

**Northwest Commission on Colleges and Universities**

**Mid-Cycle Evaluation**



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President

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## Part I. Overview of Mission Fulfillment at CBC

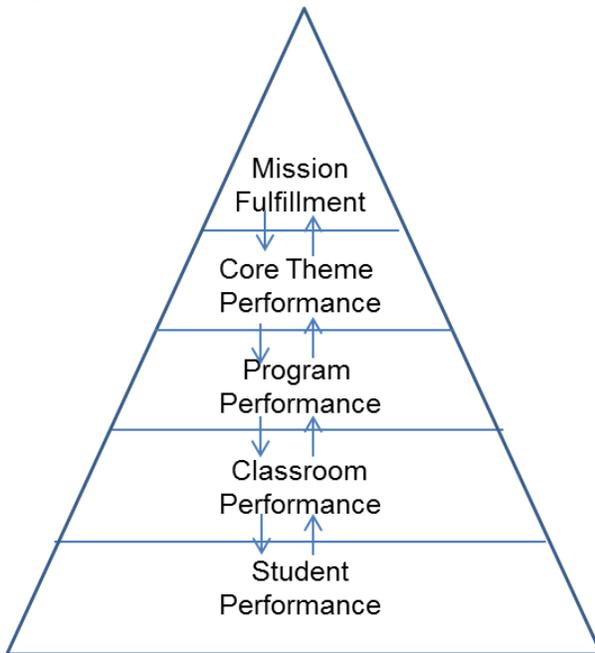
As part of the Governance process at Columbia Basin College (CBC), the College evaluates the degree to which it accomplishes its goals for Mission Fulfillment each year. This requirement is stated formally in a policy on Mission Fulfillment:

Table 1. Mission Fulfillment Policy

<b>Policy Type: Ends</b>	<b>E-2</b>
<b>Policy Title: Mission Fulfillment</b>	
<p>CBC evaluates the extent to which it accomplishes each of the Ends Statements and fulfills its Mission to the Community. An assessment of the degree of accomplishment of each End Statement is incorporated into the associated Monitoring Report provided to the Board. An assessment of overall Mission fulfillment is provided to the Board on an annual basis, at the completion of the Monitoring Report cycle. In the event that performance on any End State does not achieve the desired level, action plans will be developed and implemented to restore performance to desired levels.</p>	

CBC is governed according to the Carver Model of Policy Governance (Carver, 1997). In the Carver model, the College Mission is separated into discrete components, called End States, which at CBC correspond to accreditation Core Themes. Performance of the College can be assessed at the Mission level (i.e., Mission Fulfillment) and at the Core Theme, Program, Classroom, and Student levels. Figure 1 shows the five levels of measurement undertaken at CBC.

Figure 1. Levels of measurement



The downward-pointing arrows indicate that lower levels in the model are derived from higher levels through a process of **analysis**. That is, Core Themes are defined through an analysis of the Mission statement. In turn, Programs are identified and defined through an analysis of Core Themes. Classroom

performance is defined through an analysis of the associated Program and, finally, student performance is defined by an analysis of expectations of faculty for their classrooms. Upward arrows indicate that assessment at a given level is accomplished through a **synthesis** of data from that level plus data from the lower level. Thus, Mission Fulfillment is assessed through a synthesis of information from the college-level plus performance across the Core Themes. Core Theme performance is assessed through a synthesis of information related to the Core Themes plus information on performance at the Program level. Program performance is assessed through a synthesis of information about the Program plus data on classroom level performance, and so forth.

Assessment of Mission Fulfillment has been undertaken at the College since 2009, while monitoring reports assessing Core Theme performance have been completed for more than 10 years. A great deal of effort has been dedicated to continuously improving the quality of these reports. Quality improvements included the following:

- Introduction of the Productivity Measurement and Enhancement Process (ProMES) (Pritchard et al., 2002, 2008), a sophisticated approach to measuring organizational performance. ProMES provided a methodology for creating evaluative measurement, converting diverse metrics into a common measurement scale, and rolling up lower-level indicators into macro-level measure of performance.
- Introduction of the five-column approach to program evaluation developed by Robert Nichols (Nichols & Nichols, 2005) as a way to organize Core Themes, Objectives, Indicators, and performance improvements.
- Collection of benchmarking and normative data for the existing indicators and converting descriptive-type indicators into evaluative measures.
- Definition of *a priori* standards of performance for Indicators, Core Themes, and Mission Fulfillment

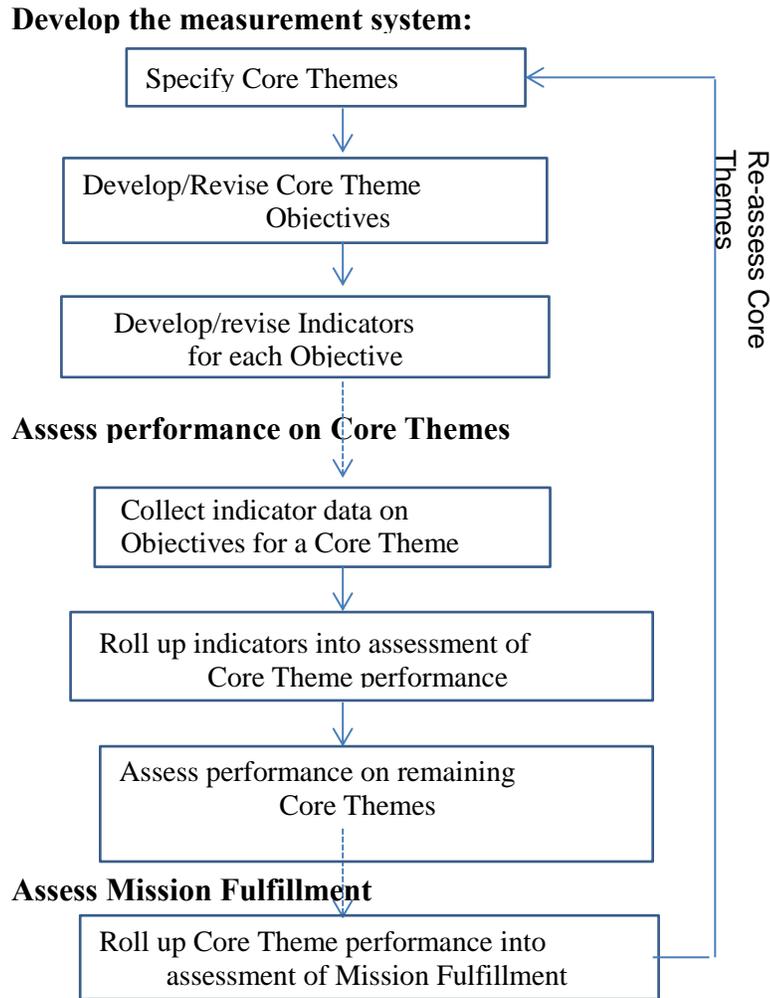
These improvements are described in more detail in Appendix A: Refinement of the Core Theme and Mission Fulfillment Measurement Systems.

