

ANALYSIS OF CORE LEARNING OUTCOMES

A. Overview

1. Academic Year:

2015-16

2. Core Learning Outcome Assessed:

Through their respective disciplines, CGCC students who earn a degree can: Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)

3. Level at which the competency is assessed:

200-level courses were chosen to reflect assessment of work students would be completing towards to the end of their degree.

4. Process (es) used to evaluate competency:

i) Overview of methodology used for assessment:

During the 2015-2016 academic year, the first Core Learning Outcome (CLO) was assessed: Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*). This was the first year that CGCC assessed its Core Learning Outcomes and an interdisciplinary team, the Core Learning Outcome Assessment Committee, was formed to create a process and develop a rubric for instructors to use in assessing whether students are achieving CLO#1.

The CLO Assessment team adapted two rubrics from AACU's ([Association of American Colleges and Universities](http://www.aacu.org/)) LEAP ([Liberal Education and America's Promise](http://www.aacu.org/)) Value ([Valid Assessment of Learning in Undergraduate Education](http://www.aacu.org/)) Rubrics (<http://www.aacu.org/>): one for the assessment of [written communication](http://www.aacu.org/) and one for the assessment of [oral communication](http://www.aacu.org/).

Instructors who taught courses that students would be taking towards the end of their degree (sophomore or 200-level courses) were asked to assess student achievement of the Institutional Core Learning Outcome: Communication. These upper level courses were chosen with the understanding that students, in theory, would have had multiple freshman level courses that included communication as a course outcome, allowing CGCC to assess students who were closer to graduation and who had had more instruction and practice in building communication skills. As recommended by the Writing Department, WR 122 was also included in this list of courses, with the rationale that this was the last writing course that most degree-seeking students would take at CGCC before they graduated. In an attempt to minimize workload for faculty, courses were chosen from the list of courses that are already up for Course Outcomes Assessment each term.

The rubrics were not used to grade student artifacts or presentations, they were used to score the student artifacts and to determine whether students who are graduating with degrees from CGCC can "*communicate effectively using appropriate reading, writing, listening, and speaking skills.*" Instructors were only responsible for scoring student artifacts or presentations using the rubric, and submitting the results to a web form, they were not responsible for analysis of the results.

In looking at the methodology, it's important to remember that assessment of Institutional Core Learning Outcomes is different than Course Assessment or Instructor Evaluations: CGCC is compiling information on student achievement of CLOs in order to be analyzed by the Core Learning Outcomes Committee and shared with the General Education Department to determine where adjustments and improvements need to be made. Assessment of Institutional Core Learning Outcomes is **not** about an individual instructor or an individual course: the purpose is to obtain a snap-shot on a more global perspective of student ability in formal college-level communications.

ii) Summary of timeline and steps in assessment process:

- 1) Week before start of term: The Academic Assessment Coordinator (AAC) looked at the CCOGs of courses up for course assessment for each term and selected those courses that either listed communication as a course outcome or indicated that the CLO Communication was addressed in depth. A list of suggested courses was sent by the AAC to each Department Chair (DC) for consideration. DC's responded confirming the selection or making revisions.
- 2) 2nd to 3rd week of term: Once a course was confirmed by the DC, instructors were contacted via email by the AAC informing them that their course had been selected for assessment of the first CLO. Information about this new process of assessing CLOs was provided, as were directions and links to the two rubrics.
- 3) 3rd week of term: the AAC contacted the instructor again to determine whether they had an appropriate assignment that could be scored with either the written or oral communication rubric. It should be noted that instructors were not required to create new assessments/assignments/projects for their courses, but were instructed to score student assignment/projects that were already used in the course to measure course level outcomes. The list of courses that would assess this CLO was revised if it was determined that instructors did not have an appropriate assignment for this purpose.
- 4) 6th week of term: packets were created by the AAC and Curriculum and Assessment Administrative Assistant (CAAA) and distributed to the instructors. Within the packets were paper copies of either the oral or written communication rubric to be used to score each individual student's assignment, and instructions for submitting the scores on the web form.
- 5) End of term to week after end of term: Instructors scored student assignments using the rubric and input the totals for each category of the rubric in the web form. Adjunct faculty submitted time cards for up to 3 hours to be paid at the Special Project Rate. The AAC compiled the results at the end of each term into an excel table.
- 6) Beginning of summer term: the AAC compiled the results for all terms into two tables: one for Written Communication and one for Oral Communication. Eventually the scores from the two tables were combined to create a meta number for analysis by the CLO Assessment Committee.
- 7) Week before Fall term 2016: The CLO Assessment Committee met to review and analyze results, review the process and make recommendations for improvement to the process. Recommendations were also made towards improving the percentage of students who achieved accomplished or above.
- 8) Fall In-service: Results were shared with faculty
- 9) October Instructional Council (IC) meeting: results, analysis and recommendations will be shared with the IC to determine how CGCC, as an institution, will move forward in the continuous improvement cycle to provide instruction in an attempt to increase the percentage of students who achieved accomplished or above in preparation for the next assessment of CLO#1 (2018-119)

iii) Sampling information:

325 students were enrolled in the 17 200-level courses and 2 WR 122 courses. A total of 269 student artifacts were scored by the instructors of those courses.

278 of those students were enrolled in courses that scored work using the written communication rubric, with 237 of those students completing the assignments. 38 students were enrolled in courses that scored using the oral communication rubric, with 32 students completing those assignments.

iv) Assessment Instrument(s):

Written and Oral Communication Rubrics were adapted from LEAP Value Rubrics (<http://www.aacu.org/>). The original VALUE initiative in 2007-09 involved teams of faculty and other educational professionals from over 100 higher education institutions engaged over many months to develop 16 VALUE rubrics for the LEAP Essential Learning Outcomes. Each rubric was developed from the most frequently identified characteristics or criteria of learning for each of the 16 learning outcomes. Drafts of each rubric were then tested by faculty with their own students' work on over 100 college campuses.

The CLO Assessment Committee's adaptations to the LEAP Rubrics included changes to some of the descriptors and a renaming of the student achievement categories from Capstone (4); Milestones (3 and 2); and Benchmark (1) (LEAP VALUE Rubrics) to Mastery; Accomplished; Developing; Beginning; Not Demonstrated; and Not Applicable (CGCC Communication Rubrics). The CLO Assessment Committee considered the adapted student achievement categories to be more applicable to the standards CGCC currently uses for students.

v) Data Analysis Procedures:

Once instructors scored the student artifacts using the adapted LEAP Value Rubric for Written and Oral Communication, results were gathered by the AAC and presented to the CLO Assessment Committee. The CLOA Committee analyzed both the results and the process. The analysis was recorded during the meeting and captured in this analysis template.

B. Results

1. Describe results of assessment work related to competency:

Provide detailed results of assessment, including charts, graphs or other visuals

Overall Communication Results:

A total of 325 students were enrolled in the courses that participated in the assessment of the CLO Communication. Of those students, 269 students completed the assignments and were scored using the Written or Oral Communication Rubric. A total of 71% of those students scored as accomplished or better when the scores of the Written Communication and Oral Communication Rubrics were combined. 14% were scored into the Developing category and 2% were scored into Beginning.

Total Number of students enrolled in assessed courses: 325	Mastery	Accomplished	Developing	Beginning	Not Demonstrated	Not Applicable
Total # of students who completed scored assignment: 269						
Totals (Combined Scored Written and Oral Communication Rubric)	36%	35%	14%	2%	1%	12%

Written Communication:

278 students were enrolled in the courses that participated in the assessment of the CLO Written Communication. Of those students, 237 students completed the Written Assignments and were scored using the Written Communication Rubric. A total of 63% of those students scored as accomplished or better in Written Communication. 20% were scored into the Developing category and 2% were scored into Beginning.

More than 70% of students scored as Accomplished or better in the categories: Audience, Context, Purpose; Content Development; Control of Syntax and Mechanics; and use of Visual Aids. 32% scored below accomplished in Sources of Evidence and the 33% scored below accomplished in the category of Organization and Presentation.

Institutional Core Learning Outcome #1: Through their respective disciplines, CGCC students who earn a degree can:								
Written Communication: Total Number of students enrolled 278 Total # of students who completed scored assignment: 237	Mastery	Accomplished	Developing	Beginning	Not Demonstrated	Not Applicable	Total numbers for Accomplished or better	Total Percentage for Accomplished or better
Written Communication Rubric: Audience, Context and Purpose: TOTALS	76	106	52	3	0	0	182	76.79%
Written Communication Rubric: Content Development: TOTALS	53	120	60	4	0	0	173	73.00%
Written Communication Rubric: Sources and Evidence TOTALS	64	98	51	5	3	16	162	68.35%
Written Communication Rubric: Organization and Presentation: TOTALS	52	106	55	9	0	15	158	66.67%
Written Communication Rubric: Control of Syntax and Mechanics: TOTALS	47	125	61	4	0	0	172	72.57%
Written Communication Rubric: Visual Aids: TOTALS	23	23	5	1	0	190	46	97.9%
Total Percentage of Students Scoring with Written Communication Rubric	22%	41%	20%	2%	0%	16%		
Total Percentage of Students who Scored Accomplished or Better with Written Communication Rubric	63%							

Oral Communication:

38 students were enrolled in the courses that participated in the assessment of the CLO Oral Communication. Of those students, 32 students completed the Oral Assignments and were scored using the Oral Communication Rubric. A total of 79% of those students scored as accomplished or better in Oral Communication. 8% were scored into the Developing category and 3% were scored into Beginning.

More than 75 % of students scored as Accomplished or better in the categories: General Purpose; Organization; Language; and Evidence Based Support. It should be noted that 59% of students scored below accomplished in the category of Delivery.

Oral Communication: Total Number of students enrolled 38 Total # of students who completed scored assignment: 32	Mastery	Accomplished	Developing	Beginning	Not Demonstrated	Not Applicable	Total numbers for Accomplished or better	Total Percentage for Accomplished or better
Oral Communication Rubric: General Purpose: TOTALS	16	11	3	2	0	0	27	84%
Oral Communication Rubric: Organization: TOTALS	18	9	3	2	0	0	27	84%
Oral Communication Rubric: Language: TOTALS	15	15	2	0	0	0	30	94%
Oral Communication Rubric: Delivery: TOTALS	13	6	1	0	0	12	19	59%
Oral Communication Rubric: Evidence Based Support: TOTALS	17	7	4	0	4	0	24	75%
Total Percentage of Students Scoring with Oral Communication Rubric	49%	30%	8%	3%	3%	8%		
Total Percentage of Students who Scored Accomplished or Better with Written Communication Rubric	79%							

2. Limitations

What were the limitations of the assessment?

- 1) The sample size for the oral report was relatively small with only 32 student assessments completed using the oral communication rubric. This small sample size may have skewed the total percentages for the results of the oral communication rubric scoring, which seem much higher as compared to the written communication rubric scoring.
It is also questionable whether samplings from 19 courses and 325 students is sufficient enough to get a broad picture of CGCC student ability, given a total enrollment of 4,657 students with an FTE of 1,063. It should also be noted that of those 325 students whose work was scored, many could have been assessed more than once, if they were enrolled in multiple courses participating in the assessment of CLOs.
- 2) 2015-16 was the first time CGCC faculty scored student work using the assessment instruments, as adapted from the highly regarded AACU LEAP rubrics. The CLO Assessment Committee had concerns that faculty at CGCC as of yet, do not share a common language with respect to the descriptors used for each category of the rubrics. For example, one faculty member scored 12 students in the category of "Delivery" using the Oral Communication Rubric as Not Applicable, while another faculty scored 15 students in the "Organization and Presentation (Written Rubric) as Not Applicable. The CLO Assessment Committee questioned whether faculty understood what was meant by "delivery" for an oral presentation, as it seems safe to assume that delivery would be part of any oral presentation. Similarly, the committee had reservations about why organization and presentation would be considered "not applicable" in a written presentation. The committee questioned whether there might be confusion with the directions for choosing an appropriate assignment, scoring with the rubric or interpreting the explanation for each descriptor. To take this limitation one step further, the committee had reservations about whether the writing and speech department teach skills that are encompassed by the rubric. Similarly, we question whether there any missing skills taught by these two departments that are not captured by the rubric, i.e. perhaps there is a misalignment between the skills, as encompassed by the rubric and the skills taught by these two departments. The committee also acknowledged that students may not know that these are the expectations and language and objectives for communication, since although the rubric is available on the web, students have not been formally informed or educated about CLO assessment. We might begin to consider that if we all (CGCC faculty and students) have common language there may be less confusion.
- 3) The Committee felt concern that students who were scored on an assignment at the beginning of the course would have significantly different scores than those who were scored towards the end of the term, after they had received more instruction. If we want students to be scored when they are at their best, it should be recommended that scoring occur on assignments submitted later in the term.
- 4) Initially, a comment box for analysis was not included when assessment of the CLO occurred during fall term. When providing results, the nursing faculty submitted analysis for the results in a Word document, providing insight into the scoring of their student work. As a result of this insightful analysis, a comments box was included in the web form for winter and spring, so that faculty had the option to provide an explanation or analysis for student scores. The majority of explanations provided an explanation of the assignment such as "*They were not required to use sources for their first argumentative essay.*" The analysis provided by the nursing department did share some insight into why students scored the way that they did. Without comments/analysis/insight provided by the faculty scoring the student work, the committee speculates that it may be missing some valuable information to consider when analyzing the results.

- 5) While the Writing Department indicated that WR 122 would be an important course to include in the assessment of CLO#1, only two WR 122 instructors participated in the assessment of communication CLO. For various reasons, WR 122 faculty either did not complete the assessment or indicated that they could not participate in the assessment. The CLO Assessment Committee reasoned that the limited number of WR 122 students work assessed for the Communication CLO may have negatively affected the results. It is reasonable to assume that during the next assessment of this CLO, more WR 122 instructors will participate - much like Course Outcomes Assessment, it will take some time for CLO Assessment to become part of the culture at CGCC.
- 6) It cannot be ignored that faculty scoring of their own student artifacts leads to a certain amount of subjectivity in determining the results. The Committee is aware of how this subjectivity may distort results, however at this time, as CGCC is only at the beginning of the process of assessing CLOs, the committee has agreed to table this concern until a later date, instead focusing on creating a culture of CLO assessment, and slowly improving the process with each year.

In summary, it should be noted that 2015-16 was the first time a CLO has been assessed at CGCC, and the newness of this assessment most likely contributed to many of the above limitations noted.

C. Analysis of Results

Assessment and analysis at this level measures whether degree-seeking students leave with some level of proficiency of the Institutional Core Learning Outcomes (Core Theme B: Transforming Lives – Education; Objective B3)

1. Discussion and Implications

Reflect on what was learned and what the impacts might be (not a repeat of findings). Reflection should include the implications of the findings to the General Education Program.

Overall, 71% of CGCC students scored at accomplished or better with regards to communication. While this may seem like a fairly adequate percentage, we should also consider that this also means that 29% of CGCC students were scored below the accomplished level (these levels are: developing, beginning, or not demonstrated). This result could mean that almost 30% of CGCC students graduating from our institution with a 2-year degree may not have the adequate writing and oral communication skills to transfer and be successful at a 4-year institution, or successfully communicate either in written or oral form in the work place.

Although the committee admits that there may be some limitations to the results, similar findings were implied in the General Education Program Review from 2012. Table 15 of the General Education Program Review, and the preceding discussion of that table compared the grades of all community college transfer students with CGCC students transferring to an OUS school in 2008-09. While that sample was also small, *“it is still worth noting that in every discipline save mathematics, CGCC students’ grades were lower than their counterparts from other community colleges. This suggests that in disciplines other than mathematics, CGCC might not be preparing its students as well as other community colleges, something that calls for further study. The biggest discrepancy falls under the discipline of Foreign Languages, a gap of .66 GPA followed by English Composition with a gap of .52 GPA.”* While a more recent General Education Program Review is currently in progress, it seems that communication skills could be negatively affecting our students as they transfer to 4 year OUS schools.

Assuming that we as an institution want to fix this deficiency, we must ask ourselves where do we go from here? While one of the purposes of the rubric was to provide a snap-shot of student ability in formal college-level communications, the rubric can also be useful in helping the college determine where to focus its attention in terms of making improvements. If we look at the categories that students had the lowest scores: “Source and Evidence”, and “Organization and Presentation” in written communication and “Delivery” in oral communication, it may be possible that faculty could focus more instruction on those three specific areas in an attempt to help more students achieve the level of accomplished in communication. Focused assessment at the course level in these three areas could occur formally, by including “Source and Evidence” and “Organization and Presentation” in rubrics used for written work and “Delivery” in rubrics used to assess oral presentations. On a less formal basis, faculty could focus on including or increasing instruction with regards to “Source and Evidence”, “Organization and Presentation”, and “Delivery” when supporting students in writing papers and presenting oral reports.

As stated previously, most courses include a course outcome that addresses communication or indicate in the CCOG that communication is addressed in-depth. For this reason, it’s important to realize that tackling the shortcoming that many of our students demonstrate in communication should come from all departments, across all disciplines. As a college, we are all responsible for student achievement of the Core Learning Outcomes.

