2) 2012-2013 results = 4 students passed MTA exam	3.1 Provide self-practices tests
------------------	--	---------------------------------------	---	----------------------------------

**Narrative:**

Title V grant objective sets a student success rate at 76% for newly developed Computer Science courses.

MTA and CompTIA exams are industry standard certifications and industry recognized proficiency measurement.

I need to meet with you for about 10 minutes during in-service to discuss your assessment. These are good outcomes, I just need to discuss format a bit.

Departments	<b>OUTCOMES</b> BBCC Outcomes being addressed	<b>TOOLS TO COLLECT DATA</b>	<b>RESULTS</b>	<b>Who Discussed the Results</b>	<b>USE OF RESULTS</b> (Changes made as a result of findings.)
Criminal Justice	75% of students will be able to identify the organizations and agencies making up the Criminal Justice System and how they work together. <i>[4:Gather and interpret information]</i>	Case Study Project and Instructor generated exams	85% of students completed this task with a 2.0 or better.	Social Sciences Division	No changes. Course format is designed to give students real life experience to apply their textbook learning.
Criminal Justice	75%+ of the students will be able to successfully complete the Intensive Case Study on a specific real-life case <i>[(4 b, c, d) Student will be able to gather and interpret information. Specifically they will be able to make comparisons and draw contrasts (4.b.), recognize the points of an issue or claim (4.c.), and access multiple sources of information (4.d.)].</i>	Case Study Project Weekly grades	On Average students completed the project with 86% or better.  88% of the class completed the project with a 2.0 or better.	Social Sciences Division	No changes. Project is valuable and students give positive feedback that it helps them understand the course material.

For the introduction to Criminal Justice course the goal was that **75% of students will be able to identify the organizations and agencies making up the Criminal Justice System and how they work together. [4:Gather and interpret information]** It was found that 85% of students were able to correctly identify these groups and their relationships in a series of assignments. The results for the 11-12 school year were similar (86%). Some students consistently fail to complete all assignments which may be why this number is not closer to 100%. We think that perhaps this might be ceiling effects where some students will have difficulties throughout the quarter or just choose to not participate.

**Annual Assessment  
Academic Year 2012-2013  
Developmental Education**

DEPARTMENT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	WHO DISCUSSED THE RESULTS?	USE OF RESULTS (changes made as a result of findings.)
Developmental English	70% of students completing English 099 will pass their portfolio, indicating readiness to progress to English 101	Portfolios Grades <i>Outcomes</i> report. Student surveys	Over ninety percent of students submitting a portfolio passed.	Faculty	Faculty plan to continue monitoring the results.
	Students passing the portfolio will have the same success rates passing English 101 as those who place there.  English 98 and 99 students will have a 70% success rate as defined by the <i>Outcomes</i> report	Grades	Big Bend's research shows that an 80% successful pass rate for students who successfully passed English 99 and then moved to English 101. This result compares to the average success rate of 77% of all students who took English 101.  Learning outcomes were added to the English 98 and 99 MCOs.		

I need to meet with you for about 10 minutes during in-service to discuss your assessment. Need to more clearly state your outcomes and how they are connected with Gen Ed Outcomes.

DEPARTMENT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	WHO DISCUSSED THE RESULTS?	USE OF RESULTS (changes made as a result of findings.)
College Survival Skills	<p>Persistence rate will higher next quarter than students who do not take College Survival Skills.</p> <p>Students will have a 70% success rate as defined by the <i>Outcomes</i> report.</p> <p>We will also be adding learning outcomes.</p>	<p>Enrollment numbers in next quarter.</p> <p>Student feedback through surveys.</p> <p><i>Outcomes</i> report.</p>	<p>Students were more likely to persist in college than students who did not take the CSS classes.</p>	<p>Faculty</p>	<p>Faculty will continue to monitor results.</p>
Adult Basic Education	<p>Meet or exceed state average of students achieving a level gain.</p> <p>Meet or exceed the state average of students completing GED or high school diploma.</p> <p>Meet or exceed the state average of students who persist forty-five hours and posttest.</p> <p>Increase instructor awareness and use of Washington Adult Learning Standards</p>	<p>CASAS assessment WABERS state database</p> <p>Use of Learning Standards cadre, in-services, faculty handbook</p>	<p>886 were federally reportable 62 % of students with the goal entered post-secondary ed. 51 of 60 (85%) GED sts. Completed GED goal. Out of total ABE sts. 245 showed level gain 383 showed significant gain Students level gain succeeded last year's numbers</p>	<p>Last year's results were discuss at the Fall In-service.</p>	<p>Basic Skills faculty will adapt the AVID strategies into their instruction to improve student transition into college</p>

## Assessment Narrative

2012-13

This past year, we looked more at measurable results, such as test scores, student success rates, and student feedback. In addition, we used the portfolio system for English 99 and started looking at student success rates for English 99 students who take English 101. In the ABE program, we used the government benchmarks.

What did we expect to find?

1. English 98 classes
  - a. The student success rate would be over 70%.
  - b. Over 70% of students successfully completing English 98 would move on to English 99.
2. English 99 classes
  - a. The student success rate would be over 70%.
  - b. Over 70% of students completing the program would pass the portfolio and move on to English 101.
  - c. English 99 students moving on to English 101 would have success rates comparable to English 101 students in general.
3. CSS classes
  - a. The student success rates would be over 70%.
  - b. CSS student retention rates would equal or exceed the rates of students not taking CSS classes.
4. ABE classes
  - a. Big Bend ABE students would outperform previous averages.
  - b. More ABE students would move from ABE into BBCC classes compared to last year.
5. Learning outcomes listed on the MCOs could be measured by the measuring systems already in place.

What did we find, and what do we plan to do?

English: Our student success rates as measured by institutional research placed our program as one of the top in our national cohort.

English 98

1. Student success rates of 80% exceeded the goal, and was higher than last year. In addition, we want to give students the chance to move from English 98 to English 101. Our main method has been to have them participate in the English 99/101 option. English 98 teachers will continue to make use of the Academic Early Warning program.

2. We are comfortable with the number of students who moved on English 99. We want to continue emphasizing the 99/101 plan as a way to speed 98 students through the system.

### English 99

1. English 99 student success rate remained stable. We plan to continue our current practices and emphasize the Academic Early Warning program.
2. Of the students who successfully completed English 99, over 90% moved on to English 101. While we can always do better, we believe current practices are effective.
3. The success rate of English 99 students in their English 101 classes was higher than that of English 101 students in general and substantially higher than students placing directly in 101, 80% versus a percentage well below 75%. In addition, their average grade point was 3.0, comparable to the average grades 101 students in general. We believe this information confirms the effectiveness of the portfolio as an assessment tool.
4. We expanded the English 99/101 option to all English 99 classes; however, relatively few students made use of the option. We are debating whether to emphasize the option more.

### CSS courses

1. Student success rate was better than last year. We plan to maintain the changes from last year. We changed textbooks to lower the cost.
2. CSS student persistent rates were higher than non CSS student success rates in college level classes. While we would like to see a stronger academic showing, we are glad that the CSS classes are helping students stay in college.
3. We are revising the CSS 100 MCO again to bring it into compliance with the AVID program.

### ABE Courses

1. ABE students did well. They exceeded state goals in a variety of areas, such as federally reported students, students achieving the goal of transitioning to post secondary education and/or obtaining a GED Thirty percent of all ABE students transitioned to college and 21 % of ABE and ESL combined transitioned. These are some of the best rates in the state. Based on the information, the program has decided to continue fostering partnerships with other initiatives and programs, providing local industries with ESL classes, and expanding IBEST to include Business Information Management as well as CDL, Nursing Assistant, Medical Assistant, and Early Childhood Education. There will be not be an IBEST for Welding this year because of staff changes.
2. ABE and Developmental English faculty have expanded ways for students to move into college level classes faster, mainly through the English 99/101 option.