The assessment of Mission Fulfillment has become an ongoing cycle of data collection, analysis, improvement actions, and evaluation of improvements that occupy a considerable amount of the College's attention throughout the entire year. The annual Mission Fulfillment assessment process is summarized in Figure 2.

The process includes the following steps to establish the measurement system:

- The Board reviews current Core Themes and updates them as needed to appropriately define the College Mission
- Senior Administrators and the Office of Institutional Effectiveness (IE), working with the Board, review and revise Objectives for each Core Theme to best define the domain of effective performance.
- IE reviews, revises, and/or develops reliable, valid, and evaluative-level performance indicators for each Objective. Even if Core Themes and Objectives remain the same, new data availability may allow for the introduction of improved indicators.

Figure 2. Assessment of Mission Fulfillment



Performance on each of the Core Themes is evaluated each year and outcomes presented broadly across the campus (e.g., to the Board, senior administrators, faculty and staff, and students) via sharing of the Monitoring Reports. Monitoring Reports are generally presented one per month from January through May, with a separate Mission Fulfillment report in June. To assess performance on each Core Theme:

- Data for each indicator is collected, analyzed, and converted to a common, point-based metric system. In this system “Good” performance is assigned 2 points, “Neutral” performance earns 1 point, and “Poor” performance earns 0 points.
- Using the common metric system, individual indicator outcomes are rolled up into an overall performance value for each Objective and the Core Theme. The “percentage of possible points attained” is computed, based on the total points achieved divided by total possible points for the Core Theme.
- The percentage of points attained is plotted on a performance curve, which converts the percentage value to a value on a 100-point performance scale. A “grade” for performance is assigned based on pre-determined performance standards. The performance curve was established in 2009 and is used for all Core Themes.

- Improvement efforts undertaken over the previous year are evaluated for their impact and new improvement actions, if needed, are identified.

When performance for all of the Core Themes has been evaluated, an overall evaluation of Mission Fulfillment is performed, which includes:

- A statistical roll-up of performance across Core Themes, weighting each Core Theme according to values established by the Board. At this time the Academic and Workforce Core Themes each account for 35% of Mission Fulfillment, Basic Skills 20%, and Cultural Enrichment and Well-Being together account for 10%.
- Any additional, subjective performance factors are considered
- An overall “grade” for Mission Fulfillment is proposed
- The Board of Trustees reviews the proposed performance rating and makes a final determination of the level of Mission Fulfillment performance

The following sections provide additional details regarding the methodologies used for each step in the Mission Fulfillment assessment process, and draw conclusions about the validity and usefulness of this process.

## **Part II. Operationalizing Core Theme and Mission Fulfillment Assessment**

An overview of Core Theme assessment is provided below, using the Academic Core Theme as an example. The full Core Theme report is provided in Appendix B (Academic Core Theme Monitoring Report for 2014) and the supporting data is provided in Appendix C (Academic Core Theme 2014: Supporting Data). This Section provides:

- Indicator data and results for Objective A (“Students Demonstrate Progress”),
- The Summary table for all Objectives in the Academic Core Theme,
- A graph depicting overall Core Theme performance,
- A summary of closing the loop activities for this Core Theme.

The assessment of the other Core Themes follows a similar methodology. All additional Core Theme reports for 2014 are accessible through the CBC website (<http://columbiabasin.edu/monitoringreports>).

The Academic Core Theme is a key mission area for CBC, reflecting the College’s intention to provide an effective education for students who aim to transfer to a baccalaureate institution or use their academic education for career or personal goals. The Objectives in this Theme consist of: (a) “Students Demonstrate Progress”; (b) “Effective Learning”; (c) “Effective Teaching”; (d) “Quality Academic Programs”; and (e) “Quality Support Programs.” Each Objective incorporates two or more Indicators to be used in assessment of performance on the Objective and as part of the roll up into overall Core Theme performance.

### **A. Example: Objective A-“Students Demonstrate Progress”**

The first objective of the Academic Core Theme is “Students Demonstrate Progress.” This objective is measured through ten indicators related to student progress (see Table 2). Data for the indicators was drawn from a variety of sources, including the CBC Data Warehouse, the 2013 State Board for Community and Technical College (SBCTC) Annual Report, the 2013 SBCTC Course Completion and Success Report, and the 2012-13 CBC Student Survey.

Table 2. Objective A Outcomes

<b>Objective A: Students Demonstrate Progress</b>			
<b>Indicator #</b>	<b>Indicator Name</b>	<b>Result</b>	<b>Outcome</b>
A1	Fall-to-fall retention	57.8% retention from 2012 to 2013	<b>2</b>
A2	F2F retention by ethnic group	58.7% retention rate for Hispanic students	<b>2</b>
A3	College-level math completion/success rates	Completion/success rates were very low for Math 141, 142, 146, 151,152	<b>0</b>
A4	Pre-college level math completion/success rates	Completion/success rates were very low	<b>0</b>
A5	Pre-college English completion/success rates	Completion/success rates were very good	<b>2</b>
A6	College-level English (101 & 102) completion/success rates	Completion/success rates were good	<b>2</b>
A7	Other course success rates	Descriptive: success rates appear good, although somewhat lower in Psych 100	<b>NA</b>
A8	SAI two year overview	Descriptive only - first 15 credits increased .1 moving it from moderate to good. Others as similar ratings to previous year	<b>NA</b>
A9	SAI points - first 15 credits	.18 points per student: Good	<b>2</b>
A10	SAI points - first 30 credits	.14 points per student: moderate	<b>1</b>
A11	SAI points - quantitative/computation	.09 points per student: moderate	<b>1</b>
A12	SAI points - completions	.09 points per student: moderate	<b>1</b>

