2012-2013
General Education/Institutional Learning Outcomes

Learning Outcomes Council
Palomar College

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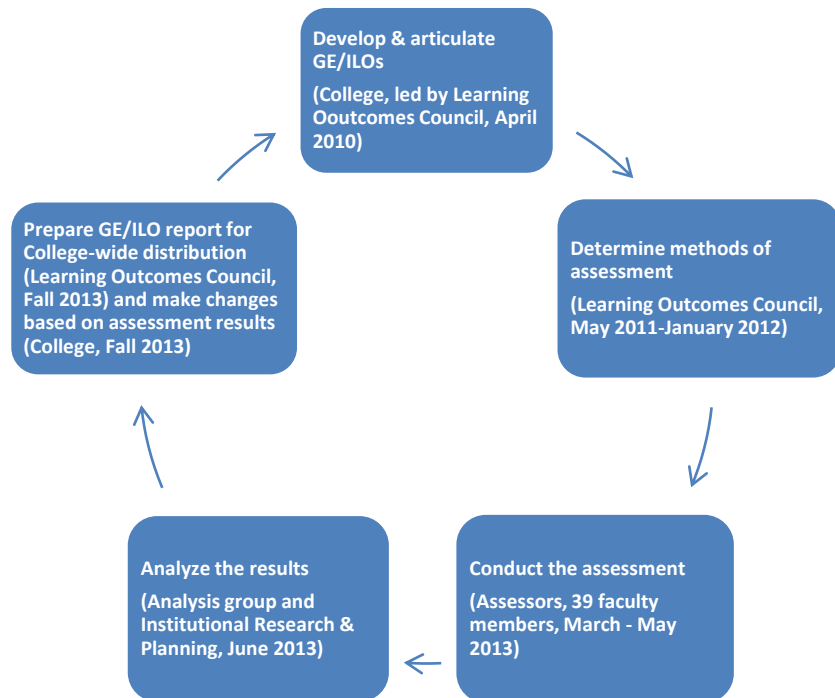
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Executive Summary

As articulated in our mission statement, Palomar College is "committed to promoting the learning outcomes necessary for our students to contribute as individuals and global citizens living responsibly, effectively, and creatively in an interdependent and changing world." The college confirmed this commitment by identifying a set of general education/institutional learning outcomes (GE/ILOs), which represent the overall set of abilities and qualities a student graduating from Palomar College should possess. The GE/ILOs were adopted from the American Association of Colleges and Universities' LEAP framework, and were modified to reflect Palomar's particular set of values. In spring 2013, the college assessed students' ability to meet two subsets of the intellectual and practical skills GE/ILO: oral communication and critical and thinking. With a focus on understanding and supporting our students, this report presents the findings of the spring 2013 GE/ILO assessment.

The purpose of this report is twofold. First it presents observations and considerations based on the spring 2013 assessment of the oral communication and critical thinking outcomes. Second, it presents an evaluation of the spring 2013 GE/ILO assessment process and makes recommendations for future GE/ILO assessment. This experience stimulated meaningful conversations among faculty and administrators about student learning and the assessment process. Several individuals and groups contributed to the findings, observations and recommendations presented in this report. What follows is a short narrative describing the assessment process as well as the groups involved.

The assessment methods and process were developed and implemented by the college's Learning Outcomes Council (LOC), who reports to the Faculty Senate. The methods for assessing the oral communication and critical thinking outcomes were identical. LOC selected a course-embedded approach to the assessment of the GE/ILOs using a common form of measurement, i.e. a rubric, for each outcome. Two common rubrics were drafted by LOC workgroups: one for oral communication and one for critical thinking. The workgroups used the American Association of Colleges and Universities' VALUE rubrics as a starting point for developing an initial draft of each rubric (see Appendix A and B for the rubrics used for this assessment project).

An evaluation and data analysis workgroup composed of 12 faculty (10 full-time and 2 part-time) and two administrators met in June 2013 to review the assessment data for both outcomes as well as the data collected in relation to the implementation of the assessment method and process. The observations and considerations made by this analysis workgroup were presented to the Learning Outcomes Council during the fall 2013 semester for review and consideration. Figure 1 illustrates the groups involved in the process over the course of the assessment cycle.

Figure 1
Groups Involved in GE/ILO Assessment Cycle

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          ┌─────────────────────────┐
          │ Develop & articulate    │
          │ GE/ILOs                 │
          │                         │
          │ (College, led by Learning│
          │ Ooutcomes Council, April│
          │ 2010)                   │
          └─────────────────────────┘

┌──────────────────────────┐        ┌──────────────────────────┐
│ Prepare GE/ILO report for│        │ Determine methods of     │
│ College-wide distribution│        │ assessment               │
│ (Learning Outcomes Council,│      │                          │
│ Fall 2013) and make changes│      │ (Learning Outcomes Council,│
│ based on assessment results│      │ May 2011-January 2012)   │
│ (College, Fall 2013)     │        │                          │
└──────────────────────────┘        └──────────────────────────┘

┌──────────────────────────┐        ┌──────────────────────────┐
│ Analyze the results      │        │ Conduct the assessment   │
│                          │        │                          │
│ (Analysis group and      │        │ (Assessors, 39 faculty   │
│ Institutional Research & │        │ members, March - May     │
│ Planning, June 2013)     │        │ 2013)                    │
└──────────────────────────┘        └──────────────────────────┘
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PART I
2013 GE/ILO Assessment Methods and Findings

Introduction

In April 2010, Palomar College identified a set of general education/institutional learning outcomes (GE/ILOs), which represent the overall set of abilities and qualities a student graduating from Palomar should possess. These were adopted from the American Association of Colleges and Universities' LEAP framework, and modified by the faculty of the college to reflect Palomar's particular set of values. The college's Learning Outcomes Council, hereinafter referred to as LOC, directs GE/ILO assessment planning and implementation. In spring 2012, the college assessed two subsets of the intellectual and practical skills GE/ILO: information literacy and critical and creative thinking. In the spring of 2013, the college assessed another subset of the intellectual and practical skills GE/ILO: oral communication. The college also revisited the critical and creative thinking outcome and decided to assess just critical thinking in spring 2013.

A total of 39 randomly selected courses participated in the assessment of the two outcomes (19 for oral communication and 20 for critical thinking). During a two-hour training session, 39 participating course instructors, who will be referred to throughout this report as the assessors, were introduced to the assessment process and the draft rubric developed by an LOC workgroup, comprised of faculty from a variety of disciplines, for each respective GE/ILO. Also during this training session, the assessors had the opportunity to further norm and refine each rubric. Upon completion of the training, a working version for each rubric was distributed to the assessors (See Appendices A and B). The assessors applied the final rubric to a designated student work (e.g. an exam, assignment, or portfolio) that would demonstrate students' ability to meet the GE/ILO being assessed. After scoring the student work, the assessors submitted the results to the college's Institutional Research and Planning office. In order to get feedback about the assessment method and process, the assessors completed an online survey upon completing the assessment. Upon completion of the project requirements, the assessors received a $250 stipend. In June 2013, a special workgroup met to review the assessment results and present observations and recommendations to LOC, which were then used to prepare this report.

Assessment Results and Observations: Oral Communication

The College used the Association of American Colleges & Universities definition of oral communication which is as follows: a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors. On April 10, 2013 a total of 578 students were enrolled in the sections participating in the oral communication assessment. Faculty completed 453 assessments. Faculty members were asked to return all assessment surveys, even if they were unable to assess a student. The reasons for not completing an assessment included that a student no longer was attending class, and /or the student did not complete the assignment used to assess oral communication. Table 1 includes the distribution of the sample by gender, age, and ethnicity.