Departments	OUTCOMES BBCC Outcomes being addressed	TOOLS TO COLLECT DATA	RESULTS	Who Discussed the Results	USE OF RESULTS (Changes made as a result of findings.)
Early Childhood Education	By 6/30/13, 70% of ECE students enrolled in I-BEST courses will receive a 2.0 or higher. (PLO)	Grades from I-BEST courses: ECE 100, ECE 105, ECE 250	77% of students enrolled in I-BEST ECE courses received a 2.0 or higher	Ryann	Provided an I-BEST course each quarter and met more frequently on-campus to support students and provide intentional instructional strategies in reading, writing and mathematics.
Early Childhood Education	By 6/30/13, 70% of ECE students enrolled in online courses will receive a 2.0 or higher. (CLO, PLO)	Grades from all ECE/EDUC online courses	74% of students enrolled in online ECE and/or EDUC courses received a 2.0 or higher	Ryann	Offered more “hybrid” courses than online only to allow more face-to-face interaction with students and faculty.
Early Childhood Education	By 6/30/13, five BBCC ECE graduates will be enrolled in BA programs through Heritage University (ECS) or EWU (Children’s Studies). (PLO)	Program Plans  Data from Heritage University ECS and EWU Children’s Studies Directors Advising/outreach efforts with HU and EWU	5 BBCC graduates were enrolled at HU for 12-13 academic year-no BBCC graduates were enrolled in ECS program through EWU for 12-13 academic year.	Ryann	Advertising and recruitment in BBCC ECE online and face-to-face courses, on-site recruitment at Inspire Development Centers, workshops and presentations provided by HU personnel on financial literacy and scholarships available through HU.

I need to meet with you for about 10 minutes during in-service to discuss your assessment. (If we didn’t meet on Monday). Need to bring in some of your Program outcomes to your assessment here.

The Early Childhood Education program offered the following I-Best courses in the 2012-2013 academic year:

ECE 100: Issues and Trends in ECE-fall

ECE 105: Health, Safety & Nutrition-winter

ECE 250: Language & Literacy Development-spring

Offering additional support through the I-Best program ensured our students were successful in achieving at least a 2.0. Support was given in reading, writing, and mathematics to increase skill levels and student retention.

11 of the 15 classes the ECE program offered in 2012-2013 were delivered in either an online only or hybrid modality to accommodate students' work and family schedules. Of the 300 students enrolled in the online only and/or hybrid courses, 74% of the students achieved a 2.0 or higher.

Five ECE graduates were enrolled in the articulated ECS program between BBCC and Heritage University for the 2012-2013 academic year. Heritage University is visible on BBCC's campus. Also, the Regional Director attends face-to-face, BBCC ECE/EDUC courses, to advertise the ECS program. No graduates were enrolled in the articulated agreement between BBCC and EWU. Recruiting efforts from EWU have not been as successful. Representatives from EWU have attended the transfer events on-campus; however, students enrolled in BBCC ECE/EDUC courses have not been targeted for recruitment into the Children's Studies program.



**Annual Assessment  
Academic Year '12-'13  
English**

DEPARTMENT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	WHO DISCUSSED THE RESULTS?	USE OF RESULTS (changes made as a result of findings.)
English 101	More than 50% of student essays will show a score of "proficient" or higher in three performance areas when judged according to the Gen Ed "communication" rubric.	Five essays collected from each 101 instructor at the end of Winter term, judged by independent observer.	Did not achieve goal	All full-time and adjunct instructors	We will continue to monitor essays from 101 and will encourage use of style sheet.
English 102	More than 75% of student essays will show a score of "proficient" or higher in all performance areas when judged according to the Gen Ed "communication" rubric.	Five essays collected from each 102 instructor at the end of Winter term, judged by independent observer.	Did not achieve goal	All full-time and adjunct instructors	Result due to flawed submissions. Will continue to monitor.
English 201	More than 50% of student essays will show a score of "proficient" or higher when judged in all performance areas according to the Gen Ed "communication" rubric.	Five essays collected from each 201 instructor at the end of Winter term, judged by independent observer.	Goal achieved	All 201 instructors	Will continue to monitor.
Online English Courses	Begin to assess effectiveness of online courses as compared to on-site courses	Compare essay samples from courses from both areas.	Goal achieved with mixed results. Essays	All full-time and adjunct instructors	Will discuss scope of assignments

DEPARTMENT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	WHO DISCUSSED THE RESULTS?	USE OF RESULTS (changes made as a result of findings.)
			were more ambitious, but scored lower.		with adjuncts who teach online.
Adjunct-Taught English Courses	Begin to assess effectiveness of adjunct- taught courses as compared to courses taught by full-time instructors	Compare essay samples from courses from both areas.	Goal achieved. Full-time instructors clearly more effective.	All full-time and adjunct instructors	Will continue to inform adjuncts of standards for courses.
101, 102	Design and implement instructional video which covers expectations and standards for composition classes	Collaborative effort among full-time faculty.	Goal not achieved	All full-time and adjunct instructors	We're putting this on hold due to other concerns.

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one of your outcomes to be tied to a Gen Ed outcome. Identify sub outcomes for your outcomes (1a, 1b, 1c, etc.). Good work. Keep it up!

## English Department Assessment Narrative

2012--2013

In 2012-2013 the English Department focused its assessment efforts on English 101. We achieved full compliance from all instructors currently teaching, meaning that every instructor teaching 101 turned in five essays which represented the work of students in that class.

This year . A total of 75 essays were reviewed—5 from each class. In addition, all members of the fulltime faculty reviewed a sampling of 12 essays in order that we might compare results and ensure that we have similar standards. This year, instructors were aware of the standards used for assessing the effectiveness of their essays and had received a three page document which described exit skills for 101 students and explained what the English Department views as acceptable and unacceptable writing style in a formal essay. This year, essays submitted by adjunct instructors outnumbered essays submitted by full-time instructors. As a result, the overall data is skewed to reflect data coming from adjunct-taught classes (7 assessed out of approximately 14 classes taught) rather than full-time classes (2 assessed out of approximately 8 taught).

As always, essays were assigned random identifying code numbers which correspond with a key available to the Assessment Coordinator. This year we had more adjunct teachers than we have had in previous years, and this altered the outcomes significantly. While the data is still being compiled and evaluated, it is clear that we have not met our goals for this year and that there are serious problems in how 101 is being taught by our instructors.

### **Sample Size**

This year we maintained the sample size of five essays per instructor, and asked that instructors submit an essay group for each course that they taught at some point during the year, thus an instructor who taught three 101 classes and one 102 class would submit two groups of five essays.

### **Research**

All essays submitted this year contained research. However one 102 class submitted research essays which were written based on research into current events and non-fiction sources rather than on literature. We have discussed this with the instructor of the course and will continue to monitor his classes. Another instructor chose single-paragraph summaries which gave an idea of citation skills but not of the students' ability to make an original argument or to link paragraphs.

### **Style**

All essays were objective research-style writing, and as such, they gave us a good opportunity to compare what is being done in different classes. Like last year, we noticed many differences in style which had no bearing on the effectiveness of the essays, but we saw clear differences in style in this

sample which showed clear discrepancies in what is being taught in these particular classes. While last year these differences generally came under the category of “voice,” this year’s sample had very low scores in clarity, support of assertions, and citation/reference format.

**Evaluation Standards:** Each of the four full-time English instructors was given a packet of essays which represented to work of several instructors. Many of these essays were scored by two, three, or even all four of the full-time English instructors. As expected, there were moderate variations in the essay scores, so we chose to focus on essays that had criteria which were consistently marked as “Emerging” or “Developing” by the majority of evaluators. We also reviewed the written comments provided by evaluators as a means of determining what standards are being applied by these instructors and what their expectations are for each category being assessed.