Based on an evaluation of indicator results, each indicator was assigned an outcome value of “2” for good performance, “1” for neutral performance, and “0” for poor performance. Indicators A3 through A12 were evaluated on the basis of comparisons with all of the community colleges in Washington State, using data provided by the SBCTC in their 2013 Annual Report or their Course Completion and Success Report. The process by which CBC’s performance on each indicator was rank-ordered in comparison to the other community colleges’ values and a performance outcome assigned is explained in greater detail in Appendix A (see page 102). Indicators A3 and A4 are particularly potent measures of performance, helping to identify what is probably CBC’s area of lowest performance-- mathematics course completion and success.

Indicators A8 through A12 reflect Washington’s Student Achievement Initiative, in which student progress is measured through a standardized system of assigning each college points for various measures of student progress. For example, Indicator A9 reflects the fact that one point is assigned to a college for each student who completes his or her first 15 credits. The indicator value of 0.18 is simply the total number of points assigned divided by CBC’s headcount for that year.

Indicator A1 was assigned a “good” performance outcome (worth 2 points) on the basis of continuing improvement in fall-to-fall retention rates and the fact that the recent value of 57.8% is the highest fall-to-fall retention rate documented since the ratio was first recorded in the early 1990s. Indicator A2 was assigned an outcome of “good”, as well, given that, for the first time, the fall-to-fall retention rate for Hispanics exceeded that of Whites.

A substantial expansion and revision of indicators for this Objective is planned for 2014-2015, based on the recent availability of statewide college transcript information from the Mutual Research Transcript Exchange (MRTE+) database. Indicators for college graduation rates, rates of transfer to a baccalaureate institution, and cumulative GPA after transfer to a baccalaureate institution were pilot-tested this year. In addition, fall-to-fall retention rates will be evaluated in comparison to the rates for all of the community colleges, using MRTE+ data, further reducing the need for subjective evaluation of outcomes.

*Highlights of Objective A Performance: Students Demonstrate Progress*

Fall-to-fall retention rates have reached the highest levels in 10 years and Hispanic retention rate have also risen. Student success rates on English courses were high while math courses were generally lower, but showed some improvements from last year. Performance on the Student Achievement Initiative (SAI) was mostly moderate though one area received a good rating.

*Comparison with last year’s performance*

Findings this year showed improvements in several areas. The success rate for pre-college English writing increased by about 6% and English 102 by about 8%, moving both from “moderate” to “good” performance. Success rates for Precalculus I increased by 14%, Statistics increased by 22%, and Calculus I increased by 24%, though each still remained in the “poor” performance category. SAI points per students first 15 credits increased from .17 to .18 moving it from “moderate” to “good” performance.

*Performance on Objective A*

Using the Nichol’s scale CBC scored 13 out a possible 20 points, earning 65% of the possible points. The College scored maximum points for retention and English course success rate, moderate points for the Student Achievement Initiative (SAI), and no points for Math course success rates.

**B. Assessing Overall Core Theme Performance**

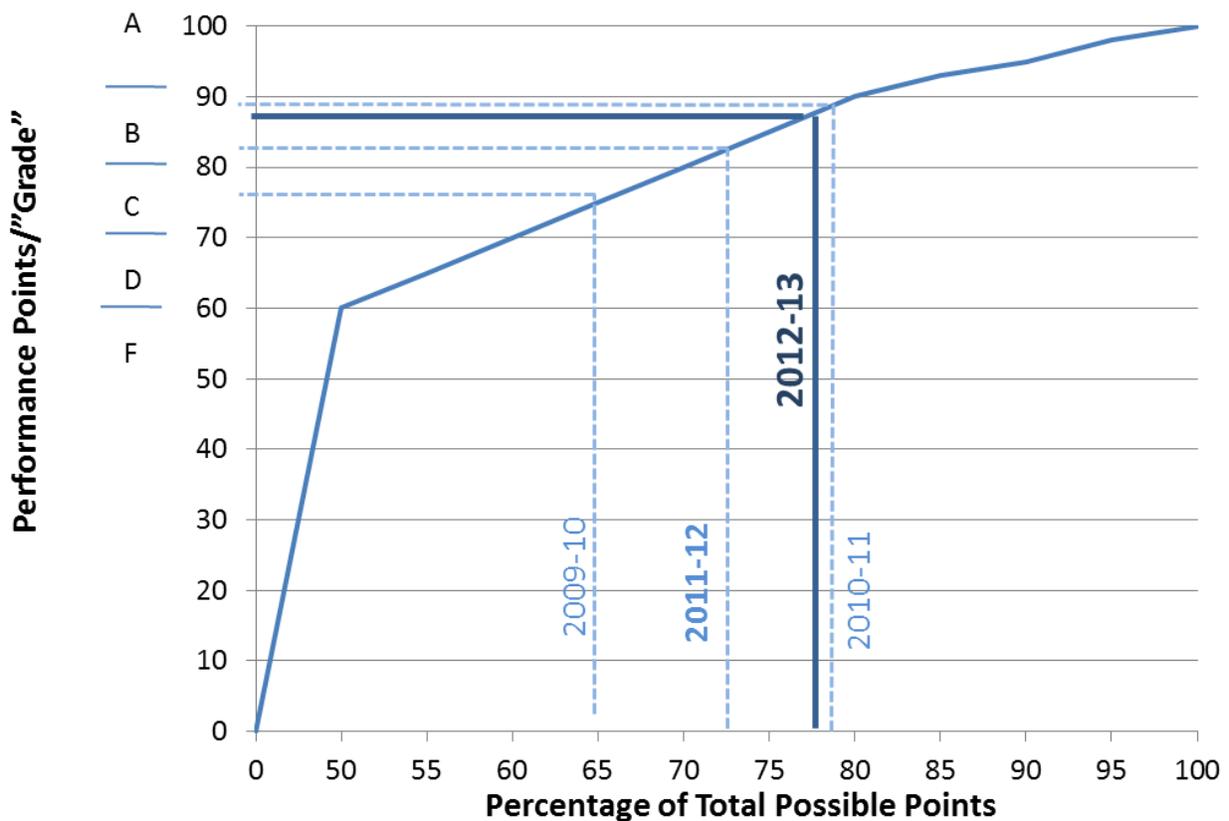
Table 3 shows a compilation of the outcomes for each of the Academic Core Theme Objectives, including possible points, points achieved, and percentage of possible points achieved. Values of percentage of possible points achieved ranged from a low of 65% for “Objective A: Students demonstrate academic progress”, to highs of 100% for “Objective B: Effective learning” and “Objective E: Quality support programs”. The percentage of total points achieved was 77.5%.