A few other considerations occurred to the committee when analyzing the results:

- i) Students may enroll in General Education courses while concurrently enrolled in WR 121. This would mean that students only need to complete WR 115 in order to meet the General Education pre-requisite. While we would hope that students would have completed WR 121, by the time they enrolled in a 200-level course, it’s very possible that some of the students assessed for communication in these 200-level courses had only earned a “C” in WR 115.
- ii) The analysis of the communication CLO is somewhat speculative. Without including an analysis portion for instructors to complete when filling out the online web form, and a description of what should be included in the analysis/comments portion of the rubric, the committee acknowledges that it may be lacking important information and insight with regards to student achievement of the CLO, Communication. For example, the analysis provided by the nursing department narrowed down the problems that students were having with Organization and Presentation as “Most of the inconsistencies fell into the following: poor introduction, poor transition from one thought to another, lack of/poor conclusive paragraph, or not relating article information to student/nurse practice.” In addition, this being the initial year for CLO assessment, there is no previous assessment with which to compare results. Consequently, it is difficult to determine with a degree of certainty whether there is an instructional opportunity or an assessment anomaly.
- iii) It would be useful to have faculty from the Writing Department and Speech Department provide input into the analysis of the CLO Communication. Their expertise in this area would most likely enhance the findings of the committee and provide insightful recommendations to help the college improve student achievement of the CLO Communication.

2. Recommendations and Action Items

Assessment of Institutional Core Learning Outcomes assesses whether students, regardless of which degree they earn at CGCC, achieve the skills and knowledge that are at the foundation of CGCC's General Education program. Recommendations and Action items should be related to recommendations made in the current General Education Program Review and can include a progress report or revisions on the Gen Ed Program Review recommendations.

i) What actions will be taken as a result of the assessment?

It is recommended by the CLO Assessment Committee that actions be taken by all faculty in their classes, since accountability for student achievement of Core Learning Outcomes is the responsibility of all faculty as indicated by their CCOGs when they specify that they address the CLO, Communication, in depth and/or list some kind of communication course outcome.

The Committee recommends that faculty of CGCC focus on 2 objectives for the next year and a half to be chosen from: "Sources and Evidence" and/or "Organization and Presentation" (for written communication) and /or "Delivery" for oral communication. As Faculty In-Service is in the process of being revamped, there is potential for faculty training opportunities. Training could be developed, led by the writing and speech departments, so that instructors in all courses could add intrinsic teaching and assessment for the 2 objectives. These workshops could also contribute to creating a common language with regard to communication across the campus. This training could be presented during Spring In-service (or as Winter Professional Development Training). Faculty could begin to implement a plan to address increased instruction in these areas starting spring term 2017. Increased instruction, on an institutional level, in these areas could continue and the effectiveness of this focus on these 2 areas could be assessed during the next scheduled assessment of the Communication CLO in 2018-19.

ii) Describe how these action items are related to recommendations from the current General Education Program Review? Include how will these changes affect the General Education program.

As previously stated, the 2012 [General Education Program Review](#) suggested further study with regard to the discrepancy between the gap of GPA in CGCC students and students of other community colleges who transfer to 4 year OUS schools, specifically in the areas of Foreign Languages and English Composition. This assessment and analysis of the CLO Communication is one way to further that recommendation, as it is related to English Composition.

Because almost all 200-level courses have some form of communication component to their course outcomes or indicate that they align with this core learning outcome at an "in-depth" level, the implications of these recommendations will have an effect on instruction beyond the General Education program. All faculty who teach students at the 200-level and most who teach at the 100-level have a responsibility to improve instruction in terms of communication in an effort to improve student accomplishment of CGCC's Core Learning Outcome of Communication.

3. Evaluate the assessment strategy

Were the assessment methods accurate indicators of student achievement of the core learning outcome? Why or why not? Suggestions for changes.

Given that the assessment methods, LEAP rubrics developed by the AACU, have been tested and widely adopted by post-secondary institutions across the US, it is probably safe to say that the assessment methods were accurate indicators of student achievement. The process, however, can be greatly improved by providing better directions to faculty, educating faculty regarding the descriptors and encouraging faculty feedback about the scoring process and the rubric. The committee recommends including an evaluation of the process once the scores are submitted. Faculty feedback may help the committee ascertain what portions of the rubric/descriptors faculty struggled to comprehend or apply, and pinpoint areas in the process that can be improved. Doing so would provide greater perspective on the process of assessment of the Core Learning Outcomes.

The committee also recommends including a comment field at the beginning of the rubric, so that instructors can provide a brief summary of the assignment that they are assessing. The committee further recommends providing better instructions for the comments/analysis fields after each objective of the rubric, so that instructors can provide insight and analysis with regards to the scoring of student achievement in each category of the rubric. As noted from the current comments fields, some assignments did not require students to “perform” in all categories. Similarly, it’s not clear why some of the categories were scored as N/A.

Lastly, the committee recommends clearly communicating that student work from the end of term be used for scoring with the rubric. We want to score students at their best, which is generally at the end of term, after they have received sufficient instruction and practice.

4. Faculty involvement

Describe faculty involvement in the assessment and analysis process.

18 Faculty were involved in the assessment of the CLO:

Bill Noonan, Katie Kissinger, John Evans, Diana Bailey, Lorie Saito, Stephen Shwiff, Leigh Hancock, Scott Stein (fall term)

Diane Uto, John Copp, Tess Fegel, Jennifer Hanlon-Wilde, Tom Kaser, Mandy Webster (winter term)

Keri Byers, Emilie Miller, John Copp, Tess Fegel, Dan Hall, Chauna Ramsey (spring term)

3 faculty and the instructional coordinator were involved in analysis process: Diana Lee-Greene, Zip Krummel, Kristen Kane and Susan Lewis (missing: Dan Ropek)

5. Additional comments

While assessment of the CLOs is in part, to comply with the requirements for NWCCU and accreditation, it's important to state that CGCC's commitment to the assessment of CLOs is the result of our promise to students that: Through their respective disciplines, CGCC students who earn a degree can:

1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical thinking and Problem-Solving*)
3. Apply the knowledge, skills and abilities to enter and succeed in a defined profession or advanced academic program. (*Professional Competence*)
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Assessment of CLOs also furthers our attainment of Core Theme B: Transforming Lives – Education and aligns with CGCC's Value of Excellence.

Results, analysis and committee recommendations will be shared with the Instructional Council during the October 2016 meeting. The results and analysis documents will also be shared with faculty through a faculty-wide email and be posted on the Academic Assessment/Institutional Core Learning Outcomes webpage in an effort towards transparency for our students and community.

D. Feedback from CAO, Directors and Department Chairs:

E. Appendices

Include any assessment method (i.e. rubric), table of results, comments from instructors

1. [AACU LEAP VALUE Rubrics](#)
2. [AACU LEAP VALUE Rubric: Written Communication](#)
3. [AACU LEAP VALUE Rubric: Oral Communication](#)
4. [Institutional Core Learning Outcome Assessment Schedule](#)
5. [General Education Program Review](#)

6. Analysis Submission from Nursing Department: In accordance with Administrative Rule 010.030.000 – Data Publishing, this submission is not available for viewing in order to protect the confidentiality of individual students. Please contact Kristen Kane, Academic Assessment Coordinator, if you have any questions.

7. Comments from Analysis Portion of Written Communication Rubric

Audience, Context and Purpose: Analysis/Comments	Content Development: Analysis/Comments	Sources and Evidence: Analysis/Comments	Organization and Presentation: Analysis/Comments	Control of Syntax and Mechanics: Analysis/Comments	Visual Aids: Analysis/Comments
		They were not required to use sources for their first argumentative essay.			No visual aids for this assignment.
The indicators generally following the grading for the students' General Argument Paper, which required research in support of the paper's thesis.					
N/A	N/A	N/A	N/A	N/A	N/A
Students participated in group research and prep. for this assignment.	Student's studied research techniques over the term. They also evaluated (weekly) written reports from past student's in order to increase the substance of their outcomes.	Student's were required to present research and documentation twice per week. After 6 weeks student's increased their skills in research development and written documentation of their interpretations and outcomes.	Over 6 weeks of the term student's were required to assess and present research findings and produce written documentation of their findings. A weekly written paper was required involving their research and data outcomes.	Because of their required weekly presentations and written assignments-the students developed their skills of oral and written communication in a style that was fluent and meaningful.	The students used power point-music-videos and interviews and guest speakers for their presentations in a very successful manner.
				Our cumulative unit of study in conventions is effective in teaching students to avoid common errors while recognizing the need for peer review to catch those errors not always obvious to student writers.	

8. Comments from Analysis Portion of Oral Communication Rubric

General Purpose: Analysis/Comments	Organization: Analysis/Comments	Language: Analysis/Comments	Delivery: Analysis/Comments	Evidence Based Support: Analysis/Comments
<p>Student's are allowed library research time in order for me to supervise their choices in the journals and abstracts they will be utilizing for their reports.</p>	<p>Examples of reports on located in the library for review-this enables students a better understanding regarding how to organize their data collection and the creation of the overall project in a successful manner.</p>	<p>In class we review language skills issues that will apply to the oral issues in their presentations to the class. They are given instruction for presentation styles(ethos/pathos/and logos). They also receive training via a pre-report practise session in small groups. In this way-timing and delivery can be rehearsed. The student also receives academic feedback from their fellow students. I also give verbal feedback to the individual student regarding their oral and presentation skills.</p>	<p>Students receive training regarding power points/films/overheads/research. Images are reviewed and mini-oral reports take place in small groups. The students also have access to reports on CD'S from past student presentations.</p>	<p>Research training is provided by the library staff and students are able to attend weekly library research meetings in the library and the classroom. As the instructor I provide research updates and clarifications on a one on one basis.</p>

Assessment completed by: Kristen Kane with the help of the CLO Assessment Committee (Susan Lewis, Zip Krummel, Diana Lee Greene)

Date: 10.8.16

Analysis to be submitted by the Academic Assessment Coordinator (kkane@cgcc.edu) by October 15 the following academic year being assessed.

ANALYSIS OF CORE LEARNING OUTCOMES

A. Overview

i. Academic Year:

2016-17

ii. Core Learning Outcome (CLO) Assessed:

Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical thinking and Problem-Solving*)

iii. Level at which the competency is assessed:

200-level courses were chosen to reflect assessment of work students would be completing towards the end of their degree.

B. Recommendations, Action, and Analysis from Previous Year

i. List recommendations from previous reviews

The results of the 2015-16 CLO assessment for Communication indicated that CGCC students scored lowest in the areas of “Sources and Evidence” and/or “Organization and Presentation” for written communication and “Delivery” for oral communication. The CLO Assessment Committee recommended that faculty focus on two of those areas in supporting student improvement for 2017-2018: “Sources and Evidence” and/or “Organization and Presentation”

The committee recommended that actions be taken by all faculty in their classes, since accountability for student achievement of Core Learning Outcomes is the responsibility of all faculty as indicated by their CCOGs when they specify that they address the CLO, Communication, in depth and/or list communication as a course outcome.

ii. Summarize actions taken in response to recommendations.

During spring in-service of 2017, faculty from all departments enthusiastically worked together to create a list of resources that could be used to support students in improving in the two areas of “Sources and Evidence” and “Organization and Presentation”. The writing department further worked to create a comprehensive list of resources that were added to the in-service list. “[Ideas & Resources for Teaching to the CLO: Communication](#)” has been posted to [the Institutional Core Learning Outcomes Assessment webpage](#) and the Teacher Support Center webpage. Faculty will include what they have done in their classes to support student achievement of CLO#1 on their Course Outcomes Assessment Results (Part B). The Academic Assessment Coordinator (AAC) will track these interventions on a spreadsheet and CLO#1 will be assessed again in 2018-19 to determine the impact of these interventions.

iii. Please describe other actions taken that were not based on previous review recommendations. What assessment, evidence, or need prompted these actions?

Last year several limitations of the process were noted:

1. The CLO Assessment team questioned whether the previous year's samplings from 19 courses and 325 students was sufficient enough to get a broad picture of CGCC student ability, given a total enrollment of 4,657 students with an FTE of 1,063. To address this concern a larger student sampling was of 385 students from 29 courses for the 2016-17 assessment of CLO#2: "Critical Thinking and Problem Solving".
2. 2015-16 was the first time CGCC faculty scored student work using the assessment instruments, as adapted from the highly regarded AACU LEAP rubrics. The CLO Assessment Committee had concerns that faculty at CGCC as of yet, do not share a common language with respect to the descriptors used for each category of the rubrics. The committee also acknowledged that students may not know that these are the expectations, language and objectives for communication; although the rubric is available on the web, students have not been formally informed or educated about CLO assessment. We might begin to consider that if we all (CGCC faculty, staff and students) have common language there may be less confusion. To address this concern, a conversation was begun regarding norming the rubric with faculty who are going to use it to score student artifacts. While no formal norming sessions occurred, the AAC was available to discuss descriptors and one member of the CLO Assessment team (Curriculum and Assessment Department (CAD) director) became involved in training for the AACU LEAP Multi-State Collaborative, becoming familiar with the AACU's norming process. The Curriculum and Assessment Department (CAD) is also planning on educating students more thoroughly about the CLO assessment and rubrics by purchasing banners for each CLO for promotion purposes on campus, and including a page in the New Student Orientation Online that describes CLO assessment at CGCC.
3. The committee felt concern that students who were scored on an assignment at the beginning of the course would have significantly different scores than those who were scored towards the end of the term, as a result of receiving more instruction. For the assessment of the second CLO in 2016-17 students were only scored on assignments that were given at the end of the term.
4. Comments/Analysis boxes were not included on the first roll out of the CLO in 2015-16. Without comments/analysis/insight provided by the faculty scoring the student work, the committee speculates that it may be missing some valuable information to consider when analyzing the results. Comments/Analysis boxes were included on the web form, and once scoring was completed faculty were sent to an online evaluation form to provide input about the process and assessment.
5. The CLO Assessment team noted that it cannot be ignored that faculty scoring of their own student artifacts leads to a certain amount of subjectivity in determining the results. The committee is aware of how this subjectivity may distort results, however at this time, as CGCC is only at the beginning of the process of assessing CLOs, the committee has agreed to table this concern until a later date, instead focusing on creating a culture of CLO assessment, and slowly improving the process with each year. During the spring of 2017, the Curriculum and Assessment Department (CAD) contacted AACU to determine if CGCC would like to be a part of the AACU LEAP Multi-State Collaborative, thus allowing other faculty from across the US who have been trained on scoring with the LEAP Rubrics to assess CGCC student work. As a result of the CAD director's participation using a rubric to score student artifacts for the AACU LEAP Multi-State Collaborative and careful deliberation by the CAD,

the CAD decided that CGCC faculty should continue to assess their own student work for the remaining CLOs in order to form a baseline. Consideration regarding CLO assessment as a worthy faculty development opportunity was also factored into the decision.

C. Overview of Process (es) used to Evaluate Competency:

i) Overview of methodology used for assessment:

During the 2016-17 academic year, the second Core Learning Outcome (CLO) was assessed: Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical thinking and Problem-Solving*). An interdisciplinary team, the Core Learning Outcome Assessment Committee, met at the beginning of the academic year to review the process from the previous year and make suggestions for improvement. The CLO Assessment team also adapted two rubrics from AACU's ([Association of American Colleges and Universities](http://www.aacu.org/)) LEAP ([Liberal Education and America's Promise](http://www.aacu.org/)) Value ([Valid Assessment of Learning in Undergraduate Education](http://www.aacu.org/)) Rubrics (<http://www.aacu.org/>): one for the assessment of [critical thinking](http://www.aacu.org/) and one for the assessment [problem solving](http://www.aacu.org/).

Instructors who taught courses that students would be taking towards the end of their degree (sophomore or 200-level courses) were asked to assess student achievement of the Institutional Core Learning Outcome: Critical Thinking and Problem Solving. These upper level courses were chosen with the understanding that students, in theory, would have had multiple freshman level courses that included critical thinking and problem solving as a course outcome, allowing CGCC to assess students who were closer to graduation and who had had more instruction and practice in building problem solving and critical thinking skills.

The process of choosing the courses used to assess the CLO differed from the previous year in that any course being taught that aligned with this CLO in-depth, or that listed critical thinking/problem solving as a course outcome was considered. Previously only courses that were also up for course outcomes assessment were selected, however to address the limitation of sample size indicated in the 2015-16 analysis, the CLO Assessment team recommended choosing from any appropriate course offered each term. As a result of this change in methodology, there was an 18% increase in student work assessed for this new CLO.

Instructors were responsible for scoring the student artifacts using the appropriate rubric, and submitting the results to a web form. Per the recommendation from the CLO Assessment Committee, instructors also had the option to include a rationale or analysis to help explain student scores.

In looking at the methodology, it's important to remember that assessment of Institutional Core Learning Outcomes is different than Course Assessment or Instructor Evaluations: CGCC is compiling information on student achievement of CLOs in order to be analyzed by the Core Learning Outcomes Assessment Committee and shared with CGCC faculty to determine where adjustments and improvements need to be made. Assessment of Institutional Core Learning Outcomes is **not** about an individual instructor or an individual course: the purpose is to obtain a snap-shot on a more global perspective of student ability in formal college-level critical thinking and problem-solving.

ii) Summary of timeline and steps in assessment process:

1) Week prior to start of term: The Academic Assessment Coordinator (AAC) looked at the CCOGs of courses and selected those courses that either listed critical thinking or problem solving as a course outcome or indicated that CLO #2 was addressed in depth. A list of suggested courses was sent by the AAC to each Department Chair (DC) for consideration. DC's responded either confirming the selection or recommending revisions.