**Overall Concerns:** We were disappointed to find that three of the instructors still seem to be allowing students to choose topics at random. We have communicated with adjunct faculty and have explained at length that this is an unacceptable choice because it allows students to use previously-written essays. We will remind adjunct instructors that there must be some form of guidance with regard to topics. We were also disappointed to find that many of the suggestions made in last year’s “Exit Skills” memo were not being followed. We continue to see serious problems in citation style, thesis placement, “voice,” and focus which had been specifically addressed in the memo. We will re-send the memo and remind instructors that they should adhere to the standard outlined in the memo.

**Clarity:** For “Clarity,” most evaluators focused on the topic of the essay and on the thesis statement. It was clear from the comments that evaluators found a lack of clarity in many of the essays submitted. In many cases, it seemed that a particular style was being taught to the class by the instructor. For example, one group of essays from a single instructor had consistent placement of thesis statements at the beginning of the second paragraph—a format that all of the evaluators found to be problematic. Many essays had no thesis at all, or an implied thesis. In some cases the assignment didn’t call for an argumentative thesis while in others the thesis was simply left out. We will encourage adjunct instructors to submit assignments that clearly contain a thesis, multiple paragraphs, some original thought from the student, and research complete with a works-cited page.

**Support of Assertions:** In many cases, assertions were supported effectively. However, in some cases a particular assignment would give students no opportunity to take a stance. Many of the essays appeared to be in response to essay prompts which asked students to summarize or to create a collage of other people’s ideas with no clear goal other than to provide information. Some of the essays contained errors in logic at the core of the essay which could perhaps have been addressed in early drafts. While some of this could represent students who don’t fully understand the assignment and simply do poorly, it is obvious that many of the assignments did not give students any opportunity to make their own assertions.

**Citation/Reference Format:** One of the most alarming observations made by the evaluators was that most of the citations styles were certainly not MLA, and were often poor examples of any citation style, existing somewhere between the rules of MLA and the rules of APA. In many cases, it was impossible to differentiate between the student's point and the point being made by the cited source. "Framing" of quotes by introducing the author's name and essay title was rare, and the most common citation style seemed to be placing a single name in parentheses after a non-quoted statement or at the end of a paragraph. While we realize that there are differences in citation style, we are firmly opposed to allowing students to cite in any way they please or to encourage them to use a single format, however formal or consistent, that doesn't introduce readers to the source of information before putting the information into a paragraph. Both quotes and paraphrases need to have stated boundaries.

**Conclusions:**

For 2013-2014 we will continue to encourage instructors to adhere to a more standard style of writing, including voice, citation style and overall essay goal. We will also consider meeting with the Dean of our division to discuss further evaluation of adjunct instructors.

**Literature**

As noted in last year's assessment narrative, we have an opportunity to begin assessing literature classes using the "multiculturalism" rubric. During 2013-2014, we will continue to discuss the types of assignments that will be assessed in the literature courses with the goal of including some form of assessment of these courses in the near future.

## ANNUAL ASSESSMENT GOALS

## FOREIGN LANGUAGE

2012-2013

DEPT	OUTCOMES	TOOLS USED TO COLLECT DATA	RESULTS	WHO DISCUSSED OUTCOMES	USE OF RESULTS
Foreign Language	75% of Spanish 123 students will demonstrate the ability to translate a section of a 1 <sup>st</sup> year Spanish novel by scoring 75% or higher on a translation exam.	Instructor generated final exam translation requirement.	90 % of 123 students scored 75% or higher on translation exam. Students demonstrated understanding of grammar and vocabulary presented in the novel.		See narrative
Foreign Language	75% of Spanish 121 students will demonstrate the ability to write a composition of at least 100 words in the target language upon completion of Spanish 121.	Instructor generated final exam.	96% of Spanish 121 students demonstrated the ability to write an original composition of 200 words in the target language.		See narrative
Foreign Language	Students in Spanish 121, Spanish 122 and Spanish 123 will demonstrate recognition of cultural differences between the English-speaking world and the Spanish-speaking world as well as the cultural diversity within the Spanish-speaking world. 70% of students will achieve a 75% or higher on "culture quizzes."	Instructor generated assessments based on cultural points as presented in the class required text "The Hispanic Way."	<p><u>Spanish 121</u> students: 48% of students achieved a score of 75% or higher on a culture quiz.</p> <p><u>Spanish 122</u>: 58% of students scored 75% or higher on a culture quiz.</p> <p><u>Spanish 123</u>: 69% of students scored 75% or higher on a culture quiz.</p>	Ryann Leonard Daneen Berry-Guerin	See narrative

Foreign Language	Spanish 121 students will demonstrate recognition of the past tense conjugations of –ar, -er and –ir verbs.	Instructor generated grammar quiz.	Not implemented
------------------	---	------------------------------------	-----------------

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one of your outcomes to be tied to a Gen Ed outcome. Your 3<sup>rd</sup> outcome about the recognition of cultural differences could be tied to Gen Ed outcomes really easily. I think specifically you have Gen Ed Outcome 5a (for native speakers) and 5b & c (for everyone). I would specifically list the outcomes and then you are great! Good work. Keep it up!

## FOREIGN LANGUAGE NARRATIVE

**Outcome #1:** Outcome goals were reached: 90% of students scored 75% or higher on translation exam. Students demonstrated the knowledge of grammar concepts and vocabulary as presented in the novel. This assignment will continue to be used to assess student progress and comprehension of the target language.

**Outcome #2:** Outcome goals were reached: 96% of 121 students showed the ability to write a comprehensible, original composition, in the target language, of at least 200 words. This assignment will continue to be used to assess student knowledge of the grammar structures and vocabulary required in each level of Spanish.

**Outcome #3:** Outcome goals were not reached in this area. However, student achievement increased with each sequential course. Although it is impossible to determine exactly why students performed so poorly on culture quizzes there are a few potential reasons from my observations:

1) Students do not understand the importance of recognizing cultural traditions in their local environment or in the context of world travel; as they continued in the sequential courses they became more interested in the cultural traditions of Spanish-speaking countries;

2) The Cultural Knowledge component of student grades is not weighted heavily enough to affect total grades and, as such, many students don't put in the effort to do well in this area;

3) Many heritage speaking students/students of Hispanic descent depend on their personal knowledge of what they have experienced growing up among many Hispanic family members. (Anecdotally, one Latino student commented before a culture quiz: "I'm going to depend on my Hispanic heritage for this quiz.") However, the cultural knowledge required in these courses covers Hispanic culture in general, not one specific Spanish-speaking country. In addition, I believe many of these students fail to recognize many of the behaviors they participate in with family as typically cultural behaviors and therefore fail to recognize them in the testing situation.

It is my firm belief that basic cultural knowledge is a crucial part of studying a foreign language and therefore I will continue to require these assignments. Due to the above observations I will make the following changes and assess whether these changes affect outcome results during the 2013-2014 academic year:

1) I will spend more time helping students understand WHY cultural knowledge is an important component of this class by providing personal and general examples of how lack of cultural knowledge can cause problems in their interactions with others in the community as well as in travel situations;



**2) I will increase the weight of the Cultural Knowledge component of the final grade in all levels of classes;**

**3) I will reinforce to heritage speaking students that we are studying Hispanic culture in general, not the culture of one specific country and region. Because there are so many Spanish-speaking countries there is knowledge to be gained even for heritage speaking students.**

Departments	<b>OUTCOMES</b> BBCC Outcomes being addressed	<b>TOOLS TO COLLECT DATA</b>	<b>RESULTS</b>	<b>Who Discussed the Results</b>	<b>USE OF RESULTS</b> (Changes made as a result of findings.)
History	75% of students will be able to define significant terms and identify the major people in American History from 1500 – 1865. <i>[4:Gather and interpret information]</i>	Exam scores. Instructor-generated exams	Exams and quizzes were administered online in six sections taught both online and in a traditional classroom. 130 students took the exams with an average score of 78%	I discussed these results with Dr. Ryann Leonard.	No changes.