Table 3. Outcomes for all Objectives

<b>Objectives:</b>	<b>Number of Indicators</b>	<b>Possible Points</b>	<b>Points Achieved</b>	<b>% Total Points</b>
A. Students Demonstrate Academic Progress	10	20	13	65%
B. Effective Learning	4	8	8	100%
C. Effective Teaching	2	4	3	75%
D. Quality Academic Programs	2	4	3	75%
E. Quality Support Programs	2	4	4	100%
<b>Total</b>	<b>20</b>	<b>40</b>	<b>31</b>	<b>77.5%</b>

The percentage of total points achieved was graphed on the standard Performance Curve that CBC developed to evaluate overall Core Theme performance. Figure 3 shows that the 77.5% value corresponded to a Performance Point value of 88, for a “B+” grade for the Academic Core Theme. Values for the previous three years are included in the figure, as well. Performance on the Academic Core Theme for 2012-13 was slightly lower than for 2010-11 but higher than values for 2009-10 and 2011-12.

Figure 3. Core Theme Performance Curve



*"Closing the Loop" Activities for the Academic Core Theme*

A major retention improvement effort was launched in fall 2012, with the initiation of Human Development 101 (HDEV 101). The goal of the course was to provide instruction in learning and academic achievement strategies for all students placed at the pre-college level in two or more subjects. The course was developed by faculty counselors who also taught the course. A number of students who qualified for the course were not able to take it fall quarter, due to the limited number of HDEV 101 sections available, so they served as a control group with which to compare retention rates. Analysis of retention rates for HDEV 101 for the fall quarter cohort of students showed significantly improved retention rates for the HDEV 101 students for fall-to-winter, fall-to-spring, and fall-to-fall retention compared to the control group and also compared to similar students in the previous year.

Other improvement efforts were directed towards mathematics course completion and success rates. Results of the math performance indicators were shared with the mathematics faculty, and several efforts were undertaken to address completion and success rate concerns. The math curriculum is currently under revision. A proposed new course will help to reduce the total number of courses required to reach college level math. Additionally, the math department currently has three working groups: data analysis, Title V grant preparation, and K12 outreach. Each group is approaching the work of student success in math with a different focus. The Title V grant preparation group serves as a clearing house for priorities to address student success. Current priorities are an enhancement and expansion of the Math Center, contextualizing of math courses, and integration of WAMAP (Washington Mathematics Assessment and Placement). The resources of NROC (National Repository of Online Courses) are also being considered for implementation. Indicator data for this year showed major improvements in the success rates of three of the math courses (Precalculus I, Statistics, and Calculus). Finally, placement processes are being examined for possible inclusion in our Title V grant application.

### C. Example of Mission Fulfillment Assessment

Mission Fulfillment includes a review of the performance demonstrated in each Core Theme area as well as an overall assessment of performance across all of the Core Themes. Minimum performance for each Core Theme has previously been defined as achieving at least 70% of the possible Performance Points (i.e., 70 Performance Points). The target performance level, however, is set at attaining at least 90% of the possible Performance Points (90 Performance Points), indicating outstanding performance. The overall assessment of Mission Fulfillment involves a statistical rollup of the Performance Points for each Core Theme, essentially consisting of the weighted mean of Performance Points achieved across the Core Themes. Similar to the standards for Core Theme performance, minimum performance for Mission Fulfillment has been set at 70 and the targeted performance set at a 90 or higher.

#### *Mission Fulfillment Calculation*

Monitoring reports were completed for academic year 2012-13 for all of the Core Themes and performance outcomes summarized (see Table 4). Three Core Themes received "A" grades: Workforce, Well-Being, and Cultural Enrichment. The Academic Core Theme received a "B+," while Basic Skills End received a "C." Performance Points ranged from a low of 72 for Basic Skills to a high of 100 for Workforce and Well-Being.

Table 4. Results for each Core Theme

Core Theme	Results					
	Indicators	Possible Points	Points Earned	% Possible Points	Performance Points	Grade
Academic	20	40	31	78.5%	87	B+
Workforce	15	30	30	100%	100	A+
Basic Skills	12	24	15	62.5%	72	C
Well-Being	6	12	12	100%	100	A+
Cultural Enrichment	8	16	12	87.5%	94	A
Total	61	122			<b>Weighted mean= 90.0</b>	<b>A-</b>

A total of 61 indicators were used for all of the reports. The roll-up of results across the Core Themes was accomplished by computing a weighted mean of the five Performance Point values. Performance Points is the only metric in the table that can legitimately be "averaged" to get an overall measure of performance. For example, taking an average of Points Earned (column 4) would unfairly weight Core Themes with a larger number of indicators. Further, it is statistically inappropriate to compute an average of percentages (column 5). The weighted mean of Performance Points was based on an equal weighting (35% each) for the Academic and Workforce, 20% for Basic Skills, and 5% each for Well-Being and Cultural Enrichment.