Table 1

Oral Communication
Student Characteristics

Characteristic	N	%
Gender		
Female	305	67.3
Male	144	31.8
Unknown	4	0.9
Total	*453*	*100.0*
Age		
< 18	6	1.3
18-19	130	28.7
20-22	139	30.7
23-29	88	19.4
30+	90	19.9
Total	*453*	*100.0*
Ethnicity		
Asian	26	5.7
Black	9	2.0
Filipino	15	3.3
Hispanic	202	44.6
Multi-ethnicity	26	5.7
Native American	4	0.9
Pac Island	2	0.4
White, Non-Hispanic	158	34.9
Unknown	11	2.4
Total	*453*	*99.9*

One notable finding from this table is that the distribution of characteristics most likely represents student enrollment in the courses that have been mapped to the GE/ILO rather than the College's student population in general. In general, the College's student population is evenly split by gender and has a higher percentage of White, Non-Hispanic students and a lower percentage of Hispanic students than the sample distribution. Table 2 shows the distribution of units completed by students participating in the study prior to their enrollment in the spring 2013.

Table 2

Oral Communication

Student Progress (Units Completed)
at Palomar

	N	%
Units Completed		
None	54	11.9
Less than 15	98	21.6
15-29.9	90	19.9
30-44.9	79	17.4
45-59.0	45	9.9
60 units or more	87	19.2
Total	*453*	*99.9*

Oral Communication Overall Observations

The oral communication rubric included four competencies: message, language, material, delivery. The faculty assessors scored over 70% of students as either proficient or exemplary on each of the four competencies. These observations are illustrated in Figure 2.

Figure 2
Oral Communication Rubric Percentages - All Students (n=452)

	Below/Emerging	Developing	Proficient	Exemplary
Message (n=452)	3	20	41	35
Language (n=452)	5	21	43	31
Material (n=452)	5	22	36	36
Delivery (n=452)	4	22	50	25
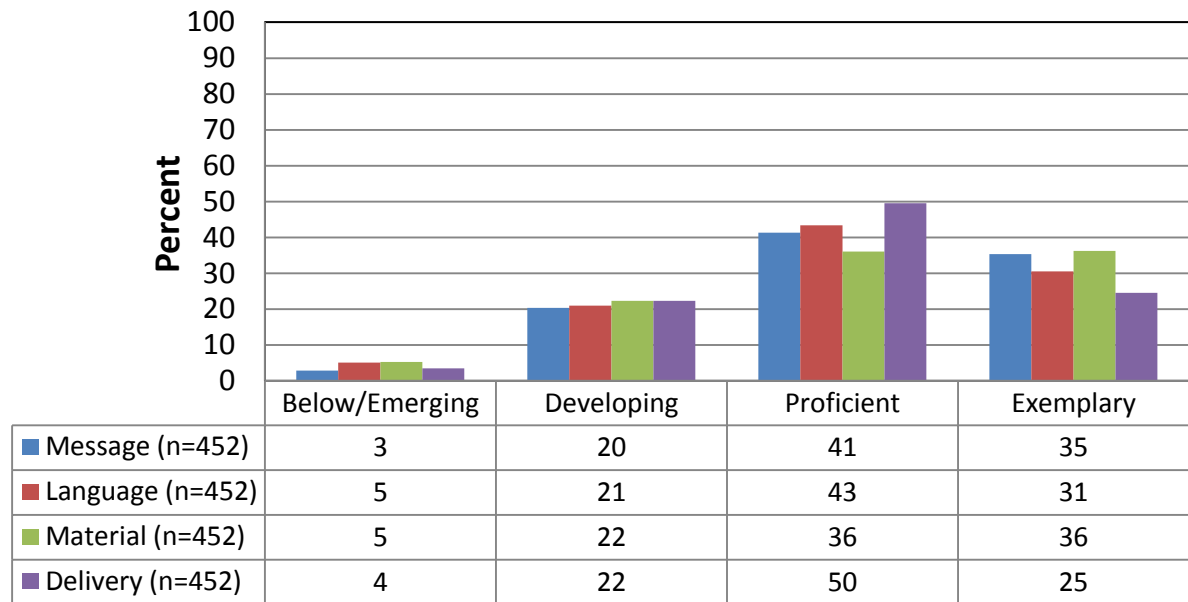
Assessment Results by Overall Score

Once assessors assessed the students in the four assessment categories, they were asked to provide an overall score for each student. Of those students who were rated on all four competencies, 77% earned an overall score of proficient or exemplary. The additional category, overall, is the fifth competency. These observations are illustrated in Figure 3.

Figure 3
Oral Communication Rubric Percentages - All Students
(n=452)

	Below/Emerging	Developing	Proficent/Exemplary
■ Message (n=452)	3	20	77
■ Language (n=452)	5	21	74
■ Material (n=452)	5	22	72
■ Delivery (n=452)	4	22	74
■ Overall (n=452)	2	21	77
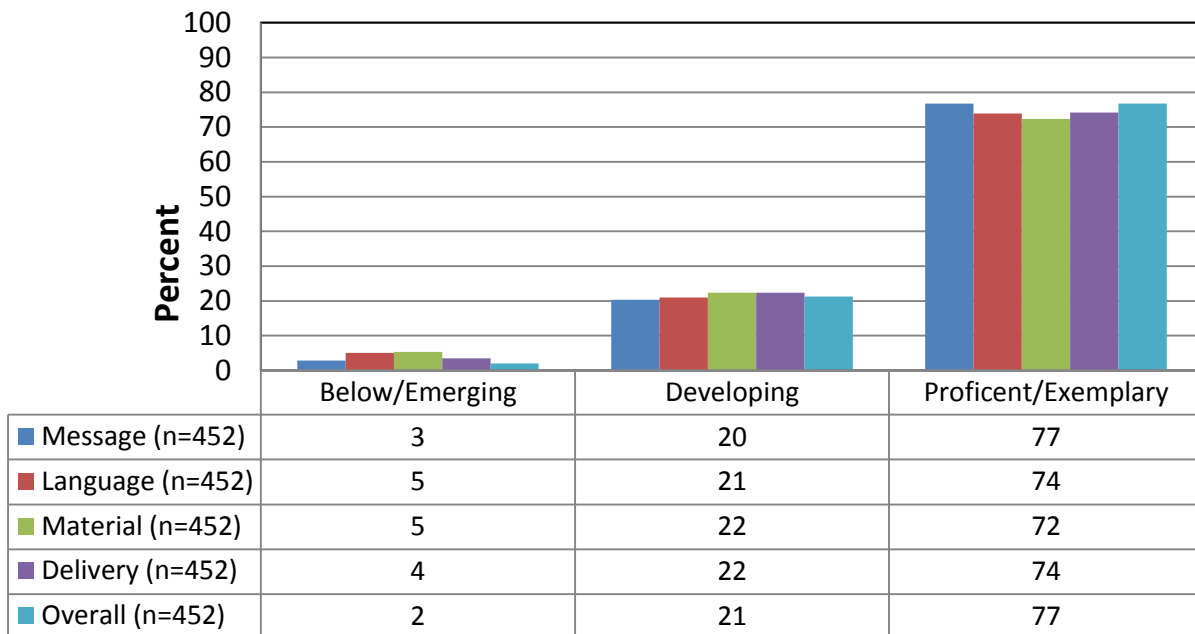
Assessment Results by Units Earned

Although the findings are not significant, overall, students with more units tended to perform better than students with less than 15 units. The average overall mean score for students who had completed 15 or more units was greater than 3.0 or proficient. These observations are illustrated in Figure 4.

