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



2015-2016
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 2015-2016 completed plans for each academic and professional technical department. We provide these first three parts to show consistency in reporting for the last three years.

The fourth part of the report is a departure from previous reports and is our attempt to solidify and more concretely explain our assessment procedure at BBCC. This section includes our new assessment procedures, which show systematic, effective, regular and comprehensive assessment of student course, program, and degree learning outcomes.

## Part One: General Education Outcomes

Big Bend Community College believes that students who graduate will demonstrate certain general education outcomes as part of their degree completion. 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, faculty were tasked with meeting the most recent accreditation recommendations. 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 academic faculty reviewed their courses and listed the top 5 general education outcomes addressed within those courses (See 2012-2013 report). We believe that with the changes made for the 2013-2016 assessments that these two recommendations are met. The second goal was for faculty to tie the general education outcomes to their department and course level assessment outcomes. All faculty completed this goal for the 2014-2015 and most did for 2015-2016. The general education outcomes addressed are discussed in detail below.

## Accreditation Recommendations

Related to the first goal is the question of whether students graduating from Big Bend Community College will have assessable documentation of degree learning outcomes. 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, 20 of them were college-level courses or courses for which we had general education data. The courses cover a good representation of distribution areas required for the degree (i.e., Humanities, Social Sciences, and Math/Science). For the third year in a row pre-college courses appear in the list for the top 30 enrolled courses. This year they are included so we can track the courses to see if they show up in the list continually. It is likely that several Gen Ed outcomes are covered in these courses and perhaps they should be included in our analysis. The courses are ENGL 099, DVS 080, Math 094, Math 096, and Math 098. These courses are not a part of the degree plan but they do influence student learning and provide a foundation for success in future courses.

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. In the 2016-2017 academic year we are taking a full review of our General Education Outcomes to determine what changes, if any, need to be made to truly reflect what is occurring during degree completion. Further, if the majority of students enroll in certain precollege 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 30* 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, articulate ... aspects of culture |  |  |  | Enrollment Numbers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | a | b | c | d | e | f | a | b | c | d | a | b | c | d | e | f | a | b | c | d | a | b | c | d |  |
| BIOL 100 |  |  |  |  |  |  | 5 |  |  |  |  | 3 | 4 |  |  |  |  | 1 | 2 |  |  |  |  |  | 258 |
| BIM 101 | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 150 |
| CHEM 121 |  |  |  |  |  |  | 3 |  | 4 |  | 1 | 5 | 2 |  |  |  |  |  |  |  |  |  |  |  | 189 |
| CJ 101 |  |  | 2 | 4 |  |  |  |  |  |  |  | 5 |  |  |  |  |  | 3 |  | 1 |  |  |  |  | 218 |
| CMST 220 |  |  | 1 | 2 |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 4 | 5 |  |  |  |  |  | 532 |
| CSS100 | 4 |  |  |  |  |  | 5 |  |  |  | 1 |  |  |  |  |  | 2 |  |  |  | 3 |  |  |  | 437 |
| DVS 080 | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 173 |
| ENGL 099 | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 240 |
| ENGL 101 | 4 | 3 | 2 |  | 1 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 840 |
| ENGL 102 |  |  | 3 |  | 2 | 1 |  |  |  |  |  |  |  | 4 |  | 5 |  |  |  |  |  |  |  |  | 561 |
| ENVS 100 |  |  | 5 |  |  |  | 3 |  |  |  | 1 |  | 4 |  |  |  |  |  | 2 |  |  |  |  |  | 168 |
| FAD 150 | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 202 |
| HIST 136 |  | 5 |  |  | 4 |  |  |  |  |  |  |  | 3 |  |  |  |  |  | 2 |  |  | 1 |  |  | 174 |
| HIST 137 |  | 5 |  |  | 4 |  |  |  |  |  |  |  | 3 |  |  |  |  |  | 2 |  |  | 1 |  |  | 171 |
| MATH 094 | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 327 |
| MATH 098 | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 627 |
| MATH 099 | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 270 |
| MATH 107 |  |  |  |  |  |  | 2 | 3 |  | 1 |  | 4 | 5 |  |  |  |  |  |  |  |  |  |  |  | 208 |
| MATH 141 |  |  |  |  |  |  | 2 |  |  | 1 |  | 3 | 4 |  |  | 5 |  |  |  |  |  |  |  |  | 239 |
| MATH 142 |  |  |  |  |  |  | 2 |  |  | 1 |  | 3 | 4 |  |  | 5 |  |  |  |  |  |  |  |  | 138 |
| MATH 146 |  |  |  |  |  |  | 3 | 1 |  | 2 |  |  | 4 |  |  | 5 |  |  |  |  |  |  |  |  | 284 |
| MUSC 105 |  | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 209 |
| NUTR\& 101 |  | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 275 |
| PEH 100 | NO DATA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 395 |
| PHIL 120 |  |  |  |  |  |  | 2 |  |  | 1 |  | 4 | 3 |  |  |  |  |  |  |  |  |  | 5 |  | 215 |
| POLS 202 |  |  |  |  | 5 |  |  |  |  |  |  |  |  | 4 |  |  |  |  | 3 | 2 | 1 |  |  |  | 198 |
| PSYC 100 |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 | 3 | 4 |  |  |  |  | 5 |  | 589 |
| PSYC 200 |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  | 1 | 3 | 4 |  |  |  |  | 5 |  | 169 |
| SOC 101 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  | 5 | 4 | 3 |  | 395 |
| SPAN 121 |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 | 1 | 2 | 5 | 197 |

Note: The top 30 enrolled courses were queried; however, 10 of the courses were either precollege level or were college level courses for which no General Education data was collected. 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.

## General Education Requirements by Department

Included in part three of our report are the annual assessment reports and narratives from each department on campus for the 2015-2016 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.

For 2015-2016, our academic faculty refined their assessment goals to more clearly include general education outcomes. Several of the departments successfully included these goals and outcomes and others are still working to refine their assessment.

Our General Education Outcomes consist of 5 primary outcomes with 24 specific criteria divided among the 5 outcomes. For the 2014-15 academic year, departments reported 53 assessments of the various outcomes and specific criteria. This is lower than last year's assessments of 61 but almost double the number of assessments during the first year (2013-2014; 30 assessments). Of those 53 assessments, 47 were benchmarked assessments, 38 of the 47 reported successful achievement of the outcome, for an overall success rate of $81 \%$.

Of the five Gen Ed outcomes, all were assessed at some level. Of the 24 specific criteria related to the five outcomes, 20 out of 24 criteria were explicitly assessed, or $83 \%$ of the criteria were assessed. Last year $96 \%$ were assessed and $88 \%$ the year before. Several specific outcomes were not assessed this year in anticipation of changes to the assessment program overall and more focus on the five main Gen Ed Outcomes.

The summary below is drawn from the assessment reports submitted by all instructional departments and programs. When a specific outcome was not stated the assessment chair reviewed the data provided and tried to determine which outcomes were addressed. For further information on any of these results, see the department reports in part three below.

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

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


## 1.a. Clarity

- Chemistry reports that $88 \%$ of students accomplished this outcome. The benchmark was $51 \%$ of students demonstrating the outcome successfully.
- Communications reports that $100 \%$ of their students accomplished this outcome. The benchmark was $90 \%$.
- Developmental English reported $82 \%$ and $87 \%$ of students met this outcome in two different courses. The benchmark was not stated.
- Foreign Language reports that $95 \%$ of students accomplished this outcome. The benchmark was $75 \%$ of students demonstrating the outcome successfully.
1.b. Logical flow from point to point
- Developmental English reported $82 \%$ and $87 \%$ of students met this outcome in two different courses. The benchmark was not stated.
- Foreign Language reports that $95 \%$ of students accomplished this outcome. The benchmark was $75 \%$ of students demonstrating the outcome successfully.


## 1.c. Sound support of assertions

- Chemistry reports that $26 \%$ of students accomplished this outcome. The benchmark was $51 \%$ of students demonstrating the outcome successfully.
- Communications reports that $100 \%$ of their students accomplished this outcome. The benchmark was 80\%.
1.d. Creative or divergent thinking
- Developmental English reported that $87 \%$ of students met this outcome. The benchmark was $80 \%$.
1.e. Adhere to conventions of standard written English
- Developmental English reported that $87 \%$ of students met this outcome. The benchmark was 80\%.
- 1.f. Sources adhere to citation/reference formats

2. Students will be able to reason mathematically.

## 2.a. Interpret information in graph form

- Math reports that $69 \%$ and $71.5 \%$ of students achieved this outcome, with a benchmark of $70 \%$.
- Philosophy reports that $71 \%$ of students achieved this outcome, with a benchmark of $75 \%$.
- Physics reports that $80 \%$ of students were able to graph data correctly, but only $60 \%$ 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.

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

- Biology reports that $79 \%$ of students from one class accomplished this outcome. The benchmark was $75 \%$ of students demonstrating the outcome successfully.
- Developmental English reported 83\%, 95\%, and 76\% of students met this outcome in three different courses. The benchmark was $70 \%, 80 \%$ and $80 \%$ respectively.
3.b. Break it into steps
- Biology reports that 79\% of students from one class accomplished this outcome. The benchmark was $75 \%$ of students demonstrating the outcome successfully.
- Chemistry reports that $48 \%$ of students accomplished this outcome. The benchmark was $51 \%$ of students demonstrating the outcome successfully.
3.c. Draw logical conclusions
- Biology reports that an average of $79 \%$ of students from different classes accomplished this outcome on a series of different assessments. The benchmark was $75 \%$ of students demonstrating the outcome successfully.
3.d. Generate multiple and diverse perspectives in trying to solve the problem
- Biology reports that an average of $79 \%$ of students from one class accomplished this outcome on a specific assessment. The benchmark was $75 \%$ of students demonstrating the outcome successfully.
- Criminal Justice reports that $82 \%$ of students accomplished this outcome. The benchmark was $75 \%$ for each assessment.


## 3.e. Recognize extraneous information

- Biology reports that an average of $78 \%$ of students from two classes accomplished this outcome on a specific assessment. The benchmark was $75 \%$ of students demonstrating the outcome successfully.
- Chemistry reports that $48 \%$ of students accomplished this outcome. The benchmark was $51 \%$ of students demonstrating the outcome successfully.


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

- Biology reports that $79.3 \%$ of students from three classes accomplished this outcome. The benchmark was $75 \%$ of students demonstrating the outcome successfully.
- Chemistry reports that $48 \%$ of students accomplished this outcome. The benchmark was $51 \%$ of students demonstrating the outcome successfully.
- Psychology reports that students do equally well in a traditional and flipped version of the classroom, $88 \%$ vs $91 \%$.


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

- Criminal Justice reports that $88 \%$ of students accomplished this outcome. The benchmark was $75 \%$ for each assessment.
- History reports that $83 \%$ of students accomplished this outcome in multiple assessments. The benchmark was $75 \%$.
4.a. Distinguish between well-supported and unsupported claims
- Criminal Justice reports that $82 \%$ of students accomplished this outcome. The benchmark was $75 \%$ for each assessment.
- Developmental English reported 82\% of students met this outcome. The benchmark was 70\%.
4.b. Make comparisons and draw contrasts
- Developmental English reported 82\% of students met this outcome. The benchmark was 80\%.


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

- Criminal Justice reports that $82 \%$ of students accomplished this outcome. The benchmark was 75\%.
4.d. Access multiple sources of information
- Biology reports that $78 \%$ of students from two classes accomplished this outcome. The benchmark was $75 \%$ of students demonstrating the outcome successfully.
- Criminal Justice reports that $82 \%$ of students accomplished this outcome. The benchmark was 75\%.
- Psychology reports that students do equally well in a traditional and flipped version of the classroom, $88 \%$ vs $91 \%$.

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

- Anthropology 100 reports a detailed assessment of this outcome; the analysis was descriptive rather than quantitative.
- Art reports that on average $86 \%$ of students in Art 216, 217, and 218 are meeting the objective to define and articulate all aspects of Outcome 5. The benchmark was 70\%.
- Sociology 101 reports a detailed assessment of this outcome; the analysis was descriptive rather than quantitative.
5.a. Define and articulate an objective sense of personal culture as it relates to external cultures.
- Spanish reports an assessment of this outcome with a benchmark of $75 \%$.
- Spanish 121 achieved $76 \%$ success
- Spanish 122 achieved 70\% success
- Spanish 123 achieved 85\% success
5.b. Define and articulate historical aspects of cultures using appropriate vocabulary and examples.
- Music reports that $88 \%$ of students succeeded in this outcome with a benchmark of $75 \%$.
- Spanish reports an assessment of this outcome with a benchmark of $75 \%$.
- Spanish 121 achieved $76 \%$ success
- Spanish 122 achieved $70 \%$ success
- Spanish 123 achieved $85 \%$ success
5.c. Define and articulate meaningful aspects of global cultures using appropriate vocabulary and examples.
- Anthropology 100 reports a detailed assessment of this outcome; the analysis was descriptive rather than quantitative.
- Music reports that $95 \%$ of students succeeded in this outcome with a benchmark of $75 \%$.
- Spanish reports an assessment of this outcome with a benchmark of $75 \%$.
- Spanish 121 achieved $76 \%$ success
- Spanish 122 achieved $70 \%$ success
- Spanish 123 achieved $85 \%$ success


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

- Spanish reports an assessment of this outcome with a benchmark of $75 \%$.
- Spanish 121 achieved $76 \%$ success
- Spanish 122 achieved $70 \%$ success
- Spanish 123 achieved 85\% success

General Conclusions:

- The number of specific assessments of General Education outcomes collected remains high and in comparison with past assessment numbers.
- Assessment data was collected for all 5 General Education outcomes; assessment data was collected for 20 out of $24(83 \%)$ of the specific criteria listed under each outcome. This is a decrease of $13 \%$ over the previous year.
- Of the assessments collected ( $\mathrm{N}=53$ ), $89 \%$ were benchmarked assessments (compared to 88\% last year).
- Of the benchmarked assessments, $81 \%$ met the benchmarks.
- In 2015-16, institutional data shows that $78 \%$ of students overall met the success benchmark of earning a 2.0 grade or better per course. Seventy-nine percent of students in traditional, face-to-face classes, $78 \%$ of students online, $71 \%$ in Hybrid, and $79 \%$ of Web-enhanced met the 2.0 benchmark. This would seem to affirm that the results of our assessment data are approximately equivalent to the grade data we are seeing institutionally.