Once upon a time there was an instructor who decided to give his students open-book online exams which were comprehensive in nature and sought to gauge their understanding of the significant terms and major people in American history from 1500—1865. His students were sore oft frightened by the daunting prospect of the test but he said, “fear not, for I have seen into the future and verily ye shall pass.” But the students remained frightened as if held in the eyes of a dragon until at long last the first test arrived. They hemmed and hawed but to no avail. For alas, their futures were tied to their feeble efforts. And lo....they passed. And the instructor said, “as I have foreseen and foretold, it is done. Now bug off!”

**Annual Assessment  
Academic Year 2012-2013  
Industrial Systems Technology**

DEPARTMENT	OUTCOMES	TOOLS TO COLLECT DATA	BENCH MARKS	RESULTS	USE OF RESULTS (Changes made as result of findings.)
IST	IST Students earning Certificates and/or degrees will attain employment (PLO)	Estimated Employment rates as published by SBCTC data	We expect 75% of our post program students will be employed	2010-11 year shows 90% estimated employment rate	
IST	Beginning IST program students will be retained earning diplomas or certification (PLO)	Data collected and compiled by the Institutional Research Dept.	We would like to retain at least 60% of beginning students.	The IST program had 56.44 FTE in 2011-12 with 29 total diplomas	
IST	IST students will see value in their education and have a favorable experience in the program. (PLO)	Institutional Research & Planning surveys	We expect 95% of present and former students will recommend the IST program to others.	Data from former students tends to point to a very favorable experience	
IST	Employers of IST students see satisfaction in employee (PLO)	Institutional Research & Planning surveys & IST advisory committee feedback	We expect 90% favorable surveys & a high degree verbal feedback		

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one Student Level Outcome (SLO) and one Program Level Outcome (PLO) in your assessment and for the outcomes to be tied to at least some of your Program Outcomes. These are all really PLO. You have a SLO in your Program Outcomes about "Applying sound maintenance procedures..." Can you assess this somehow? Then you would have a SLO here. Good work. Keep it

## 2013-2014 Annual Assessment Summation for Industrial Systems Technology

Currently the IST (Industrial Systems Technology) provides multiple pathways of instruction, interdependent upon one other, with two main degree choices and multiple certification opportunities. As a professional/technical program we tend to modify and add to the programs as technology and conditions dictate. Program flexibility and sensitivity to indicators beyond the campus are the driving force behind changes. Our customers dictate our pertinence and determine who we are.

The IST program produced 30 graduates in 2013 with 17% earning double degrees. Increased headcounts due to economic recession and other factors from the previous years pushed program resources well beyond customary limits. Today we are projecting normal populations at or about our design capacity. Assessment indicators, advisory committee examination and overall student appraisals tend to indicate the program remained healthy and valued in the past. We don't see known indicators that point to or dictate need for significant change.

Being Professional/Technical programs we are naturally work and work skill oriented. Assessment of curriculum, delivery, student learning, facility, etc. are all important, but departmental goals revolve around the basic questions Are our students finding gainful employment? Are they prepared for the expectations of their career choices? Do they see value in the education choices? Do their prospective employers see value added to this same subset of individuals?

The goals of the IST program include...

- 75% or more of program graduates or completers will be employed. Year by year records indicate the employment rates to hover around 82% (2008-09 IRRC reports) New reports are needed to indicate current trends.
- Employers will find program graduate employees to be prepared for entry level employment. Employer surveys, Focus Groups, and our Advisory committee members support success in these areas.
- The majority of students will believe the IST program prepared them for entry level employment and/or skill improvement. Student survey results and Industrial technology focus groups are generally our indicators.
- Efficient use of instructional resources. The IST Advisory Committee completed class by class review of our curriculum and methodology. The committee meets monthly and continues to be a guiding force. As a very active group, the advisory Committee provides the instructional staff with timely feedback and keeps us in tune industrial advances and technologies.

The recent past has seen the IST programs bursting at the seams *within* the recessive economic environment. Budgetary program streamlining, excessive enrollment pressure, personnel continuity issues, and general lack of suitable facility space added stress to overcrowding. Throughout the high demand on resources, we were able to maintain high degree of fidelity of instruction with a high degree of completers. As these pressures seem to be easing, we expect the IST program to flourish and we will maintain or eclipse high expectations. We will continue to find the most efficient uses of our

instructional resources and remain cognizant of indicators, and review our performance throughout the year and beyond. We will maintain a healthy relationship with our advisory group, and our industrial contacts.

Recent indicators suggest we have a balanced approach that is working while producing positive results. Feedback from surveys, focus groups, student questionnaires and assessable data continue to indicate program health. We are seeing positive outcomes and believe we are positioned for maximum benefit for our students and community, but we must be mindful of the quality of our program and make every effort to provide value to all our stakeholders.

**Math  
Assessment Results 2012-13**

DEPARTMENT	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	WHO DISCUSSED THE RESULTS?	USE OF RESULTS (changes made as a result of findings.)
MATH 90/94	75% of students will earn a P grade or at least a 2.0 grade.	Final grades.	68.8% of students earned a P grade or at least a 2.0 grade.	Stephen Lane; Barbara Whitney; Salah Abed; Sonia Farag; Tyler Wallace; Valerie Kirkwood; Kara Garrett; Bob Mohrbacher	We will investigate the difference between emporium and lecture objectives and make changes as needed.
MATH 95/96/97	75% of students will earn a P grade or at least a 2.0 grade.	Final grades.	71.9% of students earned a P grade or at least a 2.0 grade.	Stephen Lane; Barbara Whitney; Salah Abed; Sonia Farag; Tyler Wallace; Valerie Kirkwood; Kara Garrett; Bob Mohrbacher	We will investigate the difference between emporium and lecture objectives and make changes as needed.
MATH 98/99	75% of students will earn a P grade or at least a 2.0 grade.	Final grades.	64.6% of students earned a P grade or at least a 2.0 grade.	Stephen Lane; Barbara Whitney; Salah Abed; Sonia Farag; Tyler Wallace; Valerie Kirkwood; Kara Garrett; Bob Mohrbacher	We will investigate the difference between emporium and lecture objectives and make changes as needed.
MATH 120/&141	65% of students will earn a P grade or at least a 2.0 grade.	Final grades.	58.4% of students earned a P grade or at least a 2.0 grade.	Stephen Lane; Barbara Whitney; Salah Abed; Sonia Farag; Tyler Wallace; Valerie Kirkwood; Kara Garrett; Bob Mohrbacher	We will investigate how grades change in the wake of our remodeling of the pre-calculus sequence.

I need to meet with you for about 10 minutes during in-service to discuss your assessment. Need to more clearly state how your outcomes are tied to Gen Ed. We need to pick at least one thing and assess it.

I need to meet with you for about 10 minutes during in-service to discuss your assessment. Need to more clearly state your outcomes so people can tell what you are accomplishing with your students.

# MATH DEPARTMENT ASSESSMENT NOTES

## 2012-2013

We completed our pilot year of the Emporium Model in Spring Quarter 2013. We have observed that in our math classes below 100-level, emporium students pass at a considerably higher rate (ranging from 73% to 77%) than lecture students (ranging from 49% to 53%). We will review the two teaching modes and make changes to our classes as needed.