2) 2nd to 3rd week of term: Once a course was confirmed by the DC, instructors were contacted via email by the AAC informing them that their course had been selected for assessment of the second CLO. Information about the process of assessing CLOs was provided, as were directions and links to the two rubrics.

3) 3rd to 4th week of term: the AAC contacted the instructor again to determine whether they had an appropriate assignment that could be scored with either the [problem solving](#) or [critical thinking rubric](#). It should be noted that instructors were not required to create new assessments/assignments/projects for their courses, but were instructed to score student assignment/projects that were already used in the course to measure course level outcomes. The list of courses that would assess this CLO was revised if it was determined that instructors did not have an appropriate assignment for this purpose.

4) 6th week of term: packets were created by the AAC and Curriculum and Assessment Administrative Assistant (CAAA) and distributed to the instructors. Within the packets were paper copies of either the problem solving or critical thinking rubric to be used to score each individual student's assignment, and instructions for submitting the scores on the web form.

5) End of term to week after end of term: Instructors scored student assignments using the rubric and input the totals for each category of the rubric in the web form. Adjunct faculty submitted time cards for up to 3 hours to be paid at the Special Project Rate. The AAC compiled the results at the end of each term into spreadsheet.

6) Beginning of summer term: the AAC compiled the results for all terms into two tables: one for Problem Solving and one for Critical Thinking. The scores from the two tables were then combined to create a meta-number for analysis by the CLO Assessment Committee.

7) Week before fall term 2017: The CLO Assessment Committee met to review and analyze results, provide recommendations based on the results to improve student achievement of CLO#2, review the CLO assessment process and make recommendations for improvement to the process.

8) Fall In-service: Results were shared with faculty, as well as the committee's recommendations to help improve student achievement of Critical Thinking-Problem Solving. Faculty used time during in-service to develop strategies for instruction, curriculum and/or assessment based on the committee's recommendations.

9) Fall term Instructional Council (IC) meeting: results, analysis and recommendations will be shared with the IC.

10) Faculty will be reminded of their commitment to implementing strategies to support students in achievement of CLO#1 and #2 when they complete Part A of Course Outcomes Assessment.

11) Faculty will list the strategies they implemented to support student achievement of CLO#1 and #2 when they complete Part B of Course Outcomes Assessment.

iii) Sampling information:

438 students were enrolled in the 29 200-level courses from 19 disciplines. A total of 385 student artifacts were scored by the instructors of those courses.

298 of those students were enrolled in courses that scored work using the [critical thinking rubric](#), with 262 of those students completing the assignments. 140 students were enrolled in courses that scored work using the [problem solving rubric](#), with 123 students completing those assignments.

iv) Assessment Instrument(s):

[Problem Solving](#) and [Critical Thinking](#) Rubrics were adapted from LEAP Value Rubrics (<http://www.aacu.org/>). The original VALUE initiative in 2007-09 involved teams of faculty and other educational professionals from over 100 higher education institutions engaged over many months to develop 16 VALUE rubrics for the LEAP Essential Learning Outcomes. Each rubric was developed from the most frequently identified characteristics or criteria of learning for each of the 16 learning outcomes. Drafts of each rubric were then tested by faculty with their own students' work on over 100 college campuses.

The CLO Assessment Committee's adaptations to the LEAP Rubrics included changes to some of the descriptors and a renaming of the student achievement categories from Capstone (4); Milestones (3 and 2); and Benchmark (1) (LEAP VALUE Rubrics) to Mastery; Accomplished; Developing; Beginning; Not Demonstrated; and Not Applicable (CGCC Critical Thinking and Problem Solving Rubrics). The CLO Assessment Committee considered the adapted student achievement categories to be more applicable to the standards CGCC currently uses for students.

v) Data Analysis Procedures:

Once instructors scored the student artifacts using the adapted LEAP Value Rubric for Critical Thinking and Problem Solving, results were gathered by the AAC and presented to the CLO Assessment Committee. The CLO Assessment Committee analyzed both the results and the process. The analysis was recorded during the meeting and captured in this analysis template.

B. Results

1. Describe results of assessment work related to competency:

Provide detailed results of assessment, including charts, graphs or other visuals

Overall Results for Critical Thinking/Problem Solving:

A total of 438 students were enrolled in the courses that participated in the assessment of the CLO Critical Thinking/Problem Solving. Of those students, 385 students completed the assignments and were scored using either the Critical Thinking or Problem Solving scoring rubric. A total of 67% of those

students scored as accomplished or better when the scores of the Critical Thinking and Problem Solving Rubrics were combined. 23% were scored into the Developing category and 7% were scored into Beginning.

Total Number of students enrolled in assessed courses: 438	Mastery	Accomplished	Developing	Beginning	Not Demonstrated	Not Applicable
Total # of students who completed scored assignment: 385						
Totals (Combined Scored Written and Problem Solving Rubric)	36%	31%	23%	7%	2%	4%
Total Percentage of Students Scored as Accomplished or Better for Critical Thinking and Problem Solving:	67%					

Critical Thinking:

298 students were enrolled in the courses that participated in the assessment of Critical Thinking. Of those students, 262 students completed the Critical Thinking Assignments and were scored using the Critical Thinking Rubric. A total of 68% of those students scored as accomplished or better in Critical Thinking. 25% were scored into the Developing category and 6% were scored into Beginning.

More than 67% of students scored as Accomplished or better in the categories: Explanation of Issues, Evidence and Conclusions and Related Outcomes.

64% scored into accomplished or better for Influence of Context and Assumptions and the 67% scored into accomplished or better in the category of Student’s Position, which means that more than 33% of students at CGCC are still at the beginning or developing stages for these two categories.

Institutional Core Learning Outcome #2:	Through their respective disciplines, CGCC students who earn a degree can:							
Critical Thinking: Total Number of students enrolled 298 Total # of students who completed	Mastery	Accomplished	Developing	Beginning	Not Demonstrated	Not Applicable	Total numbers for Accomplished or better	Total Percentage for Accomplished or better

scored assignment: 262								
Critical Thinking Rubric: Explanation of Issues: TOTALS	97	92	61	10	0	2	189	73%
Critical Thinking Rubric: Evidence: TOTALS	77	98	67	19	1	0	175	66%
Critical Thinking Rubric: Influence of Context and Assumptions TOTALS	61	94	67	19	3	18	155	64%
Critical Thinking Rubric: Student's Position: TOTALS	76	76	54	19	3	31	152	67%
Critical Thinking Rubric: Conclusions and Related Outcomes: TOTALS	87	89	67	14	1	4	176	68%
Total Percentage of Students Scoring with Critical Thinking Rubric	32%	36%	25%	6%	1%	4%		
Total Percentage of Students who Scored Accomplished or Better with Critical Thinking Rubric	68%							

Problem Solving:

140 students were enrolled in the courses that participated in the assessment of the CLO Problem Solving. Of those students, 123 students completed the Problem Solving assignments and were scored using the Problem Solving Rubric. A total of 66% of those students scored as accomplished or better in Problem Solving. 20% were scored into the Developing category and 9% were scored into Beginning.

More than 66% of students scored as Accomplished or better in the categories: Define Problem, Identifying Strategies, Propose Solutions/Hypothesis, Evaluate Potential Solutions. It should be noted that only 65% of students scored at accomplished or better in the category of Implement Solutions and 62% scored into accomplished or better in the category of Evaluate Outcomes.

Problem Solving: Total Number of students enrolled: 140 Total # of students who completed scored assignment: 123	Master y	Accomplishe d	Developin g	Beginnin g	Not Demonstrate d	Not Applicabl e	Total numbers for Accomplishe d or better	Total Percentage for Accomplishe d or better
Problem Solving Rubric: Define Problem: TOTALS	58	25	26	11	3	0	83	67%
Problem Solving Rubric: Identify Strategies: TOTALS	58	22	30	7	6	0	80	65%
Problem Solving Rubric: Propose Solutions/Hypothesi s: TOTALS	57	29	23	11	3	0	86	70%
Problem Solving Rubric: Evaluate Potential Solutions: TOTALS	52	29	19	17	6	0	81	66%
Problem Solving Rubric: Implement Solutions: TOTALS	42	32	21	9	9	10	74	65%
Problem Solving Rubric: Evaluate Outcomes: TOTALS	45	25	24	11	8	10	70	62%
Total Percentage of Students Scoring with Problem Solving Rubric	43%	23%	20%	9%	5%	3%		
Total Percentage of Students who Scored Accomplished or Better with Problem Solving Rubric	66%							

2. Limitations

What were the limitations of the assessment?

- 1) As noted in the analysis of CLO#1 in 2015-16, it cannot be ignored that faculty scoring of their own student artifacts leads to a certain amount of subjectivity in determining results. When looking at the results of CLO#2, the committee acknowledged that results may be somewhat distorted as a result of faculty assuming that their work is being scrutinized or evaluated and consequently inflating the scores that they give students. Although the following language is included in an explanation of CLO assessment (both on the website and in faculty emails): *“Assessment of Institutional Core Learning Outcomes is **not** about an individual instructor or an individual course: the purpose is to obtain a snap-shot on a more global perspective of student ability in formal college-level communications”*, instructors may not read the entirety of their emails or may continue to believe that their student scores could impact their teaching assignments. Further the committee felt it was reasonable to assume that the categories named “Beginning”, “Developing”, “Accomplished” and “Mastery” may further influence faculty scoring, more than the associated number system of 1, 2, 3 and 4.
- 2) The committee was concerned that many instructors scored student work as “not applicable” in the categories of “Influence of Context and Assumptions” and “Student's Position” (Critical Thinking) and “Implement Solutions” and “Evaluate Outcomes” (Problem Solving). A few instructors noted in the post-assessment survey that they were concerned that the rubric may not “fit” to their assignments (see Appendices 7. Summary of Instructor Evaluations of CLO#2 Process). The layout of the web form made it difficult to determine whether other instructors’ comments/analysis addressed why a student artifact might be considered “not applicable” in these categories. Without this information, the committee is forced to speculate when interpreting the results and what they mean to teaching and learning.
- 3) Norming continues to be a limitation of this assessment work. A few instructor responses on the post-assessment survey addressed their confusion regarding the differences between the categories. Other instructors noted confusion about whether to score student work at the community college level or the university level (see Appendices 7. Summary of Instructor Evaluations of CLO#2 Process).

In summary, it should be noted that the process of CLO assessment and the adapted AACU rubrics are still fairly new to faculty. 2016-17 was the second time a CLO has been assessed at CGCC, and faculty and the CLO Assessment Committee know that there is still work to be done to improve the process to provide more accurate results and analysis. As more faculty participate in the process, awareness of Core Learning Outcomes and the process of assessment continues to improve.

C. Analysis of Results

Assessment and analysis at this level measures whether degree-seeking students leave with some level of proficiency of the Institutional Core Learning Outcomes (Core Theme B: Transforming Lives – Education; Objective B3)

1. Discussion and Implications

Reflect on what was learned and what the impacts might be (not a repeat of findings). Reflection should include the implications of the findings to the General Education Program.

The percentage of students scored as accomplished or better in critical thinking (68%) and problem solving (66%) initially appears to be relatively low, especially when compared with expectations for CGCC's Core Theme B3.3 "Achievement of student learning outcome at the institutional level (Core Learning Outcomes)". Even with the possibility of inflated scoring, CGCC degree-seeking students score "Below Mission Expectation" (Level 1 is 69% or fewer). The CLO Assessment Committee spent considerable time discussing the "norm" for community college students with regards to the AACU rubrics used to assess Critical Thinking and Problem Solving and determined that perhaps, for community college students, mastery or even accomplished levels are beyond what should be expected for students who are at sophomore level in their undergraduate education. "Developing" may be a more appropriate expectation for our students when it comes to critical thinking and problem solving, skills that may require much more time, education and/or practice to mature beyond the developing level.

Unlike 2015-16, when the committee chose to focus on the categories with the lowest scores in accomplished or better, the committee this year chose to focus on the categories that had the highest numbers of students scored into "Beginning" and "Not Applicable": Student's Position (Critical Thinking) and "Evaluate Potential Solutions" (Problem Solving). The committee felt that these two categories from the rubrics were a good fit since each required students to use similar skills in evaluating the complexity of an issue or the feasibility of multiple solutions.

The AACU rubrics are used not only to assess student achievement of the CLO's, but also to inform CGCC where faculty can work together to focus instruction in one or two areas. The implications of this focus, as recommended by the committee, is to 1) move more students from the beginning level to the developing level in developing a position (Critical Thinking) and evaluating potential solutions (Problem Solving) and 2) create a common goal for instruction that all faculty can contribute to. The number of student artifacts that were scored as "not applicable", leads the committee to assume that there may be some instruction in critical thinking that does not involve evaluating one's assumptions or positions. Similarly, some instruction in problem solving may not involve evaluating the feasibility of potential solutions.

With regards to the General Education program, it is interesting to compare results from this Core Learning Outcomes assessment of Critical Thinking/Problem Solving to that of the results of degree outcomes assessment. Results from the assessment of degree outcomes for the Associate of General Studies, Associate of Science and Associate of Science Transfer-Business all show student achievement of Critical Thinking/Problem Solving (Outcome 2 for all 3 degrees) to consistently be around 88% (students achieving a C or better in those courses that align with the outcome). This result is much higher than the result of the CLO assessment which indicates that 66-68% of students are accomplished or better. While the committee did not analyze the implications of the discrepancy in student achievement of this outcome, it should be noted that different methods of measuring student achievement of outcomes is used for the assessment of the three transfer degrees (end of course grades) as opposed to measuring student achievement of Core Learning Outcomes (scoring student artifacts).

2. Recommendations and Action Items

Assessment of Institutional Core Learning Outcomes assesses whether students, regardless of which degree they earn at CGCC, achieve the skills and knowledge that are at the foundation of CGCC's General Education program. Recommendations and Action items should be related to recommendations made in the current General Education Program Review and can include a progress report or revisions on the Gen Ed Program Review recommendations.

i) What actions will be taken as a result of the assessment?

1. It is recommended by the CLO Assessment Committee that actions be taken by all faculty in their classes, since accountability for student achievement of Core Learning Outcomes is the responsibility of all faculty as indicated by their CCOGs when they specify that they address the CLO, Critical Thinking and Problem Solving, in depth and/or list some kind of critical thinking or problem solving course outcome.

As stated in Section C.1., the committee recommends that faculty at CGCC focus on 2 objectives for the next year and a half: "Student's Position" (Critical Thinking) and "Evaluate Potential Solutions" (Problem Solving). Faculty will continue the process that they started during Spring In-service 2016, and work together to develop strategies that they can integrate into their instruction and assessment that help students to develop a position when working on critical thinking, and evaluate potential solutions when working on problem solving. A list of resources to support faculty instruction in these two areas has been compiled and posted to the Institutional Core Learning Outcomes website. Faculty will be reminded of their commitment to increase instruction or integrate an assessment for these two areas when they complete Part A of course outcomes assessment, and will then describe what they did to support students in achieving this CLO at a higher level when completing Part B. The AAC will track these interventions on a spreadsheet and CLO#2 will be assessed again in 2019-20 to determine the impact of these interventions.

2. To address the concerns of the limitations of the assessment methods, it is recommended that the terms "Beginning", "Developing", "Accomplished" and "Mastery" be removed from the adapted rubric. The rubric for the 2017-18 CLO Assessment of CLO #4 (Cultural Awareness), will have the levels numbered 1-4, so that faculty may be less influenced to inflate their scoring (Limitation 1). The web form will also be updated to include a comments area for the level "Not Applicable", so that faculty can explain why they scored a particular student artifact from a category as "Not Applicable". (Limitation 2).

3. The committee will review and determine at what level CGCC expects student achievement of each Core Learning Outcome, noting that there may be a discrepancy between expected levels depending on the skills, knowledge and/or attitude that each CLO requires.

ii) Describe how these action items are related to recommendations from the current General Education Program Review? Include how will these changes affect the General Education program.

The 2015-16 General Education Program Review does recognize that a different method of measuring student achievement of outcomes is used by some CGCC degrees and certificates than that used by the transfer degrees and recommended that "the disparity between the General Education department and

other programs at some point be resolved.” The next General Education Program review may also want to consider comparing the results of the assessment of the Core Learning Outcomes when resolving the disparity, as all 5 Core Learning Outcomes will have gone through at least one assessment cycle.

3. Evaluate the assessment strategy

Were the assessment methods accurate indicators of student achievement of the core learning outcome? Why or why not? Suggestions for changes.

Given that the assessment methods and LEAP rubrics developed by the AACU, have been tested and widely adopted by post-secondary institutions across the US, it is probably safe to say that the assessment methods were accurate indicators of student achievement. As noted in the limitations (Section B2) the committee is concerned, however, about the accuracy and subjectivity of faculty scoring their own student artifacts. The committee agrees that CGCC will continue to have faculty score their own student artifacts while a baseline for each CLO is established, however it is recognized that the process, can be improved by educating faculty regarding the descriptors, reminding faculty that student achievement of a CLO is **not** about an individual instructor or an individual course and thus encouraging faculty to accurately score student work.

4. Faculty involvement

Describe faculty involvement in the assessment and analysis process.