Figure 4
Oral Communication
Mean Overall Assessment by Units Earned
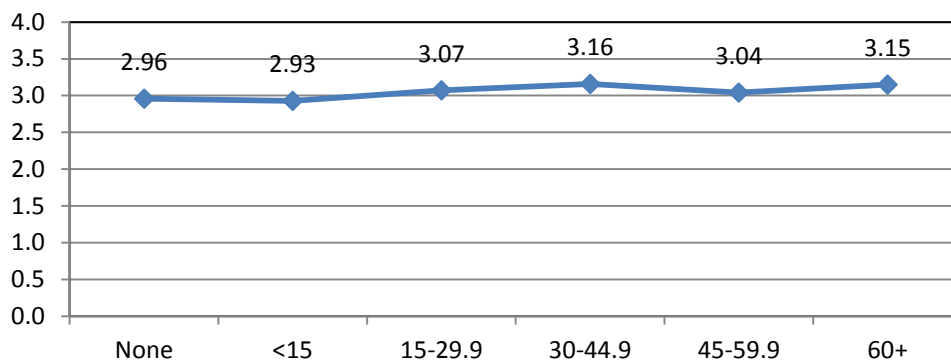
There were some significant differences across units earned groups with respect to the four assessment categories (message, language, material and delivery). In the message category, students with more than 60 units performed better than students with no units. In the language category, students with more than 60 units performed better than students with no units, <15 units and students, with 45-59.9 units. In the material category, students with 15-44.9 units were better than students with less than fifteen units. In the last category, delivery, there was no difference across the units earned groups. These observations are illustrated in Table 3.

Table 3

Mean Scores on Oral Communication Factors by Units Completed

Units	None	<15	15-29.9	30-44.9	45-59.9	60+
N	(54)	(98)	(89)	(79)	(56)	(87)
Group	(A)	(B)	(C)	(D)	(E)	(F)
Factor						
Message	2.93	3.01	3.10	3.20	3.02	3.22 (B)
Language	2.85	2.89	2.99	3.08	2.89	3.17 (BCF)
Material	2.94	2.95	3.13 (F)	3.19 (F)	2.80	3.05
Delivery	2.93	2.84	2.97	3.03	3.00	2.98

Notations identify significant difference p<.05. Refer to column letter to identify group.

Assessment Results by Demographics: Gender

The overall results for gender are similar. The mean overall score for male and female students was above proficient (3.0). These observations are illustrated in Figure 5 and Table 4.

Figure 5
Oral Communication
Mean Overall Assessment by Gender
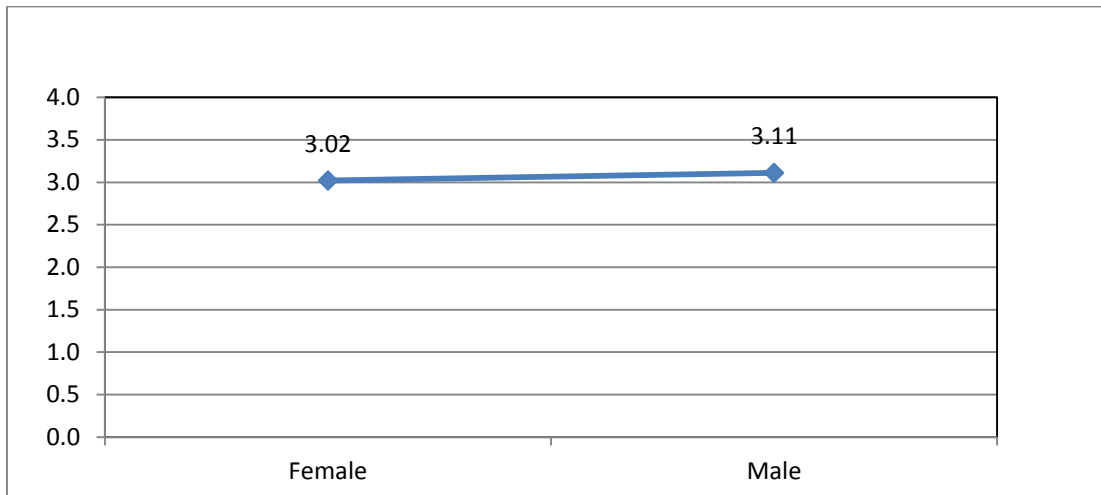
Table 4
Overall Assessment – Gender

Gender	n	Mean	SE
Female	304	3.02	0.043
Male	144	3.11	0.070

Assessment Results by Demographics: Age

The results indicate that as age increases overall mean assessment scores decreases. Students aged 18-19 performed better than students over age 30 in three of the four factors - message, language and material. For delivery, there were no differences across age categories. These observations are illustrated in Figure 6.

Figure 6
Oral Communication:
Mean Overall Assessment by Age
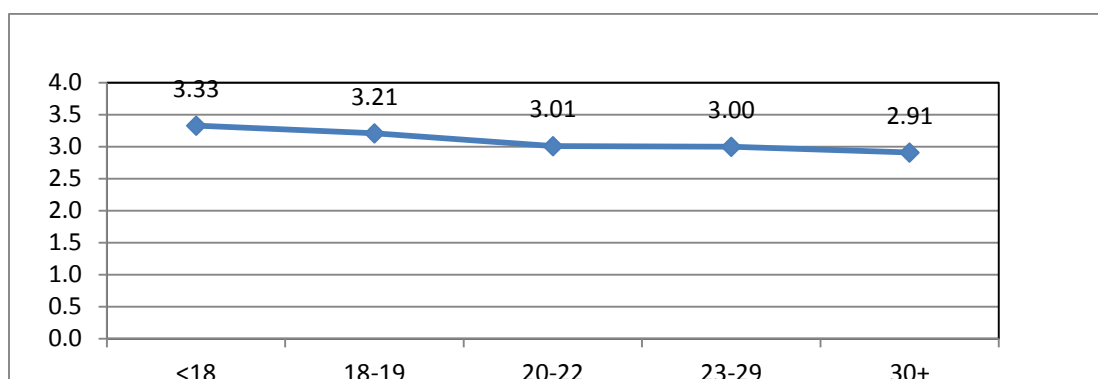
Assessment Results by Demographics: Ethnicity

The sample size across racial/ethnic categories varied; only groups with more than 20 students were analyzed. White and multi-ethnic students performed better than Asian and Hispanic students. These observations are illustrated in Table 5.

Table 5
Overall Assessment Race/Ethnicity

Race/Ethnicity	n	Mean	SE
Asian	26	2.62	0.148
Black	9	3.00	0.236
Filipino	15	3.47	0.133
Hispanic	202	2.93	0.055
Multi	26	3.27	0.152
NatAm	4	3.25	0.250
PacIsl	2	4.00	0.000
White	157	3.21	0.060
Unknown	11	2.82	0.226

Student performance varied somewhat across the competencies in the rubric. For example, the White, NonHispanic student group performed better than the Hispanic and Asian Student groups across the three factors of message, language, and materials. In addition, all groups included in the analysis performed better than the Asian student group across the factor of delivery. Refer to Appendix X to view the detailed results tables of the analyses conducted to evaluate the differences in performance across demographic variables. These observations are illustrated in Table 6.

Table 6
Mean Scores on Oral Communication Factors by Ethnicity (unknowns excluded)

Race/Ethnicity	Asian	African Am.	Filipino	Hispanic	Multi	NatAm	PacIsl	White
N	(26)	(9)	(15)	(202)	(26)	(4)	(2)	(157)
Group	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Factor								
Message	2.81	-	3.47 N too small	2.99	3.15	-	-	3.22 (AD)
Language	2.46	-	3.33 N too small	2.88 (A)	3.35 (AD)	-	-	3.13 (AD)
Material	2.65	-	3.07 N too small	2.94	3.19 (A)	-	-	3.21 (AD)
Delivery	2.38	-	3.40 N too small	2.86 (A)	3.19 (AD)	-	-	3.06 (AD)

Data suppressed for a category if number of students in group less than 10.
Notations identify significant difference $p<.05$. Refer to column letter to identify group.
Results of significant tests only report on groups with >=20 in a category

Discussion of Findings: Workgroup Summary
The following discussion summarizes the comments and conversations by the faculty assessors and the analysis workgroup.