# Part Two: Program Outcomes for Professional Technical Education 

Spring, 2016
For 2015-2016, our academic faculty continued to refine their assessment goals to more clearly include general education outcomes and professional technical faculty identified student level learning outcomes in addition to their program level outcomes. Several of the departments successfully included these goals and outcomes and others are still working to refine their assessment.

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. The current outcomes for each of our Professional Technical Programs are listed below. The Outcomes are further labeled by the type of outcome they are Program (PO), Course (CO), or Student Learning Outcome (SLO). For the 2014-2015 academic year, faculty in these areas were asked to assess at least one PO and one SLO. All programs assessed at least one SLO and one PO except for Automotive, Aviation, Commercial Driver's License, and Welding (needed a SLO). Of the assessed outcomes, our faculty assessed 22 POs and 8 SLOs. Many of the assessed outcomes were directly related to the Program Outcomes listed below. Additional assessment outcomes looked at specific skills students achieved in a program or how many students completed a specific level of a program. The number of assessed student learning outcomes is down from the previous year. This is believed to be due to a change in assessment approach at the end of the 15-16 and beginning of 16-17 academic years. With the new changes in assessment there should be a natural increase in Student Learning Outcomes assessed in our Professional Technical areas.

## Accounting Outcomes for Students completing an Associate Degree

1. Graduates of the program will be successfully employed in an accounting or accountingrelated 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 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 IST.
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

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 2015-2016 Assessment Reports

Below are the completed 2015-2016 assessment reports. For those instances where specific outcomes were not identified by the department, the Assessment Chair attempted to appropriately label the assessed outcome.

Annual Assessment
Department: Academic Support Division (Dev. Ed.)
Year: 2015-2016

| DEPARTMENT/ COURSE | OUTCOMES (Include related Gen Ed Outcome - If Any) | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| English 099 | 1.Students will be able to write clearly and effectively with <br> Clarity, Logical flow from point to point, Sound support of assertions, Creative or divergent thinking, Adherence to conventions of standard written English, Source adherence to citation/reference formats. <br> 2. Students will be able to solve problems combining and applying knowledge from multiple sources. <br> - Draw logical conclusions. <br> -Recognize extraneous information. <br> -Follow directions and fulfill the expectations of the assignment. <br> 3. Students will be able to gather and interpret information. <br> -Distinguish between well-supported and unsupported claims. <br> -Make comparisons and draw conclusions. <br> -Recognize the points of an issue or claim. <br> -Access multiple sources of information. <br> 4. Students will be able to define and articulate personal, historical, global, and workplace/community aspects of culture. <br> --Define and articulate an objective sense of personal culture as it relates to external cultures. | 4 out of class essays <br> 2 in-class essays <br> Class assignments <br> Quizzes <br> Peer essay reviews <br> revisions <br> Portfolio evaluations by other 099 instructors <br> Readings/Journal writings | $82 \%$ of students completed the class with a 2.0 or more. |
| English 098 | Students will be able to write clearly and effectively. <br> -Clarity <br> - Logical flow from point to point <br> - Sound support of assertions <br> - Creative or divergent thinking <br> - Adherence to the conventions of standard written English. <br> -Students will be able to solve problems combining and applying knowledge from multiple sources. | Class assignments include using a dictionary, word processer, sentence structure, punctuation, journal writing, reading, and use of the library <br> Students will write paragraphs with topic | $87 \%$ of students completed the class with a 2.0 or more. |


| DEPARTMENT/ |
| :--- | :--- | :--- | :--- |
| COURSE |$\quad$| OUTCOMES (Include related Gen Ed |
| :---: |
| Outcome - If Any) |$\quad$| TOOLS USED TO |
| :---: |
| COLLECT DATA |$\quad$ RESULTS

## Narrative:

Success rates (2.0 or better) for CSS 100, ENGL 098, and ENGL 099 were $\mathbf{8 0 \%}, \mathbf{8 7 \%}$, and $\mathbf{8 2 \%}$ (respectively) last year. It is generally felt that our 099 students are able to successfully complete English 101.

English 099 Dawne E. has created a one-time assessment for English 099 students. This assessment will take place the last week of the quarter. A committee will be formed winter quarter to assessment the results. This assessment will not replace the portfolio system.

The success rate (2.0 or better) for students who completed ENGL 099 and passed ENGL 101 was $67 \%$ last year - this includes students who took ENGL 099 and received credit for ENGL 101. Removing these students, drops the success rate to $62 \%$.

Basic Skills Programs: HS21 remains steady with 114 completing in 2015-16 and this quarter 80 students have identified as HS21 so far. Our student numbers increased with a new ESL class opening in Warden.

Annual Assessment
Department: Accounting/Business
Year: 2015-2016

| DEPARTMENT/ <br> COURSE OUTCOMES (Include <br> related Gen Ed Outcome <br> - If Any)TOOLS USED <br> TO COLLECT <br> DATA | RESULTS |
| :--- | :--- | :--- | :--- |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

OUTCOME 1: $60 \%$ 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 (2013-14) Estimated Employment Rates for the AT program were $53 \%$ 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 very close to being gainfully employed at the rate of our expected outcome.

- What conclusions do you draw from these results.

The data is 2 years lagging but is the most current we have from the SBCTC. The local economy in 2013-2014 was still suffering the effects from the national and state economic recession that began in 2009. However, our actual employment numbers are not as good as we had estimated.

- 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 the goal at 60\% because a year from now, we will be looking at 2014-2015 data, and the national and state economies continued to slightly improve in 2014. 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 workrelated tasks that they would be expected to perform.

- What the results actually showed.
$83 \%$ of the students improved their learning of the content on the test. $28 \%$ of the students significantly improved their learning of the content.
- What conclusions do you draw from these results.

The results from 2015-2016 are consistent with prior years' findings: there is 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 this year's results, faculty will dedicate more class time and more emphasis will be given to the teaching and learning and application of GAAP which correlates with properly 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\&201 online class during 2016-2017 so we can hopefully gather data from two different classes.

OUTCOME 3: Students will know by the end of the year which components of the curriculum assisted their learning process the most.

- What you did to assess your course

Four methods used to assess students' learning in the Winter 2016 Quarter BUS\&201 class were analyzed.

- What you expected to find.

We feel we use good, sound methods and tools for teaching the related concepts of Accounting and Business. However, it is critical to know to what degree these methods are beneficial to their learning.

- What the results actually showed.

The results indicated the four methods used are mostly beneficial. The data indicates that two of the methods need to be altered.

- What conclusions do you draw from these results.

The students are mostly satisfied with the methods used during the delivery of the course. All four methods will be used again; however, modifications will be made the next time this class is taught with, a) required purchase and readings of the WSJ, and b) combining daily quizzes along with required work to be completed using the online content MindTap.

- What changes (if any) you plan to make in your teaching as a result of the data. Based upon this year's results, the same methods will be used again the next time the class is taught. Plans to alter 2 of the methods mentioned above are in place.
- 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.


## Annual Assessment

Department: Art
Year: 2015-2016

| DEPARTMENT/ <br> COURSE | OUTCOMES (Include <br> related Gen Ed Outcome <br> - If Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |
| Art 218 and Art <br> 216 | 70\% will attain 2.0 or <br> higher to demonstrate <br> student proficiency in <br> cultural understanding as <br> stated in general <br> education outcome 5. | Projects and <br> exams | Art 218 $93 \%>2.0$ <br> $26 / 28$ <br> $16 / 20$ |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

Art 216 and 218 are both art history classes with interactive studio projects as well as written projects and tests to see the students' proficiency in the course material. Art 218 is the modern class spanning the late nineteenth century to 1980 s or 90 s. The time span is shorter but the number of art movements are greater. Art 216 covers prehistoric to Medieval with some side ventures into the ancient Near East, Egypt, Greece and Rome as well as early European Medieval. The students have said they like the interactive projects that help them more fully understand and appreciate the time periods and cultures. For example, in Art 216, the students learn Gothic style calligraphy that the monks used in illuminated manuscripts. Some have said it was the hardest thing they have ever done. Art 218 emphasizes writing skills by giving each student weekly individual research assignments on specific artists. Together with studio assignments they come to understand various art styles. Each year the results seem to be getting better so something right is happening.

## Annual Assessment Results

Department: Automotive
Year: 2015-2016

| DEPARTMENT/ <br> COURSE | OUTCOMES (Include <br> related Gen Ed Outcome - <br> If Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |
| Automotive | 75\% of students who <br> earned certificates, <br> degrees, or 45 technical <br> credits will be employed in <br> the auto or related <br> industry. | Employment Data <br> from yearly <br> survey. | 100\% of students <br> surveyed are employed. |
| Automotive | Work to increase the <br> number of students who <br> take the ASE certification <br> exams by use of the new <br> student tests. This will <br> decrease travel and costs. | Results from on- <br> campus testing. | On-campus testing was <br> not performed last year, <br> but is being instituted <br> this fall. |
| Automotive | Encourage students that <br> are working toward a non- <br> degree or certificate option <br> to apply for the certificates <br> prior to completion. | Number of <br> certificates <br> created for <br> students. | Approximately 100 <br> certificates were printed <br> and distributed. |

We are pleased with employment data which is always a good indicator of success. Students surveyed were all employed in the area.

Preparation for on-line on-campus testing was not completed in time for students to take advantage of the two testing windows available in the fall and spring. A lot of hands are required to coordinate the testing with administration, instructor inclusion, and proctoring

Although a great deal of time is required to prepare required paperwork and then create the certificates, John placed certificates in the hands of most of the first year students, particularly those who may not be returning for second year. This is also an indicator used for Perkins funding.

Continuing forward, is seems to make sense to include all second year students for certificates as well as first year for simple data (who received one who did not) and to maintain access to Perkins funding.

Student ASE testing will provide continent-wide industry certification. The ASE certifications do have an expiration, however.

Annual Assessment
Aviation
Year 2015-2016

| DEPARTMENT | OUTCOMES | TOOLS TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| Commercial Pilot-1 | Aviation students will have 90\% pass rates on FAA Flight Checks. | Flight information on computer and in written records | 90\% pass rate on FAA Flight Checks <br> 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 | 95\% pass rate on the FAA Knowledge Tests <br> 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 <br> Gauge student knowledge of the Aviation Program's expectations and formulate solutions for positive outcomes. |


|  |  |  |  |
| :---: | :--- | :--- | :--- |
| DEPARTMENT | OUTCOMES | TOOLS TO <br> COLLECT DATA | RESULTS |

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 9 AMT students that completed all three of the FAA exams, one student failed one of the three FAA written exams and two students failed Oral and Practical exams. All three students came back and successfully completed all FAA required Written, Oral and Practical Exams

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 10 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 AMT program operates under the guidance and surveillance of the Federal Aviation Administration and is required to follow an FAA approved curriculum manual.

The AMT program developed a competency based, 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 and student success continues to be one of our biggest concerns this academic year.

## Annual Assessment

Department: Biology
Year: 2015-2016

| DEPARTMENT/ course | OUTCOMES (Include related Gen Ed Outcome If Any) | TOOLS USED <br> TO COLLECT DATA | 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 <br> Student <br> Assessment <br> Survey collected at quarter's end in BIOL\& 241 and BIOL\& 260 | 97\% 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 - 2 | $75 \%$ 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. | 80.9\% of students 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, 100 \% repeated or received below a 2.5 in BIOL\& 211.) $100 \%$ of students who successfully completed BIOL\& 211 at BBCC with a 2.5 or better, without repeating, also successfully completed BIOL\& 241 or BIOL\& 260. |
| Biology - 3 | 75\% of students enrolled in Biology courses will achieve selected General Education Outcomes. | Selected assignments/ tests in selected biology courses. | 14 classes were evaluated; 81.6\% of students achieved selected outcomes. |
| Biology - 4 | 75\% of students enrolled in Biology courses will achieve selected Student Learning Outcomes. | Selected assignments/ tests in selected biology courses. | 5 assignments or tests were evaluated; 79.2\% of students achieved the stated student learning outcomes. |

## Biology Department Annual Assessment 2015-2016 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 apace 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 2014-2015 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, "75\% of students in BIOL\&241 or BIOL\&260 who successfully completed BIOL\&211 at BBCC, receiving a grade point of 2.0 or better, will successfully complete BIOL\&241 or BIOL\&260 (with a 2.0 grade point or better)" 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. $97 \%$ 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, $80.9 \%$ of students with BIOL\&211 grades of 2.0 or more were successful in their next biology course, BIOL\&241 or BIOL\&260.