Our college-level math students passed Math 120 and Math &141 at a rate of 58.4%. Over the course of the spring and summer, we revamped our Math 120, Math &141, and Math &142 classes, streamlining and rearranging the content and objectives. In so doing, we eliminated the Math 120 class (leaving Math &141 and Math &142) and created an in-house textbook for the remaining classes. We expect our new two-course sequence to facilitate entry into calculus and improve student success rates.



**Annual Assessment  
Academic Year 2012-2013  
Medical Assistant**

DEPARTMENT	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	USE OF RESULTS (Changes made as result of findings.)
Medical Assistant	75 percent of Medical Assistant Students will be employed in the Medical Assistant field six months of completion of their certificate. (PLO)	We will conduct a follow up survey six months after the completion of the Medical Assistant Certificate.	Will be available January 2014	
Medical Assistant	85% of students of MA specific classes will successfully complete at a 2.0 or better (CLO, PLO)	Success rate of all MA courses per IR&P	Overall 93% of students in MA prefix courses were successful. Lowest scores: MAP108 (math) at 89%, MA 195 Externship at 80%	MAP 108 is a requirement for moving forward; may be a gatekeeper course. Continue to monitor
Medical Assistant	90% of students will complete the 198 extern hours at 3 or above on the skill check-offs (SLO)	Completion paperwork from the preceptor	94.5% successfully completed externship; goal met	Continue to monitor
Medical Assistant	85% of MA students entering 112 will complete their certificate requirements within 9 months. (PLO)	Transcript review.	85.7% of students enrolled in MA 112 completed requirements for licensure/certification within 9 months	Continue to monitor

I need to meet with you for about 10 minutes during in-service to discuss your assessment. Mostly I want to meet because assessment might be new to you and get us all on the same page.

Departments	OUTCOMES BBCC Outcomes being addressed	TOOLS TO COLLECT DATA	RESULTS	Who Discussed the Results	USE OF RESULTS (Changes made as a result of findings.)
Music	75% of students will be able to complete the listening journal with a 2.0 or better. <i>[3.c: Draw Logical Conclusions, 3.f. Follow directions and fulfill the expectations of the assignment]</i>	Graded Listening Journals	57% of students completed this with a 2.0 or better.	Ryann & Pat	Change some instructions and assignments in the listening journal.

\_\_\_\_\_ **75% of students will be able to complete the listening journal with a 2.0 or better.** *[3.c: Draw Logical Conclusions, 3.f. Follow directions and fulfill the expectations of the assignment]* It was found that 57% of students were able to complete this assignment according to my desired directions and goals. Students really seem to struggle with this assignment and do not seem to connect with the assignment in the way that I would hope. I believe this occurs because some students have weak or no connection with classical music. After elementary school many of them no longer have exposure in school unless in performing group. They don't see relevance of the classics. Also, I don't believe students make connections to the world around them or experience the world in a way to where they stop to examine the beauty around them. My plan for the next year is to change some of the way that the assignment is presented to see if this increases engagement with the assignment and helps to increase the results.

You are all good and we don't need to meet. You have at least one of your outcomes tied to a Gen Ed outcome. If you would like to include more that would be wonderful but not required! I plan to find you at the end of the year to help finish up this year's assessment. Great work! Keep it up.

**Annual Assessment  
Academic Year 2012-2013  
Nursing**

DEPARTMENT	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	USE OF RESULTS (Changes made as result of findings.)
Nursing – 1	75% of students beginning the nursing program will complete within 3 years (PLO)	IR&P to compile data	Cohort 10-12 76% within 3 years; cohort 11-13 48% within 2 years; 8% returning for third year	Unique challenges for 11-13 cohort: personal and health issues; 12% of this class were re-admits from previous year. However, continue to monitor student support and academic expectations
Nursing – 2	85% of Nursing graduates will pass the NCLEX on the first attempt. (above the national mean) (SLO)	Nursing Department Collection	2013: 100% of nursing graduates passed NCLEX on the first attempt (Natl average 83%)	Continue to monitor
Nursing – 3	Graduates will rate the program above 4.0 (on a 5 point scale) six months after graduation. (PLO)	Nursing Graduate Survey	10-12 cohort 4.23 goal met	Continue to monitor
Nursing – 4	Graduates will rate their competency as beginning practitioners above 4.0 (on a 5 point scale), six months after graduation. (PLO)	Nursing Graduate Survey	10-12 cohort 4.29 goal met	Continue to monitor
Nursing – 5	Employers will rate the graduates' competency as beginning practitioners above 4.0 (on a 5 point scale), six months after graduation. (PLO)	Nursing Employer Survey	10-12 cohort 4.68 goal met	Continue to monitor
Nursing – 6	90% of graduates who seek employment will be hired in health care within the first 6 months. (PLO)	Nursing Department collection	96% of graduates seeking employment are employed within 6 months	Continue to monitor

You are all good and we don't need to meet. You have at least one Student Level Outcome (SLO) and one Program Level Outcome (PLO) and the outcomes on assessment are tied to at least one Program Outcome. Great work! Keep it up.

### **Nursing Program Ongoing Assessment 2012-2013**

The nursing program is continually assessing and evaluating the effectiveness of the educational program. Specific to this academic year

**NUR 135:** Assessing student preparation for the psychomotor skills component has been an ongoing issue. The program has extended use of Skills Modules integrated with the ATI system already in use. The skills modules provided Pre-Tests, a variety of learning tools (videos, written material, clinical challenges, etc) and Post Tests. The post tests can be taken more than once, with a 12 hour blackout between attempts. Students are required to obtain 90% or better on the post-test prior to entering the skills lab. This has improved the students' performance and retention of learning; it has reduced the need for didactic teaching, improving the satisfaction with the skills lab component.

**Clinical courses (NUR 111, 121, 131, 211, 221):** Effective clinical paperwork promotes student learning in the clinical setting; instructors continually assess the effectiveness of the assignments. Building on changes over the past two years, the faculty initiated the use of concept maps for students to document their thought processes in the clinical area . These concept maps allow the student to demonstrate the relationships between assessment, intervention, disease process, and diagnostic testing.

**Theory courses (NUR 110, 120, 130, 210, 220, 230):** All faculty have been challenged to revise their teaching style to reduce dependence on PowerPoint lectures. Increased use of active learning strategies including a case study approach are being implemented. "Clicker" technology (low tech version) was implemented during this year, providing the faculty with immediate feedback for student comprehension and increasing student engagement by requiring all students to respond to questions independently in the classroom . Faculty also continued with occasional "group testing", allowing students to work together for a potential extra few points to encourage verbalization of thought process and collaborative effort. Faculty had mixed results with this technique: strong students benefitted from the experience, but weaker students tended to hold on to their erroneous thought process, pulling their group's score down. Will continue to evaluate.

Departments	OUTCOMES BBCC Outcomes being addressed	TOOLS TO COLLECT DATA	RESULTS	Who Discussed the Results	USE OF RESULTS (Changes made as a result of findings.)
Philosophy	<p>Assessment 2a: interpret information in graph form.</p> <p>Hypothesis: the majority of my students will successfully use truth tables to determine whether an argument is valid or invalid.</p>	<p>Exam 4 on Truth Tables in PHIL&amp;120 Symbolic Logic:</p> <p>75 out of 100 points considered successful</p>	<p>16 out of 22 students (73%) earned more than 75 out of 100 points.</p>	Dennis Knepp	Try again

Philosophy Department Narrative: General Education Outcome 2a (interpret information in graph form) was chosen since this is a representative example of reasoning in PHIL&120 Symbolic Logic.

This was assessed using the scores from Exam 4: Truth Tables.

I found that the majority of students were successful and I will continue to use this exam.