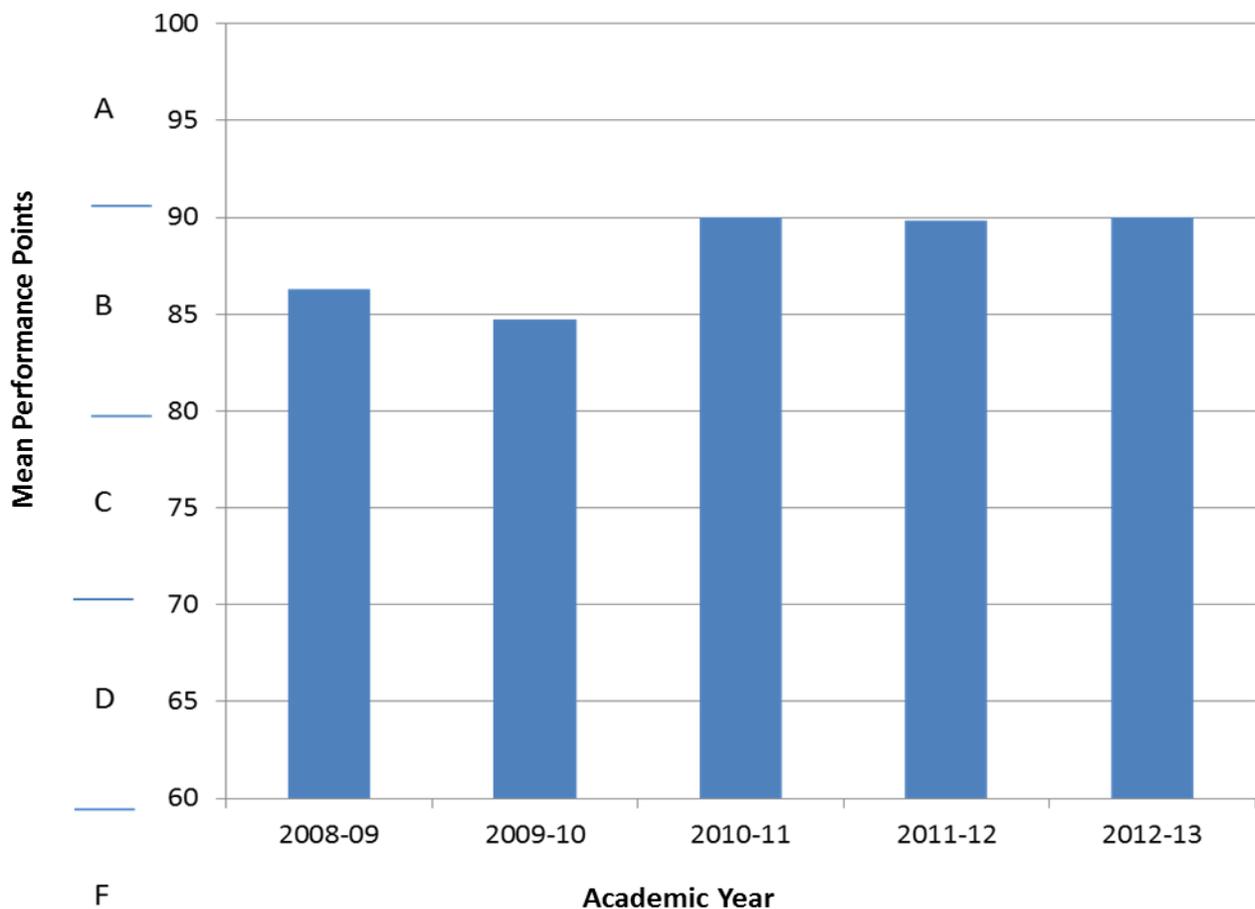
Consequently the weighted mean value was computed using the following formula:

**Total Mission Fulfillment points**=  $.35*(87+100)+.2*(72)+.05*(100+94)$ , resulting in **90.0 points** for Mission Fulfillment, which represents an "A-" level of performance. (Performance Point values of 90 and above are defined as "A" performance). This value is well above the minimal performance level of 70 points and right at the targeted value of 90 points.

*Longitudinal Performance Trends*

Mission Fulfillment has remained relatively steady for the past three years at about the "A-" performance level (see Figure 4). This reflects about a five point improvement over 2008-09 and 2009-10.

Figure 4. Longitudinal performance in Mission Fulfillment



Finally, the assessment of Mission Fulfillment needs to be more than a statistical calculation, and needs to include evidence that the college is working towards excellence in student learning, student success, and excellence in the college's various academic and business practices and processes. In support of CBC's efforts towards excellence, it should be noted that CBC received recognition from the Aspen Institute this spring as being one of the top 150 community colleges in the country and that CBC was invited to move on to the next round of the competition in which the top 10 community colleges will be identified. The following represent some of the areas within CBC that were cited in its Aspen Application for representing areas of college excellence in the area of improving student success:

- Hawk Central: a centralized location within Student Services that addresses all registration issues in a "one stop shopping" model. Students meet with a specialist who triages questions and assists with problem solving. Prior to Hawk Central, 77% of financial applications were reviewed before fall quarter started, subsequently 92% have been reviewed. Approximately 39,000 student visits per year.
- Human Development 101: new students who placed at a remedial level on two of three COMPASS test are required to take this new course which teaches learning strategies for college success. Fall-to-fall retention showed a 10% increase compared to control groups.
- First Year Introduction: a 4-day 1-credit course required for all new students, offered prior to each quarter. Topics include campus resources, academic honesty, educational planning, college expectations, and study skills. Results show a 5-7% increase in next quarter retention rates, increased credit accumulation, and about 5% increase in graduation rates.
- Completion Coaches: three completion coaches deliver comprehensive advising services to enhance student retention, persistence and completions. They employ proactive interventions, monitor academic progress for at-risk students, and assist with systems navigation, educational planning, and academic advising. Anticipated results include about 200 more students being retained per quarter.
- Resource Center: provides assistance to low-income students in the areas of: 1) childcare assistance 2) travel assistance and 3) professional evaluations for Learning Disabilities. Also provides disability accommodations and emergency book and tuition loans.
- Veterans Education and Transition Services: supports the unique transitional needs of veterans and service members by providing academic and career advising, mental health counseling, VA education benefits certifying official, and veteran related programming. CBC is the only community college in Washington to adopt the Department of Education's 8 Keys to Success in serving student veterans.
- Math Success Center: provides final exam review workshops for students in Math 95 and 98 (which share a common final). Passing this final exam is a requirement for successfully completing the course and moving on to college-level math to obtain an Associate's Degree. Students who participate pass the final exam at a rate of about 25% higher than non-participants.
- Mathematics Engineering Science Achievement (MESA): helps traditionally underrepresented minorities and first-generation college students in obtaining STEM degrees. In the first four years of this grant, MESA students completed Associate's degrees at a rate of 50% higher than average CBC students, and nearly 40% higher than CBC STEM students. To date MESA has served 130 students.
- College Assistance Migrant Program (CAMP): Helps students from migrant and seasonal farm worker backgrounds succeed in college by providing intensive academic, career, financial, and support services during their first year. The CBC CAMP program is currently ranked in the top ten in the country. The first year completion rate and fall retention rate for CBC CAMP students was 96%.
- I-BEST: Pairs two instructors in a classroom, one teaches technical content and the other teaches basic skills in English language and math. Students earn college credit and are encouraged to continue their post-secondary pathways, which allows for quick transition and degree obtainment.