Of the students that did not succeed in a higher level course, $44.4 \%$ had achieved a 2.4 or less in BIOL\&211, the prerequisite course, and $88.9 \%$ repeated BIOL\&211 to earn the required 2.0 or above. These percentages accounted together represent $100 \%$ of the unsuccessful students in BIOL\&241 or 260 that also took BIOL\&211. These students clearly struggled in BIOL\&211, continuing to struggle even when they repeated the course. Looking further at the successful students, $100 \%$ 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.
This year, the percentage of BIOL\&211 successful students that were successful in BIOL\&241 or 260 increased. We raised the percentage required to receive a 2.0 and we were able to have SI for all sections of BIOL\&211. We have stressed the need to exceed the minimum prerequisite grade for the subsequent biology courses.
Our challenge has been the success rates in BIOL\&211. It is clear from reviewing the specifics of the students unsuccessful in BIOL\&241 or 260 that repeating BIOL\&211 is not a great strategy for success. Students come into BIOL\&211 with their chemistry prerequisite but have little or no biology background for this upper level biology course. For many, this lack of biology background sets them up to fail. In the spring of this year, we changed the MCO to require a biology course, BIOL\&100 or BIOL 104, as a prerequisite. This becomes fully effective Winter Quarter 2017. We are hoping that the success rates will improve with the added biology preparation.

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. Fourteen classes were evaluated and $81.6 \%$ of students achieved the criteria.

Student groups in three sections of BIOL\& 211 were evaluated for General Education Criteria: 3f, Follow directions and fulfill the expectations of the assignment. $76.5 \%$ of the student lab groups achieved the selected criteria. It should be noted that this lab, Lab 6, Enzyme Activity in the Mitochondria, is one of the most difficult and detail-oriented labs; lab data clearly reflects when students did not follow all lab protocols.
Students in eight sections of BIOL\& 100 were evaluated for General Education Criteria: 3f, Follow directions and fulfill the expectations of the assignment. $84.7 \%$ of the students achieved the selected criteria.
BIOL\& 242 was evaluated for the General Education Criteria: 3a.-f. Solve problems combining and applying knowledge from multiple sources; 4d. Make comparisons and draw contrasts and 4d Access multiple sources of information. An average of $79 \%$ of students in two sections of BIOL\& 242 achieved these selected criteria using a lab report on Respiratory System Mechanics as the selected assignment.
BIOL\& 260 was evaluated for Gen Ed Outcomes 3c. Draw logical conclusions, 3e. Recognize extraneous information; 3 . Follow directions and fulfill the expectations of the assignment; and 4d. Access multiple sources of information. $77 \%$ of students in BIOL\& 260 achieved these selected criteria using a lab report on throat cultures as the selected assignment.
Biology Outcome 4, "75\% of students enrolled in Biology courses will achieve selected Student Learning Outcomes." Five assignments or exams were evaluated within BIOL\& 100 and BIOL\& 241 classes and $79.2 \%$ of students achieved the criteria.

Students in three sections of BIOL\& 100 were evaluated for selected Student Learning Outcomes: 3 and 6 which are "Define what a cell is and describe cell structure and membrane structure," and "List the events that occur during each phase of mitosis," respectively. 74.5\% achieved Learning Outcome 3 and $84.3 \%$ achieved Learning Outcome 6 based on scores from final exams. Follow directions and fulfill the expectations of the assignment. $84.7 \%$ of the students achieved the selected criteria.
Biology 241 students were evaluated on the course objective to "demonstrate a detailed understanding of cell chemistry and metabolism, and their relationship to health and disease". Students averaged $79 \%$ on questions pertaining to this objective on their final exam.

## Annual Assessment

Department: Business Information Management
Year: 2015-2016

| DEPT | COURSE/STUDENT OUTCOME | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| BIM-1 | Lab course grades 15/16 will remain level or improve over lab course grades 14/15 | Grades 14/15 and 15/16 | The overall average remains level <br> 15/16 Average: 3.39 <br> 14/15 Average: 3.42 <br> 13/14 Average: 3.40 |
| BIM-2 | The percentage of credits completed will improve in the lab courses | Grades 14/15 and 15-16 | The percentage of credits completed did not improve. <br> 15/16: Students successfully completed $79 \%$ of credits registered <br> 14/15: Students successfully completed $81 \%$ of credits registered <br> 13/14: Students successfully completed <br> 74\% of credits registered (12/13: 78\%) |
| BIM-3 | All students starting and completing BIM280 modules will pass the MOS exams. | Grades \& MOS exam results | F15: 60\% (3 of 5) students earned a 2.0 or better (3.7 Avg). <br> W16: 58\% (7 of 12) students earned a 2.0 or better (3.0 Avg). <br> Sp16: 71\% (5 of 7) students earned a 2.0 or better (3.7 Avg). <br> $63 \%$ of 24 attempts for the year were successful |
| BIM-4 | Set baseline for student satisfaction in 15-16 for use in subsequent year. | Canvas evaluations tools and anonymous class surveys | Satisfaction scores averaged 3.35 from Canvas Surveys in all categories for all three quarters with 277 ( $\sim 47 \%$ ) of the students responding. <br> Surveys were for all sections of BIM 101, $104,110,111,112$, and 130. |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

BIM-1: The minimum competency for all BIM Lab courses increased from 1.5 to 2.0 beginning Fall13. Additionally, students had only four, rather than six, testing attempts to meet the course competency (with the exception of the keyboarding skill-based courses). It was expected that the changes will result in higher grades for all lab courses.

This is the third year we have measured this and the changes in the minimum competency for course completion does not appear to have an impact on the overall course grades.

We will replace this outcome with a new metric for the 16/17 year as this outcome is not helping us to improve or change the program in any way.

## BIM-2:

BIM 101 completion rates were $82 \%$ which is higher than the overall class completion rate of $79 \%$. There does not appear to be a reason why we would continue to single out BIM 101 in the future. However, it does indicate that BIM 101 should remain as a variable credit course.

This number has been relatively flat now for about 8 years with some anomalies here and there. It is apparent that we need to explore new ways to get this number to improve. In the Fall of 2016, BIM will begin a Cohort Program. To date, there are not enough students to impact the numbers; but, we may be able to use the cohort as a control group to see if the more focused advising/support will help.

BIM will hopefully be fully staffed in the 16/17 academic year, Ryan Duvall will be the new fulltime instructor; we are hopeful that with a full staff and some new ideas, the program numbers can be improved.

BIM-3: The outcome was not met for the 15/16 academic year. The outcome may never be met as the goal is $100 \%$. However, the number of tests and percentage of passing scores increased dramatically.

This is at least in part because the BIM 180 and 280 projects were changed late in 14/15 to reflect a more "MOS-like" assessment. MOS test processes changed and we were not aware of it until students began to test in 14/15. 15/16 was the first full year of the new assessments. We believe this prepared the students better. Many of the students who failed took BIM 180 prior to the new project/assessments.

| Academic Year | Percentage Of <br> Passing Scores | Number of <br> Attempts |
| :--- | ---: | ---: |
| $14 / 15$ | 40 | 10 |
| $15 / 16$ | 63 | 24 |

For the 16/17 academic year, we are going to take advantage of the Microsoft Imagine Academy to provide better support for the students in preparing for the MOS Exams. We should aim for another 25 percentage points. All of the students who take the MOS Exams this coming year will have been exposed to the new assessments unless we have a returning student who attended prior to 14/15.

BIM-4: Surveys were administered using the EvaluationKit in Canvas for all sections of BIM 101, 104, 110, 111, 112, and 130. This combination of courses is representative of the various types of courses we present with the exception of the higher-level project courses. We will
continue to use this set of courses throughout 16/17 and may add another set of classes as a baseline for the project classes.

The survey also includes comments, so we will use those comments to see if we can get information that will help us improve these scores. The baseline is set at 3.35. An interesting note is that the number of responses increased throughout the year, but the percentage fell. I hope we can drive a greater than 47\% participation rate.

| Quarter | Average <br> Scores | Number of <br> Responses | Class Roster <br> Count | Percentage |
| :--- | ---: | ---: | ---: | ---: |
| Fall 15 | 3.43 | 37 | 73 | 50.7 |
| Winter 16 | 3.33 | 42 | 88 | 47.7 |
| Spring 16 | 3.39 | 49 | 116 | 42.2 |

## Annual Assessment

Department: Chemistry
Year: 2015-2016

| DEPARTMENT/ COURSE | OUTCOMES (Include related Gen Ed Outcome - If Any) | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \hline \text { Chemistry } \\ & \text { 161/162/163 } \end{aligned}$ | Class median on the American Chemical Society General Chemistry Examination will be at or above the national $50^{\text {th }}$ 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 class median was a $36 / 75$, compared to the National $50^{\text {th }}$ percentile, which was 42.3/75. |
| Chemistry 121 | 65\% of students will have a combined score of 3 (proficient) or better <br> Gen Ed Outcomes 3b, 3e, 3 f | Selected question(s) from the Winter quarter final exam will be evaluated on a 4 point scale relating to selected criteria from the Problem Solving General Education Outcomes | 22 out of 46 students (or 48\%) received a 3 or better on a question from the final that measured 3b: Breaking a problem into steps |
| Chemistry 105 | 65\% of students will demonstrate proficiency in clarity of ideas (1a) and sound support of assertions (1c) | Selected discussion posting(s) from Winter quarter will be evaluated on a 4 point scale relating to the Write Clearly and Effectively General Education Outcomes | 24 out of 27 <br> student posts demonstrated proficiency in clarity of ideas, but only 7 out of 27 demonstrated sound support of assertions |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

## For CHEM 161/162/163:

Description of the ACS exam:
The American Chemical Society General Chemistry Examination is the national standard used by more schools in the United States 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:
The class median was 36 out of 75 . We had decided to use the median instead of the average a couple years ago to give a clearer picture of class performance. When compared, the class average was 37 out of 75 , so it seems like a consistent measure either way. The national average was 42.3 out of 75 , so the results were disappointing. This was my (Lindsay Groce's) first time teaching the series, so I know that part of what the data show is my inexperience with the material/class. Next year, I will be teaching the courses again and it will be interesting to see how the class performance looks. This is part of the reason we are keeping the assessment for these courses the same - to compare the results with the same instructor teaching it.

## For CHEM 121:

A question was selected from the Winter final exams given across all sections of CHEM 121. It was selected based on the Gen Ed criteria of breaking down a problem into steps. Here is the question selected:

If 34.00 g of iron are reacted with 22.00 g of $\mathrm{O}_{2}$, how many grams of $\mathrm{Fe}_{2} \mathrm{O}_{3}$ actually form according to the equation $4 \mathrm{Fe}+3 \mathrm{O}_{2} \rightarrow 2 \mathrm{Fe}_{2} \mathrm{O}_{3}$ ?

This question is a limiting reactant problem. It requires the student to perform multiple mathematical steps and interpret the results. Looking back on this question and assessing it on a 4-point scale (defining 3 as proficient), $48 \%$ of the students ( 22 out of 46) were at least proficient. Our objective was $65 \%$ of students demonstrating the ability to successfully break a problem into steps and we fell short of that. The results of this have sparked conversations in our department about changing emphasis on these types of problems. The CHEM 121 course is geared toward pre-health studies programs (pre-nursing, pre-dental, etc.), so perhaps shifting the way things are covered and the material emphasized would make the course better for the students and allow them to be more successful.

These conversations at the department level will continue, but we also need to plan for a new faculty member as one of our two-member department is retiring this year. This has the potential to change many things, so we decided to stick with the same plan as last year for this year, as well. We also intend to track small changes that we make throughout the year and report on their impacts on student success. We have an associate/part-time faculty member with our department this year and we want to work on assessing courses like 121 that are being taught now by 2 different faculty members. The goal of this assessment is consistency in our offerings and ensuring that students taking the same course are coming out with the same objectives met.

## For CHEM 105:

We chose to assess the discussion board on Genetically Modified Organisms (GMOs) looking at the Gen Ed outcomes of Clarity of Ideas (1a) and Sound Support of Assertions (1c). Last year's assessment looked at these same criteria and we concluded that it was challenging to assess because it was so subjective and that we would reevaluate this year as to whether it felt worthwhile to continue looking at this for future assessments.

This year, we used the same rubric:

## STUDENTS WILL BE ABLE TO COMMUNICATE CLEARLY AND EFFECTIVELY

| Performance | Exemplary | Proficient | Developing | Emerging | Score | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Demonstrat es Clarity of Ideas | Introduction, development and condusion are exceptional. Paragraphing, transitions, and other aspects of structure are dear and appropriate | Introduction, development and condusion are adequate. Paragraphs/transitions contain no errors in structure. Paragraphs and other aspects of structure develop a single idea and do so thoroughly. | Introduction, development and condusion need improvement. Paragraph structure/transitions show noticeable problem s. Paragraphs/sub-topics have a topic, but wander. | Introduction, development and condusion are inadequate. <br> Paragraph <br> structure/transitions/sub-topics are hard to follow. Paragraphs/sub topics have no solid topic. |  |  |
| Shows <br> Sound <br> Support of <br> Assertions | Topic is covered thoroughly, with assertions that are creative and dearly supported. Supporting evidence is dearly related to assertion and carefully explicated. | Topic is covered adequately, with limited attention to the support of assertions. Supporting evidence is marginally connected to assertion and explication seems incomplete. | Topic is not adequately covered, and assertions seem incomplete or obliquely related. Supporting evidence seems disconnected from assertions and is inadequately explicated. | Topic is not covered at all, and assertions are unrelated to topic. NO supporting evidence, or ineffective use of evidence. Little or no explication of examples. |  |  |

We found that 24 out of 27 student posts showed proficiency in Clarity of Ideas. We found that only 7 out of 27 students showed proficiency in Sound Support of Assertions. The high percentage (89\%) of students proficient in Clarity of Ideas is consistent with what we found last year ( $85 \%$ ). The difference in what we did this year was to assess each objective separately. The combination of the two objectives allowed for a better looking average, but separating out the two shows a deficiency in supporting claims. These data are being used this year to make some changes to the way the assignment is presented. This year, more of an emphasis is being placed on supporting claims with sources and making sure to cite where information comes from. This was always an expectation in past years, but was made more explicit this year. We will look at both of these criteria next year to see if changing the way the assignment was presented had a significant impact on that percent proficiency (this year's: 26\%) in Sound Support of Assertions.