The results of this assessment suggest that approximately 70% of the students assessed are at the proficient level or above in oral communication. The analysis workgroup was somewhat surprised with the findings. Some faculty suggested that because the students were given the rubric ahead of time, they were more prepared for their presentations and therefore performed better.

One faculty member from the Speech Department, who was part of the assessment and analysis workgroup, said that she thinks that she might have been tougher on her students than other assessors because she used the rubric in a speech class where she expected more out of her students. A discussion followed questioning whether students in speech classes should be part of an oral communication assessment. In addition, the group discussed the importance of the training and rubric norming provided to the faculty assessors.

The assessment results suggest that as students complete classes at Palomar College, they improve their oral communication skills. The workgroup members suggested that is could be because students gain practice by giving presentations through course instruction and assignments.

The analysis group found the demographic findings interesting. Students ages 18-19 performed better than students over 30 in three of the four factors - message, language and material. Some analysis group members suggested that younger students are more comfortable in front of peers, whereas older students may have fewer peers in the classroom environment. The analysis group also discussed ways that the college might help older students with these skills. In terms of ethnicity, Asian students performed lower on the rubric competencies than white, Hispanic and multi-ethnic students. The analysis group also discussed ways to help this group and other non-native speakers with oral communication skills. A professional development session for instructors and a special workshop for students with communication apprehension were suggested.

Most of the faculty assessors participating in the oral communication assessment said that using the rubric made the assessments very easy. One assessor said, "The assessment project introduced an oral presentation into a class where we typically do not do so, and it was a great success. The students loved it, and it piqued their interest in chemistry."

Considerations and Ideas for Exploration
After reviewing the findings prepared by the analysis workgroup, the Learning Outcomes Council suggests the following actions for consideration.

1. Make the oral communication rubric available to all faculty members. The rubric would be helpful to faculty not trained in speech or oral communication when grading presentations.

2. Provide professional development training to faculty to help teach oral communication skills.

3. Consider generating a report to find out how many of the students in this assessment had taken Speech 100 prior to taking the current course or were dually enrolled in Speech 100 while taking this course.

4. Offer speech preparation workshops for students in the TLC.

5. Create a learning module on dashboard for students on "how to prepare a speech."

6. Consider trainings for use on the Dashboard.

Assessment Results and Observations: Critical Thinking

The College adapted the definition of critical thinking from the Foundation for Critical Thinking and added additional concepts. The definition is as follows: "Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. " At Palomar College, we also believe critical thinking involves the development of open-mindedness, and the identification of assumptions and implications and awareness of one's own biases.

On April 10, 2013 a total of 620 students were enrolled in the course sections participating in the critical thinking assessment. Faculty completed 423 assessments. Participating faculty were asked to return all assessment surveys, even if they were unable to assess a student. The reasons for not completing an assessment included that the student was no longer attending class and/or the student did not complete the assignment used to assess critical thinking. Table 7 includes the distribution of the sample by gender, age, and ethnicity.

Table 7

Critical Thinking
Student Characteristics

Characteristic	N	%
Gender		
Female	190	53.8
Male	163	46.2
Unknown	0	0.0
Total	*353*	*100.0*
Age		
< 18	2	0.1
18-19	111	31.4
20-22	134	38.0
23-29	49	13.9
30+	57	16.1
Total	*353*	*99.5*
Ethnicity		
Asian	19	5.4
Black	8	2.3
Filipino	7	2.0
Hispanic	123	34.8
Multi-ethnicity	16	4.5
Native American	0	0.0
Pac Island	3	0.8
White, Non-Hispanic	169	47.9
Unknown	8	2.3
Total	*353*	*100.0*

One finding from this table is that the distribution of characteristics most likely represents student enrollment in the courses that have been mapped to the GE/ILO rather than the College's student population in general. In general, the College's student population is evenly split by gender and has a higher percentage of White, Non-Hispanic students and a lower percentage of Hispanic students than the sample distribution. Table 8 shows the distribution of units completed by students participating in the study prior to their enrollment in the spring 2013.

Table 8

Critical Thinking

**Student Progress (Units Completed)
at Palomar College**

	n	%
Units Completed		
None	36	10.2
Less than 15	98	27.8
15-29.9	60	17.0
30-44.9	60	17.0
45-59.0	41	11.6
60 units or more	58	16.4
Total	*353*	*100.00*

Critical Thinking Overall Observations

The critical thinking rubric included five competencies: Conceptualization of issues, evidence, influence of context and assumptions, student's position, conclusions and related outcomes. Of those students who were rated on all five critical thinking competencies, 56% earned an overall score of proficient or exemplary. Students were strongest in conceptualizing the problem – with 61% scoring proficient or better. These observations are illustrated in Figure 7.

**Figure 7
Critical Thinking Rubric Percentages - All Students**

	Below/Emerging	Developing	Proficient	Exemplary
Conceptualize	15	25	34	27
Evidence	19	25	27	29
Context	15	29	28	28
Position	19	26	28	27
Conclusions	17	29	28	26

(n=353)
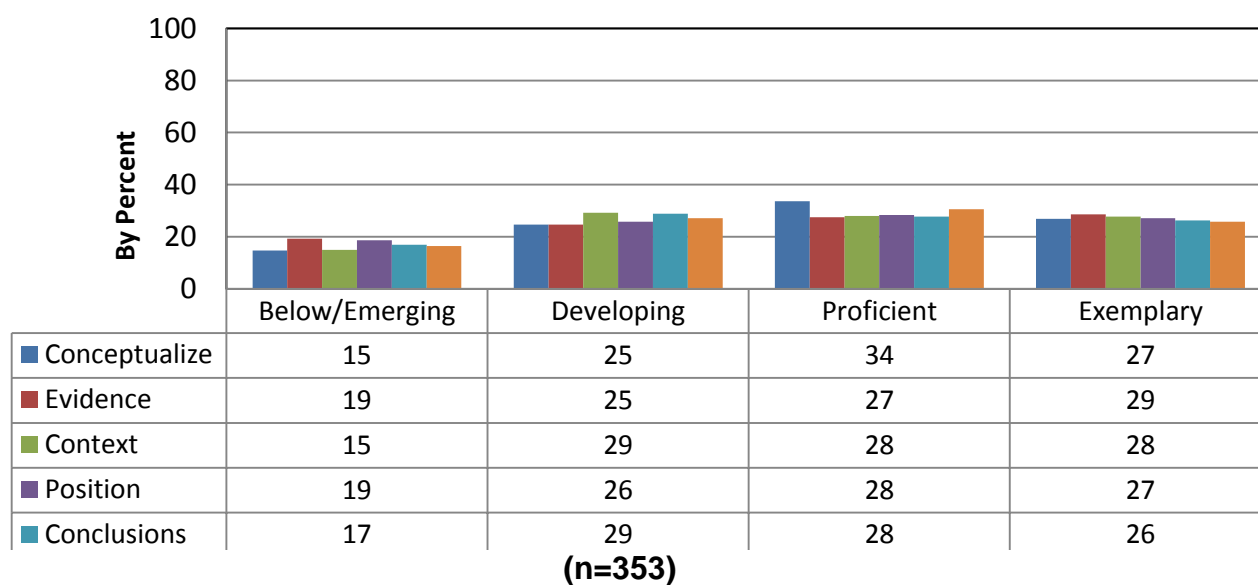
Assessment Results by Overall Score

Upon assessing each student in the five categories, instructors were asked to provide an overall score for each student. The correlations between overall score and assessment of individual competencies ranged from .903 to .926. This suggests that critical thinking could be assessed using one overall score versus assessing and scoring multiple critical thinking competencies.