You are all good and we don't need to meet. You have at least one of your outcomes tied to a Gen Ed outcome. If you would like to include more that would be wonderful but not required! Great work! Keep it up.

**Annual Assessment**  
**Academic Year 2012-2013**                      **Physics**

DEPARTMENT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	WHO DISCUSSED THE RESULTS?	USE OF RESULTS (changes made as a result of findings.)
Engineering Physics (PHYS& 221)	Class as a whole will match the nationwide average for gains on the Force Concept Inventory. Allows for comparison of BBCC students against other physics students in the U.S.	Pre- & post testing using the Force Concept Inventory, a test widely used in the physics community in the U.S. and some foreign countries. First Force Concept Inventory administered on the first day of class in PHYS& 221. Test to be given again in late Fall Quarter or early Winter Quarter.	Class showed a normalized gain (percent gain divided by percent possible) of 45%. This compares to a nationwide average of about 13%. This class of students did very well.	Jim Hamm and Kathleen Duvall	While the results were very good, I intend to try some new things in the 2013-2014 academic year, such as “flipping” the class. Video lectures will be available for previewing and for review.
Physics for Non- Science Majors (PHYS& 100)	75% of students will demonstrate the ability to graph experimental data correctly, determine the slope of a graph of experimental data, and make predictions based on that graph. 75% of students will demonstrate the ability to correctly convert from one type of unit to another.	Laboratory Final given in the ninth week of winter quarter.	75% of the students could graph data correctly and determine the slope, but only 45% could make predictions based on that slope. 64% of students earned perfect scores on the unit conversion problems, but the remainder were below 65% on this portion. Squared and cubed conversions were the most difficult.	Jim Hamm and Kathleen Duvall	I will record video lectures on graphing and unit conversion, and have these available for previewing and review.

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one of your outcomes to be tied to a Gen Ed outcome. For this last outcome you are addressing Gen Ed Outcome 2a. I would write this out in the outcome and you will be good. Good work. Keep it up!

# Annual Physics Assessment Report

2012-2013 School Year

Instructor: Jim Hamm

Date of Report: September 18, 2013

In Engineering Physics I use a test called the Force Concept Inventory. I give this as a pre-test on the first day of class in the fall and give it again as a post-test. Most schools give the post-test at or near the end of the fall term, but I usually forget to give it until Winter Quarter (or even Spring Quarter).

I use this test because it is used nationwide by schools engaged in assessment of their physics courses.

From past performances of my classes, I expect them to do better than the nationwide average of 13% gains from the pre-test to the post-test. The class in the 2012-2013 school year averaged 45% gains on this test, gains which are very good for this test, and compare well with the nationwide averages.

I am the only instructor in the physics department, but I have shared these scores with others in the math and science division in conversations during our first week back from summer break.

In my Physics for Non-majors course I used the Laboratory Final in the course as an assessment. Because this is a test I developed myself, I have no way of comparing the results with students elsewhere. There are certain goals that I want to achieve in that course, however, and this was a chance to check up on how students were doing. I've only been recording detailed information on this test for two years, so I could only compare the Winter 2013 class to the Winter 2012 class. The 2013 class did somewhat better, but with the small sample size (there were only 11 students who took the 2013 test), it is not possible to draw any conclusions.

There are two areas I am particularly interested in doing the evaluation in the Physics for Non-majors course: dealing with making and interpreting graphs of experimental data (linear relations only), and converting units from one type to another. In both areas I could see student performance decrease as the complexity of the task increased. (In unit conversion, for instance, 83% of students scored above 75% on a question involving a conversion from nanometers to feet, but only 36% of students managed that when the conversion was from newtons per meter *squared* to pounds per foot *squared*.) This isn't completely surprising, but I'm not happy with the results. This year I will record additional videos that emphasize some of the problem areas associated with graphing and unit conversion, and have some additional assignments based on those videos. Students will be able to watch the video lectures as many times as necessary.

Departments	OUTCOMES BBCC Outcomes being addressed	TOOLS TO COLLECT DATA	RESULTS	Who Discussed the Results	USE OF RESULTS (Changes made as a result of findings.)
Political Science	Comparing the use of instructor-generated essay exams with test-bank multiple choice exams.	Assignments / Exam Scores. Instructor generated exams.	Fall 2012 Essay Exam Average Scores Test 1: 74.25% Test 2: 83% Total Avg. Exam Score = 78.63  Spring 2013 Multiple Choice Exam Average Scores Test 1: 90.35% Test 2: 79.9% Total Avg. Exam Score = 85.13%	Webb Waites	Exams are moving from essay-based to a multiple-choice format

The American Government course has during the last several years been undergoing a transformation from a traditional lecture-based course to an emporium class. Part of this transformation has been an examination of testing methods. Students traditionally complain of essay exams—the standard format for exams in this 200-level class for over a decade—saying that essay exams are too difficult to complete due to the complexity of the questions asked. This mantra has been heard regardless of the questions employed in the testing. To determine whether there was any truth to the complaint, the department chose to offer a section which took the standard essay exam and another which took an exam consisting of multiple-choice questions. The material being tested was the same material delivered in the same way for both classes. The expectation held by the department was that regardless of the testing method, the scores would be comparably the same. The average score for the essay exam was 78.63%. Surprisingly, the multiple choice exam, however, was higher at 85.13%. As a result, the departmental faculty have concluded that student perform better on multiple-choice exams than they will on essay exams asking questions on the same material. The reasons for this are likely due to a combination of factors including the students' study habits and their personal trepidation over taking "hard" exams. There is also a concern that students may not be exposed to essay exams earlier in their educational careers and are simply unprepared for them.

You are all good and we don't need to meet. You have at least one of your outcomes tied to a Gen Ed outcome. If you would like to include more that would be wonderful but not required! Great work! Keep it up.



Departments	OUTCOMES [BBCC Gen Ed Outcomes being addressed]	TOOLS TO COLLECT DATA	RESULTS	Who Discussed the Results	USE OF RESULTS (Changes made as a result of findings.)
Psychology	Students will be able to use new open source course textbook as effectively and with the same course success rates as the previous traditional format textbook. [4:Gather and interpret information]	Course assessments between 11-12 and 12-13 years	Average student scores in 11-12 were 2.53 and average scores in 12-13 were 2.66.	Psych Department	It looks like the online text is not detrimental to students and may even have improved scores by allowing students more format options. We will continue to use the text.
Psychology	There will be no difference in exam scores and final grades between students who had open-note, open-book (ON-OB) exams and students who had closed-note closed-book exams (CN-CB), facilitated in Canvas. [3. Students will be able to solve problems combining and applying knowledge from multiple sources.]	Instructor-Generated Exams	Winter quarter average scores (CN-CB) = 73% Spring quarter average scores (ON-OB) = 72.6%	Social Sciences Division	From here on out open-note, open-book exams will be used as it appears there is no difference between scores and these instructions reduce the possibility of cheating.
Psychology	Students who complete weekly course summaries in their PSYC 100 course will perform better on exams than students who use only self-derived methods of study [3. Students will be able to solve problems combining and applying knowledge from multiple sources.& 4:Gather and interpret information]	Instructor-generated Exam scores compared between Holliway and Leonard's courses	Average Exam Scores for: Leonard were 74% Holliway were 84%	Psych Department	It appears that students who wrote weekly summaries may have some benefit over students who experienced a more traditional lecture style. The instructors will meet to determine if there should be changes to instruction.

You are all good and we don't need to meet. You have at least one of your outcomes tied to a Gen Ed outcome. If you would like to include more that would be wonderful but not required! Great work! Keep it up.