Year: 2015-2016

| DEPARTMENT/ COURSE | OUTCOMES <br> (Include related Gen Ed Outcome If Any) | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| CDL | Instruction will prepare them for an entry-level employment in the transportation industry. | - CDL <br> former <br> student survey | - Survey shows that our instruction is adequate for entry-level employment. |
| CDL | Equipment is adequate in the program | - CDL <br> former <br> student <br> survey <br> - Repair expense data per equipment | - Survey shows that student's feel our equipment is starting to get out dated for what is being used in today's industry. <br> - Expense records indicate that our older trucks are breaking down more and will need to be replaced. |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

Annual Assessment
Department: Communications
Year: 2015-16

| COURSE | OUTCOMES | TOOLS USED TO COLLECT DATA | DESIRED RESULTS | ACTUAL RESULTS |
| :---: | :---: | :---: | :---: | :---: |
| CMST\&220 | Basic Public Speaking Skills: <br> 1. Choice of Topic <br> 2. Strong Introduction <br> 3. Organization, Clarity, Transitions <br> 4. Development and support of main points. <br> 5. Adapting material to the audience. <br> 6. Effective use of eye contact. <br> 7. Effective use of body language. <br> 8. Vocal Projection <br> 9. Strong Conclusion <br> 10. Effective use of visual aids. | Speech <br> Evaluation forms from Instructor. <br> Speech Evaluation from students. | $90 \%$ of the students will achieve a score of $80 \%$ or higher on 8 of the 10 basic public speaking skills. <br> $80 \%$ of the Students will achieve a score of $87 \%$ or higher on one of their three main speeches as scored by the instructor. <br> $80 \%$ of the Students will achieve an overall score of $87 \%$ or higher on one of their three main speeches as scored by their peers. | $100 \%$ of the students achieved a score of $80 \%$ or higher on 8 of the 10 basic public speaking skills. <br> 93.5\% (43-46) of the students achieved a score of $87 \%$ or higher on one of their three main speeches. <br> 97.8 (45-46) of the students achieved a score of $87 \%$ or higher on one of their three main speeches as scored by their peers. |

## Annual Assessment

Department: Computer Science
Year: 2015-2016

| DEPARTMENT/ course | OUTCOMES (Include related Gen Ed Outcome - If Any) | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| Computer Science Program Goal | 90\% of students enrolled in Computer Science courses express satisfaction of quality of instruction and instructional strategies and delivery modalities <br> (TV objective 8b) | Quarterly Student Survey | Forgot to administer the survey |
| CS 111 Intro to Programming | Upon completion of the course, 75\% of students will demonstrate the ability to create a computer program using variables, selection structures, loops, arithmetic computations, and modularity. A score of $80 \%$ or higher will be considered adequate demonstration. (SLO,PO) | Final Exam | 11/27 = 41\% passed the final exam with an $80 \%$ or higher. This is the combined data from Fall 2015 and Spring 2016. |
| CS 104 Intro to Computer Hardware | At least 70\% of students pass an A+ certification practice test with a score of $80 \%$ or higher. (PO) | Certification Practice Exam | Didn't teach this class during the 15-16 school year |

Program Goal: Forgot to do the surveys during the school year. Mary Shannon had previously done them, and I just completely forgot about these assessment goals during the school year.

Intro to Programming: The students were assessed in their Final Exams where they had to demonstrate the ability to write a computer program with the features listed above. Their performance was graded by the instructor. If we consider an $80 \%$ as success, then this goal was not met. The course was taught twice, during Fall 2015 and Spring 2016. Only $41 \%$ of students passed the assessment with an $80 \%$ or greater, which is down from the year before. Not sure what happened, perhaps I made the exam too difficult. We did have SI leaders helping out, which did help some. Now What? Not really sure what to do about this one.

Intro to Computer Hardware: Didn't teach this course during the school year.

## Annual Assessment

Department: Counseling Center
Year: 2015-2016

| DEPARTMENT/ |
| :--- | :--- | :---: | :---: |
| COURSE |$\quad$| OUTCOMES (Include |
| :--- |
| related Gen Ed |
| Outcome - If Any) |$\quad$| TOOLS USED TO |
| :---: |
| COLLECT DATA |$\quad$ RESULTS

A brief questionnaire was administered to students who received advising in the counseling center during the following dates: May 9, 2016 - May 20, 2016. Students were asked 8 questions specific to advising. 102 students were surveyed.

1. I was greeted in a courteous and professional manner today in the Counseling Center. 85 Strongly Agree, 16 agree, 1 strongly Disagree
2. Did you have a scheduled advising appointment today?

79 Yes, 23 No (dropped in)
3. Reason for your appointment today (students selected from several options)
a. Admissions Information - 14
b. Transfer Degree Information - 17
c. Professional Technical Program Info. - 2
d. Discuss my Education Plan - 45
e. Education plan needed for financial aid -5
f. Block on my registration -7
g. Help with registering for classes -5
h. Adding/Dropping a class -9
i. Campus referral - 0
j. Counseling - 2
k. Other: (class code, get pin, missed their appt., running start questions) - 5
I. Intended area of study: Welding -1, Ecology -1, Criminal Justice -1, Nursing-4, Business -1, Teaching -2, AA - 5, Aviation - 1, DTA -6, Music -1, Computer Science -1, Biology -1,
m. Program: Running Start -3, Aviation -2, Nursing -5, Software Development -1, Medical Assistant -1.
4. What best describes your educational plans (Check One):
a. I am interested in completing a transfer degree with plans to transfer to a university. -73
b. I am interested in completing a professional technical degree with plans to seek employment. - 17
c. I am undecided which degree to pursue at this time.-13
d. Other: 1
5. How many credits have you completed (Check one)?
a. 0 to $10-0$
b. 1 to $30-46$
c. 30 to $60-24$
d. 60 to $90-16$
e. 90 or more -4
6. Is the person you met with today your assigned advisor?
a. Yes -54
b. No - 46
7. Advisor was knowledgeable about the degree I am pursing at BBCC.
a. Yes -99
b. No - 3
8. As a result of the advising appointment today I am more knowledgeable about my educational plan at BBCC.
a. Yes -100
b. No - 1

Other Comments:

- Feeling confident about my educational career now, thanks.
- For new students: Make a list of essential information like FAID, GPA, ETC.
- They were so nice, helpful, and looked for possible solution to my problem.
- I am truly grateful for the advisor to have the time to meet me and help me with my situation.
- So simple. I over thought this process and you guys made everything happen. Thanks, Jaime!
- She was great.
- You guys are very helpful. Thank You!
- MariAnne is awesome.
- I enjoyed my appointment. The counselor was very helpful.
- Maria Anita Zavala is the best counselor I ever met. She helps me with love, she is the kindest person and she always finds the right things to provide me better service. I would never change my advisor. Thank you Maria Anita.
- Excellent help. Very Friendly.
- Very helpful, makes me feel welcomed and excited for my future.
- My counselor Mari Anne was very informative and greatly answered all my questions.
- Jaime is great.


## Annual Assessment

Department: Criminal Justice
Year: 2015-2016

| COURSE | COURSE/STUDENT OUTCOME | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| CJ 220 | $75 \%$ of students will be able to design a prison so that it appropriately manages offenders and reflects understanding of current correctional issues. | CJ 220 Prison Project | $82 \%$ of students got a 2.0 or better on the project of those who turned something in. |
| DEGREE OUTCOME | GEN ED OUTCOMES (3d, 4a, 4d): 3.d. Generate multiple and diverse perspectives in trying to solve the problem, 4.a. Distinguish between well-supported and unsupported claims, 4.d. Access multiple sources of information |  |  |
| MULTI YEAR TREND | 15-16: 82\% of students were able to accomplish this goal. <br> 14-15: 88\% of students were able to accomplish the goal. <br> 13-14: 83\% of students were able to accomplish the goal. |  |  |
| CJ 101 | $75 \%$ of students will be able to identify the organizations and agencies making up the Criminal Justice System and how they work together. | Case Study Project and Instructor generated exams | $88 \%$ of students who completed the project did so with a 2.0 or better. $84 \%$ of students were able to successfully pass exams with a 2.0 or better. |
| DEGREE OUTCOME | GEN ED OUTCOME (4): 4. Students will be able to gather and interpret information. |  |  |
| $\begin{aligned} & \text { MULTI } \\ & \text { YEAR } \\ & \text { TREND } \end{aligned}$ | 15-16: $90 \%$ of students were able to identify the organizations and agencies of the CJ system through project completion. Only $84 \%$ were able on exams to achieve that 2.0 status. <br> 14-15: $88 \%$ of students were able to identify the organizations and agencies of the CJ system. $82 \%$ were able on exams to achieve that 2.0 status. <br> 13-14: 89\% of students were able to identify the organizations and agencies of the CJ system through project completion. Only $66 \%$ were able on exams to achieve that 2.0 status. |  |  |

## Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

CJ 220: The main project in CJ 220 is for students to design a prison. One group design's a men's prison and one group designs a women's prison. All of the discussion board assignments throughout the quarter feed into data collection for this final project as well as their own additional research. For the Spring 2016 quarter, for the first time, I had two separate and distinct sections (Online vs. Ground). Each section was designated as a group for ease. The challenge with group work online is to find a way for people to communicate easily and still work together on a project. This is difficult to do. By creating a standardized template for the project the process was easier. However there was still problems with getting people started and setting up a discussion board for them to chat. I realized I need to make clearer instructions and assign parts to students. Also, because the online section was larger than the ground section, the workload division wasn't equal. I'm not sure how to remedy this but need to be able to modify the project so that the work is equal. Overall, the students were still successful on reaching their goal of completion.

CJ 101: In Fall 2104 several changes were made to the Intro to CJ courses. First, the Duncan project underwent major revision. The project was streamlined and all extra credit was removed. Over a 3 year period, students performed consistently on this project both before and after the changes. I think the revisions have stream-lined the project for students and for the instructors and have made the impact of the project on their learning more noticeable. Anecdotally, we hear students continuing they discuss the Duncan case in their other CJ classes in detail and carry that one case as an example in their other coursework.

Second, there was a new textbook used as well as a change to course delivery in Fall 2014. All sections of CJ 101 were flipped with mini lectures on content watched at home by students and class time was for lecture review and discussion about the chapter topics or current events. This flipped model was more enjoyable for students and for the faculty teaching the course. Further the performance on the exams seems to have improved each quarter and improved dramatically from the pre-flip to post-flip. Overall grades improved for the course as well from 3.13 (Fall 2013) to 3.56 (Fall 2015), with 3.31 (Fall 2014) falling in line with the upward trend.

Annual Assessment
Department: Early Childhood Education
Year: 2015-2016

| DEPARTMENT/ course | OUTCOMES (Include related Gen Ed Outcome - If Any) | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| Early Childhood Education | Fill at least one out of two vacancies on ECE Advisory Committee with members from industry. (PO) | Asked members to recruit at ECE advisory committee meeting on 10/22/15. <br> Also, sent out emails inviting other industry members to participate. | Filled vacancy with Angela Weber, BBCC LC Child Care Center Manager. <br> Also, had representation from Child Care Aware, DEL, MLSD, Inspire Development Centers and FSGC throughout year. |
|  | Students seeking their Initial Certificate will have the necessary skills to pass their state-wide credential on the first try. (SLO) | Institutional Research data | 41 students successfully completed their Initial Certificate in 15-16. |
|  | At least 50\% of students who complete their Initial Certificate and/or an AAS degree in 15-16 will obtain a job in the industry. (PO) | Contacted industry partners to confirm employment | Of the 21 students who completed their Initial Certificates in 15-16, 19 were either already employed, or became employed after they completed their certificate ( $90 \%$ employment rate). <br> Of the 14 students who completed their AAS in ECE degrees, all 14 were either already employed, or become employed after they completed their degree ( $100 \%$ employment rate). |

## Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

1. Our ECE advisory committee has solid representation from the industry. We have had anywhere from 6-8 members attend meetings on a regular basis. They provide feedback on curriculum, share what projects their agencies are working on, community events, and program wants and/or needs. Although we have solid representation from employers, I would like to get a student back on the committee next year. I think student input is extremely valuable when determining what decisions need to be made for our program.
2. We almost tripled the number of students who completed their Initial Certificate this year, from last year (14 completions in 15-16). For some, they needed this credential in order to apply for a position as an infant/toddler or preschool teacher. For others, they needed this credential in order to sustain their current position. We received a request from Child Care Aware and DEL to offer the Initial Certificate in Spanish to family home providers, who needed this credential to meet the education WAC by March 2017. We partnered with OSD and Othello Hospital to offer classes in the evenings and on the weekends to accommodate students' work and family schedules. We had 18 students complete this credential in spring.

We plan to offer another cohort in fall and winter to respond to our industry's need.
3. Many of our industry partners contact me with job openings. I post these in my ECE advising course, which is beneficial to both employers, and our students. Because we prepare our students to meet minimum licensing requirements within the first quarter they are enrolled in the program, they are prepared for employment as soon as they complete their Initial Certificate. I encourage all of my students to obtain not only this credential, but the others we offer as well. The more credentials they have under their belt, the more job opportunities they have!