Assessment Results by Units Earned

Initial examination of performance broken down by units earned suggests that there are no significant differences in means across the factors. This could be due to the small sample size in each of the unit categories. These observations are illustrated in Figure 8.

Figure 8

Critical Thinking
Mean Overall Assessment by Units Earned
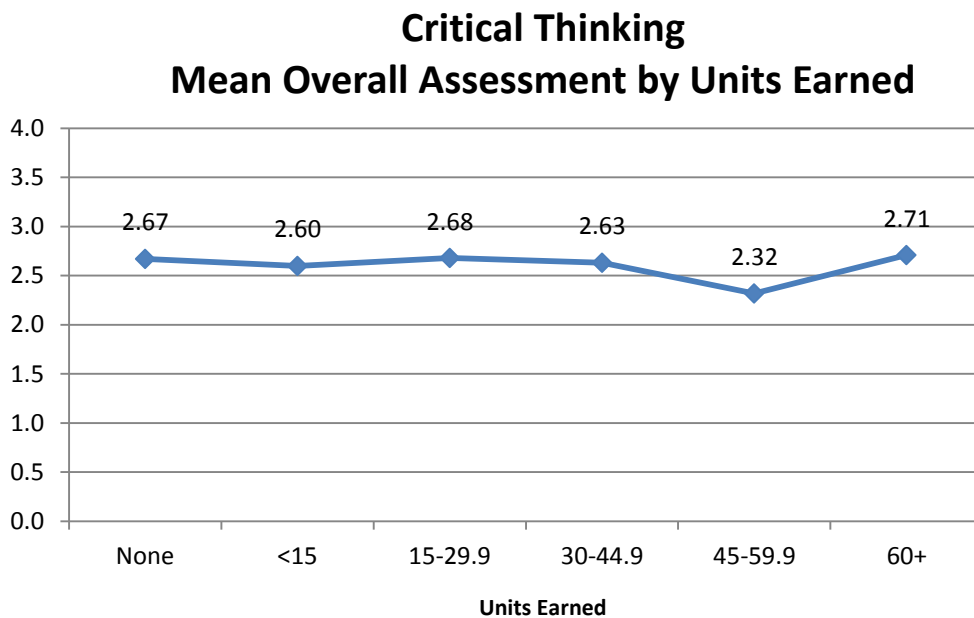
Assessment Results by Demographics: Age

The average overall assessment score was higher for older students. These observations are illustrated in Figure 9.

Figure 9
Critical Thinking
Mean Overall Assessment by Age
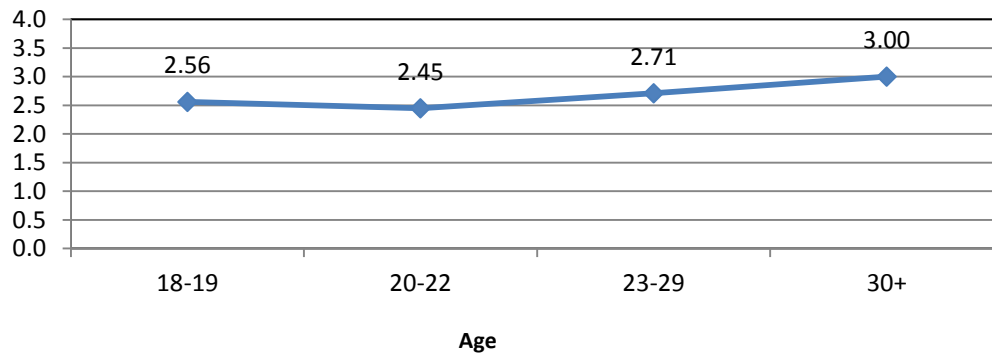
When considering the individual competencies, students ages 30+ did better than students ages 18-19 and ages 20-22 in the following three categories: conceptualize, evidence, and conclusion. Students age 30+ did better than 20-22 year olds for context. Students age 30+ did better than all other age categories for position. (Table 8)

Table 8

Mean Scores on Critical Thinking Factors
by Age Category

Age	<18	18-19	20-22	23-29	30+
N	(2)	(111)	(134)	(49)	(57)
Group	(A)	(B)	(C)	(D)	(E)
Factor					
Conceptualize	-	2.59	2.63	2.78	3.09 (BC)
Evidence	-	2.56 (E)	2.51	2.59	2.96 (BC)
Context	-	2.64 (E)	2.54	2.67	2.95 (C)
Position	-	2.56	2.46	2.63	3.09 (BCD)
Conclusions	-	2.56	2.45	2.71	3.00 (BC)

Data suppressed for a category number of students in group less than 10.

Notations identify significant difference p<.05. Refer to column letter to identify group.

Assessment Results by Demographics: Gender

Female students performed better than males. These observations are illustrated in Table 9.

Table 9
Overall Assessment – Gender

Gender	n	Mean	SE
Female	190	2.75	0.076
Male	163	2.50	0.087

Assessment Results by Demographics: Ethnicity

There was no difference across groups in regards to ethnicity. As in the oral communication assessment, the sample size across groups varied, therefore, only groups with more than 20 students were analyzed. The only two groups large enough to examine are white and Hispanic students. These observations are illustrated in Table 10.

Table 10

Mean Scores on Critical Thinking Factors by Ethnicity (unknowns excluded)

Race/Ethnicity Group	Asian (A)	African Am. (B)	Filipino (C)	Hispanic (D)	Multi (E)	NatAm (F)	PacIsl (G)	White (H)
N	(19)	(8)	(7)	(123)	(16)	(0)	(3)	(169)
Factor								
Conceptualize	3.11	-	-	2.65	2.73	-	-	2.73
Evidence	3.00	-	-	2.59	2.69	-	-	2.64
Context	3.11	-	-	2.66	2.62	-	-	2.64
Position	2.84	-	-	2.59	2.44	-	-	2.66
Conclusions	2.89			2.55	2.62			2.64

Data suppressed for a category number of students in group less than 10.

Notations identify significant difference $p<.05$. Refer to column letter to identify group.

Results of significant tests only report on groups with $>=20$ in a category

Discussion of Findings: Workgroup Summary

The following discussion summarizes the comments and conversations of the faculty assessors and the analysis workgroup.

Over 50% of our students scored at proficiency or better on all five competencies. Some suggested that the language in the rubric was too complicated, and the assessors may not have understood it so that may account for the scores. However, most of the assessors liked the rubric. One assessor said, "The critical thinking rubric works with a number of reading assignments I require and I may employ it again in the future." Another one said, "This definitely gave me a lot to think about in terms of what critical thinking skills I want students to have when they finish this course." There was some discussion about the possibility of using multiple rubrics for critical thinking.

The analysis workgroup expected students with more units to perform better than students with fewer units. However, this was not observed in the data.

The workgroup found the demographic data interesting for critical thinking. Female students performed better than male students, and older students performed better than younger students. The group suggested that older students might have performed better in critical thinking because prior knowledge is important to critical thinking and older students have more prior knowledge than younger students.

The results of this assessment and the assessment process suggest that the critical thinking rubric needs further development. The workgroup suggested that the campus community continue to discuss the definition of critical thinking and possible assessment methods. In addition, the group discussed the importance of the training and rubric norming provided to the faculty assessors.

Considerations and Ideas for Exploration

1. After reviewing the findings prepared by the analysis workgroup, the Learning Outcomes Council suggests the following actions for consideration:

2. Revisit the definition and intention of the college's critical thinking outcome.

3. Consider creating more than one critical thinking rubric.

4. Consider using a standardized critical thinking test to assess critical thinking.

5. Need to clarify our expectations to faculty with respect to scoring the rubric. Consider some reliability testing during training.

6. Need to make the rubric available to faculty and students.

7. Offer professional development workshops on teaching critical thinking.

8. If rubrics are adopted and used – make them available for faculty to look at when they are mapping course student learning outcomes.