The Director of Community College Excellence for the Aspen Institute, Joshua Wyner, has documented a number of Best Practices among Aspen Award winners in his recent book *What Excellent Community Colleges Do* (Wyner, 2014). These Best Practices focus on the topics of completion and transfer, equity and developmental education, learning outcomes, labor markets, and the community college president. The IE office has reviewed these practices and made an admittedly subjective assessment of the resources CBC devotes to each of the Wyner practices. For example, Table 5 below shows Wyner’s Best Practices for completion and transfer and an assessment of CBC’s focus on each. Significant resources have been devoted to providing “one stop shopping” at registration, eliminating late registration and moving back application deadlines, and requiring student success classes (e.g., HDEV 101) for under-prepared students. An upcoming area of focus is going to be identifying clear, structured pathways for students from initial registration through graduation. An assessment of CBC’s resources dedicated to all of Wyner’s Best Practices is included in Appendix D.

Table 5. CBC resources dedicated to Wyner’s Best Practices for Completion and Transfer

<b>Themes from Wyner Chapter 1: Completion and Transfer</b>	
<b>Theme:</b>	<b>CBC Resources dedicated to this area</b>
Create clear, structured pathways for students from entry through graduation; minimize student decisions	Moderate-- a key future area
Provide effective advising, with low student to advisor ratios, to support student decisions and success	Significant
Increase instructors’ commitment to student retention (as is usually the case in career/technical programs) through greater faculty/student engagement	Moderate
Create specific programs for students to enroll in, with clear, structured pathways to completion	Moderate
Use faculty as mentors and advisors, as well as for instruction. Train faculty to be successful in these roles	Low
Create a graduation plan from day 1	Low
Provide student-friendly, “one stop shopping” at registration	Significant
Do not allow registration after the first day of class; move the application and enrollment process earlier to give students time to register in advance	Significant
Require student success classes	Significant
Use technology to support student success (e.g., to track student progress towards a degree)	Moderate

#### **D. Measurement of Student Learning**

One of the most difficult aspects of measuring CBC’s performance involves assessing Student Learning Outcomes (SLOs), defined as “knowledge, skills, and abilities that a student has attained at the end (or as a result) of his or her engagement in a particular set of higher education experiences” (Council for Higher Education Accreditation, 2003, p. 5). The SLOs, listed in Table 6, have been identified by the faculty Teaching and Learning Committee and rubrics developed for their measurement

Table 6. CBC Student Learning Outcomes

**1. Think Critically**

- Understand, analyze, and evaluate the elements of one's environment and one's habits of thought
- Conceptualize alternatives to both

**2. Reason Quantitatively and Symbolically**

- Develop a sense of number and pattern
- Analyze, evaluate, and synthesize symbolic statements and quantitative arguments

**3. Communicate Effectively**

- Use spoken and written language to express opinions, discuss concepts, and persuade an audience
- Synthesize ideas and supporting information to create effective messages

**4. Apply Information Tools and Resources**

- Accurately assess information needs
- Select appropriate information tools and resources and use them efficiently
- Evaluate, manage, and use information effectively and responsibly

**5. Develop Cultural Awareness**

- Respect self and others
- Explore and appreciate different cultures in an increasingly diverse, global community
- Challenge culture-bound assumptions

**6. Master Program Learning Outcomes**

- Become familiar with a body of knowledge
- Demonstrate ability to know or do the stated program learning outcomes, which are developed by each department and program

Rubrics for the SLOs are available on the CBC website (<http://columbiabasin.edu/slo>). These learning outcomes cut across disciplines and are addressed in many courses; yet they are not mastered in any single course. Rather they are developed throughout the student's time in higher education.

The CBC Teaching and Learning Committee (TLC) has, for the past three years, focused on measurement of the Critical Thinking and Communications SLOs. In the most recent study, (conducted in Spring quarter, 2013), participating faculty members assigned their students (n=264) to a 1-hour in-class essay, in which students responded to a prompt developed by the TLC. Students were enrolled in either a 100- or 200-level composition, nursing, psychology, history, or sociology course or a 1-credit First Year Introduction (FYI) course required of all CBC students upon entry into the College. The essays were graded and used as part of the final course grade. Subsequently, a team of 23 faculty members, representing 13 disciplines, met to score the essays using a rubric (Table 7) that had been developed by the TLC.

Table 7. Critical Thinking and Communications Rubric

<b>Element</b>	<b>Superior</b> (Always displays this element) 1	<b>Skilled</b> (Displays this element most of the time) 2	<b>Minimal Competence</b> (Displays this element occasionally or somewhat) 3	<b>Inadequate/ Below College Level</b> (Displays this element rarely or not at all) 4
<b>Responds appropriately to the prompt</b> <i>Addresses the assigned question and all sections are related to the assigned question (i.e., are on topic).</i>				
<b>Interprets the evidence correctly</b> <i>Interprets evidence correctly <b>and</b> connects the evidence to the assigned purpose.</i>				
<b>Recognizes limitations or flaws in the evidence</b> <i>Recognizes flaws in the evidence <b>or</b> recognizes how the evidence is insufficient to address the problem.</i>				
<b>Responds in an organized and coherent essay</b> <i>Ideas and paragraphs are focused, sufficiently developed, logically connected, <b>and</b> related to the assigned purpose.</i>				
<b>Uses correct grammar, word choice, and spelling</b>				