25 faculty from 19 disciplines were involved in the assessment of the CLO (compared to 18 faculty in the previous year):

Fall Term: Elizabeth Anderson (ART 284), Luise Langheinrich (BA 223), Tom Lieurance (EET 221), Emilie Miller (BI 211), Dan Ropek (BI 231), Laura McMullen (BI 234), David Wagenblast (EC 200), Stephen Shwiff (HST 201), John Copp (PS 201), Kristen Kane (PSY 201A), Zip Krummel (PSY 215), Dan Hall (SOC 205), Leigh Hancock (ENG 237)

Winter Term: Patrick Hawke (CAS 213), Siri Olson (CAS 216), Robert Surton (CS 250), Lorie Saito (NUR 211), Gretchen Gebhardt (G 202), Tess Fegel (PSY 215), Mandy Webster (WS 210), Jennifer Hanlon-Wilde (ENG 253), Silvia Huszar (SPA 202)

Spring Term: Stephen Shwiff (BA 208, BA 226), John Evans (MTH 253), Kristin Alligood (BI 213), Jack Brook (FN 225), David Wagenblast (EC 202), Chauna Ramsey (WR 227)

3 faculty and the instructional coordinator were involved in analysis process: Dan Hall, Dan Ropek, Zip Krummel, Kristen Kane and Susan Lewis.

5. Additional comments

While assessment of the CLOs is in part, to comply with the requirements for NWCCU and accreditation, it's important to state that CGCC's commitment to the assessment of CLOs is the result of our promise to students that: Through their respective disciplines, CGCC students who earn a degree can:

1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. *(Communication)*
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. *(Critical thinking and Problem-Solving)*
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. *(Quantitative Literacy)*
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. *(Cultural Awareness)*
5. Recognize the consequences of human activity upon our social and natural world. *(Community and Environmental Responsibility)*

Assessment of CLOs also furthers our attainment of Core Theme B: Transforming Lives – Education and aligns with CGCC’s Value of Excellence.

Results, analysis and committee recommendations will be shared with faculty during the fall 2017 in-service. The results and analysis documents will also be shared with faculty through a faculty-wide email and be posted on the Academic Assessment/Institutional Core Learning Outcomes webpage in an effort towards transparency for our students and community.

D. Appendices

Include any assessment method (i.e. rubric), table of results, comments from instructors

1. [AACU LEAP VALUE Rubrics](#)
2. [AACU LEAP VALUE Rubric: Critical Thinking](#)
3. [AACU LEAP VALUE Rubric: Problem Solving](#)
4. [Institutional Core Learning Outcome Assessment Schedule](#)
5. Comments from Analysis Portion of Critical Thinking Rubric

Explanation of Issues	Evidence	Influence of Context and Assumptions	Student's Position	Conclusions and Related Outcomes
This was a very good class in which all students who completed the assignment showed at least some ability to think critically and use sources to develop a comprehensive synthesis.	All but one student met the minimum standard for sources of the assignment. Most sources used were of reasonable quality. As a whole the class did very well.		Students were less accomplished in this aspect of their assignment.	See previous.
Assignment varied in how students could write, thus the not applicable.			Requirements allowed varied writing. In these five papers, students did not clearly come out on a	

			position, although positions were inferred in writing, there was no clear indication of direct position taken.	
May be a little bit of second language influence in this one.	They impressed me a little bit here, just started getting a more thoughtful interpretation/evaluation.	Find them trying to take the easy way out, or the simplest and obvious perspectives.	Still thinking too simplistic and not global enough, or about others'.	"By this point they were ""getting it,"" and the thinking really kicked in.
Next time I will do this again, keep track, and then re-do it a few weeks later and see if I get any regression to the mean."				
	I don't think this category is as accurately assessed as it could be. Some students were able to interpret/evaluate the information they took from their sources, however they may not have been able to question the viewpoints of the experts. In the future, I would encourage this descriptor to be dived into two separate ones, separating questioning viewpoints from interpreting/evaluating sources.	"Students demonstrated this, but it was not necessarily a requirement for this paper, as a result, scoring appears to be all over the place for this category.		
A question I have is what if this isn't required for the paper, but students demonstrate it anyway. Can we have students score into a category that is not required for the paper?"				
				This result sample is small, so may not be as helpful as a larger sample. One student has taken an Incomplete, so will not complete this assignment until mid-January.
50% of students were accomplished in explanation of issues in completing assignment	50% of students were accomplished in using evidence and information to investigate their conclusion in answering the assignment	50 % of students were developing an influence of context and assumptions in answering the assignment	at least 75% of students were able to develop a perspective or opinion in answering the assignment	All students were able to at least develop a conclusion in answering the assignment
Complex thought was achieved by a few, most were in the middle areas on all categories.	Two students were able to use of evidence with enough evaluation and interpretation as a option, most accepted and used evidence from the sources without questioning its viewpoint, etc. was achieved by a	Mostly placed their own interpretation of the information as the core of their answers, with majority reaching the developing level of their putting thoughts into context.	In this area students did much better than in other areas surveyed. The majority of class' discussion and focus on writing were in the area of scholarly thesis supported by evidence bringing the paper to a	Areas of focus were better than ones we didn't focus on. Students didn't necessary have the preparation for the writing level expected at the WR 121.

	few, most did not evaluate the sources at all.		strong supported conclusion.	
Relatively weak, lowest score.	Evidence use was strong.	Most evenly spread across proficiency levels.		"Relatively strong, showed ability to reach reasoned conclusions.
Note - a place to overview the actual topic in this form might have provided more context for the data provided."				
Many students achieved mastery in this area due to their preparation and long hours of in-class research and discussions. They created power points, interviews and videos regarding their subject matter. Their teamwork on presentations created an avenue for dedicated information processing and group and individual evaluations of their work.	The students were able to analyze and discuss data in a group modality- individual research techniques and weekly group discussion meetings. They gathered information from journals/books/web sites/personal interviews and case studies.	Many of the student's received high levels in this area due to weekly analysis groups-research groups and individual and group in-class evaluations. After data collection students were required to present both personal and academic positions in regards to their subject matter. I provided weekly guidance and evaluations on their progress.	The student research groups were required to synthesize complex issues and to explore issues with imagination and reflections based on data and peer reviewed articles. They were also required to test theories with direct discussion- data review and community interviews. All of the students produced power points- art and creative question and answer sessions in order to educate other class members.	Students provided evaluations and evidence of their findings via academic research-weekly group discussions and peer review evaluations. The held screening sessions of their reports in order to provide evidence based data. Open discussions were provided during their presentations in order for all students a chance to discuss viewpoints and their related outcomes.
"I think the large amount of snow days really impacted the overall quality of papers submitted this term. I had a few students (3) not submit final drafts, so some of these ratings are based on rough drafts. I also noticed the writing ability was lacking in a few papers. (NOTE: This applies to all portions of the rubric).				
I also found many students struggled with writing abstracts - which is where this rubric item would have been found in my assignment."	Many students focused papers more on research and reporting information they found. Only a few spend more time on comparing the information and questioned what was found. Again, I think the snow days impacted this a great deal - two weeks at the start of the term really cut into research and writing time.	I did not feel as though this aspect applied to my assignment.	Again, students struggled with formulating an abstract and clearly stating the point/purpose/thesis of their paper. I definitely notice a difference in the quality of papers this term vs. fall term. (many students were overlapping) I think all the snow days impacted the overall quality. I have students submit rough drafts, giving them feedback and areas to improve on - many were incomplete and did not have abstracts to comment on!	"All statements made in previous comments also apply here. The conclusion is the last thing they write and therefore is always the item that needs the most improvement.

6. Comments from Analysis Portion of Problem Solving Rubric

Define Problem	Identify Strategies	Propose Solutions/Hypothesis	Evaluate Potential Solutions	Implement Solutions	Evaluate Outcomes
			I should have been more clear on the requirement of the student fully explaining their solutions. Some were quite brief on their writing.	This is not applicable since their implementations will happen either after they graduate or at some other time. They did have an implementation plan.	This is not applicable since the students did not implement their solution. But I did require an evaluation plan for when they implement. They had to have a measurable, time defined objective that they could then evaluate against. This they did have in their project.
Wasn't required since the 'problems' were stated in the assignment.	Overall good use of multiple strategies.	Hypothesis were limited due to structure of the assignment.	Many more in 'developing', perhaps a problem with the project fit to category.		Many able to evaluate reasoned outcome assessment.
				some students showed a flaw in lab procedure, or writing report, not in understanding	
Students were able to define the problem presented to them and use the tools they had been learning and apply them to create an original document. The student that is at the Beginning level did not participate in class discussions nor followed through with weekly assignments to develop the critical thinking skills used to define a problem.	Students were able to determine which tools were applicable to the problem and utilize a multitude of strategies to address the problem in creating original documents. It was very clear students were strong in this area and the tools used were impressive. The two students in at the developing level has shown growth through out the term.	Students used a variety of solutions to address the problem. It is clear students had developed the knowledge and skill to apply to the problem.	Students are accomplished in this area. The solutions presented in original documents were creative and multi-dimensional. There is not only one correct answer to the problem. Students demonstrated they were knowledgeable and comfortable with the solutions they presented.	The majority of students are at the mastery level in this category, even though there are 4 in Accomplished, it will not take much more for them to reach the Mastery level. Again, the students in the Beginning and below are students who struggled on a weekly basis to complete the minimum amount of work or chose not to complete any assignments prior to the final.	Clearly, students chose to go over and beyond the bare minimum of the assignment in order to demonstrate the skills they have gained.
"4 students did not complete assignment.					

45% in developing stage 2					
23% in stages 3-4"	"4 students did not complete assignment.				

7. Summary of Instructor Evaluations of CLO#2 Process:

Q2: How long did it take you to complete the scoring using the rubric?

30 minutes to 5 hours dependent on. Instructors reported that those hours included:

- Familiarization with the rubric and determine how to apply it to the particular assignment to be assessed
- Folded scoring with rubric and the grading of assignment
- Collecting of data

Q3: What questions or concerns do you have about using the rubric to score your students' assignments?

- None
- Questions of rubric fit with assignment (i.e.: some assignments did not have multiple solutions)
- level of evaluating students (4 year college level vs 2 year college level)
- "subjective and open to interpretation, but thought provoking"
- Many felt the rubric was well-thought out: "I did like the rubric to score the assignment because it was applicable to the assignment, due to there not being only one answer to the problem (creating original documents with the tools and skills covered throughout the term). Students are encouraged to demonstrate what they've learned and think outside of the box, rather than in a specific step-by-step process."
- Difficulty with distinguishing levels: "I found it a bit hard to distinguish between levels on some items. For example, when a student is writing a paper about his interpretation of how insects function metaphorically in Grapes of Wrath, it's a little bit hard to judge how thoroughly and systemically he has analyzed his and others' assumptions. Not impossible--but I wouldn't call the results I've submitted "hard data."

Q4: What other questions or concerns do you have about the rubric or assessment of Institutional Core Learning Outcomes?

- No concerns, but it makes me realize that I need to include more information in my course about opposing viewpoints and how to present them in an essay.
- Gives me great feedback about motivating students and to continue providing supervised research and peer review and in-class discussions.
- Assignments need to be carefully crafted to rubrics. Complex to do since critical thinking and problem solving overlap partially and have gaps where they may not relate well.
- I understand that we need to do this. And I'm committed to promoting and deepening critical thinking skills in all my classes. It seems essential to our democracy to do so.

Q5: Further Comments

- This assessment aside, the most glaring issue with students' work was a failure across the board to properly cite and give credit to other sources used, especially in this case where big chunks were taken from their book or from what I did in class on the board (part of what they were told to do)

- The rubric is very helpful for assessing work. I found the rubric to be more intuitive than assigning traditional grades. I think I will try to incorporate the rubric more to help facilitate grading.
- What a great way for a teacher to evaluate their students. Assists me in the importance of holding high standards and the amazing potential of students when provided guidance and enthusiasm in the classroom is demonstrated.
- Takes too much thinking.

Assessment completed by: [Kristen Kane](#) with the help of the CLO Assessment Committee ([Susan Lewis](#), [Zip Krummel](#), [Dan, Ropek](#) and [Dan Hall](#))

Date: 9.20.17

Analysis to be submitted by the Academic Assessment Coordinator (kkane@cgcc.edu) by October 15 the following academic year being assessed.

ANALYSIS OF CORE LEARNING OUTCOMES

A. Overview

1. Academic Year:

2017-18

2. Core Learning Outcome (CLO) Assessed:

#4 - Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)

3. Level at which the competency is assessed:

200-level courses were chosen to reflect assessment of work students would be completing towards the end of their degree.

B. Recommendations, Action, and Analysis from Previous Year

1. List recommendations from previous reviews

2. Summarize actions taken in response to recommendations.

3. Describe and analyze results from actions taken

Recommendation 1. The committee recommended that faculty at CGCC focus on 2 objectives for the next year and a half: “Student’s Position” (Critical Thinking) and “Evaluate Potential Solutions” (Problem Solving).

Actions: CLO assessment results and report were shared with faculty during fall in-service 2017. Faculty collaborated to create [Ideas & Resources for Teaching to the CLO: Critical Thinking and Problem-Solving](#). Faculty report out their interventions to support students in critical thinking and problem solving in Part B of their course outcomes assessment, with the Academic Assessment Coordinator (AAC) tracking the interventions in a spreadsheet.

Results: To be analyzed following the 2nd assessment of CLO 2.

Recommendation 2. To address the concerns of the limitations of the assessment methods, it was recommended that the terms “Beginning”, “Developing”, “Accomplished” and “Mastery” be removed from the adapted rubric. The rubric for the 2017-18 CLO Assessment of CLO #4 (Cultural Awareness), will have the levels numbered 1-4, so that faculty may be less influenced to inflate their scoring.

Actions: The descriptors for student achievement levels were removed from the [Intercultural Knowledge and Competence Rubric](#). Student achievement levels were numbered at 1 - 4, not demonstrated and not applicable.

Results: The committee questioned whether removing the descriptors had any impact on the accuracy of scoring student work. As noted below in Recommendation 3 the committee determined that level 3 (accomplished) was a reasonable target for CGCC students. Analyzing the results, the committee noted that a large percentage of students (36%) were scored into level 4 (mastery). The

committee deliberated over whether students were really achieving this level of knowledge, skills and attitudes for cultural awareness and questioned whether some instructors were still inflating scores for student work. Even though descriptors were removed, it would be obvious to instructors that level 4 was the highest level for students to achieve, and the committee suspected that a few faculty were still influenced by the desire for their students reach a high level of achievement for cultural awareness. The committee also contemplated that the inflation of scoring may be a result of the lack of norming and understanding of how to apply the rubric.

Recommendation 3. The committee will review and determine at what level CGCC expects student achievement of each Core Learning Outcome, noting that there may be a discrepancy between expected levels depending on the skills, knowledge and/or attitude that each CLO requires.

Actions: The committee reviewed the performance indicators for each level of achievement in the rubric, gauging which level was most appropriate for community college students.

Results: The committee determined that it is reasonable to expect CGCC students to achieve the level of “accomplished” (level 3) for CLO #4 “Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community”. The committee deemed that the level of knowledge, skills and attitudes expected for level 4, mastery, as described by the adapted LEAP rubric for cultural awareness, are outside of the realm of this community college’s expectations and responsibilities.

Please describe other actions taken that were not based on previous review recommendations. What assessment, evidence, or need prompted these actions?

No other actions were taken to change the process or the rubric of CLO assessment. It should be noted that several other limitations were indicated in the [Report 2016-17: CLO#2 Critical Thinking and Problem-Solving](#) :

1. The committee was concerned that many instructors scored student work as “not applicable” in the categories of “Influence of Context and Assumptions” and “Student's Position” (Critical Thinking) and “Implement Solutions” and “Evaluate Outcomes” (Problem Solving). A few instructors noted in the post-assessment survey that they were concerned that the rubric may not “fit” to their assignments ([see Appendices 7. Summary of Instructor Evaluations of CLO#2 Process](#)). The layout of the web form made it difficult to determine whether other instructors’ comments/analysis addressed why a student artifact might be considered “not applicable” in these categories. Without this information, the committee is forced to speculate when interpreting the results and what they mean to teaching and learning.

Action: No action was taken to address this limitation. Web form options will be reviewed with the Information Technology department for 2018-19 CLO assessment.

2. Norming continues to be a limitation of this assessment work. A few instructor responses on the post-assessment survey addressed their confusion regarding the differences between the categories. Other instructors noted confusion about whether to score student work at the community college level or the university level .

Action: While norming activities did not take place, changes to the rubric were made to clarify performance indicators. Potential influential descriptors for the levels of achievement were removed as described in Actions to Recommendation 2.

C. Overview of Process (es) used to Evaluate Competency:

A. Overview of methodology used for assessment:

During the 2017-18 academic year, the fourth Core Learning Outcome (CLO) was assessed: “Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)”. An interdisciplinary team, the Core Learning Outcome Assessment Committee, met at the beginning of the academic year to review the process from the previous year and make suggestions for improvement. The CLO Assessment team also adapted the [Intercultural Knowledge and Competence rubric](#) from AACU’s ([Association of American Colleges and Universities](#)) LEAP ([Liberal Education and America’s Promise](#)) Value ([Valid Assessment of Learning in Undergraduate Education](#)) Rubrics (<http://www.aacu.org/>)

Instructors who taught courses that students would be taking towards the end of their degree (sophomore or 200-level courses) were asked to assess student achievement of the Institutional Core Learning Outcome: Cultural Awareness. These upper level courses were chosen with the understanding that students, in theory, would have had a few freshman level courses that included cultural awareness as a course outcome, allowing CGCC to assess students who were closer to graduation and who had had more instruction and practice in building cultural awareness skills.