PART II

GE/ILO ASSESSMENT PROCESS, EVALUATION & RECOMMENDATIONS

Introduction

Overall, the analysis workgroup participants and faculty assessors benefitted from this assessment process. Creating these kinds of forums where teachers speak across disciplines and acknowledge their shared involvement in students' general education is valuable. The feedback provided by focus groups and surveys was overwhelmingly positive. Many faculty members and groups were involved in the assessment process. It included many meaningful conversations about student learning. There is now a greater awareness of GE/ILOs and our assessment practices because groups like Faculty Senate, Curriculum, Learning Outcomes Council and the Strategic Planning Council were involved in the process. The assessment process connected the college to student learning, and faculty found commonality in teaching and learning across disciplines.

An evaluation and data analysis workgroup composed of 12 faculty (10 full-time and 2 part-time) and two administrators met in June 2013 to review the assessment data for both outcomes as well as the data collected in relation to the implementation of the assessment method and process. The observations and considerations presented in Part II of this report were made by this analysis workgroup. While the group did not agree on everything, they were able to evaluate the data and make recommendations for future assessments. The analysis workgroup was comprised of the following individuals:

- Michelle Barton, Director of Institutional Research & Planning
- Berta Cuaron, Vice-President of Instruction
- Katy French, SLOAC Co-coordinator, Library
- Marty Furch, SLOAC Co-Coordinator, ESL
- Wendy Nelson, SLOAC Co-Coordinator, Media Studies
- Dillon Emerick, Philosophy
- Greg Larson, Math
- Leanne Maunu, English
- Melinda Carrillo, Reading
- Erin Feld, Reading
- Chris Johnson, History
- Chris Lowry, Speech Communication
- Michael Deal, Life Sciences
- Karen Fritts, Speech Communication

Evaluation of the Assessment Process

This evaluation is based on SLOAC coordinator feedback as well as data collected through an online survey completed by the assessors The two SLOAC Coordinators documented their experience throughout the process, and assessors provided feedback about their experiences.

Observations

Training and Workload

Group and individual training sessions were needed in order to train all faculty participants, a.k.a. the assessors. Each session walked the assessors through the GE/ILO assessment process and provided opportunity for assessors to practice together scoring with the rubric using a sample paper or watching a speech. Assessors also had the opportunity to provide input on the final version of the rubric for each outcome assessed.

Assessors were satisfied with the training provided. They commented that the training was very important and that the assessment couldn't have been conducted without it. All of the assessors surveyed agreed that the purposes of the project were well presented during the orientation.

Assessors were asked to keep track of the time they spent working on the assessment project. Figure 10 provides a breakdown of how much time faculty spent per assessment. Compare this to last year.

Figure 10

How much total time did you spend on this assessment project, not counting the training or this survey?

Legend:
- Less than 1 hour
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- 5 hours or more
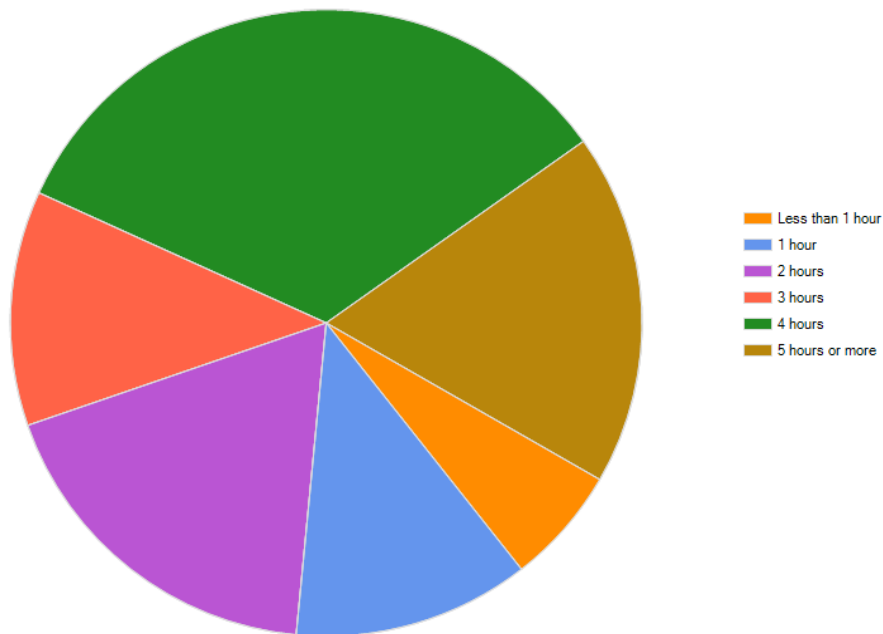
Using the Rubrics

Most assessors said that the rubrics were easy to use and apply to their assignments. Several said that they would use the rubric again in their classes. One assessor said, "This definitely gave me a lot to think about in terms of what critical thinking skills I want students to have when they finish this course." However, some of the assessors struggled with the critical thinking rubric. One assessor said, "I thought that some of the descriptions

overlapped or were rather fuzzy. Others did not directly address some of the critical thinking issues that students had.”

The workgroup discussed some of the challenges with using the same rubric for all disciplines. Some workgroup members suggested that we might need to include more training on using the critical thinking rubric.

Impact on Teaching

Some assessors said they adapted their assignments to fit the rubrics during this study. Many said that using the rubrics helped them focus their assignments better. One assessor said, “the critical thinking rubric works with a number of reading assignments I require and I may employ it again in the future.”

67% of the assessors surveyed said the experience with this assessment project would have some impact on their planning and design of curriculum for future classes. One assessor said,
“The assessment project introduced an oral presentation into a class where we typically do not do so and it was a great success. The students loved it and it peaked their interest in chemistry.” Another said, “It helped me to become clearer in what I want my students to learn in my class.”

Several of the assessors said that there was an increase in student learning because they used the rubric. One assessor said, “Yes, I noticed the students that used the rubric to develop their presentation scored higher and had a stronger command of the subject.” Another assessor said, “Having clear guidelines helped students prepare for their presentation. They were also able to develop clear supporting material based on the rubric.”

Another assessor said, “It's good to have Palomar's rubrics so I can better prepare my students for clear levels of performance. “

The process of using rubrics not only helps increase awareness for students of our learning outcomes but also provides an opportunity for faculty to reflect on teaching and learning and helping students.

Recommendations for Future Assessment Processes

The following recommendations are based on the assessment results presented above as well as feedback about the GE/ILO project from the SLO coordinators, Institutional Research & Planning and participating faculty. Appendix C provides an evaluation of the assessment process prepared by the SLOAC coordinators.

General Recommendations

After reviewing the findings prepared by the analysis workgroup, the Learning Outcomes Council suggests the following actions for consideration:

1. Eliminate department overrepresentation in assessment.

2. Analysis workgroup suggested that we start talking about make this mandatory instead of voluntary.

3. IR &P recommends a larger "n" or sample size.

4. Create a mini lecture on the various rubrics and how to use them to assess student learning. This could be videotaped and placed in Blackboard or on the LOC Website.