## Psychology Narrative

**Narrative:** We had three outcomes this year that we wanted to evaluate. Our first outcome was that **students will be able to use new open source course textbook as effectively and with the same course success rates as the previous traditional format textbook. [4:Gather and interpret information].** We had switched to an open source online textbook and we wanted to determine how the format change would affect students. We felt that with the increased use of technology in society and within our students we wanted to provide a format that might fit student's lifestyles better. There is still a paper option for students as well and all options were relatively inexpensive compared to other texts. We assessed overall course grades from the 11-12 school year and the 12-13 school year to see if the change in text affected students. There was no negative effect on student's grades and although not quantified statistically, there was a slight increase in grades with the new text. We plan to continue to use the text as it is more cost effective and flexible for student's needs.

Our second outcome was that **there will be no difference in exam scores and final grades between students who had open-note, open-book (ON-OB) exams and students who had closed-note closed-book exams (CN-CB), facilitated in Canvas. [3. Students will be able to solve problems combining and applying knowledge from multiple sources.].** We wanted to address a nagging question of whether students' scores would be impacted by switching to open-note, open-book exams. As many of the Social Science courses are online there is a concern that students online may be using additional resources on exams that ground students don't get to use because they are being watched for cheating. We hypothesized that there would be little to no difference in exam scores no matter the resources used because we felt that study time had a bigger impact over resources used during the exam. We found zero difference between scores of students who were in a traditional ground and online classed with no resources allowed and students who were able to use their books and notes during exams. From here on out the option for instructors is to use open-note, open-book exams if they desire.

Our third outcome was to determine if **students who complete weekly course summaries in their PSYC 100 course will perform better on exams than students who use only self-derived methods of study [3. Students will be able to solve problems combining and applying knowledge from multiple sources.& 4:Gather and interpret information].** We have two full time instructors in this department who use very different methods of instruction. We wanted to make sure that students using either method were prepared to take their higher level Psychology courses. The exams of the two instructors were similar and so we compared exam scores between the two instructors to determine any effects of method on student success. It appears that students who wrote weekly summaries prior to attending class meetings scored higher on final exams. It could be the case that the focus on key terms and applying those terms in class discussions and questions can assist students in comprehending key terms and concepts.

Departments	OUTCOMES BBCC Outcomes being addressed	TOOLS TO COLLECT DATA	RESULTS	Who Discussed the Results	USE OF RESULTS (Changes made as a result of findings.)
Religious Studies	<p>Assessment 5c: define and articulate meaningful aspects of global cultures using appropriate vocabulary and examples.</p> <p>Hypothesis: the majority of my students will adequately define key terms and discuss important issues in Ancient Religions, Islam, Christianity which demonstrates their understanding of global culture.</p>	Exam in REL 201 World Religions on key terms in Ancient Religions, Islam, and Christianity: 75 out of 100 points considered successful	17 out of 25 students (68%) earned more than 75 out of 100 points.	Dennis Knepp	Try again

Religious Studies Department Narrative: General Education Outcome 5c (define and articulate meaningful aspects of global cultures using appropriate vocabulary and examples) was chosen since this is a representative example of content in REL 201 World Religions.

This was assessed using the scores from Exam 1: Ancient Religions, Islam, and Christianity.

I found that the majority of students were successful and I will continue to use this exam.

You are all good and we don't need to meet. You have at least one of your outcomes tied to a Gen Ed outcome. If you would like to include more that would be wonderful but not required! Great work! Keep it up.

**Annual Assessment 12-13**

**Social Sciences**

<b>Departments</b>	<b>OUTCOMES BBCC Outcomes being addressed</b>	<b>TOOLS TO COLLECT DATA</b>	<b>RESULTS</b>	<b>Who Discussed the Results</b>	<b>USE OF RESULTS (Changes made as a result of findings.)</b>
Social Sciences	Across the division, students who report better study skills will have better grades. Also, we will examine differences between online and ground formats of instruction. We will also look for consistency in findings from the 11-12 year to examine true trends in student behavior.	Study skills assessment tool.	We did confirm our hypotheses. See narrative for more information.	Social Sciences Division	Look into the new AVID program to assist students with improving study skills to help them improve their study habits.

## Annual Assessment 12-13 Social Sciences

**Goal 1: Confirm study skill behavior in students between the 2011- 2012 and 2012- 2013 school years to show that students with better study behaviors have higher success rates. Also, look for trends in class format (online vs. ground).**

In 2011-2012, two instructors in the Social Sciences division piloted a Study Skills Survey that was designed to have students self-assess their study skills and provided them with external resources to help improve weak areas. This survey was borrowed from the Virginia Polytechnic Institute and State University (<http://www.ucc.vt.edu/stdysk/checklis.html>) and a few of our own items were added. Below are the survey and instructions. In 2012- 2013 we took the survey division wide to see if there would be similar trends across the division as well as reliable results between the two years.

We took the survey items and ran a correlation to see if there were any relationships between individual items and final grades. We also looked to see if there were any relationships between items and the course format (online vs. ground). There were several interesting findings replicated from last year.

We saw consistent findings between the two years in that students grades were lower when they responded yes to questions number **#4** (study with radio/tv), **#7** (class notes hard to understand), **#23** (get lost in reading), **#28** (discouraged in reading, hope others will explain it), **#29** (assigned papers overwhelm me). This year we also found that students had lower grades when they responded yes to questions number **#2** (cram for tests the night before), **#6** (I usually doodle, daydream, text, or sleep in class), **#18** (when I get to the end of the chapter I can't remember what I read). We also found that for several of these items students responded yes to more than one of these items. This indicates to us a trend in student study skills with students possibly not understanding what is required for good studying.

Grades tended to increase when students asked questions in class (**#9**), took detailed notes (**#15**), review their notes periodically throughout the quarter (**#16**), make use of study aids (**#24**) and practice quizzes (**#25**). These results were similar to the previous year.

We also found some interesting results based on course format. Ground students compared to online students tended to not take detailed notes in class (**#15**). They also studied in a haphazard way (**#22**) and did not regularly use the study aids provided (**#24**).

These results show that there are definitely different approaches to studying that are chosen by students. We believe there may be three different sets of students in our courses; those that know how to study and are successful at it, those that don't know how to study but would like to be successful, and those that are not concerned with how well they do in a particular course. We, as a division, are planning to create a first day presentation/handout about study methods and how to be successful at studying. This presentation may be tailored to the specifics of a course but in general we plan to highlight the results of this study and discuss with students what is required for successful study. We hope to adopt some of the AVID program for use in our courses to assist our students. We hope to see that the results of the survey in our next assessment report will reflect the majority of students using better study techniques and having improved results on exams and course assignments. The actual survey and instructions to students are in Appendix A.

## Study Skills Survey

Please take a minute and fill out this survey. This survey will help you understand how you study. **On the second page, print the survey before you click "DONE" and follow the instructions below.**

<http://www.surveymonkey.com/s/SocSciStudySkillsSurvey>

We in the Social Sciences division are using this survey to try to better understand how our students study and how we can help them be more successful in our classes. We will not see this data until the end of the quarter after grades are submitted and all personal information is removed before the information is reviewed.

**However, you can use this survey now to improve your study techniques. Print the survey before you click "DONE"** and if you have answered "yes" to two or more questions in any category, look at the [Study Skills Self-help Information](#) (<http://www.ucc.vt.edu/stdysk/stdyhelp.html>) for those categories or come talk to your instructor. If you have one "yes" or less in a category, you are probably proficient enough in these areas that you don't need Self-help Information. Feel free, however, to get information in areas that you may have special interests, even if you scored well.

- Time Scheduling - 1, 2, and 3.
- Concentration - 4, 5, and 6.
- Listening & Note taking - 7, 8, 9, 14, 15, and 16.
- Reading – 17, 18, 19, 20, 23, 26, 27, and 28.
- Exams - 21 and 22.
- Asking for Help - 10, 11, 12, and 13.
- Writing Skills -29, 30, and 31.
- Using Study Aids – 24 and 25.