Each term, instructors who were teaching courses that had a cultural literacy designation or addressed cultural awareness in-depth or minimally, as indicated in the CCOGSs, were contacted to determine if they had a suitable assessment to be scored using the [Intercultural Knowledge and Competence](#) rubric. Instructors were then responsible for scoring the student artifacts using the rubric, and submitting the results to a web form. Instructors also had the option to include a rationale or analysis to help explain student scores.

In looking at the methodology, it’s important to remember that assessment of Institutional Core Learning Outcomes is different than Course Assessment or Instructor Evaluations: CGCC is compiling information on student achievement of CLOs in order to be analyzed by the Core Learning Outcomes Assessment Committee and shared with CGCC faculty to determine where adjustments and improvements need to be made. Assessment of Institutional Core Learning Outcomes is **not** about an individual instructor or an individual course: the purpose is to obtain a snap-shot on a more global perspective of student ability in formal college-level critical thinking and problem-solving.

B. Summary of timeline and steps in assessment process:

1) Week prior to start of term: The Academic Assessment Coordinator (AAC) looked at the CCOGS of courses and selected those courses that either listed cultural awareness as a course outcome or indicated that CLO #4 was addressed in depth. A list of suggested courses was sent by the AAC to each Department Chair (DC) for consideration. DC’s responded either confirming the selection or recommending revisions.

2) 2nd - 3rd week of term: Once a course was confirmed by the DC, instructors were contacted via email by the AAC informing them that their course had been selected for assessment of the fourth CLO.

Information about the process of assessing CLOs was provided, as were directions and links to the rubric.

3) 3rd - 4th week of term: the AAC contacted the instructor again to determine whether they had an appropriate assignment that could be scored with the [Intercultural Knowledge and Competence](#) rubric. It should be noted that instructors were not required to create new assessments/assignments/projects for their courses, but were instructed to score student assignment/projects that were already used in the course to measure course level outcomes. If it was determined that instructors did not have an appropriate assignment for this purpose, the course was removed from the list of courses used to assess CLO#4.

4) 6th week of term: packets were created by the AAC and Curriculum and Assessment Administrative Assistant (CAAA) and distributed to the instructors. Within the packets were paper copies the [Intercultural Knowledge and Competence](#) rubric to be used to score each individual student's assignment, and instructions for submitting the scores on the web form.

5) End of term - week after end of term: Instructors scored student assignments using the rubric and input the totals for each category of the rubric in the web form. Adjunct faculty submitted time cards for up to 3 hours to be paid at the Special Project Rate. The AAC compiled the results at the end of each term into a spreadsheet.

6) Beginning of summer term: the AAC compiled the results for all terms.

7) Week before fall term 2018: The CLO Assessment Committee met to review and analyze results, provide recommendations based on the results to improve student achievement of CLO#4, review the CLO assessment process and make recommendations for improvement to the process.

8) Fall In-service: Results were shared with faculty, as well as the committee's recommendations to help improve student achievement of cultural awareness. Faculty used time during in-service to develop strategies for instruction, curriculum and/or assessment based on the committee's recommendations.

9) Faculty will be reminded of their commitment to implementing strategies to support students in achievement of CLO#1, #2 and #4 when they complete Part A of Course Outcomes Assessment.

10) Faculty will list the strategies they implemented to support student achievement of CLO#1, #2 and #4 when they complete Part B of Course Outcomes Assessment.

C. Sampling information:

429 students were enrolled in the 21 200-level courses from 7 disciplines. A total of 355 student artifacts were scored using the [Intercultural Knowledge and Competence Rubric](#) by the instructors of those courses.

Assessment Instrument(s):

[Intercultural Knowledge and Competence Rubric](#) was adapted from LEAP Value Rubrics (<http://www.aacu.org/>). The original VALUE initiative in 2007-09 involved teams of faculty and other educational professionals from over 100 higher education institutions engaged over many months to develop 16 VALUE rubrics for the LEAP Essential Learning Outcomes. Each rubric was developed from the most frequently identified characteristics or criteria of learning for each of the 16 learning outcomes. Drafts of each rubric were then tested by faculty with their own students' work on over 100 college campuses.

The CLO Assessment Committee's adaptations to the LEAP Rubrics included changes to some of the performance indicators and a renaming of the student achievement categories from Capstone (4); Milestones (3 and 2); and Benchmark (1) ([LEAP VALUE Rubrics](#)) to 4; 3; 2; 1; Not Demonstrated; and Not Applicable ([CGCC Intercultural Knowledge and Competence Rubric](#)). Per Recommendation 2 from the 2017-18 CLO Analysis, the CLO Assessment Committee anticipated that the adapted student achievement categories would be less influential on instructor decisions, and instead instructors would focus on the performance indicators for guidance.

Data Analysis Procedures:

Once instructors scored the student artifacts using the adapted LEAP Value Rubric for Cultural Awareness, results were gathered by the AAC and presented to the CLO Assessment Committee. The CLO Assessment Committee analyzed both the results and the process. The analysis was recorded during the meeting and captured in this analysis template.

D. Results

1. Describe results of assessment work related to competency:

Provide detailed results of assessment, including charts, graphs or other visuals

Results for Cultural Awareness:

A total of 429 students were enrolled in the courses that participated in the assessment of the CLO Cultural Awareness. Of those students, 355 completed the assignments and were scored using [Intercultural Knowledge and Competence Rubric](#). A total of 75.71% of those students scored into the levels of 3 and 4 (accomplished or better). 19.09% of students scored into the category of 2 (developing) and 4.33% of students scored into the category of 1 (beginning). Less than 1% scored into "not demonstrated" and 8.45% were scored into the "not applicable" category.

Institutional Core Learning Outcome #4: Through their respective disciplines, CGCC students who earn a degree can: Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (Cultural Awareness)								
Cultural Awareness	4	3	2	1	Not Demonstrated	Not Applicable	Total numbers for Accomplished* or better	Total Percentage for Accomplished or better
Total Number of students enrolled 429 Total # of students who completed scored assignment: 355								
CLO: Cultural Awareness: Knowledge: Cultural Self-awareness: TOTALS	138	121	53	19	1	23	259	78.01%
CLO: Cultural Awareness: Knowledge of cultural worldview	118	142	58	16	1	20	260	77.61%
CLO: Cultural Awareness: Skills: Cultural Empathy: TOTALS	121	140	62	12	0	20	261	77.91%
CLO: Cultural Awareness: Skills: Verbal and nonverbal communication: TOTALS	106	135	59	7	4	45	241	77.49%
CLO: Cultural Awareness: Attitudes: Curiosity: TOTALS	105	119	89	14	7	20	224	67.07%
CLO: Cultural Awareness: Attitudes: Openness: TOTALS	124	118	54	17	4	38	242	76.34%
Total Number of Students Scoring with	712	775	375	85	17	166	1487	75.71%
Total Percentage of Students Scoring with Cultural Awareness Rubric	36.25%	39.46%	19.09%	4.33%	0.87%	8.45%	*3=Accomplished 4=Mastery	
Total Percentage of Students who Scored Accomplished or Better with Cultural Awareness Rubric**	75.71%							
** Students who were scored into "Not/Applicable" are not included in total.								

2. Limitations

What were the limitations of the assessment?

- As noted in the analysis of CLO#1 in 2015-16 and CLO#2 in 2016-17, it cannot be ignored that faculty scoring of their own student artifacts leads to a certain amount of subjectivity in determining results. When looking at the results of CLO#4, the committee acknowledged that results may be somewhat distorted as a result of faculty assuming that their work is being scrutinized or evaluated and consequently inflating the scores that they give students. Although the following language is included in an explanation of CLO assessment (both on the website and in faculty emails): *“Assessment of Institutional Core Learning Outcomes is **not** about an individual instructor or an individual course: the purpose is to obtain a snap-shot on a more global perspective of student ability in formal college-level communications”*, instructors may not read the entirety of their emails or may continue to believe that their student scores could impact their teaching assignments. Further the committee felt it was reasonable to assume that the numbering system of 1, 2, 3 and 4 may influence faculty as much as categories named “Beginning”, “Developing”, “Accomplished” and “Mastery”.

- 2) Norming continues to be a limitation of this assessment work. The committee considered that the inflated scores (36% of students scored into level 4/mastery) may in part be a result of faculty not understanding how to apply the rubric to student work.

In summary, it should be noted that the process of CLO assessment and the adapted AACU rubrics are still fairly new to faculty. Although 2017-18 was the third time a CLO has been assessed at CGCC, faculty and the CLO Assessment Committee know that there is still work to be done to improve the process to provide more accurate results and analysis. As more faculty participate in the process, awareness of Core Learning Outcomes and the process of assessment continues to improve.

E. Analysis of Results

Assessment and analysis at this level measures whether degree-seeking students leave with some level of proficiency of the Institutional Core Learning Outcomes (Core Theme B: Transforming Lives – Education; Objective B3)

1. Discussion and Implications

Reflect on what was learned and what the impacts might be (not a repeat of findings). Reflection should include the implications of the findings to the General Education Program.

The committee deliberated over the results and what they meant in terms of both student achievement and faculty instruction of cultural awareness. The committee concluded that cultural awareness was a more difficult CLO to teach to and measure because it was more subjective than the first two CLOs assessed, Communication and Critical Thinking. The first two categories of the rubric for CLO#4 assessed student knowledge, and it made sense that these two categories would have higher numbers, since it may be easier to encourage students to contemplate their cultural self-awareness and teach them about different cultural worldviews. The other categories, empathy, communication, curiosity and openness are not as concrete and often require students to adjust belief systems or attitudes. The committee also recognized that while a student may score high in these areas for a particular assignment because they are being graded on these skills and attitudes, students may yet not incorporate cultural empathy, inter-cultural communication, curiosity and openness as consistent behavioral ways of thinking.

Because the AACU rubrics are used not only to assess student achievement of the CLO's, but also to inform CGCC where faculty can work together to focus instruction, the committee decided it would be of benefit to use the outcome to remind faculty what we should be teaching in the classroom.

Since the percentage of students scoring at the level of accomplished or better in the categories of "cultural self-awareness", "knowledge of cultural worldview", "cultural empathy", "verbal and nonverbal communication" and "openness" were all within the 76%-77% range, the committee agreed that faculty should focus on "Curiosity" since this category had the lowest score of students achieving "Accomplished" or better at 67%.

The implications of this focus, as recommended by the committee, is to 1) move more students from the beginning and developing levels for cultural curiosity to the level of accomplished. This means that students would move from demonstrating either minimal interest in learning more about other cultures

(beginning) or asking simple or surface questions about other cultures (developing) to asking deeper questions about other cultures and seeking out answers to these questions (accomplished). As stated previously, the committee felt that mastery (or asking complex questions about other cultures, seeking out and articulating answers to these questions that reflect multiple cultural perspectives) may be reaching beyond our expectation for the majority of CGCC degree-seeking graduate. This focus will also create a common goal for instruction that all faculty can contribute to. In doing so, we hope to move students towards “the curiosity to learn respectfully about the cultural diversity of other people and on an individual level to traverse cultural boundaries to bridge differences and collaboratively reach common goals”, as described in cultural diversity category of the AACU’s Global Learning VALUE Rubric.

With regards to the General Education program, the committee was concerned that with the exception of AAOT graduates, many of our degree-seeking students may never take a course that addresses or instructs in cultural awareness. Since the number of courses that address this CLO are limited, and students (with the exception of AAOT students) are not required to take a General Education course with a cultural literacy designation, CGCC could potentially have many graduates who never receive instruction in this CLO.

2. Recommendations and Action Items

Assessment of Institutional Core Learning Outcomes assesses whether students, regardless of which degree they earn at CGCC, achieve the skills and knowledge that are at the foundation of CGCC’s General Education program. Recommendations and Action items should be related to recommendations made in the current General Education Program Review and can include a progress report or revisions on the Gen Ed Program Review recommendations.

i) What actions will be taken as a result of the assessment?

Recommendation 1. The CLO Assessment Committee proposes that actions be taken by all faculty in their classes, since accountability for student achievement of Core Learning Outcomes is the responsibility of the college as a whole. As stated above, while many of CGCC’s courses do not have a cultural literacy designation nor a course outcome that addresses cultural awareness, CGCC faculty and the institution could do much to foster curiosity about other cultures. The committee recommends that faculty continue the process that they started during spring in-service 2016, and work together to develop strategies that they can integrate into their instruction and assessment that help students to move towards asking deeper questions about other cultures and seeking out answers to these questions. The AAC will compile a list of resources to support faculty instruction in this area and post to the Institutional Core Learning Outcomes website. Faculty will be reminded of their commitment to increase or integrate instruction for cultural curiosity when they complete Part A of course outcomes assessment, and will then describe what they did to support students in achieving this CLO at a higher level when completing Part B. The AAC will track these interventions on a spreadsheet and CLO#4 will be assessed again in 2022-23 to determine the impact of these interventions.

Recommendation 2. To address the concerns of inflated scoring and lack of norming, it is recommended that a better explanation of the difference between “not demonstrated” and “not

applicable” be included on the rubric. The AAC will also work with IT to include a box for faculty comments on the webform, so that scoring may be further explained.

Recommendation 3. Once assessment of all 5 CLO’s has been completed, the faculty in-service exercise of creating strategies for instruction should be replaced with exercises in norming.

Recommendation 4. The committee will continue to review and determine at what level CGCC expects student achievement of each Core Learning Outcome, noting that there may be a discrepancy between expected levels depending on the skills, knowledge and/or attitude that each CLO requires.

Recommendation 5. To address the potential deficiency of degree-seeking students receiving instruction of this CLO, as a result of limited courses and the lack of requirements for students to take courses that address cultural literacy, the committee supports a recommendation that the college move towards some form of Guided Pathways. The committee assumes that there is the possibility for similar limitations from the 2018-19 assessment of CLO#5 (Community and Environmental Responsibility) as a result of students not being required to complete coursework that addresses this CLO.

- ii. li) Describe how these action items are related to recommendations from the current General Education Program Review? Include how will these changes affect the General Education program.

The 2016 General Education Program Review’s 2nd recommendation was to “ Revamp the program to align it more fully with its mission, especially its goals of providing a common experience and preparing students for the roles as citizens of the US and the world.” As described in the General Education Program’s Mission, CGCC’s common educational experience “is defined by CGCC’s Core Learning Outcomes and is developed primarily through a set of general education course requirements that all students take, regardless of their major. Ultimately, the mission of the General Education program at CGCC is to provide our students with a common experience and set of skills that prepare students for success in their majors, as citizens of the US and the world and in their personal and professional lives after graduation.” The action of CGCC faculty intentionally providing resources and extra support for students to improve achievement in cultural literacy implicitly supports the General Education program’s Recommendation 2 by making changes to course curriculum and delivery to better prepare students for the roles of citizens of the US and the world.

3. Evaluate the assessment strategy

Were the assessment methods accurate indicators of student achievement of the core learning outcome? Why or why not? Suggestions for changes.

Given that the assessment methods and LEAP rubrics developed by the AACU, have been tested and widely adopted by post-secondary institutions across the US, it is probably safe to say that the assessment methods were accurate indicators of student achievement. As noted in the limitations (Section D2) the committee is concerned, however, about the accuracy and subjectivity of faculty scoring their own student artifacts. The committee agrees that CGCC will continue to have faculty score their own student artifacts while a baseline for each CLO is established, however it is recognized that the

process, can be improved by educating faculty regarding the descriptors, reminding faculty that student achievement of a CLO is **not** about an individual instructor or an individual course and thus encouraging faculty to accurately score student work.

4. Faculty involvement

Describe faculty involvement in the assessment and analysis process.

10 faculty from 7 disciplines were involved in the assessment of the CLO (compared to 25 faculty in the previous year):

Fall Term: Dan Hall (SOC 204 and SOC 205), Kristen Kane (PSY 201A), Zip Krummel (PSY 201A and PSY 215), and Stephen Shwiff (HST 201)

Winter Term: John Copp (PS 202), Tess Fegel (PSY 215), Leigh Hancock (ENG 253), Kristen Kane (PSY 202A), Zip Krummel (PSY 201A), Stephen Shwiff (HST 202), Kristy Towell (ENG 250), Diane Uto (COMM 237) and Mandy Webster (WS 201)

Spring Term: John Copp (PS 203), Dan Hall (SOC 213), Leigh Hancock (ENG 214), Kristen Kane (PSY 215), Zip Krummel (PSY 201A and PSY 202A), Stephen Shwiff (HST 203), and Mandy Webster (WS 202)

4 faculty and the Director of Curriculum and Assessment were involved in analysis process: Katy Jablonski, Kristen Kane, Zip Krummel, Susan Lewis and Dan Ropek.