5. Create a teaching and learning website where the rubrics and training could be placed.

6. Continue to revisit the techniques used for training faculty how to use the rubrics for future GE/ILO assessments

APPENDICES

A. Oral Communication Rubric

B. Critical Thinking Rubric

C. Assessment Methods: Process and Procedures

D. Assessment Data Significance Tests

Appendix A: Oral Communication

GE/Institutional SLO ____**Oral Communication**____

Definition: *Oral communication is a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors.* –Association of American Colleges & Universities

Competency	0 Below benchmark	1 Emerging	2 Developing	3 Proficient	4 Exemplary
Central Message & Organization	• Message is unclear • Organization is weak	• Does not present a central message • Does not present an observable organizational pattern	• Presents an understandable central message but is not repeated and is not memorable • Uses an organizational pattern that is intermittently observable	• Presents a clear and consistent central message with supporting material • Uses a clear and consistently observable organizational pattern	• Presents a well-projected, compelling central message • Uses a skillful and cohesive organizational pattern
Language	• Uses poor language choices	• Uses language choices that are unclear and minimally support the effectiveness of the presentation	• Uses some inappropriate language choices • Uses mundane and common place language, which partially support the presentation	• Uses thoughtful language choices that generally support the effectiveness of the presentation • Uses appropriate language	• Uses imaginative, memorable, and compelling stylistic choices which enhance the effectiveness of the presentation
Supporting Material	• Supporting materials are missing or inadequate	• Uses insufficient supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities)	• Uses supporting materials that partially support the presentation and establishes presenter's credibility or authority on the topic	• Uses supporting materials that make appropriate reference to information or analysis that generally supports the presentation	• Correctly cites a variety of credible supporting materials that make highly effective reference to information or analysis that significantly supports presentation
Delivery	• Delivery techniques were missing or poor	• Uses delivery techniques (posture, gesture, eye contact, and vocal expressiveness) that detract from the presentation • Appears uncomfortable	• Uses delivery techniques that make the presentation understandable • Appears tentative	• Uses delivery techniques that make the presentation interesting • Appears comfortable	• Uses delivery techniques that make the presentation compelling • Appears polished and confident

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OVERALL SCORE (between 0-4)        _____
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Adapted from the Association of American Colleges & University VALUE rubrics,
http://www.aacu.org/value/abouttherubrics.cfm

Appendix B: Critical Thinking Rubric

Definition: According to the Foundation for Critical Thinking, "Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. " At Palomar College, we also believe critical thinking involves the development of open-mindedness, and the identification of assumptions and implications and awareness of one's own biases.

Competency	0 Below Benchmark	1 Emerging	2 Developing	3 Proficient	4 Exemplary
Conceptualization of issues	Issue / Problem/ Interpretation was not stated or demonstrated or was misunderstood	Issue / Problem/ Interpretation to be considered critically is stated or demonstrated without clarification or description.	Issue / Problem/ Interpretation to be considered critically is stated or demonstrated, described, and clarified but understanding is impeded by significant omissions and imprecision.	Issue / Problem/ Interpretation to be considered critically is stated or demonstrated, described, and clarified but understanding is impeded by minor omissions and imprecision.	Issue / Problem/ Interpretation to be considered critically is stated or demonstrated, clearly and described comprehensively, delivering relevant information necessary for full understanding.
Evidence *Selecting and using information to investigate a point of view or conclusion*	Adequate evidence is missing and/or unclear	Information / Source is taken from source(s) without any interpretation / evaluation. Personal viewpoints and those of sources and authorities are taken as fact, without question.	Information / Source is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis. Personal viewpoints, those of sources/ authorities, or a text is read literally and taken mostly as fact, with little questioning.	Information / Source is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis. Personal viewpoints and those of sources and authorities are subject to questioning.	Information / Source is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Personal viewpoints and those of sources and authorities are questioned thoroughly.
Influence of context and assumptions	Influence of context is missing and/or unclear.	Begins to identify context(s) when presenting a position. Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions).	Identifies relevant context(s) when presenting a position. Questions some assumptions. May be more aware of others' assumptions than one's own (or vice versa).	Identifies own and others' assumptions and relevant context(s) when presenting a position.	Carefully evaluates the relevance of context(s) and thoroughly (systematically and methodically) analyzes own and others' assumptions when presenting a position.

Student's position (perspective, thesis / hypothesis)	Student's position is missing and/or unclear.	Student's position is stated, but is simplistic and obvious.	Student's position acknowledges different sides of an issue.	Student's position takes into account the complexities of an issue. Others' points of view are acknowledged within position	Student's position is original and plausible, taking into account the complexities of an issue. Others' points of view as well as limits of student's position are acknowledged.
Conclusions and related outcomes (implications, consequences)	Conclusions are missing and / or unclear.	Conclusions are not supported by premised and supporting ideas because of omissions and/or logical flaws.	Conclusions are derived in a somewhat logical fashion from premised and supporting ideas, but with significant omissions and/or logical flaws. The relationship between premises and conclusions is not well-demonstrated.	Conclusions follow in a logical manner from premised and supporting ideas with minor omissions and/or logical flaws. The relationship between premises and conclusions is somewhat demonstrated.	Conclusions clearly follow in a logical manner from premised and supporting ideas with no omissions and logical flaws. The relationship between premises and conclusions is clearly demonstrated.

Adapted from the Association of American Colleges & University VALUE rubrics, http://www.aacu.org/value/abouttherubrics.cfm

OVERALL SCORE (between 0-4)   _____

Appendix C: Assessment Methods: Process and Procedures

The methods for assessing the oral communication and critical thinking outcomes were identical. The assessment process was developed and implemented by the College's Learning Outcomes Council (LOC), who reports to the Faculty Senate. After extensive research and discussion, the Learning Outcomes Council selected a course-embedded approach to the assessment of GE/ILOs using a common form of measurement, i.e. a rubric, for each outcome.

Course-Embedded Assessment

Course instructors, a.k.a. assessors, participating in the assessment project selected a student work (e.g. an exam, assignment, or portfolio) that would demonstrate students' ability to meet the GE/ILO being assessed, information literacy or critical and creative thinking. The assessors were advised to use an assignment or project that they had already developed for the course. The assessors applied a common rubric to student work. After scoring the student work, the assessors submitted the results to the college's Institutional Research and Planning office.

Rubric

Workgroups, one for oral communication and one for critical thinking drafted two common rubrics. The workgroup used the American Association of Colleges and Universities' VALUE rubrics as a starting point for developing an initial draft of each rubric. During the training session, the assessors modified the rubric in order to make it more effective for all. Upon completion of the training, a final version of each rubric was distributed to the assessors (see Appendix A and B).

Random Selection of Course Sections

In order to get a random sample of students, a random selection of course sections was selected for each outcome. The courses included in the sample were drawn from the pool of courses that mapped to the respective outcome (oral communication or critical thinking) in the Palomar Outcomes Database, a.k.a. the POD. LOC chose to limit the sample to those courses that mapped to the respective GE/ILO in the POD with the belief that these courses would be more likely to have an assignment that could be used to measure the outcome. Thirty-nine sections participated in the assessment.

The selection of courses participating in the assessment of both outcomes did not provide a representative sample of all college courses. However, more disciplines were represented in this assessment than the last assessment.

Table C-1: Disciplines Represented in the Assessment of Each Outcome

Oral Communication	Critical Thinking
Child Development	Child Development
Chemistry	Fashion
Reading	Economics
Speech	Business
ESL	AIS
History	Psychology
Geography	Reading
Microbiology	History
Philosophy	Math
Psychology	Spanish
French	Philosophy
Sociology	Sociology
OIS	Media Studies
Media Studies	ESL
FIRE	
Italian	
Spanish	

Faculty Participation

Faculty participation in this assessment project was voluntary. Faculty assessors received a $250 stipend upon completion of the project. In order to receive the stipend, assessors needed to complete the following:
- Attend a 2-hour training session where they were introduced to the project and had the opportunity to review and revise the rubric.
- Share the assessment rubric with students before students completed the project to be assessed.
- Score student work using the final version of the rubric and submit the rubric scores for each student to the Institutional Research & Planning office.
- Report experiences throughout the assessment process by completing a survey.

Cost of Assessment Project

LOC received $10,000 in grant funding through the college's Strategic Planning Council's Strategic Planning Priority Funding and $10,000 from the accreditation budget. The $20,000 budget was used to pay faculty assessor stipends, workgroup stipend and for coordinators preparing the report.