## Annual Assessment

Department: English
Year: 2015-2016

| DEPARTMENT/ COURSE | OUTCOMES (Include related Gen Ed Outcome - If Any) | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| English 101 and 102 | Create a standardized test, administered on Canvas, which asks students to develop an opening paragraph strategy which includes a strong argumentative thesis which addresses controversial aspects of a topic. | Research into tests being used in other schools. <br> Departmental collaboration on assignment design. | We were unable to achieve this goal. We are looking into quicker, more efficient ways of scoring individual samples. |
| English 101 and 102 | Create a standardized test, administered on Canvas, which asks students to apply quotation/citation strategies effectively within a paragraph. | Research into tests being used in other schools. <br> Departmental collaboration on assignment design. | We were unable to achieve this goal. We are looking into quicker, more efficient ways of scoring individual samples. |
| English 101 | Evaluate students' ability to write paragraphs which demonstrate: Structure and Clarity of Ideas/ Mechanics, Citation and Professional Communication/ Voice and Tone. (All taken from Gen Ed communication rubric. | Paragraphs based on a standardized assignment to be developed this year. | We were unable to achieve this goal. We are looking into quicker, more efficient ways of scoring individual samples. |
| English 102 | Evaluate students' ability to write paragraphs which demonstrate: Structure and Clarity of Ideas/ Mechanics, Citation and Professional Communication/ Voice and Tone. (All taken from Gen Ed communication rubric. | Paragraphs based on a standardized assignment to be developed this year. | We were unable to achieve this goal. We are looking into quicker, more efficient ways of scoring individual samples. |

This year, the English Department set out to establish a standardized test which could be used by any instructor in the English Department to assess student progress. We looked through numerous models, with a view toward licensing a test which assessed the exit skills that we find
most important in 101. We did this because the portfolio system that we had been using was deemed to have vague, somewhat subjective results and was very time-consuming to administer.

After working on this, we determined three major things:

1) There is no existing test which will suit our needs.
2) While we made great progress toward defining outcomes and describing possible test questions, we also found that designing and implementing a test bank was far more than any of us (or all of us) can take on at this point.
3) We would benefit from a new approach to assessment.

Steve has led the assessment process in English for ten years, and will be passing leadership on to Allison Palumbo. Allison will work with us to design new ways of assessing our classes.

Over the past two weeks, we have also determined something that must be addressed in assessment of English 101: the fact that the people we have traditionally assessed (ENGL instructors) are not the only ones giving students credit for English 101. The Academic Support Department has been awarding select students ENGL 101 credit based on portfolio evaluation, and Adult Basic Education is planning to implement a course which allows students in ABE classes to receive credit for ENGL 101. It's clear that assessing our own instructors is only part of the task of assessing ENGL 101.

We have attached a draft of a "Memorandum of Understanding" which addresses the issue of credits in our Department being awarded by instructors who are not part of our assessment process. The Memorandum explains basic standards and assessment methods that are to be used in any instance where a student in a class other than ENGL 101 seeks credit for ENGL 101.

## Memorandum of Understanding

This memorandum has been developed by the English Department as a means of establishing measurable exit skills and standards for any student who wishes to receive ENGL 101 credit without taking the class.

- All materials submitted by students seeking ENGL 101 credit must be reviewed by a tenured or tenure-track English instructor, who will make the final determination of whether ENGL 101 standards have been met. No other instructor or administrator may grant ENGL 101 credit.
- Materials will be reviewed by one English instructor. If that instructor determines that the material is acceptable, approval will be granted. If that instructor deems the material unacceptable, it will be passed to a second English instructor who will also review it. If both find it unacceptable, approval will be denied. If the second instructor finds the material acceptable, a third English instructor will make the final determination.
- Materials submitted will consist of a portfolio of at least three essays written for the course and a "capstone" essay which demonstrates the student's proficiency in the argumentative research writing style. The "capstone" essay must have an obvious connection to other material in the portfolio. It can be a revision of a previous essay, an expansion of shorter assignments, or integration of various assignments into a larger work.
- The "capstone" essay will be at least 1000 words and will use at least 5 sources. It will demonstrate the ability to compose an argumentative research essay which shows a
mastery of MLA format, the ability to effectively incorporate secondary sources into the essay, the ability to summarize and respond to secondary sources, and the ability to address the opposition effectively.
- If reviewers determine that the capstone essay is plagiarized, the student will not be considered for ENGL 101 credit and will receive an " F " in the course for which the portfolio was created.
- The English Department will make every effort to complete portfolio review as quickly as possible, but can make no promise that portfolios will be reviewed by the end of the term.

Standards for evaluating the capstone essays will be based on the Smarter Balanced Assessment Rubrics as used in Washington's secondary schools. The rubric will focus on five areas of proficiency, and will specify standards for 101-level proficiency as well as pre-101-level proficiency. A student who is granted 101 credit must show 101-level proficiency in all five areas of proficiency.

## Areas of focus: Topic and Content, Thesis, Focus/Structure, Voice, Quotation/Citation

A student judged to have met the standards for 101 completion will have submitted writing which consistently meets the following standards with no significant errors or deviation from these standards. Each of these is taken from the "Smarter Balanced" standards for $11^{\text {th }}$ grade writers.

| Topic and Content | Thesis | Focus and Structure | Voice | Quotation/ Citation |
| :---: | :---: | :---: | :---: | :---: |
| Shows thorough and convincing support/evidence for the argument(s) and claim that includes the effective use of sources (facts and details). The response clearly and effectively expresses ideas, using precise language. <br> Alternate and opposing argument(s) are clearly acknowledged or addressed. | Claim is introduced and clearly communicat ed. Focus is strongly maintained for the purpose and audience. | Effective introduction and conclusion. Logical progression of ideas from beginning to end. Strong connections between and among ideas with some syntactic variety. Consistent use of a variety of transitional strategies to clarify the relationships between and among ideas. | Vocabulary is clearly appropriate for the audience and purpose. <br> Effective, appropriate style enhances content. <br> Excellent use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling. | Comprehensive evidence (facts and details) from the source material is integrated, relevant, and specific. Clear citations or attribution to source material. Effective use of a variety of elaborative techniques. |
| Yes No | Yes No | Yes No | Yes No | Yes No |

In addition, a student judged to have met the standards for 101 completion will have submitted a capstone essay which demonstrates the following characteristics:

1. A topic, or an approach to a topic, which is nuanced and which avoids clichés. Topic should seem "fresh," balanced, and truly controversial.
2. Clear, respectful engagement and interaction with ideas of other authors.
3. Consistent and rhetorically effective integration of sources beyond simply following MLA rules, with each paragraph adding to the overall goal of the essay rather than simply conveying information.

## Annual Assessment

Department: Foreign Language
Year: 2015-2016

| DEPARTMENT/ course | OUTCOMES (Include related Gen Ed Outcome If Any) | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| Foreign Language | 75\% of Spanish 122 students will demonstrate the ability to translate a section of a $1^{\text {st }}$ year Spanish novel by scoring $75 \%$ or higher on a translation exam. | Instructor generated final exam translation requirement. | 76\% of Spanish 122 students demonstrated the ability to translate a section of a $1^{\text {st }}$ year Spanish novel with a score of $75 \%$ or higher. |
| 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. Gen Ed Outcome 1a, 1b | Instructor generated final exam. | Expected outcome achieved. 95\% of Spanish 121 students demonstrated the ability to write a unique composition in the target language with a score of $85 \%$ or higher. |
| 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." <br> Gen Ed Outcome 5a-d | Instructor generated assessments based on cultural points as presented in the class required text "The Hispanic Way." <br> *changes made to weight of Cultural Knowledge component in final grade computation; reinforcement of importance of cultural knowledge for all students. | 1. 76\% of Spanish 121 students received a score of $75 \%$ or higher on c culture quizzes. <br> 2. $70 \%$ of students enrolled in Spanish 122 received a score of $75 \%$ or higher on culture quizzes. <br> 3. $85 \%$ of students enrolled in Spanish 123 received a score of $75 \%$ or higher on culture quizzes. |


| DEPARTMENT/ <br> COURSE | OUTCOMES (Include <br> related Gen Ed Outcome - <br> If Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |
| Foreign <br> Language | Spanish 123 students will <br> demonstrate recognition of <br> the past tense conjugations <br> of -ar, -er and -ir verbs. | Instructor <br> generated <br> grammar quiz. | 1. 81\% of students <br> scored 85\% or higher <br> on grammar quiz <br> requiring recognition <br> past tense verb <br> conjugations in all <br> Spanish verb groups. |

## Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

Assessment tool \#1 (Translation assignment): 76\% of students met the desired outcome of receiving $75 \%$ or higher on a Translation assignment of a first year Spanish novel. This is slightly lower than in past years. Looking at the averages of four translation assignments it was found that on the first two translation assignments over $90 \%$ of the class received $75 \%$ or higher score. Later assignments showed that a much lower average was achieved by students. It seems likely that as the quarter progressed students were becoming busier and made decisions on which assignments they could afford to spend more time on and still achieve the desired grade. I will be monitoring this scenario during the 2016-2017 year to see if this pattern holds true or if the lower scores were simply an anomaly.

Assessment tool \#4 (Grammar Quiz): This was the first year I have used this assessment. I was unhappy with the wording in the original plan as it did not specify a "successful" score on this assessment. I will be changing plans for 2016-2017 school year to indicate a more specific goal for this assessment. I do however, feel that this quiz demonstrated a successful recognition of Spanish grammar. An average of $81 \%$ of students scored $85 \%$ or higher on the quiz. However, that average was skewed low by 3 significantly lower scores: two of $65 \%$ and one of $32 \%$. In actuality 12 students scored $90 \%$ or higher and 10 students scored between 8089\%.

Annual Assessment
Department: History
Year: 2015-2016

| DEPARTMENT/ COURSE | OUTCOMES (Include related Gen Ed Outcome - If Any) | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| History | $75 \%$ of students will be able to define significant terms and identify the major people in American History from 1500-1865. [4:Gather and interpret information] | Exam scores. <br> Instructorgenerated quizzes based exclusively upon recorded lectures | 83\% of students scored a 2.0 or higher. Goal met. |
| HIST 110 | Students will be able to explain how the counterculture sought to differentiate itself from the mainstream culture. | Research Paper Assignment | 75\% of student assigned write on this paper option received a 2.0 or better for their grade indicating they fully explained all of the required elements of the assignment. |

## Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

In previous years, students have been given weekly quizzes in which the answers could be found in both the recorded lectures and the required textbook. The end result was that many students did not watch the recorded lectures prior to taking the required quiz. This year's assessment will seek to observe whether watching the recorded lectures is truly necessary to attaining a successful grade in the class- 2.0 or higher.

Results:
Significant to the results of the study was the discovery that the ability to track whether students watch the recorded lectures is inaccurate. Canvas provides a student activity log, but it does not track students who use the Canvas app via a cell phone or tablet. Only activity over a desktop or laptop computer is captured. As a result, it is impossible to be certain how many students utilized the recorded lectures versus online searches and textbook mining.

That said, this is the third year of this particular assessment. In prior years, results were: 2013-2014: 85\% of students scored 2.0 or higher;
2014-2015: 82\% of students scored 2.0 or higher.

This year's results were in line with the two previous: $83 \%$ of students scored 2.0 or higher. With these results, we are satisfied we have found a teaching method which encourages student success. This will be the last time this particular assessment is performed.

HIST 110-I assigned a research paper where students explained how their counter-culture topic went against mainstream culture. A research paper was the best tool because it required students to delve deeper into these movement and evaluate how culture changed in the 1960s. Critical thinking was instrumental for students to successful complete this assignment.

The results showed that 15 out of 20 students received a 2.0 or higher. The remaining 5 students just did not turn the assignment in. These results were a success in demonstrating students' ability to think critically and effectively write on the topic. For now I will keep using this tool to assess students ability to explain how the counter-culture sought to differentiate itself from the mainstream culture.