5. Additional comments

1. In May 2018, CGCC's Instructional Council revised CLO #4 from "Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)" to "Use an understanding of cultural differences to constructively address issues that arise in the workplace and community. (*Cultural Awareness*)" to address concerns that "appreciate" was not measurable.
2. While assessment of the CLOs is in part, to comply with the requirements for NWCCU and accreditation, it's important to state that CGCC's commitment to the assessment of CLOs is the result of our promise to students that: Through their respective disciplines, CGCC students who earn a degree can:
 1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
 2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical thinking and Problem-Solving*)
 3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
 4. Use an understanding of cultural differences to constructively address issues that arise in the workplace and community. (*Cultural Awareness*)

5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Assessment of CLOs also furthers our attainment of Core Theme B: Transforming Lives – Education and aligns with CGCC’s Value of Excellence.

Results, analysis and committee recommendations will be shared with faculty during the fall 2018 in-service. The results and analysis documents will also be shared with faculty through a faculty-wide email and be posted on the Academic Assessment/Institutional Core Learning Outcomes webpage in an effort towards transparency for our students and community.

iii. Appendices

Include any assessment method (i.e. rubric), table of results, comments from instructors

1. [AACU LEAP VALUE Rubrics](#)
2. [AACU LEAP VALUE Rubric: Intercultural Knowledge and Competence](#)
3. [Institutional Core Learning Outcome Assessment Schedule](#)

Assessment completed by: Kristen Kane with the help of the CLO Assessment Committee (Susan Lewis, Zip Krummel, Dan, Ropek and Katy Jablonski)

Date: 9.18.18

Analysis to be submitted by the Academic Assessment Coordinator (kkane@cgcc.edu) by October 15 the following academic year being assessed.

ANALYSIS OF CORE LEARNING OUTCOMES

A. Overview

1. Academic Year:
2018-19

2. Core Learning Outcome (CLO) Assessed:

#5 Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*).

3. Level at which the competency is assessed:

200-level courses were chosen to reflect assessment of work students would be completing towards the end of their degree.

B. Recommendations, Action, and Analysis from Previous Year

1. List recommendations from previous reviews
2. Summarize actions taken in response to recommendations.
3. Describe and analyze results from actions taken

Recommendation 1. The Core Learning Outcome (CLO) committee recommended that faculty continue the process that they started during spring in-service 2016, and work together to develop strategies that they can integrate into their instruction and assessment.

Actions: The Academic Assessment Coordinator (AAC) compiled a list of [Ideas and Resources for Teaching to CLO#4](#): Cultural Awareness developed by faculty during fall in-service 2018. This list was developed with the intention of supporting faculty instruction in the area indicated by the results of the assessment of CLO#4, focusing on cultural curiosity. The list was posted to the [Institutional Core Learning Outcomes website](#), along with the lists of resources and strategies for [CLO #1 \(Communication\)](#) and [CLO#2 \(Critical Thinking/Problem-Solving\)](#). Faculty have been reminded of their commitment to increase or integrate instruction for the areas identified for each of the CLOs when they completed Part A of course outcomes assessment. Faculty reported out on what they did to support students in achieving each CLO at a higher level when completing Part B. The AAC has tracked these interventions, on a spreadsheet. CLO #1 will be assessed again in 2020-21, CLO #2 in 2021-22 and CLO#4 in 2022-23 to determine the impact of these interventions.

Results: To be analyzed following the 2nd assessment of CLO#4

Recommendation 2. To address the concerns of inflated scoring and lack of norming, it was recommended that a better explanation of the difference between “not demonstrated” and “not applicable” be included on the rubric. It was also recommended that the AAC work with IT to include a box for faculty comments on the web form, so that scoring may be further explained.

Actions: The following explanations were included on the rubric:

- “not demonstrated”: Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (level one) level performance.

- “not applicable”: Evaluators are encouraged to assign “not applicable” if student work was not required to address a category

A box for faculty comments was also included on the web form with instructions to include an explanation for any criterion that was scored as “Not Applicable”.

Results: The table below shows the changes in the percentage of students scored into the categories of “not demonstrated” and “not applicable” over the past 4 years.

Table 1. Percentage of Students Scored into “Not Demonstrated” and “Not Applicable”

	2015-16 CLO#1	2016-17 CLO#2	2017-18 CLO#4	2018-19 CLO#5
% of students scored into “not demonstrated”	1	2	0.87	4.71
% of students scored into “not applicable”	12	4	8.45	7.25

The CLO Assessment Committee assumed that the higher percentage of students scored into the “not demonstrated” category may be indicative of faculty having a better understanding of the difference between “not demonstrated” and “not applicable”.

The following explanations demonstrate the effectiveness of using the web form to track instructor rationales for scoring Not Applicable. Instructor clarifications helped the committee determine whether a score truly should be in the “not demonstrated” category (meaning that student work did not meet benchmark performance level) or whether the course or assignment used for scoring did not address the criteria:

- *Assignment did not require an examination of effects at a global level*
- *This one was a real stretch, however, as we don't really cover "global systems" in American Literature...nor is it an action-oriented class*
- *This course does not require any implementation of action*
- *This was a tough one, I did not ask students to address their own responsibilities in relation to Volcanic Hazards and Mitigation, although a few addressed in a basic way*
- *Assignment required a historical and contemporary overview, did not require intervention or specific action on a global level*
- *Ethical consequences of different market structures were not required in this assignment*

To other factors that may have affected student scores:

- *Abnormal amounts of snow days this term that might have impacted the quality of work the students submitted at the end of the term. Many were stressed and overwhelmed with other courses cramming in material in the last few weeks.*

Recommendation 3. Once assessment of all 5 CLO’s has been completed, the faculty in-service exercise of creating strategies for instruction should be replaced with exercises in norming.

Actions: To be implemented 2020-21

Results: Although this recommendation will not be implemented until 2020-21, the committee continues to feel strongly that faculty require training to become more familiar with the criteria of each

rubric. Plans are progressing to provide faculty opportunities to develop specific assignments that can be scored using the criteria of each rubric during the next cycle of CLO assessment. This exercise should help faculty with norming of their scoring of student artifacts.

Recommendation 4. The committee will continue to review and determine at what level CGCC expects student achievement of each Core Learning Outcome, noting that there may be a discrepancy between expected levels depending on the skills, knowledge and/or attitude that each CLO requires.

Actions: The committee reviewed the performance indicators for each level of achievement in the rubric, gauging which level was most appropriate for community college students.

Results: The committee determined that it is reasonable to expect CGCC students to achieve the level of “accomplished” (level 3) for CLO #5 “Recognize the consequences of human activity upon our social and natural world. The committee considered that the level of knowledge, skills and attitudes expected for level 4, mastery, as described by the adapted LEAP rubric for community and environmental responsibility, are outside of the realm of this community college’s expectations and responsibilities.

Recommendation 5. To address the potential deficiency of degree-seeking students receiving instruction of this CLO, as a result of limited courses and the lack of requirements for students to take courses that address cultural literacy, the committee supported a recommendation that the college move towards some form of Guided Pathways.

Actions: Several of the CLO committee members participated in the Strategic Planning winter/spring term meetings to establish new strategic goals for CGCC for 2019-2024. A strategic goal to develop an institutional guided pathways model was established

Results: Some of the CLO Committee members participated on the Strategic Planning Team that addressed Goal #3: Establish an Institutional Guided Pathways Model. Four goals were established for 2019-20: 1) Establish a Guided Pathways Team; 2) Develop a four year plan for development and implementation; 3) Identify the data points and institutional benchmarks for tracking Guided Pathways implementation and success; 4) Populate meta-majors: programs and curriculum

4. Please describe other actions taken that were not based on previous review recommendations. What assessment, evidence, or need prompted these actions?

During 2018-19, the majority of CGCC courses were taken through Curriculum Committee to update which ones address the new CLO#3: Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (Quantitative Literacy).

Course alignment to CLOs were also updated to identify which courses address the CLOs as a Major designation: *1. the outcome is addressed recurrently in the curriculum, regularly enough to establish a thorough understanding. 2. Students can demonstrate and are assessed on a thorough understanding of the outcome. The course includes at least one assignment that can be assessed by applying the appropriate [CLO rubric](#).*

and/or as a Minor Designation: *1. The outcome is addressed adequately in the curriculum, establishing fundamental understanding. 2. Students can demonstrate and are assessed on a fundamental understanding of the outcome. The course includes at least one assignment that can be assessed by applying the appropriate [CLO rubric](#).*

Instructors are also required to indicate CLO alignment on their syllabi in an effort to make students aware of which courses provide instruction for which CLOs.

C. Overview of Process (es) used to Evaluate Competency:

1. Overview of methodology used for assessment:

During the 2018-19 academic year, the fifth Core Learning Outcome (CLO) was assessed: “Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*).” An interdisciplinary team, the Core Learning Outcome Assessment Committee, met at the beginning of the academic year to review the process from the previous year and make suggestions for improvement. The CLO Assessment team also adapted the [Global Learning Value rubric](#) from AACU’s ([Association of American Colleges and Universities](#)) LEAP ([Liberal Education and America’s Promise](#)) Value ([Valid Assessment of Learning in Undergraduate Education](#)) Rubrics (<http://www.aacu.org/>)

Instructors who taught courses that students could potentially be taking towards the end of their degree (sophomore or 200-level courses) were asked to assess student achievement of the Institutional Core Learning Outcome #5: Community and Environmental Responsibility. These upper level courses were chosen with the understanding that students, in theory, would have had a few freshman level courses that may include community and/or environmental responsibility as a course outcome, allowing CGCC to assess students who were closer to graduation and who had had more instruction and practice in building community/environmental responsibility skills.

Each term, instructors who were teaching courses with a major or minor designation for addressing community and/or environmental responsibility, as indicated in the CCOGs, were contacted to determine if they had a suitable assignment to be scored using the adapted [Community and Environmental](#) rubric. Instructors were then responsible for scoring the student artifacts using the rubric, and submitting the results to a web form. Instructors also had the option to include a rationale or analysis to help explain student scores, in particular any student work scored as “Not Applicable”.

2. Summary of timeline and steps in assessment process:

1) Week prior to start of term: The academic assessment coordinator (AAC) looked at the CCOGs of courses and selected those courses that either listed community and/or environmental responsibility as a course outcome or had a major or minor designation for addressing CLO #5. A list of suggested courses was sent by the AAC to each Department Chair (DC) for consideration. DC’s responded either confirming the selection or recommending revisions.

2) 2nd - 3rd week of term: Once a course was confirmed by the DC, instructors were contacted via email by the AAC informing them that their course had been selected for assessment of the fifth CLO. Information about the process of assessing CLOs was provided, as were directions and links to the rubric.

3) 3rd - 4th week of term: the AAC contacted the instructor again to determine whether they had an appropriate assignment that could be scored with the [Community and Environmental](#) rubric.* If it was determined that instructors did not have an appropriate assignment for this purpose, they either volunteered to create or adapt an existing assignment or the course was removed from the list of courses used to assess CLO#5.

* The faculty training supporting the development of the assignment(s) to be assessed using the CLO rubrics, as required for a major/minor designation, is scheduled to begin in the 2019 fall pre-service.

- 4) 6th week of term: packets were created by the AAC and curriculum and assessment administrative assistant (CAAA) and distributed to the instructors. Within the packets were paper copies of the [Community and Environmental](#) rubric to be used to score each individual student's assignment, and instructions for submitting the scores on the web form.
- 5) End of term - week after end of term: Instructors scored student assignments using the rubric and input the totals for each category of the rubric in the web form. Adjunct faculty submitted time cards for up to 3 hours to be paid at the Special Project Rate. The AAC compiled the results at the end of each term into a spreadsheet.
- 6) Beginning of summer term: the AAC compiled the results for all terms.
- 7) 2 weeks before fall term 2019: The CLO Assessment Committee met to review and analyze results, provide recommendations based on the results to improve student achievement of CLO#5, review the CLO assessment process and make recommendations for improvement to the process.
- 8) Fall In-service: Results will be shared with faculty, as well as the committee's recommendations to help improve student achievement of community and environmental responsibility. Faculty will use time during in-service to develop strategies for instruction, curriculum and/or assessment based on the committee's recommendations.
- 9) Faculty will be reminded of their commitment to implement strategies to support students in achievement of CLO#1, #2, #4 and #5 when they complete Part A of Course Outcomes Assessment.
- 10) Faculty will list the strategies they implemented to support student achievement of CLO#1, #2, #4 and #5 when they complete Part B of Course Outcomes Assessment.

3. Sampling information:

365 students were enrolled in the 22 200-level courses from 12 disciplines. A total of 333 student artifacts were scored using the [Community and Environmental Responsibility rubric](#) by the instructors of those courses.

4. Assessment Instrument(s):

The [Community and Environmental Responsibility rubric](#) was adapted from LEAP Value Rubrics (<http://www.aacu.org/>). The original VALUE initiative in 2007-09 involved teams of faculty and other educational professionals from over 100 higher education institutions engaged over many months to develop 16 VALUE rubrics for the LEAP Essential Learning Outcomes. Each rubric was developed from the most frequently identified characteristics or criteria of learning for each of the 16 learning outcomes. Drafts of each rubric were then tested by faculty with their own students' work on over 100 college campuses.

The CLO Assessment Committee's adaptations to the LEAP Rubrics included changes to some of the performance indicators and a renaming of the student achievement categories from Capstone (4); Milestones (3 and 2); and Benchmark (1) ([LEAP VALUE Rubrics](#)) to 4; 3; 2; 1; Not Demonstrated; and Not Applicable ([CGCC Community and Environmental Responsibility rubric](#)). Per Recommendation 2 from the 2017-18 CLO Analysis, the CLO Assessment Committee anticipated that the adapted student achievement categories would be less influential on instructor decisions, and instead instructors would focus on the performance indicators for guidance.

5. Data Analysis Procedures:

Once instructors scored the student artifacts using the adapted LEAP Value Rubric for Community and Environmental Responsibility, results were gathered by the AAC and presented to the CLO Assessment

Committee. The CLO Assessment Committee analyzed both the results and the process. The analysis was recorded during the meeting and captured in this analysis template.

D. Results

1. Describe results of assessment work related to competency:

Provide detailed results of assessment, including charts, graphs or other visuals

A total of 365 students were enrolled in the courses that participated in the assessment of the CLO Community and Environmental Responsibility. Of those students, 333 completed the assignments and were scored using the [Community and Environmental Responsibility rubric](#). A total of 63.74% of those students scored into the levels of 3 and 4 (accomplished or better). 24.17% of students scored into the category of 2 (developing) and 7.38% of students scored into the category of 1 (beginning). 4.71% scored into “not demonstrated” and 7.25% were scored into the “not applicable” category.

Table 2. [Results for Community and Environmental Responsibility](#)

Institutional Core Learning Outcome #5: Through their respective disciplines, CGCC students who earn a degree can: Recognize the consequences of human activity upon our social and natural world. (Community and Environmental Responsibility)								
Community and Environmental Responsibility Total Number of students enrolled 365 Total # of students who completed scored assignment: 333	Mastery	Accomplished	Developing	Beginning	Not Demonstrated	Not Applicable	Total numbers for Accomplished or better	Total Percentage for Accomplished or better
CLO: Community and Environmental Responsibility: Global Self-Awareness: TOTALS	109	117	67	25	4	11	226	70.19%
CLO: Community and Environmental Responsibility: Perspective Taking: TOTALS	96	129	63	14	7	24	225	72.82%
CLO: Community and Environmental Responsibility: Understanding Global Systems : TOTALS	85	87	93	43	8	17	172	54.43%
CLO: Community and Environmental Responsibility: Applying Knowledge to Contemporary Global Contexts: TOTALS	89	66	68	20	48	42	155	53.26%
CLO: Community and Environmental Responsibility: Attitudes: Personal and Social Responsibility: TOTALS	105	119	89	14	7	20	224	67.07%
Total Number of Students Scoring with Community and Environmental Responsibility Rubric	484	518	380	116	74	114	1002	63.74%
Total Percentage of Students Scoring with Community and Environmental Responsibility Rubric	30.79%	32.95%	24.17%	7.38%	4.71%	7.25%		
Total Percentage of Students who Scored Accomplished or Better with Community and Environmental Responsibility Rubric* * Students who were scored into "Not/Applicable" are not included in total.	63.74%							

2. Limitations

What were the limitations of the assessment?

- 1) As noted in the analysis of CLO#1, 2 and 4 in previous years, it cannot be ignored that faculty scoring of their own student artifacts leads to a certain amount of subjectivity in determining results. Although the committee has considered alternative methods for scoring student work, such as paying to have artifacts scored using the AACU's Multi-State Collaborative, the committee decided that the college should complete this first cycle of assessment using the current process to create a baseline of student achievement for each CLO using consistent methodology.
- 2) Norming continues to be a limitation of this assessment work. The committee recognizes that the rubrics and the process are still new to instructors, and as a result faculty may not be familiar with or have an accurate understanding of the criteria for each category of the rubric yet. During the 2019 meeting, the CLO Assessment discussed plans for the next cycle of CLO assessment (2020-2025) to include time during faculty in-service to create assignments specific to the rubrics which may help increase familiarity and norming.
- 3) This particular CLO and the rubric address two different themes: Community Responsibility and Environmental Responsibility. The committee recognized that many courses that align with this CLO most likely only teach to either community responsibility or environmental responsibility, and that as a result student artifacts scored with this rubric may not address one of the themes. The committee considered that this division of themes may be partly responsible for the high percentage (7.25%) of students scored into "not applicable".
- 4) Currently the college does not have a means to identify which students in the 200-level General Education courses used for CLO assessment are close to graduation. While the committee recognizes that student achievement of Institutional Core Learning Outcomes would best be assessed after a student has had sufficient instruction in multiple courses, there is no means to ensure that the assessment is taking place during a student's final term.