## Study Skills Survey

**Demographic information collected to match results to course data: Name, Student ID, Class completing survey for, Instructor**

**For each of the following use the response options of A) Yes B) No**

1. I spend too much time studying for what I am learning.
2. I usually spend hours cramming the night before an exam.
3. If I spend as much time on my social activities as I want to, I don't have enough time left to study, or when I study enough, I don't have time for a social life.
4. I usually try to study with the radio and TV turned on.
5. I can't sit and study for long periods of time without becoming tired or distracted.
6. I go to class, but I usually doodle, daydream, text on my phone, or fall asleep.
7. My class notes are sometimes difficult to understand later.
8. I watch recordings of lectures I attended (when available) to make sure I understand the class materials.
9. I ask questions in class regularly.
10. When I need help with my studies I ask a friend:
11. When I need help with my studies I ask a parent:
12. When I need help with my studies I visit the professor's office:
13. When I need help with my studies I visit student services to ask for assistance:
14. I usually seem to get the wrong material into my class notes.
15. I take detailed notes in class.
16. I review my class notes periodically throughout the quarter in preparation for tests.

17. I take notes on my required reading.
18. When I get to the end of a chapter, I can't remember what I've just read.
19. I don't know how to pick out what is important in the text.
20. I can't keep up with my reading assignments, and then I have to cram the night before a test.
21. I study enough for my test, but when I get there my mind goes blank.
22. I often study in a haphazard, disorganized way under the threat of the next test.
23. I often find myself getting lost in details of reading and have trouble identifying main ideas.
24. I make regular use of the study aides available to me in the class website (if provided).
25. I regularly complete practice quizzes, even when they are not required for the grade (if provided).
26. I rarely change my reading speed in response to the difficulty level of the selection, or my familiarity with the content.
27. When I encounter a word I am unfamiliar with in my reading, I look it up and write down the definition.
28. I become so discouraged when reading something difficult that I put it down and hope someone in class will explain it to me.
29. When my teachers assign papers I feel so overwhelmed that I can't get started.
30. I usually write my papers the night before they are due.
31. I can't seem to organize my thoughts into a paper that makes sense.

**Annual Assessment 12-13**

**Sociology**

<b>Departments</b>	<b>OUTCOMES BBCC Outcomes being addressed</b>	<b>TOOLS TO COLLECT DATA</b>	<b>RESULTS</b>	<b>Who Discussed the Results</b>	<b>USE OF RESULTS (Changes made as a result of findings.)</b>
Sociology	Students who utilize clicker technology in their courses will have greater class participation and engagement than students who do not use the clickers. <i>[3. Students will be able to solve problems combining and applying knowledge from multiple sources.]</i>	Clicker technology, classroom observations, and a simple participation scale.	There was no discernible difference in amount of engagement.	Social science faculty.	Results demonstrated that it takes time to enculturate students into the use of clickers.

Clickers provide another dimension in classroom participation, yet when clickers were compared with regular quiz review, the engagement was similar. Although clickers provide immediate feedback, the review of weekly quizzes (non-clicker comparison group) was also very dynamic resulting in students clarifying issues and asking questions that elaborated on the questions presented in the quizzes. One issue that was apparent in trying to use the clickers was the time constraints that a 65 minute period has. Passing out the clickers and making sure that we were all ‘clicked-in’ was time consuming and took a little but away from the novelty of their use. Perhaps the transition would be more fluid if the class period was two hours. I think that after using the clickers more than twice, students would also be more comfortable with the procedures needed to get the clickers working properly and fluidly.

You are all good and we don’t need to meet. You have at least one of your outcomes tied to a Gen Ed outcome. If you would like to include more that would be wonderful but not required! Great work! Keep it up.



**Annual Assessment 2012-2013**

**Welding**

DEPARTMENT/ COURSE	OUTCOMES	TOOLS TO COLLECT DATA	RESULTS	USE OF RESULTS (changes made as a result of findings.)
Welding	75% of Welding students who earned certificates or degrees or students with 45 credits or more with at least a 2.0 G.P.A. will be employed. (PLO)	Estimated employment rates SBCTC data 2010-11 obtained in January 2013	The most recent data indicates that the student employment rate is at 64%.	Continue to assess and try to improve.
Welding	75% of the students who elected to take WABO certification passed (PLO)	Washington Association of Building Officials Certification Data	50% of the students that elected to attempt the WABO certification passed	The welding department will continue to assist students that desired certification, and will emphasize areas that students commonly have challenges.

In the Welding department we had two outcomes we chose to assess. First, we wanted to look at employment and had the goal that “75% of Welding students who earned certificates or degrees or students with 45 credits or more with at least a 2.0 G.P.A. will be employed.” We found based on 2010-2011 results that the employment rate is around 64%. The welding department will continue to focus on the areas that local and regional employers have the greatest need for employees, and also continue share with the students, employment opportunities that are outside the immediate region. Our second outcome was focused on certification. Specifically we wanted “75% of the students who elected to take WABO certification to pass”. We found that 50% of students who attempted the certification passed. We are working to identify areas of struggle for students and will work to assist those who are interested in the certification to hopefully improve certification numbers.

Please see my comments below. Assuming they make sense to you (and not just in my head) we don't need to meet. I have a few 5 minute sessions if you want to chat. We are looking for at least one Student Level Outcome (SLO) and one Program Level Outcome (PLO) in your assessment and for the outcomes to be tied to at least some of your Program Outcomes. You have two great SLO in your Program Outcomes. One regarding safety practicing and one regarding cutting procedures and equipment use. Can you assess one of these and then you will be great! Good work. Keep it up!

## Appendix A

### General Education Outcomes Matrix By Class Completed Spring 2013 In-Service

Relating Courses to Gen Ed Outcomes: For each course listed, please mark if it meets the criteria for the four BBCC outcomes for General Education (see Gen Ed Outcomes sheet for details). If any courses are missing from this list, please include them in the space provided at the bottom of the list.

	Students will be able to:																							
	1. Write clearly and effectively.						2. Reason mathematically.				3. Solve problems combining and applying knowledge from multiple sources.						4. Gather and interpret information.				5. Define and articulate personal, historical, global and workplace/community aspects of culture.			
	a	b	c	d	e	f	a	b	c	d	a	b	c	d	e	f	a	b	c	d	a	b	c	d
Total Count GEO/column	30	23	22	12	32	19	45	12	9	28	32	56	54	32	12	75	20	42	23	37	45	51	33	20
ACCT 201										3		2	5		4	1								
ACCT 202										3		2	5		4	1								
ACCT 203										3		2	5		4	1								
ANTH 100	3													2				4			5	1		
ART 100														4		1								
ART 101											2	3		4		1								
ART 102											2	3		4		1								
ART 103											2	3		4		1								
ART 104											2	3		4		1								
ART 105											2	3		4		1								
ART 106											2	3		4		1								
ART 121											2	3		4		1								
ART 122											2	3		4		1								
ART 123											2	3		4		1								
ART 198											2	3		4		1								
ART 216																1		4		5		2	3	
ART 217																1		4		5		2	3	
ART 218																1		4		5		2	3	









POLS 202					5									4					3	2	1			
POLS 203														5							4	3	2	1
PSYC 100				2											1	3	4						5	
PSYC 200				1										4			5	2			3			
REL 201																	5			4	1		2	3
REL 211																	5			4	1	2		3
SOC 101	1															2					5	4	3	
SOC 201	1															2					5	4	3	
SOC 204	1															2					5	4	3	
SOC 220	1															2					5	4	3	
SPAN 121		5																			3	1	2	5
SPAN 211		5																			3	1	2	5
SPAN 221		5																			3	1	2	5