## Annual Assessment

Department: Industrial Systems Technology
Year: 2014-2015

| DEPARTMENT/ course | OUTCOMES (Include related Gen Ed Outcome - If Any) | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| IST | IST students will see value in their education and have a favorable experience in the program (PO) | Data collected and compiled by the Institutional Research Dept. | Success rates for 2014-15 indicate 91.4\% employment rates and equally high retention rates. |
| IST | IST graduates will be able to safely apply sound maintenance procedures to related industrial equipment (SLO, PO) | Successful completion of assigned laboratory exercises | Course by course success rates average 83.6\% as noted from 2014-15 Institutional Research course success rates |
| Department: Industrial Systems Technology Year:2015-2016 |  |  |  |
| IST | Students will be able to troubleshoot and repair simple circuits. | Successful completion of lab exercises with a 2.0 or better | Fall 2015 course records indicate 97\% Lab success rates by grading records |
| IST | Students will demonstrate the value of work ethics | Timely completion of labs and assignments~ by course by course assignments | 92.4\% of IST Students completed or made up assignments on a timely manner . |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

Annual Assessment
Department: Library
Year: 2015-2016

| COURSE | COURSE/STUDENT OUTCOME | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| Library Orientation/ <br> Introduction Class | 1.Students will be introduced to library resources. <br> 2. Students will be able to navigate the library website in general. | 2 question survey monkey quiz, library website forms filled out | 1 - Changed to evaluation kit survey, not many forms filled out. Do better next year. <br> 2 - Library website forms handed back to instructors, general success rate about $90 \%$ pass on average. |
| Library Instruction, research oriented class | 1. Students will be able to use specific library resources related to class assignments.(4d) <br> 2. Students will be able to evaluate, identify, and use internet resources for research purposes. $(4 a, 4 b, 4 d$ ) | 2 question survey monkey quiz, teacher and student feedback | 1 - based solely on personal feedback from instructor to librarian, general success <br> 2 - need to test for this better to evaluate. |
| Library | To assess structures, resources, technology, etc. in the library | Online Evaluation kit survey \& Paper survey in library | Out of 117 responses, 70 said they got what they needed at the library. 58\% come to use computers, $45 \%$ to use study rooms, $53 \%$ to print, + more results found. |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to
collect data; What did you find? = Results; What now? = Use of Results)

## Annual Assessment

Department: Math
Year: 2015-2016

| DEPARTMENT/ <br> COURSE | OUTCOMES (Include related Gen Ed Outcome - If Any) | TOOLS USED TO COLLECT DATA | RESULTS | NARRATIVE |
| :---: | :---: | :---: | :---: | :---: |
| Emporium Math classes <br> Math 094 <br> Math 097 <br> Math 098 <br> Math 099 | Over 70\% of students will successfully complete the Emporium class they enroll in. <br> Gen Ed: <br> 2. Students will be able to reason mathematically | Completion rates | 65\% of students successfully completed the emporium class they enrolled in. This is a 5\% decrease in the success rate for these classes. | The attendance policy for all emporium classes was changed in Fall 16. The previous policy was convoluted and difficult to understand. <br> However, absentee rates increased under this new policy while success rates declined. <br> In 2017-17, we are implementing a different attendance policy. We will evaluate the effectiveness at the end of the year. |
| Math 098 | Over 70\% of students will score $75 \%$ or higher on the unit 10 exam in Math 098 (Factoring) <br> 2. Students will be able to reason mathematically | Unit 10 exam scores | 274 out of 383 <br> students who took the Unit 10 exam, or $71.5 \%$ of students, scored 75\% or higher on this exam. | Factoring had been identified by the department as a skill that students in college level math classes were struggling with. <br> New lectures were recorded for this unit in Math 098, and new content was added to the course. <br> Although success rates on the exam were good, and $81 \%$ of students taking the exam successfully completed the entire unit, instructors note that students still struggle with different methods of factoring trinomials. A recording will be added discussing two specific methods of factoring polynomials and advising students to focus on learning one method rather than trying to switch between the two. We will reevaluate this objective next year. |

**Completion rates for 094, 097, 097 and 099

| Academic <br> Year | Division | CourseID | Course Title | Percent <br> Successful | 2014-15 <br> Success |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2015-16$ | Pre-college Level <br> Math | MATH <br> 094 | INTRODUCTION TO <br> ALGEBRA | $69 \%$ | $70 \%$ |
| $2015-16$ | Pre-college Level <br> Math | MATH <br> 097 | ELEMENTARY <br> ALGEBRA | $100 \%$ | $98 \%$ |
| $2015-16$ | Pre-college Level <br> Math | MATH <br> 098 | INTERMEDIATE <br> ALGEBRA I | $63 \%$ | $71 \%$ |
| $2015-16$ | Pre-college Level <br> Math | MATH <br> 099 | INTERMEDIATE <br> ALGEBRA II | $62 \%$ | $69 \%$ |

## Annual Assessment

Department: Medical Assistant
Year: 2015-2016

| DEPARTMENT/ <br> COURSE | OUTCOMES (Include <br> related Gen Ed Outcome - If <br> Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |
| Medical Assistant | 75\% of Medical Assistant <br> Students that are actively <br> seeking employment, will be <br> employed in the Medical <br> Assistant field six months <br> after completion of the MA <br> program. (PLO) | Survey Monkey <br> sent to students <br> that have <br> completed the MA <br> program | Results as of <br> $12 / 29 / 16:$ <br> $73 \%$ had attained <br> employment with <br> one student <br> pending an <br> interview |
| Medical Assistant | 75\% of students declaring <br> MA as major, pass all <br> required MA courses with a <br> 2.0 or better. <br> MA111,112,113,150,195,197 | IR\&P data | Success <br> percentage of <br> these classes was <br> $85 \%$. |
| HED 121,122,123,119,239 |  |  |  |
| MAP 108 |  |  |  |
| (PLO,CLO, SLO) |  |  |  |$\quad$| (PLI |
| :--- |

The percentage of students that were actively seeking employment upon completion of their externships and were then hired as of 12/29/16 was $73 \%$, with one student that was currently in the interview phase of the hiring process.

The success rate of $85 \%$ for all MA/HED classes, the students declaring MA as their major was very good. As a program, the instructors have been asked to adhere to very similar guidelines in regards to general course expectations. This has proven to be a good method of keeping all students on the same page for expectations such as no late homework accepted, attendance policies, and grading scales. Once the student has been introduced to the policies they are essentially the same throughout the entire MA curriculum. One note on success rates was that HED 119 only had a 64\% success rate. In 2015-2016 we piloted HED 119 as a combined
course that used to be HED 150 and HED 151. We need to look into this further to determine why the number of students completing the course with a 2.0 or above it so low.
$100 \%$ of the students that completed the 198 hours of externship all finished with marks at or well above a 3 (on a scale of 1-5, 5 being excellent). Our program has had high praises from our community partners and the feedback from the sites has been that our students come to their sites very prepared to enter into their externships. Next summer we will be piloting a new procedure for externship evaluation using survey monkey.

The pass rate for the AMT national test is still pending as the students have 1 full year to complete this once they have been granted the state interim certification. We will have more data by August 2017. As of 12/29/16, the pass rate for the 15-16 cohort of 15 students was $86 \%$ (only 7 students have taken the test as of $12 / 29 / 16$ ). In the spring of 2017 , we will be requiring all students to pass the national exam prior to their externship hours. This new requirement is in accordance our advisory committee's wishes.

## Annual Assessment

Department: Music
Year: 2015-2016

| DEPARTMENT/ |
| :---: | :---: | :---: | :---: |
| COURSE | | OUTCOMES (Include related |
| :---: |
| Gen Ed Outcome - If Any) |$\quad$| TOOLS |
| :---: |
| USED TO |
| COLLECT |
| DATA |$\quad$| RESULTS |
| :---: |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

The composer card project lets the student look at the different European cultures of music as it spreads through Europe during the Early, Baroque, Classical, Romantic, and $20^{\text {th }}$ Century Eras. It allows them to use the vocabulary appropriate to the time period as well as identifying musical examples through listening. The cards serve as a study material as well as a handy guide to navigating through all the different types of music they will encounter.

Test \#2 allows the student an opportunity to look at music from all around the world noting the similarities and differences amongst the different cultures all around the world. Through listening questions and written questions, they will be able to see who, what, when, where, and why certain music is created. Questions and answers will be made up of appropriate vocabulary and examples.

## Annual Assessment

Year: 2015-2016

| DEPARTMENT/ <br> COURSE | OUTCOMES (Include <br> related Gen Ed Outcome <br> - If Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |


| DEPARTMENT/ <br> COURSE | OUTCOMES (Include <br> related Gen Ed Outcome <br> - If Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |

## Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; what did you find? = Results; What now? = Use of Results)

~* (Nursing 3) the low score in the nursing graduates rating of the program may be explained by the classroom climate that existed during this academic period (student and faculty in turmoil). Climate resolving as per a pre-graduate survey June 2016 rating overall satisfaction at 4.11 (response rate 100\%).

## Nursing Lecture NUR 110, 120, 130 and NUR 210, 220, 230

Instructors continued to use the Flipped model instruction for both levels. This helped students to be better prepared for the "in class" time, allowing instructors to actively implement different strategies to reinforce concepts. In addition, students are forced into more active critical thinking, a critical skill in nursing. In a traditional teaching model, time restraints would only allow these concepts to be introduced and not reinforced. At the beginning of class, instructors assessed student's preparation through use of pre-lecture quizzes, in order to direct further teaching needs.

Examples of in class activities include:

- White boards: Several boards around the room are frequently used during classroom time to organize information about specific topics and their relationship to nursing care and patient education. After completion, students educated the classroom on those points. This method is helpful as students have a framework from which to ask questions, and often answer them themselves.
- Concept maps: Instructors implement this technique for students to complete either individually on paper or as a group on the white boards. A visual map allows students to better understand the relationships between important data or ideas. As nursing students are challenged to understand complex problems in a patient's condition, organizing information in a logical and visual manner greatly helps them to understand and thus learn in a meaningful way. To further elaborate, students are able to make connections that otherwise were not previously appreciated.
- Patient case scenarios: A particular patient's information is provided to the students, and they are then expected to draw conclusions about the patient's situation and needs.

Students are asked to analyze results of labs and diagnostics and to cluster clinical findings into categories from which they can continue with the nursing process in order to assure the best care of the patient.

- Philosophical chairs: In increasingly diverse health care communities, students are shown the importance of respectfully listening to different viewpoints, enabling them to become better advocates for their patients. This teaching technique includes researching a controversial topic, interpreting and articulating ideas clearly and efficiently. In addition, students are to re-state the opposing view while remaining considerate and professional.
- Competitive group games and quizzing strategies: Material is frequently also reinforced by the use of games such as jeopardy, bingo and quiz tournaments. Students enjoy fun while learning and it allows them to assess their baseline knowledge. Students competing for class points have to provide and explain rationales for their answers and conclusions. Bingo is a good way for students to review medical terminology well.
- Other:
o NCLEX style questions are often presented to the students to help them identify topics of strength or weakness. To succeed in their NCLEX, students need a strong content knowledge foundation, and the ability to use good critical thinking skills. Students use the hand held device (clicker) to record their answers anonymously, then percent that answered correctly is displayed on the board. It allows to identify which topics students struggle more with. The correct answer and rationale is then discussed as a group.
o Use of Venn diagrams (overlapping circles) are helpful for comparing and contrasting two topics. Any shared concepts or characteristics are placed or written on the overlapping area. A good example is Rheumatoid arthritis vs Osteoarthritis.


## Skills labs and Clinical Courses (all levels)

Students come to skill labs prepared with content knowledge. They are presented with a demonstration to a particular skill and then have plenty of time to practice the skill in groups of two. Instructors are able to observe and to provide students with immediate feedback.

Last year, the nursing department got feedback from the advisory committee that some graduate registered nurses lacked written documentation skills in their facilities. The nursing department immediately implemented changes which are demonstrating to be successful. Particularly helpful was the required bedside documentation after a performed skill in skills lab. Also, instructors are reviewing the student's clinical notes while in the clinical setting, providing them with feedback as appropriate. Additionally, another implementation was to add specific assignments related to documentation to each clinical course syllabus. Faculty was able to focus more specifically on evaluating the student's documentation, providing the feedback needed in order to improve it.

The methods and strategies described above not only effectively help students to retain information. They also encourage all students to interact and actively participate, and keep them engaged. These teaching strategies also help facilitate the student's application of nursing theory to higher level of critical thinking which is so necessary for development of nursing
judgment in the clinical setting. Improvement in these skills are reported by staff in the clinical settings.

What now?
The nursing department will continue to implement these and new methods for effective instruction. The use of Simulation in lectures and skills has been very successful! Here they practice through role playing in patient-nurse and nurse-nurse or nurse-doctor interactions which allows them to feel more confident in the clinical areas.

During classroom and skills lab, we will have students practice more with discharge teaching in order to allow students to learn how to apply knowledge to specific situations in the clinical areas.

## Annual Assessment

Department: Philosophy
Year: 2015-2016

| DEPARTMENT/ <br> COURSE | OUTCOMES (Include <br> related Gen Ed Outcome <br> - If Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

## Annual Assessment

Year: 2015-2016

| $\begin{array}{l}\text { DEPARTMENT/ } \\ \text { COURSE }\end{array}$ | $\begin{array}{l}\text { OUTCOMES (Include } \\ \text { related Gen Ed Outcome - } \\ \text { If Any) }\end{array}$ | $\begin{array}{l}\text { TOOLS USED TO } \\ \text { COLLECT DATA }\end{array}$ | RESULTS |
| :--- | :--- | :--- | :--- |\(\left.] \begin{array}{l}Engineering <br>

Physics <br>
(PHYS\& 221)\end{array} $$
\begin{array}{l}\text { Class as a whole will } \\
\text { match the nationwide } \\
\text { average for gains on the } \\
\text { Force Concept Inventory. } \\
\text { Allows for comparison of } \\
\text { BBCC students against } \\
\text { other physics students in } \\
\text { the U.S. }\end{array}
$$ $$
\begin{array}{l}\text { Pre- \& post testing } \\
\text { using the Force } \\
\text { Concept Inventory, a } \\
\text { test widely used in the } \\
\text { physics community in } \\
\text { the U.S. and some } \\
\text { foreign countries. First } \\
\text { Force Concept } \\
\text { Inventory administered } \\
\text { on the first day of class } \\
\text { in PHYS\& 221. Test to } \\
\text { be given again in late } \\
\text { Fall Quarter or early } \\
\text { Winter Quarter. } \\
\text { averaged 27\%. } \\
\text { While this is about } \\
\text { double the national } \\
\text { average of 13\% for } \\
\text { this test, it is quite } \\
\text { low compared to } \\
\text { (The lowest class I } \\
\text { had before this } \\
\text { showed 34\% } \\
\text { normalized gains.) }\end{array}
$$\right\}\)

## Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

I'll address each of the courses separately.