There were five criteria, or elements, in the prompt; the first three related to Critical Thinking and the second two related to Communications. Ratings of 1 (“Superior”), 2 (“Skilled”), 3 (“Minimal”) were considered to reflect varying degrees of college-level performance, while a rating of 4 (“Inadequate”) was considered below college-level performance. Analysis of inter-rater reliability (based on the intra-class correlation coefficient) showed moderate to strong levels of inter-rater agreement for all 5 items. Table 8 shows the percentage of all students who were scored at college-level for each item:

Table 8. Percentage of students scoring at college-level for each criterion

<b>Rubric Items:</b>	<b>Percent of students who scored at college level</b>
Uses effective grammar, syntax, spelling	85%
Responds appropriately to the problem	82%
Interprets the evidence correctly	70%
Responds in an organized and coherent essay	70%
Recognizes limitations of evidence	54%

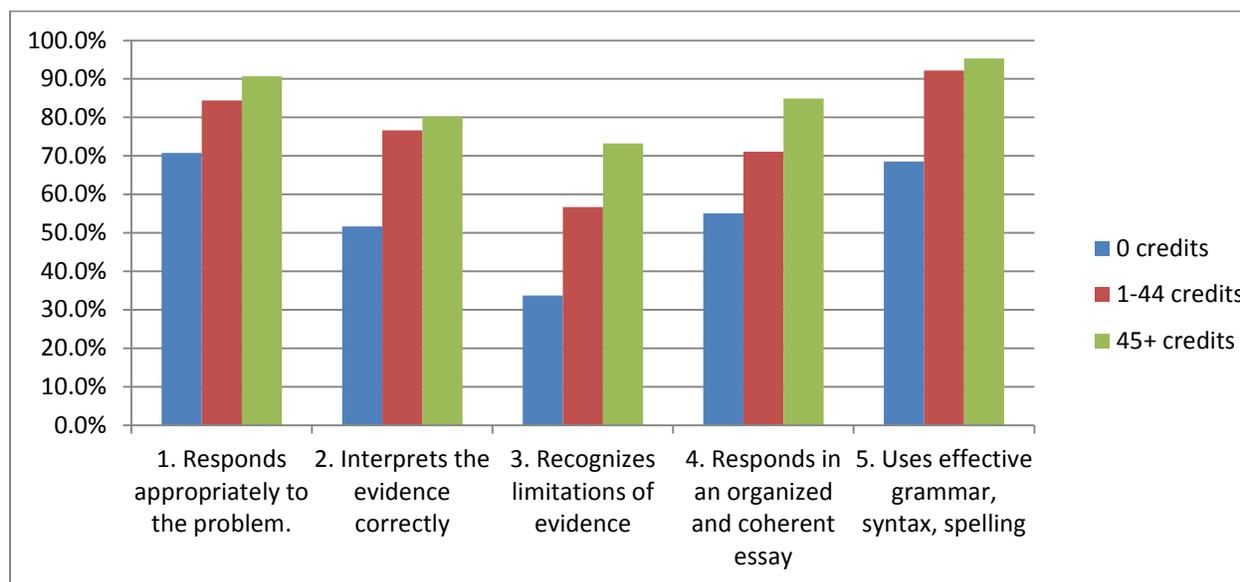
Overall, while many students were able to correctly analyze and interpret the data, and write a coherent paper, few challenged the data or questioned its sufficiency to answer the questions in the prompt.

Additional analyses were performed to identify demographic or ability variables that might be associated with the rubric ratings. For example, one might anticipate that students with a higher cumulative grade point average, students with a greater number of credits, more mature students, or students who performed at college-level on the college’s placement test (COMPASS) might earn higher ratings on the rubric elements. Consequently, multiple regression analyses were performed using the five rubric elements as the dependent variables and age, cumulative GPA, cumulative credits, and COMPASS outcomes as independent variables. Multiple regression analyses have the benefits of showing the total predictability of the dependent variable and the unique significance of each independent variable in predicting the dependent variable. The analysis holds constant the remaining independent variables while assessing the contribution of a single independent variable.

For all five rubric elements, “Cumulative Credits Obtained” was the only consistent and significant predictor of rubric ratings. For each analysis, higher levels of credits were associated with higher ratings on the elements, with significance levels of  $p < .001$  or higher. The standardized regression coefficient, indicating the relative predictor importance, was considerably higher for cumulative credits than for any other predictor. That is, being older, having higher overall grades, and having higher placement levels were not associated with higher ratings.

These analyses suggest the importance of accumulating college credits to receiving higher ratings on the Critical Thinking and Communications rubrics and imply that attending CBC has a significant and positive impact on Critical Thinking and Communications skills. The results also downplay the likelihood that the results can be explained by maturation effects, ability effects, or student attrition. To more clearly indicate the impact of accumulated credits on Critical Thinking and Communications skills, student were divided into those with 0 credits (FYI students), 1-44 credits, and 45+ credits. Figure 5 shows the performance on each of the five rubric items by student credit level. For all 5 items, students with the greater credit levels displayed better performance.

Figure 5. SLO performance by accumulated credit level



Additional studies of Critical Thinking and Communications skills are being undertaken by several individual faculty members, who were awarded TLC grants for their studies.

The Critical Thinking and Communications SLO assessments have been a very time-intensive effort for the Teaching and Learning Committee. In order to help support their efforts and to expand the assessment to all SLOs in a shorter time frame, CBC has entered into a contract with the Council for Aid to Education to conduct an assessment of critical thinking, quantitative reasoning, written communications, and use of information tools and resources using the Collegiate Learning Assessment (CLA+). The instrument will be administered to 100 incoming freshmen and to 100 students with 75+ credits this fall. The College will provide a \$500 bookstore credit to incoming students who participate and a cash award of \$100 to the more senior students. The data will be used to identify areas of strength and weakness in the SLO performance of CBC students and to inform faculty as to which specific areas are most in need of improvement in student learning. In addition, a value-added assessment will be conducted, to compare performance of entering versus exiting students.

*Nursing Program: Evaluation of Student Learning*

In the area of Nursing, evaluation of student learning demonstrates that graduates have achieved competencies consistent with the institutional mission and professional standards and that the outcomes of the Nursing Program have been achieved. The Systematic Evaluation Plan (available at <http://columbiabasin.edu/institutionalassessment>) is the Nursing Program’s written program evaluation plan and is a dynamic process that has been used to develop, maintain, and revise aspects of the program. The Nursing Program Director has the primary responsibility for overseeing implementation of the SEP with frequent input from the nursing faculty.