E. Analysis of Results

Assessment and analysis at this level measures whether degree-seeking students leave with some level of proficiency of the Institutional Core Learning Outcomes (Core Theme B: Transforming Lives – Education; Objective B3)

1. Discussion and Implications

Reflect on what was learned and what the impacts might be (not a repeat of findings). Reflection should include the implications of the findings to the General Education Program.

While the total percentage (63.74%) of students who scored into accomplished or better for community and environmental responsibility provides a number to determine if CGCC is meeting its mission for Core Themes, this overall percentage does not provide enough meaning to be used by the committee in their analysis of student achievement of this CLO. In order to make a more informed analysis, the committee looked to student achievement scores for each specific category of the rubric. Since the AACU rubrics are used not only to assess student achievement of the CLO's, but also to inform CGCC where faculty can work together to focus instruction, as in previous years, the committee decided to focus on the categories where the fewest students scored into accomplished or better: "Applying Knowledge to Contemporary Contexts" (53.26%) and "Understanding Global Systems" (54.43%). The committee found it interesting to note that

these two categories both address community and environmental responsibility on a more global scale, while the other categories that had significantly higher percentages of students scoring into accomplished or better addressed community and environmental responsibility on a more personal level (“Global Self-Awareness 70.19%; “Perspective Taking” *72.82%; “Personal and Social Responsibility 67.07%).

The committee contemplated why students’ had difficulty understanding the impact of community and environmental responsibility on a more global scale, yet had a much greater understanding of community and environmental responsibility on a more personal level. Some faculty committee members stated that they were not surprised at the difference of student understanding between the global level and the personal level since often when global issues are discussed in class students seem shocked and unformed. It was hypothesized that perhaps students are currently tuning out of political and global issues and focusing more on personal awareness and relationships.

Rationales from the web form required when students were scored into “not applicable” also indicate that faculty may not be teaching or assessing the concept of community/environmental responsibility at the global level. The committee recommends that faculty focus their instruction in a concerted effort to move more students from the beginning and developing levels for “Understanding Global Systems” and “Applying Knowledge to Contemporary Global Contexts” to the level of accomplished. This means that students would not only understand their own personal responsibility in the challenges to communities and the environment, but would also develop a deeper understanding of community and environmental responsibility on a more global level.

In terms of the connection between the achievement of CLO#5 and the General Education program, the committee was concerned that many of our degree-seeking students may never take a course that addresses or instructs in community and environmental responsibility. Since students are not required to take a General Education course that addresses community and environmental responsibility, CGCC could potentially have many graduates who never receive instruction in this CLO.

The committee also expressed concern that this CLO addressed two different aspects: community responsibility and environmental responsibility. As a result it may be difficult for faculty to teach to or ensure student accomplishment of this CLO.

F. Recommendations and Action Items

Assessment of Institutional Core Learning Outcomes assesses whether students, regardless of which degree they earn at CGCC, achieve the skills and knowledge that are at the foundation of CGCC’s General Education program. Recommendations and Action items should be related to recommendations made in the current General Education Program Review and can include a progress report or revisions on the Gen Ed Program Review recommendations.

1. What actions will be taken as a result of the assessment?

Recommendation 1. The committee recommends that faculty continue the process that they started during spring in-service 2016, and work together to develop strategies that they can integrate into their instruction and assessment that help students move towards increasing their understanding and achievement of their community and environmental responsibility on a more global level. All faculty are

*Perspective Taking is defined on the rubric as “the ability to engage and learn from perspectives and experiences different from one’s own and to understand how one’s place in the world both informs and limits one’s knowledge.”

encouraged to participate in this goal, since accountability for student achievement of Core Learning Outcomes is the responsibility of the college as a whole. In particular, the AAC was encouraged by the committee to ensure that CTE faculty are engaged in and understand their value to the process. While it's widely understood that the General Education courses can be relied upon to teach to the CLOs, it cannot be ignored that students are often receiving instruction and demonstrating these skills in CTE classes as well.

The AAC will compile a list of these resources to support faculty instruction in this area and post to the Institutional Core Learning Outcomes website. Faculty will be reminded of their commitment to increase or integrate instruction for improving student understanding of global systems and how to apply knowledge to contemporary global contexts when they complete Part A of course outcomes assessment, and will then describe what they did to support students in achieving this CLO at a higher level when completing Part B. The AAC will track these interventions on a spreadsheet and CLO#5 will be assessed again in 2023-24 to determine the impact of these interventions.

Recommendation 2. To address the potential deficiency of degree-seeking students receiving instruction of this CLO, as a result of the lack of requirements for students to take courses that address community and environmental responsibility, the committee supports a recommendation that the college continue to move towards some form of Guided Pathways model that is more prescriptive in requiring coursework that ensures that all CLOs are addressed.

Recommendation 3. The committee recommends that Instructional Council consider adopting a 6th CLO, splitting CLO#5 into two separate Core Learning Outcomes: Community Responsibility and Environmental Responsibility. The committee noted that the inclusion of environmental responsibility in the college's Core Learning Outcomes represents a value that is somewhat unique among colleges. As such, it would express a strong commitment to this value if it was in a separate Core Learning Outcome, better supporting CGCC's identity as a green institution. Focusing on environmental responsibility as a 6th Core Learning Outcome will also allow the college to focus more instruction on this CLO, thus having a greater impact on students.

Recommendation 4. To address the concerns of the lack of familiarity that faculty may have with the criteria of the rubric and a lack of norming, it is recommended that in the following cycle of CLO assessment, faculty focus on working together in their departments to create assignments that are more specific to the criteria of the rubric. These assignments could be adopted by department faculty to assess student learning of the CLO in their classes, adapted to specific course content or used as examples for faculty to develop their own assignments.

2. Describe how these action items are related to recommendations from the current General Education Program Review? Include how these changes will affect the General Education program.

The 2016 General Education Program Review's 2nd recommendation was to "Revamp the program to align it more fully with its mission, especially its goals of providing a common experience and preparing students for the roles as citizens of the US and the world." As described in the General Education Program's Mission, CGCC's common educational experience "is defined by CGCC's Core Learning Outcomes and is developed primarily through a set of general education course requirements that all students take, regardless of their major. Ultimately, the mission of the General Education program at CGCC is to provide our students with a

common experience and set of skills that prepare students for success in their majors, as citizens of the US and the world and in their personal and professional lives after graduation.” The action of CGCC faculty intentionally providing resources and extra support for students to improve achievement in a global understanding of community and environmental responsibility implicitly supports the General Education program’s Recommendation 2 by making changes to course curriculum and delivery to better prepare students for the roles of citizens of the US and the world.

G. Evaluate the Assessment Strategy

Were the assessment methods accurate indicators of student achievement of the core learning outcome? Why or why not? Suggestions for changes.

Given that the assessment methods and LEAP rubrics developed by the AACU, have been tested and widely adopted by post-secondary institutions across the US, it is probably safe to say that the assessment methods were accurate indicators of student achievement. As noted in the limitations the committee does have some concerns:

- The subjectivity of faculty scoring their own student artifacts.
- The lack of norming when using the rubric to score student artifacts
- The difficulty of using one rubric to assess the two separate themes of community responsibility and environmental responsibility
- The inability to distinguish those students who are in their last term from those who may be new to college level coursework

The committee agrees that CGCC should continue to have faculty score their own student artifacts establishing a baseline for each CLO. The committee acknowledges, however, that the process can be improved by aiding faculty in creating appropriate assignments that can be scored by the rubrics and educating faculty regarding the descriptors.

H. Faculty Involvement

Describe faculty involvement in the assessment and analysis process.

13 faculty from 12 disciplines were involved in the assessment of the CLO (compared to 10 faculty in the previous year):

Fall Term: John Copp (HST 201), Gretchen Gebhardt (G208), Leigh Hancock (ENG 222), Ronda Hull (HEC 201), Zip Krummel (PSY 215), Emilie Miller (BI 211), and Lorie Saito (NUR 210).

Winter Term: Gretchen Gebhardt (G 202), Leigh Hancock (ENG 253), Ronda Hull (HE 262), Raymond Kempf (PHL 201), Zip Krummel (PSY 239), Christopher Lindsay (BA 285), Emilie Miller (BI 211), Diane Uto (COMM 237), David Wagenblast (EC 201), and Mandy Webster (WS 201)

Spring Term: Leigh Hancock (ENG 254), Kristen Kane (PSY 215), Emilie Miller (BI 234), David Wagenblast (EC 202), and Mandy Webster (WS202).

4 faculty and the director of curriculum, assessment, strategic planning and accreditation were involved in analysis process: Gretchen Gebhardt, Katy Jablonski, Kristen Kane, Zip Krummel, and Susan Lewis.

I. Additional Comments

1. While assessment of the CLOs is in part, to comply with the requirements for NWCCU and accreditation, it's important to state that CGCC's commitment to the assessment of CLOs is the result of our promise to students that: Through their respective disciplines, CGCC students who earn a degree can:
 1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. *(Communication)*
 2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. *(Critical thinking and Problem-Solving)*
 3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. *(Quantitative Literacy)*
 4. Use an understanding of cultural differences to constructively address issues that arise in the workplace and community. *(Cultural Awareness)*
 5. Recognize the consequences of human activity upon our social and natural world. *(Community and Environmental Responsibility)*

Assessment of CLOs also furthers our attainment of Core Theme B: Transforming Lives – Education and aligns with CGCC's Value of Excellence.

Results, analysis and committee recommendations will be shared with faculty during the fall 2019 in-service. The results and analysis documents will also be shared with faculty through a faculty-wide email and be posted on the Academic Assessment/Institutional Core Learning Outcomes webpage in an effort towards transparency for our students and community.

J. Appendices

Include any assessment method (i.e. rubric), table of results, comments from instructors

1. [AACU LEAP VALUE Rubrics](#)
2. [AACU LEAP VALUE Rubric: Global Learning](#)
3. [Institutional Core Learning Outcome Assessment Schedule](#)

Report on the analysis of CLO#5 completed by: Kristen Kane with the help of the CLO Assessment Committee (Susan Lewis, Zip Krummel, Gretchen Gebhardt and Katy Jablonski)

Date: 9.10.19

ANALYSIS OF CORE LEARNING OUTCOMES

A. Overview

1. Academic Year:

2019-20

The unusual circumstances of the 2019-20 academic year should be noted. During spring term CGCC campuses were closed to students and faculty as a result of the covid-19 coronavirus epidemic. All spring term courses were taught remotely. Spring term was reduced to 10 weeks to provide instructors an extra week prior to the start of term to prepare and adjust courses for remote learning.

2. Core Learning Outcome (CLO) Assessed:

#3 Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*).

3. Level at which the competency is assessed:

The majority of courses chosen were at the 200-level to reflect assessment of work students would be completing towards the end of their degree. The exceptions were GS 106, 108 and 109 (the instructor polled her students and found that the majority of them were taking these courses during their second year); and MTH 111 and 112, as these are often the last math courses many students take at CGCC.

B. Recommendations, Action, and Analysis from Previous Year

1. List recommendations from previous reviews
2. Summarize actions taken in response to recommendations.
3. Describe and analyze results from actions taken

Recommendation 1. The committee recommended that faculty continue the process that they started during spring in-service 2016, and work together to develop strategies that they can integrate into their instruction and assessment that help students move towards increasing their understanding and achievement of their community and environmental responsibility on a more global level. All faculty were encouraged to participate in this goal, since accountability for student achievement of Core Learning Outcomes is the responsibility of the college as a whole. In particular, the AAC was encouraged by the committee to ensure that CTE faculty are engaged in and understand their value to the process. While it's widely understood that the General Education courses can be relied upon to teach to the CLOs, it cannot be ignored that students are often receiving instruction and demonstrating these skills in CTE classes as well.

It was recommended that the AAC compile a list of these resources to support faculty instruction in this area and post to the Institutional Core Learning Outcomes website. Faculty were to be reminded of their commitment to increase or integrate instruction for improving student

understanding of global systems and how to apply knowledge to contemporary global contexts when they complete Part A of course outcomes assessment, and then describe what they did to support students in achieving this CLO at a higher level when completing Part B. The AAC will track these interventions on a spreadsheet and CLO#5 will be assessed again in 2023-24 to determine the impact of these interventions.

Actions: The Academic Assessment Coordinator (AAC) compiled a list of [Strategies and Resources for Teaching to CLO#5: Community and Environmental Responsibility](#) developed by faculty during fall in-service 2019. This list was developed with the intention of supporting faculty instruction in the area indicated by the results of the assessment of CLO#5, focusing on the categories where the fewest students scored into accomplished or better: “Applying Knowledge to Contemporary Contexts” and “Understanding Global Systems”. The list was posted to the [Institutional Core Learning Outcomes website](#), along with the lists of resources and strategies for [CLO #1 \(Communication\)](#), [CLO#2 \(Critical Thinking/Problem-Solving\)](#) and [CLO#4 \(Cultural Awareness\)](#). Faculty have been reminded of their commitment to increase or integrate instruction for the areas identified for each of the CLOs when they completed Part A of course outcomes assessment. Faculty then reported out on what they did to support students in achieving each CLO at a higher level when completing Part B. The AAC has tracked these interventions, on a spreadsheet. CLO #1 will be assessed again in 2020-21, CLO #2 in 2021-22, CLO#4 in 2022-23 and CLO#5 in 2023-24 to determine the impact of these interventions.

Results: To be analyzed following the 2nd assessment of CLO#5 in 2023-24.

Recommendation 2. To address the potential deficiency of degree-seeking students receiving instruction of this CLO, as a result of the lack of requirements for students to take courses that address community and environmental responsibility, the committee supports a recommendation that the college continue to move towards some form of Guided Pathways model that is more prescriptive in requiring coursework that ensures that all CLOs are addressed.

Actions: Actions have yet to be taken in this area. The General Education department will be completing a program review in 2020-21 using 5 years’ worth of CLO assessment data that could potentially lead to a Gen Ed redesign that would be similar in nature to a Guided Pathways model.

Results: To be determined in 2020-21

Recommendation 3. The committee recommends that Instructional Council consider adopting a 6th CLO, splitting CLO#5 into two separate Core Learning Outcomes: Community Responsibility and Environmental Responsibility. The committee noted that the inclusion of environmental responsibility in the college’s Core Learning Outcomes represents a value that is somewhat unique among colleges. As such, it would express a strong commitment to this value if it was in a separate Core Learning Outcome, better supporting CGCC’s identity as a green institution. Focusing on environmental responsibility as a 6th Core Learning Outcome will also allow the college to focus more instruction on this CLO, thus having a greater impact on students.

Actions: This recommendation was made to the college’s Instructional Council in the fall of 2019. No further actions have been taken towards this recommendation. There is the potential that this

recommendation may be implemented as a result of the General Education department examining the data from the CLO assessments as part of their program review.

Results: To be determined

Recommendation 4. To address the concerns of the lack of familiarity that faculty may have with the criteria of the rubric and a lack of norming, it is recommended that in the following cycle of CLO assessment, faculty focus on working together in their departments to create assignments that are more specific to the criteria of the rubric. These assignments could be adopted by department faculty to assess student learning of the CLO in their classes, adapted to specific course content or used as examples for faculty to develop their own assignments.

Actions: Actions towards this recommendation will be implemented during the second phase of CLO assessment. The first workshop is planned for fall in-service of 2020-21. Members of the CLO Assessment Committee will facilitate a workshop designed to help faculty develop assessments that can be used to assess CLO#1 and any course-level communication outcomes. The Written Communication Rubric and Oral Communication Rubric will be used as a guide to develop the assessments.

Future in-service workshops/presentations will focus on faculty and/or department collaborative exercises to create assignments that are more specific to the criteria of the rubrics for the CLO that will be assessed each year, replacing the exercise of collaborating to create Strategies and Resources for Teaching to CLOs.

Results: to be determined

4. Please describe other actions taken that were not based on previous review recommendations. What assessment, evidence, or need prompted these actions?

No other actions were taken during 2019-20

C. Overview of Process (es) used to Evaluate Competency:

1. Overview of methodology used for assessment:

During the 2019-20 academic year, the third Core Learning Outcome (CLO) was assessed: "Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*).” An interdisciplinary team, the Core Learning Outcome Assessment Committee, met at the beginning of the academic year to review the process from the previous year and make suggestions for improvement. The CLO Assessment team also adapted the [Quantitative Literacy Value rubric](#) from AACU’s ([Association of American Colleges and Universities](#)) LEAP ([Liberal Education and America’s Promise](#)) Value ([Valid Assessment of Learning in Undergraduate Education](#)) Rubrics (<http://www.aacu.org/>)

Instructors who taught courses that students would be taking towards the end of their degree (sophomore or 200-level courses) were asked to assess student achievement of the Institutional Core Learning Outcome: Quantitative Literacy. These upper level courses were chosen with the understanding that students, in theory, would have had a few freshman level courses that included quantitative literacy as a course outcome, allowing CGCC to assess students who were closer to graduation and who had had more instruction and practice in building quantitative literacy skills. Three 100-level science courses were included after the instructor polled students to ensure the majority of them were taking these courses in their second year. Students from MTH 111 and 112 were also assessed, as these are often the last math courses that many students take prior to graduation.