1. In Engineering Physics, the normalized gains (this is the actual gain divided by the possible gain, turned into a percentage) were still good compared to national averages, but were not good compared to what I have had in the past. I'm especially bothered by several students I had who showed no gains whatsoever between the pre-test and the post-test. I intend to use this year's post-test as part of the student's fall quarter grade; I suspect that when the post-test doesn't count students may not take it seriously. I also intend to spend more time on conceptual questions in class, having students work out answers to the questions in groups, then sharing their answers with the class.
2. General Physics. The post-test was given the first week of winter quarter, and I had only four students continue to the second quarter (many more students did well fall quarter, but most of them only wanted one quarter of a lab science, so they did not continue). The small number of students used in these statistics don't tell me much. If and when I teach this class again, I plan to give the post-test at the end of the first quarter of the class rather than the beginning of the second quarter of the class.
3. Physics for Non-Science Majors. This assessment showed about the same results that l've seen in past years. Something I stress in the class is graphing experimental data and finding slopes of those lines, and I'm happy with $80 \%$ of the students in the class being able to do that. Making predictions based on that result is more difficult and abstract; I'd like $75 \%$ of the students to be able to do that, but l've never been able to hit that number. I know from working with the students in labs that they have trouble doing this, and perhaps I'll never hit the 75\% value with students at this level. The unit conversion part of the test is encouraging; I'm very happy with $83 \%$ of a class being able to do these correctly, so I'll continue with what worked last year (available videos, a mid-quarter quiz, and one or two questions on nearly every homework assignment).

## Annual Assessment

Department: Political Science
Year: 2015-2016

| DEPARTMENT/ <br> COURSE | OUTCOMES (Include <br> related Gen Ed Outcome <br> If Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |
| POLS\& 202 <br> (Riley) | Seeking to determine <br> whether required use of <br> practice quizzes as study <br> prep for exams has an <br> impact upon student <br> success | Overall course <br> grades to <br> demonstrate <br> overall results; <br> exams and quizzes <br> to equal the same <br> number of points in <br> the students' <br> overall grades. | Goal met. |

## Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

This is the continuation of a study began in 2014. Students are given weekly quizzes on textbook chapters alongside chapter practice quizzes to be used in preparation for the three exams given during the quarter. In 2014-2015, we saw an increase in student success numbers when practice quizzes were available to students. This year, we hope to demonstrate a sustained increase in order to determine whether this is a best practice.

Results:
In the spring of 2014 with optional practice quizzes, students scored an average 79\% on their exams. The class average grade in the spring of 2014 was $82 \%$. In the fall of 2014, with quizzes required, the average score was $76 \%$. The class average grade in fall 2014 was $77 \%$. Granted, overall course scores involved more than the exams, however, my conclusion is that requiring the quizzes actually has a detriment to overall performance as students may have found themselves with an extra layer of weekly study which taxed their performance in other areas of the course. To determine whether this was the case, in the spring of 2015 I required students complete the weekly chapter quizzes, but did not require exams on top. The average quiz score was $71 \%$ with an average course score of $75 \%$.

As a continuation of the study, in the current academic year, I replicated the previous year's requirements. In the fall, I required weekly quizzes along side of three exams. Students performed along the same lines as the previous fall, averaging $76 \%$ on their quizzes, and $80 \%$ on the exams. In the spring quarter, I reverted back to a format with weekly quizzes and a single comprehensive exam at the conclusion of the course. Student performance plummeted with average score of $69 \%$ on the quizzes and $71 \%$ on the exam.

When polled at the end of the spring quarter, the students responded that the majority of students did not make use of the practice quizzes, or even open their textbook until the night before the weekly quiz was due.

What this appears to demonstrate is that practice quizzes combined with exams assists with higher course scores overall, whereas the use of a weekly quiz without examinations produces the lowest scores. Having the combination of more frequent exams with the practice quizzes appears to encourage more close study of the material, whereas a single comprehensive exam promotes laziness among the students.

As a result, weekly quizzes, combined with practice quizzes and more frequent exams will be employed for future quarters.

## Annual Assessment

Department: Psychology
Year: 2015-2016

| COURSE | COURSE/STUDENT OUTCOME | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Psychology } \\ & 100 \\ & \text { (Leonard) } \end{aligned}$ | Students will perform as well in a new flipped model class room as students who experienced a more traditional lecture format. | Final exam scores | Overall Ground Fall 15 students performed equally well (91\%) in Ground PSYC 100 to students in Spring 14 (88\%). |
| DEGREE OUTCOME | GEN ED OUTCOMES (3f, 4d): 3.f. Follow directions and fulfill the expectations of the assignment 4.d. Access multiple sources of information |  |  |
| $\begin{aligned} & \hline \text { MULTI } \\ & \text { YEAR } \\ & \text { TREND } \end{aligned}$ | 15-16: 86\% of online and 91\% of ground students were able to accomplish this goal. <br> 14-15: $89 \%$ of online and $83 \%$ of ground students were able to accomplish the goal. <br> 13-14: 83\% of online and $88 \%$ of ground students were able to accomplish the goal. |  |  |

PSYC 100 (Leonard) - All of Ryann Leonard's sections of PSYC 100 were flipped in Fall 2014 with mini lectures on content watched at home by students and class time was for lecture review and discussion about the chapter topics or current events. This flipped model was more enjoyable for students and for the faculty member teaching the course. Further in a three year trend, the performance overall in the course seems to be unaffected by the change in format. Ground and online students seemed to fair equally ( $86 \%$ vs. $88 \%$ ). Initially after the switch ground students were doing worse than online students and it was believed that this was due to the fact that ground students were depending on the in class time for all lecture and were not watching the videos at home. This seems to have improved in this last year. It appears that there was no difference in scores between the two modes of delivery yet the instructor enjoyed the courses and engagement with the students more than in the traditional format.

| Year | Quarter | Online Grade <br> Ave <br> (\% 2.0 or better) | Ground Grade <br> Ave <br> (\% 2.0 or better) | Yearly Average |
| :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 3 - 1 4 ~ ( P r e - F l i p ) ~}$ | Fall 13 | $2.36(66 \%)$ |  |  |
|  | Winter 14 | $3.03(86 \%)$ |  |  |
|  | Spring 14 | $3.29(96 \%)$ | $3.12(88 \%)$ | $\mathbf{2 . 9 5}(\mathbf{8 4 \% )}$ |
| $\mathbf{1 4 - 1 5 ~ ( F l i p ~ F a l l ~}$ | Fall 14 | $3.12(100 \%)$ | $2.94(83 \%)$ |  |
| $\mathbf{1 4 )}$ | Winter 15 | $2.96(86 \%)$ |  |  |
|  | Spring 15 | $2.80(82 \%)$ | $2.95(83 \%)$ | $\mathbf{2 . 9 5 ( 8 8 \% )}$ |
| $\mathbf{1 5 - 1 6}$ | Fall 15 | $2.88(81 \%)$ | $3.23(91 \%)$ |  |
|  | Winter 16 | $3.14(90 \%)$ |  |  |
|  | Spring 16 | $3.16(87 \%)$ |  | $\mathbf{3 . 1 0}(\mathbf{8 7 \% )}$ |
| Overall Average |  | $\mathbf{2 . 9 7}(\mathbf{8 8 \%})$ | $\mathbf{3 . 1 2}(\mathbf{8 6 \% )}$ |  |

## Annual Assessment

Department: Welding
Year: 2015-2016

| DEPARTMENT/ <br> COURSE | OUTCOMES (Include <br> related Gen Ed Outcome <br> - If Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |
| Welding | 75\% of welding students <br> who earned a certificate <br> or a degree or students <br> with 45 credits or more <br> with at least a 2.0 will be <br> employed. | Estimated <br> employment rates <br> SBCTC data | Need to receive data |
| Welding | $75 \%$ of students who <br> elected to take the <br> WABO certification <br> passed the test. | WABO certification <br> data |  |

Narrative: (What did you do \& why? = Outcome; How did you do it? = Tools used to collect data; What did you find? = Results; What now? = Use of Results)

## Part Four: Comprehensive Assessment Program

In the 2016-2017 academic year the Big Bend Community College Assessment Committee is working on developing a more comprehensive program for assessment of student learning at the course, program, and degree level. We are developing a specific program for assessment that will be streamlined and efficient and allow us to "close the loop" in assessment by tying back our outcomes to General Education requirements and Institutional goals. This section includes our new assessment procedures, which show systematic, effective, regular and comprehensive assessment of student course, program, and degree learning outcomes. We are also working on creating a manual that can be provided to faculty as an introduction to our faculty-driven assessment at Big Bend Community College. Below is a discussion of the specific changes we have made to date.

In the Fall and Winter quarters of the 2016-2017 academic year our Assessment Committee has accomplished several tasks. First, we simplified and defined assessment terms for our outcomes. We decided that for our purposes of assessment that Program Outcomes and Degree Outcomes were so similar in how Big Bend Community College operates and advises students that these two items would be equated for assessment. We created definitions for Course Learning Outcomes, Program/Degree Learning Outcomes, and General Education/Related Instruction Outcomes. Second, for our General Education Outcomes we decided to simplify them so they could be fewer in number and more encompassing of the actual work done on campus. We realized through this discussion that the goals of State required Related Instruction (Computation, Communications, and Human Relations) would also be covered by our new General Education Outcomes and we have combined assessment between these two categories into one. Third, we created a schedule for future assessment work and have planned assessment activities and training for both Spring 2017 and Fall 2017. We will be focused on writing better learning outcomes for each department. Fourth, the committee's work has been incorporated into a developing manual that new faculty can use to learn about Big Bend Community College campus assessment. A working draft of this document is presented below.

## Assessment at Big Bend Community College

Welcome to Big Bend Community College. Assessment is part of your job while you are here. What is the purpose? Assessment provides continuous instructional improvement. It needs to be meaningful and not simply a check box activity. When we assess a learning outcome it needs to be connected to a bigger question or initiative. Further, assessment data should be meaningful and inform instructional decisions. Assessment is a part of regular faculty duties and this manual will help explain the process and reasoning behind the documentation of what has been assessed. With assessment we can produce positive change for students on campus. Accreditation standards need to be addressed but effective, regular assessment for the purposes of continuous instructional improvement should also cover accreditation standards.

## Assessment of Student Learning Cycle

At Big Bend Community College we aim to "close the loop" in our assessment. This means we hope to make our assessment meaningful and informative to what we do as educators. We expect to make some change to or draw conclusions about our program/course as a result of our assessment. We may even support or encourage change at an institutional level based on what we discover through assessment. The figure below represents our "Assessment Cycle" and encourages us to ask the question - So what?


You have done your required assessment. SO WHAT?
Besides simply filling in boxes or forms we need to ask what our assessment results mean and whether we need to make changes based on what we learned. Do assessment results suggest you need to make changes to your lesson plans or assignments, course sequences, scope and sequence of your course, pre or co-requisites, placement, support services, how you teach a particular concept, the need for additional learning supports, how to better integrate technology
into your teaching? Do results suggest you need to change your Student Learning Outcomes at a course or program level? Does your MCO still reflect what is being covered in your course? Do results fit in line with Program/Degree, General Education/Related Instruction Outcomes? Do we need to make changes at an institution level?

The above are all relevant questions to ask after your assessment. There may also be others. Overall, if you are showing comprehensive assessment where you draw some conclusion or take a next step based on your findings, then you are likely "closing the loop" and conducting successful assessment.

In the examples below you can see where one department has drawn final conclusions on their assessment cycle and two departments are still working on completing the full assessment cycle "loop".

Annual Assessment
Department: Criminal Justice

| COURSE | COURSE/STUDENT OUTCOME | TOOLS USED TO COLLECT DATA | RESULTS |
| :---: | :---: | :---: | :---: |
| CJ 101 | $75 \%$ of students will be able to identify the organizations and agencies making up the CJ System and how they work together. | Case Study and Instructor generated exams | $88 \%$ of students completed the project with a 2.0 or better. $84 \%$ of students successfully passed exams with a 2.0 or better. |
| DEGREE OUTCOME | GEN ED OUTCOME (4): 4. Students will be able to gather and interpret information. |  |  |
| $\begin{aligned} & \hline \text { MULTI } \\ & \text { YEAR } \\ & \text { TREND } \end{aligned}$ | 15-16: $90 \%$ of students were able to identify the organizations and agencies of the CJ system through project completion. Only $84 \%$ were able to achieve 2.0 on exams. <br> 14-15: $88 \%$ of students were able to identify the organizations and agencies of the CJ system. $82 \%$ were able to achieve 2.0 on exams. <br> 13-14: 89\% of students were able to identify the organizations and agencies of the CJ system through project completion. Only $66 \%$ were able to achieve 2.0 on exams. |  |  |

CJ 101: In Fall 2104 several changes were made to the Intro to CJ courses. First, the Duncan project underwent major revision. The project was streamlined and all extra credit was removed. Over a 3 year period, students performed consistently on this project both before and after the changes. The revisions have stream-lined the project for students and instructors and have made the impact on their learning more noticeable. Anecdotally, we hear students continuing to discuss the Duncan case in their other CJ classes.

Second, there was a new textbook used as well as a change to course delivery in Fall 2014. All sections of CJ 101 were flipped with mini lectures on content watched at home by students and class time was for lecture review and discussion about the chapter topics or current events. This flipped model was more enjoyable for students and for the faculty teaching the course. Further the performance on the exams seems to have improved each quarter and improved dramatically from the pre-flip to post-flip. Overall grades improved for the course as well from 3.13 (Fall 2013), 3.31 (Fall 2014), to 3.56 (Fall 2015).

This example shows a closed assessment cycle with conclusions drawn from their data and course changes implemented.