The CBC Nursing Program’s SEP lists all Accreditation Commission for Education in Nursing (ACEN) criteria for evaluation, the expected level of achievement, frequency of assessment, results, and action taken. Some areas of the plan are assessed each quarter, others on an annual basis, and others as needed. This comprehensive plan follows the ACEN Standards and fulfills the requirements of the Washington Administrative Code (WAC) 246-840-548 which mandates maintenance of a systematic plan for ongoing evaluation. Data is also collected in these areas: performance on NCLEX-RN, program completion, program satisfaction, job placement, and employer satisfaction with program graduates. Discussion

regarding aggregated data occurs at faculty meetings and is used to make program changes. The college-wide software program *Tracdat* is utilized to track all program and course outcomes. A variety of evaluation measures are utilized to measure program and course outcomes including, but not limited to: performance of standardized tests, written assignments, and competency / skills evaluations. All faculty members participate in collecting data to measure program and course outcomes and discussion regarding aggregated data occurs at faculty meetings and is used to make program changes. All decisions regarding the need for action plans or change are made by consensus of the faculty and documented on the SEP. The data-driven plan has three years of trended data and action plans listed and a new plan is started every three years.

### **Part III. Effectiveness of the Mission Fulfillment Assessment System**

After eight years of development of the College's performance measurement system, it has reached a state of providing important and actionable performance information for the College. For the Academic Core Theme, indicator data suggests strong performance in terms of student learning, retention, completion, and transfer to and performance at a baccalaureate institution. However, the completion and success rates for specific mathematics courses are clearly problem areas, which are currently being addressed by multiple improvement actions. For the Workforce Core Theme, CBC students show strong performance in terms of passing certification or licensing examinations, excellent ability to find a program-related job, and good salary levels. There seem to be no clear areas of poor performance for the Workforce Core Theme. For Basic Skills, students show a moderate rate of moving upwards through the CASAS levels but relatively low rates of transition to college-level coursework.

However, there are still some problematic measurement issues for these Core Themes. Measurement of Student Learning Outcomes has proven very difficult, involving extensive research efforts to clarify performance on just a few SLOs. Further assessment work needs to be accomplished in order to attain regular measurement of performance on all of the SLOs. As mentioned earlier, adoption of the Collegiate Learning Assessment (CLA+) on an annual basis will be a very positive move forward in this area. For the Workforce Core Theme, there are several indicators for which benchmarking data is not available. For example, in reviewing data on completion rates for each program, for local employment rates, and for the salary levels of jobs held by CBC alumni, there are no comparable statistics for other community colleges in the state to help assess the effectiveness of CBC programs. We are forced to logically develop and state our own performance standards for these areas and rely on expert judgment for an assessment.

The remaining two Core Themes, Well-Being and Cultural Enrichment, have proven harder to measure given the inherently subjective nature of the topics. Starting in spring, 2012, the Board of Trustees modified an existing Core Theme (Physical and Emotional Well-Being) to reflect the more focused issue of psychological well-being. Recent research from the field of Positive Psychology was reviewed and introduced by the IE Office to provide a sound theoretical and measurement basis for the revised Core Theme. Now, measures of well-being are based on the PERMA model (positive emotion, engagement, meaning, positive relationships, and accomplishment) (Seligman, 2011) and have been introduced for this Core Theme.

Cultural Enrichment is currently the Core Theme with the weakest system of indicators. The content of this Core Theme is, unfortunately, not based on clear theoretical or conceptual models. The indicators essentially reflect enrollments in classes with an arts & humanities or cultural component, attendance at diversity-related campus events, or funding provided by the ASCBC for cultural events. In short, the indicators are mostly descriptive, rather than evaluative, in nature. In spite of several attempts to improve these indicators over the past several years, relatively little progress has been made—Cultural Enrichment

is simply very difficult to measure effectively. Consequently, the CBC Diversity Committee and the IE Office have proposed significant changes to this Core Theme to make it more conceptually useful and measurable. The revised wording (stated in draft form) is:

*Cultural Effectiveness Core Theme:*

*CBC exists to enable students to perform effectively in the multi-cultural, diverse environments that are present in higher education, in the globally competitive 21st century workplace, and in the increasingly diverse and globally-oriented culture in which we live.*

The revised Core Theme wording reflects the changing realities of higher education, the workplace, and American society. Even within the CBC service area, demographics have dramatically changed within the last 10 years, with rising percentages of Latinos and students from many international regions. There is a greatly increased need for students to have an understanding of multiple cultures and to be able to function and navigate in a diverse/multicultural society. There is a considerable research and theory base associated with the notion of cultural effectiveness, and a number of reliable and valid measurement tools have been developed.

The attention CBC provides to arts and humanities education would not be eliminated by this proposal. Instead, this area would be placed into the Academic End State and an appropriate objective and indicators added to reflect arts and humanities and culture-related education.

Another area for improvement of the Mission Fulfillment measurement system would be to more fully incorporate the results of the Program Reviews which are being undertaken on an ongoing basis by all of the various Departments within CBC. The current format of the Program Review process was developed in May, 2011, and implemented during the 2011-12 academic year. However, Core Themes, Objectives, and Indicators do not yet fully incorporate results of the Program Reviews. Indicators based on the Program Reviews need to be incorporated into the appropriate Core Themes.

Overall, although there is an ongoing continuous improvement process associated with CBC Core Themes and Indicators, on the whole the system has a strong conceptual and psychometric basis for validity and has provided actionable information to guide improvement efforts. The process of rolling up Core Theme results into an assessment of Mission Fulfillment is also, we believe, very sound from statistical and psychometrical perspectives. The roll up process, however, does not fully capture the efforts CBC is making to attain excellence in its educational services. We have tried to incorporate Joshua Wyner's Best Practices model as a way of documenting and demonstrating college excellence and improvement efforts in areas that are sometimes not amenable to quantitative measurement. We believe the expanded Mission Fulfillment measurement system which we have developed at CBC will present a strong case for showing compliance with all of the requirements of the Year Seven Comprehensive Evaluation and Peer Evaluation.

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