Each term, instructors who were teaching courses that addressed quantitative literacy in-depth or minimally, as indicated in the CCOGSs, were contacted to determine if they had a suitable assessment to be scored using the adapted [Quantitative Literacy rubric](#). Instructors were then responsible for scoring the student artifacts using the rubric, and submitting the results to a web form. Instructors also had the option to include a rationale or analysis to help explain student scores.

In looking at the methodology, it is important to remember that assessment of Institutional Core Learning Outcomes is different than Course Assessment or Instructor Evaluations: CGCC is compiling information on student achievement of CLOs in order to be analyzed by the Core Learning Outcomes Assessment Committee and shared with CGCC faculty to determine where adjustments and improvements need to be made. Assessment of Institutional Core Learning Outcomes is **not** about an individual instructor or an individual course: the purpose is to obtain a snap-shot on a more global perspective of student ability in formal college-level quantitative literacy.

2. Summary of timeline and steps in assessment process:

1) Week prior to start of term: The Academic Assessment Coordinator (AAC) looked at the CCOGS of courses and selected those courses that either quantitative literacy as a course outcome or indicated that CLO #3 was addressed in depth. A list of suggested courses was sent by the AAC to each Department Chair (DC) for consideration. DCs responded either confirming the selection or recommending revisions.

2) 2nd - 3rd week of term: Once a course was confirmed by the DC, instructors were contacted via email by the AAC informing them that their course had been selected for assessment of the third CLO. Information about the process of assessing CLOs was provided, as were directions and links to the rubric.

3) 3rd - 4th week of term: the AAC contacted the instructor again to determine whether they had an appropriate assignment that could be scored with the [Quantitative Literacy rubric](#). If it was determined that instructors did not have an appropriate assignment for this purpose, the course was removed from the list of courses used to assess CLO#3.

4) 6th week of term (fall/winter): packets were created by the AAC and Curriculum and Assessment Administrative Assistant (CAAA) and distributed to the instructors. Within the packets were paper copies of the [Quantitative Literacy rubric](#) to be used to score each individual student's assignment, and instructions for submitting the scores on the web form. During spring term, an email that included the instructions and individual scoring rubric was emailed to all instructors

5) End of term - week after end of term: Instructors scored student assignments using the rubric and input the totals for each category of the rubric in the web form. Adjunct faculty submitted time cards for up to 3 hours to be paid at the Special Project Rate. The AAC compiled the results at the end of each term into a spreadsheet.

- 6) Beginning of summer term: the AAC compiled the results for all terms.
- 7) 2 weeks before fall term 2020: The CLO Assessment Committee met to review and analyze results, provide recommendations based on the results to improve student achievement of CLO#3, review the CLO assessment process and make recommendations for improvement to the process.
- 8) Fall In-service: Results will be shared with faculty, as well as the committee's recommendations to help improve student achievement of quantitative literacy. Faculty will use time during in-service to develop strategies for instruction, curriculum and/or assessment based on the committee's recommendations.
- 9) Faculty will be reminded of their commitment to implementing strategies to support students in achievement of CLO#1, #2, # 3, #4 and #5 when they complete Part A of Course Outcomes Assessment.
- 10) Faculty will list the strategies they implemented to support student achievement of CLO#1, #2, #3, #4 and #5 when they complete Part B of Course Outcomes Assessment.

3. Sampling information:

385 students were enrolled in the 23 courses from 6 disciplines. A total of 321 student artifacts were scored using the [Quantitative Literacy rubric](#) by the instructors of those courses.

Assessment Instrument(s):

The [Quantitative Literacy rubric](#) was adapted from LEAP Value Rubrics (<http://www.aacu.org/>). The original VALUE initiative in 2007-09 involved teams of faculty and other educational professionals from over 100 higher education institutions engaged over many months to develop 16 VALUE rubrics for the LEAP Essential Learning Outcomes. Each rubric was developed from the most frequently identified characteristics or criteria of learning for each of the 16 learning outcomes. Drafts of each rubric were then tested by faculty with their own students' work on over 100 college campuses.

The CLO Assessment Committee's adaptations to the LEAP Rubrics included a renaming of the student achievement categories from Capstone (4); Milestones (3 and 2); and Benchmark (1) ([LEAP VALUE Rubrics](#)) to 4; 3; 2; 1; Not Demonstrated; and Not Applicable ([CGCC Quantitative Literacy rubric](#)). Per Recommendation 2 from the 2017-18 CLO Analysis, the CLO Assessment Committee anticipated that the adapted student achievement categories would be less influential on instructor decisions, and instead instructors would focus on the performance indicators for guidance.

Data Analysis Procedures:

Once instructors scored the student artifacts using the adapted LEAP Value Rubric for Quantitative Literacy, results were gathered by the AAC and presented to the CLO Assessment Committee. The CLO Assessment Committee analyzed both the results and the process. The analysis was recorded during the meeting and captured in this analysis template.

D. Results

1. Describe results of assessment work related to competency:

Provide detailed results of assessment, including charts, graphs or other visuals

Results for Quantitative Literacy:

A total of 385 students were enrolled in the courses that participated in the assessment of the CLO Quantitative Literacy. Of those students, 321 completed the assignments and were scored using the [Quantitative Literacy rubric](#). A total of 60.97% of those students scored into the levels of 3 and 4 (accomplished or better). 19.88% of students scored into the category of 2 (developing) and 12% of students scored into the category of 1 (beginning). 7.14% scored into “not demonstrated” and 1.85% were scored into the “not applicable” category.

Institutional Core Learning Outcome #3: Through their respective disciplines, CGCC students who earn a degree can: Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (Quantitative Literacy)									
Quantitative Literacy Total Number of students enrolled 385 Total # of students who completed scored assignment: 321	Mastery	Accomplished	Developing	Beginning	Not Demonstrated	Not Applicable	Total numbers for Accomplished or better	Total Percentage for Accomplished or better	
CLO: Quantitative Literacy: Interpretation: TOTALS	124	113	51	27	6	0	237	73.83%	
CLO: Quantitative Literacy: Representation: TOTALS	120	87	76	13	25	0	207	64.49%	
CLO: Quantitative Literacy: Calculation: TOTALS	131	83	42	16	27	22	214	71.57%	
CLO: Quantitative Literacy: Application/Analysis: TOTALS	83	88	94	43	13	0	171	53.27%	
CLO: Quantitative Literacy: Assumptions: TOTALS	97	62	62	55	32	13	159	51.62%	
CLO: Quantitative Literacy: Communication: TOTALS	105	80	51	73	32	0	185	51.40%	
Total number of students scored into category using Quantitative Literacy Rubric	860	493	376	227	135	35	1153	60.97%	
Total percentage of students scored into category using Quantitative Literacy Rubric	34.90%	26.07%	19.88%	12.00%	7.14%	1.85%			
Total Percentage of students who scored into Accomplished or better with Quantitative Literacy Rubric* * Students who were scored into "Not/Applicable" are not included in total.								60.97%	

E. Analysis of Results

Assessment at this level measures whether CGCC degree-seeking students can demonstrate the Institutional Core Learning Outcomes at a two-year lower-division competency level. (Core Theme B: Transforming Lives – Education; Objective B3)

1. Discussion and Implications

Reflect on what was learned and what the impacts might be (not a repeat of findings). Reflection should include the implications of the findings to the General Education Program.

While the total percentage (60.97%) of students who scored into accomplished or better for quantitative literacy provides a number to determine if CGCC is meeting its mission for Core Themes, this overall percentage does not provide enough meaning to be used by the committee in their analysis of student achievement of this CLO. In order to make a more informed analysis, the committee looked to student achievement scores for each specific category of the rubric. Since the AACU rubrics are used not only to assess student achievement of the CLO's, but also to inform CGCC where faculty can work together to focus instruction, as in previous years, the committee decided to focus on the categories where the fewest students scored into accomplished or better: "Application and Analysis" (53.27%) and "Assumptions" (51.62%). Although the category of "Communication" also had a low percentage of students scoring into accomplished or better (51.40%), the committee reasoned that the ability to identify and explain "Assumptions" as well as conduct "Application and Analysis" needed to be improved prior to "Communication" in order that the student would have something to communicate. The committee also thought that the skill of communicating results could be addressed by the activities faculty are already integrating into their teaching to support CLO#1: Communication.

The committee discussed why students seemed to struggle in these last three categories, concluding that the ability to "apply", "analyze", evaluate "assumptions" and use quantitative information to support an argument, requires higher cognitive abilities. Students are required to go beyond computation and actually think critically about the data.

In terms of the connection between the achievement of CLO#3 and the General Education program, the committee wondered what these results might mean for teaching math at CGCC. The foundational skills related to quantitative literacy are often first learned in math courses, and then carried over into other courses (General Education courses require, at the very minimum, completion of MTH 20 for this very reason). Similarly, many CGCC programs do not require students to complete math classes beyond Introductory Algebra (MTH 65), and it's possible that students are not getting enough practice in these higher level quantitative literacy skills related to critical thinking. One math faculty who scored student work commented that in terms of students struggling with application and analysis, it seemed that students "haven't been taught to think along those lines". Another math faculty noted when scoring student work for "assumptions" that analyzing their assumptions was not part of the assignment: *"This assignment did not expect students to look at assumptions. But trust me, this means something very specific to mathematicians. The math might be right, but that doesn't mean you get a good answer. Everything depends on the assumptions made. It is the assumptions, after all, that lead us to pick one mathematical model over another."* After making changes to teaching and assessments for courses taught the following term, this same faculty member stated that time was spent *"trying to get them to realize that the assumptions we make lead to the type of equation we are going to use (constant growth,*

constant percent growth, and so on...). But projects beyond those weren't really showing that. And I saw the same thing again. It wouldn't surprise me if that's an issue across the board for this particular outcome. And I know I will have to emphasize it in all my classes and not just math 111." This faculty's realization mirrors the committee's that more focus needs to be placed on analysis, application and evaluation of assumptions. The committee also concluded that the critical thinking skills of application, analysis and evaluating assumptions are not just attributed to quantitative literacy and math. The concepts of application, analysis and evaluating assumptions are applicable across all disciplines and all faculty could contribute towards instruction in these areas.

The committee further determined that upon completion of a two year degree, it's reasonable to expect CGCC students to achieve the level of "accomplished" in all areas identified by the rubric. While the committee recognizes that the last three categories are difficult and require more critical thinking, the committee feels that community colleges have a greater responsibility for these foundational skills so that students can successfully transfer to a 4-year school and/or demonstrate competency in the workforce.

F. Recommendations and Action Items

Assessment of Institutional Core Learning Outcomes assesses whether students, regardless of which degree they earn at CGCC, achieve the skills and knowledge that are at the foundation of CGCC's General Education program. Recommendations and Action items should be related to recommendations made in the current General Education Program Review and can include a progress report or revisions on the Gen Ed Program Review recommendations.

1. What actions will be taken as a result of the assessment?

Recommendation 1. The committee recommends that the scope of supporting student attainment of these skills be broadened to include other disciplines as well. The committee recommends that faculty continue the process that they started during spring in-service 2016, and work together to develop strategies that they can integrate into their instruction and assessment that help students to move towards the level of accomplishment or better in application/analysis and the ability to make and evaluate assumptions. The AAC will compile a list of resources to support faculty instruction in these areas and post this list to the Institutional Core Learning Outcomes website. Faculty will be reminded of their commitment to increase or integrate instruction for application/analysis and assumptions when they complete Part A of course outcomes assessment, and will then describe what they did to support students in achieving this CLO at a higher level when completing Part B. The AAC will track these interventions on a spreadsheet and CLO#3 will be assessed again in 2024-25 to determine the impact of these interventions.

Recommendation 2. The committee recommends that the college have a conversation about how to incorporate the analytical skills taught in the math department into lower level math courses.

Recommendation 3. The committee recommends that faculty embrace a more intentional approach to teaching the concepts addressed by the rubrics. This intentionality would include using the words and terminology from the rubrics with our students, as well as educating them about how the content of General Education courses are tied to their attainment of CLOs. One suggestion would be to include the assignments supporting student achievement of CLOs in the syllabi, as an

addition to the requirement that all Gen Ed syllabi include the CLO major and minor designations. Workshops are planned to be offered during fall 2020 in-service to support faculty towards this goal.

Recommendation 4. To address the concerns of the lack of familiarity that faculty may have with the criteria of the rubric, future in-services will include workshops designed around creating assignments specific to the criteria of the rubric. These workshops will not only help faculty become more familiar with the criteria, but also ensure that courses are supporting student achievement in the appropriate CLOs as indicated in the CCOGs. It is recommended that the Instructional Council member of the committee remind the General Education department chairs about the major/minor designation of CLOs so that the department chairs can continue to educate faculty in their departments.

Recommendation 5. In order to further support faculty in the above recommendation, the committee proposes that the college consider expanding the CLO workshops, to be offered each term. Doing so would require more faculty to be trained on applying the rubrics, something that could occur during the summer through the AAC&U VALUE Institute Calibration Trainings. Faculty would be trained on norming, as well as compensated (the rate in 2018 was \$750) for their time in scoring student artifacts. These faculty could then lend their expertise to providing workshops for CGCC faculty each term.

2. Describe how these action items are related to recommendations from the current General Education Program Review? Include how these changes will affect the General Education program.

The 2016 General Education Program Review's 2nd recommendation was to "Revamp the program to align it more fully with its mission, especially its goals of providing a common experience and preparing students for the roles as citizens of the US and the world." As described in the General Education Program's Mission, CGCC's common educational experience "is defined by CGCC's Core Learning Outcomes and is developed primarily through a set of general education course requirements that all students take, regardless of their major. Ultimately, the mission of the General Education program at CGCC is to provide our students with a common experience and set of skills that prepare students for success in their majors, as citizens of the US and the world and in their personal and professional lives after graduation." The action of CGCC faculty intentionally providing resources and extra support for students to improve achievement in quantitative literacy implicitly supports the General Education program's Recommendation 2 by making changes to course curriculum and delivery to better prepare students for the roles of citizens of the US and the world.

G. Evaluate the Assessment Strategy

Were the assessment methods accurate indicators of student achievement of the core learning outcome? Why or why not? Suggestions for changes.

Given that the assessment methods and LEAP rubrics developed by the AACU, have been tested and widely adopted by post-secondary institutions across the US, it is probably safe to say that the

assessment methods were accurate indicators of student achievement. As noted in the limitations the committee does have some concerns:

- The subjectivity of faculty scoring their own student artifacts.
- The lack of norming when using the rubric to score student artifacts
- The inability to distinguish those students who are in their last term from those who may be new to college level coursework

An extensive discussion occurred during the annual meeting regarding how to improve the assessment method. Suggestions included using capstones and e-portfolios, methods already adopted by programs such as Early Childhood Education, Entrepreneurship/Business Management, and the Elementary Educator Transfer Pathway. For 2020-21, the committee agreed that CGCC should continue to have faculty score their own student work until 1) the General Education Program Review has been completed and 2) the use of capstones and e-portfolios have been assessed. The committee acknowledges, however, that the process can be improved in 2020-21 by aiding faculty in creating appropriate assignments that can be scored by the rubrics and better educating faculty regarding the descriptors.

H. Faculty Involvement

Describe faculty involvement in the assessment and analysis process.

8 faculty from 6 disciplines were involved in the assessment of the CLO:

Fall Term: Gretchen Gebhardt (GS 106), Emilie Miller (BI 211 and BI 234), Pam Morse (MTH 111), Abel Wolman (MTH 243).

Winter Term: John Evans (MTH 243 and MTH 252), Gretchen Gebhardt (GS 109), Emilie Miller (BI 211 and BI 212), Todd Meislahn (BA 211), Pam Morse (MTH 111), Chris Spengler (EET 252), David Wagenblast (EC 201).

Spring Term: John Evans (MTH 112 and MTH 253), Gretchen Gebhardt (GS 108), Emilie Miller (BI 211), Todd Meislahn (BA 212 and BA 213), Pam Morse (MTH 111), David Wagenblast (EC 202).

4 faculty and the director of accreditation and assessment were involved in analysis process: Gretchen Gebhardt, Katy Jablonski, Kristen Kane, Zip Krummel, and Susan Lewis.

I. Additional Comments

1. While assessment of the CLOs is in part, to comply with the requirements for NWCCU and accreditation, it's important to state that CGCC's commitment to the assessment of CLOs is the result of our promise to students that: Through their respective disciplines, CGCC students who earn a degree can:
 1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
 2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical thinking and Problem-Solving*)

3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
4. Use an understanding of cultural differences to constructively address issues that arise in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Assessment of CLOs also furthers our attainment of Core Theme B: Transforming Lives – Education and aligns with CGCC’s Value of Excellence.

Results, analysis and committee recommendations will be shared with faculty during the fall 2020 in-service. The results and analysis documents will also be shared with faculty through a faculty-wide email and be posted on the [Academic Assessment/Institutional Core Learning Outcomes webpage](#) in an effort towards transparency for our students and community.

J. Appendices

Include any assessment method (i.e. rubric), table of results, comments from instructors

1. [AACU LEAP VALUE Rubrics](#)
2. [AACU LEAP VALUE Rubric: Quantitative Literacy](#)
3. [Institutional Core Learning Outcome Assessment Schedule](#)

Report on the analysis of CLO#3 completed by: Kristen Kane with the help of the CLO Assessment Committee (Susan Lewis, Zip Krummel, Gretchen Gebhardt and Katy Jablonski)

Date: 9.17.20