Annual Assessment
Aviation Maintenance Technology
Year 2015-2016

| DEPARTMENT | OUTCOMES | TOOLS TO <br> COLLECT DATA | RESULTS |
| :---: | :--- | :--- | :---: |
| AMT - 2 | Of all AMT students <br> completing any <br> FAA written exams, <br> what is the subject <br> matter codes that <br> are most frequently <br> missed? | FAA Airmen <br> knowledge test <br> report | Identified 10 areas out of 274 <br> which were missed by more <br> than 60\% of students. |

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 10 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.

This example demonstrates an in process cycle where the next step would likely be to review the 10 areas, make changes to specific curriculum and see if there are improved results after changes are made.

Annual Assessment
Department: Computer Science
Year: 2015-2016

| DEPARTMENT/ <br> COURSE | OUTCOMES (Include related Gen <br> Ed Outcome - If Any) | TOOLS USED TO <br> COLLECT DATA | RESULTS |
| :--- | :--- | :--- | :--- |
| CS 111 Intro to <br> Programming | Upon completion of the course, <br> $75 \%$ of students will demonstrate <br> the ability to create a computer <br> program using variables, selection <br> structures, loops, arithmetic <br> computations, and modularity. A <br> score of 80\% or higher will be | Final Exam | $11 / 27=41 \%$ <br> passed the <br> final exam with <br> considered adequate |
| demonstration. (SLO,PO) |  | $80 \%$ or <br> higher. This is <br> the combined <br> data from Fall <br> 2015 and |  |

Intro to Programming: The students were assessed in their Final Exams where they had to demonstrate the ability to write a computer program with the features listed above. Their performance was graded by the instructor. If we consider an $80 \%$ as success, then this goal was not met. The course was taught twice, during Fall 2015 and Spring 2016. Only $41 \%$ of students passed the assessment with an $80 \%$ or greater, which is down from the year before. Not sure what happened, perhaps I made the exam too difficult. We did have SI leaders helping out, which did help some. Now What? Not really sure what to do about this one.

This example also demonstrates an in process cycle where the next step would likely be to review changes and overall curriculum to see if the material was at the appropriate level for student learning. Perhaps more mini assessments of student learning could occur during the quarter to try to pinpoint difficult material.

## Assessment Definitions

Below are definitions for the accreditation terms that we feel are generalizable across the institution as students complete their education at Big Bend. They are hierarchical and students should complete many course learning outcomes on the way to completing their Program/Degree at Big Bend Community College (AAS, AA\&S, AS-T, etc.). Students should also have encountered all of the five General Education/Related Instruction Outcomes by the time they finish their degree. The specific Course, Program/Degree, and General Education/Related Instruction Outcomes can also be found in Big Bend Community College materials listed below. In each row, the outcomes created should be the same in every place they are required to be listed.

| Type of Outcome | Definition of Student Learning Outcomes | Where they <br> can be found |
| :--- | :--- | :--- |
| Course Learning <br> Outcome | ■ Discrete skills or knowledge that a student will <br> master while taking a specific college course. <br> a A learning outcome is what the student will know or <br> be able to do as a result of taking the course. | MCO, Syllabus |
| Program/Degree <br> Learning Outcome | ■ Broad sets of skills or knowledge that students will <br> be able to show or demonstrate as a result of taking <br> a set of courses and/or completing a <br> degree/credential. <br> - These outcomes are broader, fewer, and perhaps <br> more abstract than individual course outcomes. | MCO, Catalog, <br> Website, <br> Program <br> Materials |
| General <br> Education/ <br> Related Instruction <br> Learning Outcome | Overarching behaviors, knowledge, or skills that <br> students will be able to show or demonstrate after <br> taking BBCC courses in different areas. <br> These outcomes are broad, cross curricular, and <br> embedded in the requirements of the degree. <br> aAS degrees and certificates of 45 credits or more <br> include outcomes in the areas of Human Relations, <br> Communication and Computation. | MCO, Portal, <br> Catalog, <br> Assessment <br> Site, Website, <br> Program <br> Materials |

## General Education/Related Instruction Outcomes

In February 2017 the faculty voted to change our General Education Outcomes. The current General Education Outcomes are listed below. During the outcome revision it was also decided that the General Education Outcomes were general enough that they could also be applied to the Related Instruction Outcome areas of Communication, Computation, and Human Relations. Both Transfer and Workforce Education faculty can benefit from these outcomes and should try to include them on their Course Master Course Outlines (MCOs) where appropriate. On the MCOs they should be listed after Student Learning Outcomes and before the Course Content Outline. The five General Education/Related Instruction Outcomes are listed below:

1. Students will be able to communicate clearly and effectively.
2. Students will be able to reason mathematically.
3. Students will be able to solve problems by gathering, interpreting, combining and/or applying information from multiple sources.
4. Students will be able to recognize or articulate personal/interpersonal aspects of, or connections between, diverse cultural, social, or political contexts.
5. Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills.

Below are two activities that will help you become familiar with our General Education/Related Instruction Outcomes and will help you apply them to your specific courses and department materials.

## General Education/Related Instruction Activity

1) We need to close the assessment loop. Using one course MCO, Syllabus, and assignment try to answer the following questions:
a) Can the outcomes listed in your MCO be linked to any of the proposed General Education Outcomes?
b) Are the course outcomes listed in your MCO provided to your students in your syllabus or any class materials?
c) Look at the assignment(s) you brought. Which course outcomes does your assignment(s) specifically address? (It doesn't have to address all of an outcome if it is a multi-part assignment or task.)
2) Which proposed General Education Outcome(s) could you apply to courses or programs in your department?

## Writing a Good Learning Outcome*

* Modified from "Learning Outcomes: Learning achieved by the end of a course or program" by By Shirley Lesch, George Brown College.
http://liad.gbrownc.on.ca/programs/InsAdult/currlo.htm


## What is meant by Learning Outcomes?

Think for a moment about a course or training session with which you are currently involved. Identify one skill that you think would be essential to know or do by the end of this learning period. If you were able to do this, then you are beginning to construct a learning outcome.

## Definition of Learning Outcomes

Learning outcomes are statements that describe significant and essential learning that students have achieved, and can reliably demonstrate at the end of a course or program. In other words, learning outcomes identify what the learner will know and be able to do by the end of a course or program.

Spady, (1994), an educational researcher who spearheaded the development of outcomes based education, suggests that the ability demonstrate learning is the key point. This involves a performance of some kind in order to show significant learning, or learning that matters. He claims that significant content is essential, but that content alone is insufficient as an outcome.

Rather, knowledge of content must be manifested through a demonstration process of some kind.

An outcome statement that incorporates this knowledge within a performance demonstration might include:

- The learner will have demonstrated the ability to make engine repairs on a variety of automobiles.

In the above statement, the ability to make engine repairs implies that the person has the requisite knowledge to do so. Performance statements include higher level thinking skills as well as psychomotor skills.

Spady, also addresses the context or setting in which the performance demonstration occurs. He suggests a range of performance contexts from that of demonstrations of classroom learning to those which involve living successfully in the larger society. Thus, his highest level outcomes refer to generic skills such as the preparation of learners to be problem solvers, planners, creators, learners and thinkers, communicators etc., regardless of subject areas studied.

Learning outcomes refer to observable and measurable

- knowledge
- skills
- attitudes


## Characteristics of Learning Outcomes Statements

Learning outcomes should:

- reflect broad conceptual knowledge and adaptive vocational and generic skills
- reflect essential knowledge, skills or attitudes;
- focus on results of the learning experiences;
- reflect the desired end of the learning experience, not the means or the process;
- represent the minimum performances that must be achieved to successfully complete a course or program;
- answer the question, "Why should a student take this course anyway?"

Learning outcomes statements may be considered to be exit behaviors.

## Background and Context for Development of Learning Outcomes

Learning outcomes reflect a movement toward outcomes based learning (OBL) in elementary, secondary, and post secondary educational systems throughout North America, and beyond. This movement is, in turn, influenced by public pressure to ensure a greater accountability and consistency within educational systems. Through the creation of outcomes statements, and the evaluation of learner performance in relation to those statements, it is believed by some that a more accountable educational system will result.

Outcomes-based education is thought to provide greater:

- consistency - in course offerings across the educational system
- accountability - expectations for learning are clearly stated, and frequent assessment processes help both educator and student identify progress toward meeting the outcomes
- accessibility - clearly defined outcomes enable learners to demonstrate achievement of those outcomes through prior learning assessment processes


## College Context

In the college system, learning outcomes are written at the:

- COURSE level
- PROGRAM/DEGREE level
- GENERAL EDUCATION/RELATED INSTRUCTION level

LEARNING OUTCOMES in the college system may express

- Skills
- Knowledge
- Behaviors


## Guidelines for Writing Learning Outcomes

Learning Outcomes written at the course level should:

- State clear expectations.
o Learners know what they have to do to demonstrate that they have achieved the learning outcomes.
- Represent culminating performances of learning and achievement.
o This means the highest stage of development, or exit, end performance.
- Describe performances that are significant, essential, and verifiable.
o Performances can be verified or observed in some way and that they represent more than one small aspect of behavior. Also, performance is considered to be essential for success in the course.
- Preferably state only ONE performance per outcome.
- Refer to learning that is transferable
o The learning can readily be transferred from a class to a work place environment, or from one workplace environment to another, etc.
- Not dictate curriculum content.
o There could be a number of different ways to achieve the outcome.
- Reflect the overriding principles of equity and fairness and accommodate the needs of diverse learners.
- Represent the minimal acceptable level of performance that a student needs to demonstrate in order to be considered successful. (Source: Guidelines to the Development of Standards of Achievement through Learning Outcomes, 1994. College Standards and Accreditation Committee)

Learning Outcomes written at the program/degree level should:

- Be broader, fewer and perhaps more abstract performance expectations compared to the course level outcomes.
- Reflect performance requirements seen as a culmination of several courses or completion of a program/degree.

Learning Outcomes written at the General Education/ Related Instruction level should:

- Reflect overarching behaviors, knowledge, or skills that students will be able to demonstrate after taking BBCC courses in different areas.
- Be broad, cross curricular, and embedded in the requirements of the degree. Not just related to specific area of study.
- Be relevant in degrees or certificates of 45 credits or more.


## Overview of Learning Outcomes Structure in Community Colleges

```
    GLOBAL INFLUENCES
WORKPLACE REQUIREMENTS
```

$\downarrow$

DEVELOPMENT OF PROGRAM/DEGREE LEARNING OUTCOMES Essential knowledge, skills and attitudes required by program graduates
$\downarrow$

OVERALL CURRICULUM DESIGN
Mapping of content and course sequence to provide required vocational, general education and generic skill outcomes

```
\downarrow
```

COURSE LEARNING OUTCOMES Faculty developed learning outcomes for individual courses within a program
$\downarrow$

INSTRUCTIONAL OBJECTIVES/ ASSIGNMENTS
Essential knowledge, skills and attitudes required for each unit of instruction within a course

## Anatomy of Learning Outcomes

Learning Outcome statements may be broken down into three main components:

- an action word that identifies the performance to be demonstrated;
- a learning statement that specifies what learning will be demonstrated in the performance;
- a broad statement of the criterion or standard for acceptable performance.

For example:

| ACTION WORD |  |  |
| :--- | :--- | :--- |
| (performance) | LEARNING STATEMENT <br> (the learning) | CRITERION <br> (the conditions of the performance <br> demonstration) |
| Applies | principles of asepsis | when executing psychomotor skills |
| Produces | documents | using word processing equipment |
| Analyzes | global and environmental factors | in terms of their effects on people |

(Source for categories: Developing Learning Outcomes Self-Study Guide, Humbler College of Applied Arts and Technology, March, 1996)

## Performance Elements

Learning outcomes statements can be supported by the inclusion of performance elements. Performance elements or indicators as they are sometimes called, provide a more specific picture of an ability. They define and clarify the level and quality of performance necessary to meet the requirements of the learning outcome. In effect, the elements are indicators of the means by which the learner will proceed to satisfactory performance of the learning outcome. That is, they help to address the question, "What would you accept as evidence that a student has achieved a certain level, or is in the process of achieving the outcome?
(Source: Generic Skills Learning Outcomes for Two and Three Year Programs in Ontario's Colleges of Applied Arts and Technology. The College Standards and Accreditation Council, May, 1995)

For example, suppose you have the learning outcome "Applies analytical skills when addressing contemporary social issues."

Some performance elements might include:

- identifies assumptions underlying various points of view
- presents a cogent argument with supporting evidence.

Verbs to avoid when writing learning outcomes include:
Appreciate, Enjoy, Know, Realize, Be aware of, Perceive
These words are vague and abstract. There is really no way to concretely assess them.
Some common verbs that I have seen included in learning outcomes include the following:
Use, Develop, Analyze, Express, Evaluate, Organize, Create, Write, Plan, Apply, Produce, Implement, Compile, Incorporate, Construct

## CHECKLIST FOR INTEGRATION OF LEARNING OUTCOMES

- I know what the learning outcomes are for my course and program.
- I have designed learning activities and resources which reflect the learning outcomes.
- I have designed assessment/evaluations with feedback opportunities for students. The evaluation strategies reflect the learning outcomes.
- When necessary, course learning outcomes have been developed in consultation with program advisory committees, and groups of other faculty; not by individuals working in isolation.
o Since learning outcomes reflect the present and anticipated future needs of society, their development is most sound when there is discussion and input from a variety of sources.
- Course learning outcomes dovetail with program learning outcomes for the program in which I am working.
- Some learning outcome statements may receive more weighting or importance within a course than others. This differential course weighting would be reflected in the percentage of a course grade attached to each outcome.