Data Analysis

LOC identified a set of variables to be analyzed for this assessment project. The analysis includes an examination of assessment scores for all students across each element of the two rubrics used in the project. It also includes an examination of assessment scores on each element of the rubrics by student groups formed on the basis of units completed prior to the spring 2013 semester, gender and ethnic background. While LOC and the Faculty Senate did not identify hypotheses to be tested, both groups maintain a working assumption that students who have completed more units (or a significant number of units) will perform better on ILO assessments than students who have completed few or no units.

Simple descriptive statistics, frequencies and mean distributions, were completed. Where appropriate independent t-tests or independent Z tests for percentages were run to discern significant differences between student groups, which were formed, based upon units completed. Caution should be employed when interpreting the results. The sample sizes of some of the student groups are relatively small. The process along with the development of assessment instruments is still under review and refinement.

Appendix D: Assessment Data Significance Tests

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Table FACTOR01 Page 1
Spring 2013 General Education / Institutional Learning Outcomes Study
ORAL COMMUNICATION


Oral Communication: Outcome 1 of 4
 Messsage
(Limited To Students Rated On ALL Scales)
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	GENDER			AGE GROUP					ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	452	304	144	6	130	138	88	90	26	9	15	202	26	4	2	157	11
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%	100%
Emerging or Below (Net)	13	7	6	-	3	4	3	3	1	-	-	6	1	-	-	5	-
	2.9%	2.3%	4.2%		2.3%	2.9%	3.4%	3.3%	3.8%			3.0%	3.8%			3.2%	
0 Below Emerging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 Emerging	13	7	6	-	3	4	3	3	1	-	-	6	1	-	-	5	-
	2.9%	2.3%	4.2%		2.3%	2.9%	3.4%	3.3%	3.8%			3.0%	3.8%			3.2%	
2 Developing	92	63	29	-	21	27	17	27	9	3	2	50	5	-	-	20	3
	20.4%	20.7%	20.1%		16.2%	19.6%	19.3%	30.0%	34.6%	33.3%	13.3%	24.8%	19.2%			12.7%	27.3%
								E	P			P					
Proficient or Above (Net)	347	234	109	6	106	107	68	60	16	6	13	146	20	4	2	132	8
	76.8%	77.0%	75.7%	100%	81.5%	77.5%	77.3%	66.7%	61.5%	66.7%	86.7%	72.3%	76.9%	100%	100.0%	84.1%	72.7%
				EFGH	H				I					JLMPQ I	IJLMPQ	IL	
3 Proficient	187	144	42	5	45	59	46	32	10	4	4	86	9	3	-	67	4
	41.4%	47.4%	29.2%	83.3%	34.6%	42.8%	52.3%	35.6%	38.5%	44.4%	26.7%	42.6%	34.6%	75.0%		42.7%	36.4%
		C		EFH			EH							K			

```
Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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ORAL COMMUNICATION

Oral Communication: Outcome 1 of 4
 Messsage
(Limited To Students Rated On ALL Scales)

	TOTAL	GENDER		AGE GROUP					ETHNICITY								
		Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
4 Exemplary	160	90	67	1	61	48	22	28	6	2	9	60	11	1	2	65	4
	35.4%	29.6%	46.5%	16.7%	46.9%	34.8%	25.0%	31.1%	23.1%	22.2%	60.0%	29.7%	42.3%	25.0%	100.0%	41.4%	36.4%
			B		FGH						IJL				KLMNPQ IJ	IL	
MEAN	3.09	3.04	3.18	3.17	3.26	3.09	2.99	2.94	2.81	2.89	3.47	2.99	3.15	3.25	4.00	3.22	3.09
					GH						IL				JKLMPQ I	IL	
STANDARD ERROR	0.038	0.044	0.075	0.167	0.071	0.069	0.082	0.091	0.167	0.261	0.192	0.057	0.173	0.250	0.000	0.063	0.251

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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ORAL COMMUNICATION

Oral Communication: Outcome 1 of 4
 Messsage
(Limited To Students Rated On ALL Scales)

		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	452	54	98	89	79	45	87	48	81	86	79	46	112
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Emerging or Below (Net)	13	2	3	2	3	-	3	2	3	-	4	-	4
	2.9%	3.7%	3.1%	2.2%	3.8%		3.4%	4.2%	3.7%		5.1%		3.6%
0 Below Emerging	-	-	-	-	-	-	-	-	-	-	-	-	-
1 Emerging	13	2	3	2	3	-	3	2	3	-	4	-	4
	2.9%	3.7%	3.1%	2.2%	3.8%		3.4%	4.2%	3.7%		5.1%		3.6%
2 Developing	92	12	25	19	12	13	11	9	22	20	12	11	18
	20.4%	22.2%	25.5% G	21.3%	15.2%	28.9%	12.6%	18.8%	27.2% G	23.3%	15.2%	23.9%	16.1%
Proficient or Above (Net)	347	40	70	68	64	32	73	37	56	66	63	35	90
	76.8%	74.1%	71.4%	76.4%	81.0%	71.1%	83.9% C	77.1%	69.1%	76.7%	79.7%	76.1%	80.4%
3 Proficient	187	28	38	36	30	18	37	25	32	33	32	15	50
	41.4%	51.9%	38.8%	40.4%	38.0%	40.0%	42.5%	52.1%	39.5%	38.4%	40.5%	32.6%	44.6%
4 Exemplary	160	12	32	32	34	14	36	12	24	33	31	20	40
	35.4%	22.2%	32.7%	36.0%	43.0% B	31.1%	41.4% B	25.0%	29.6%	38.4%	39.2%	43.5%	35.7%

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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ORAL COMMUNICATION

Oral Communication: Outcome 1 of 4
 Messsage
(Limited To Students Rated On ALL Scales)

		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
MEAN	3.09	2.93	3.01	3.10	3.20	3.02	3.22 B	2.98	2.95	3.15	3.14	3.20	3.12
STANDARD ERROR	0.038	0.105	0.085	0.086	0.094	0.117	0.086	0.113	0.094	0.084	0.097	0.119	0.076

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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ORAL COMMUNICATION

Oral Communication: Outcome 1 of 4
 Messsage
(Limited To Students Rated On ALL Scales)

	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	452	26	41	385	390	55	7	396	18	22	339	113	181	271	–
	100%	100.0%	100%	100.0%	100.0%	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	
Emerging or Below (Net)	13	2	2	9	13	–	–	13	–	–	11	2	7	6	–
	2.9%	7.7%	4.9%	2.3%	3.3%			3.3%			3.2%	1.8%	3.9%	2.2%	
0 Below Emerging	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1 Emerging	13	2	2	9	13	–	–	13	–	–	11	2	7	6	–
	2.9%	7.7%	4.9%	2.3%	3.3%			3.3%			3.2%	1.8%	3.9%	2.2%	
2 Developing	92	18	8	66	78	13	1	83	2	7	64	28	50	42	–
	20.4%	69.2%	19.5%	17.1%	20.0%	23.6%	14.3%	21.0%	11.1%	31.8%	18.9%	24.8%	27.6%	15.5%	
		CD												N	
Proficient or Above (Net)	347	6	31	310	299	42	6	300	16	15	264	83	124	223	–
	76.8%	23.1%	75.6%	80.5%	76.7%	76.4%	85.7%	75.8%	88.9%	68.2%	77.9%	73.5%	68.5%	82.3%	
			B	B										M	
3 Proficient	187	6	22	159	151	33	3	163	4	10	130	57	82	105	–
	41.4%	23.1%	53.7%	41.3%	38.7%	60.0%	42.9%	41.2%	22.2%	45.5%	38.3%	50.4%	45.3%	38.7%	
			B	B		E						K			
4 Exemplary	160	–	9	151	148	9	3	137	12	5	134	26	42	118	–
	35.4%		22.0%	39.2%	37.9%	16.4%	42.9%	34.6%	66.7%	22.7%	39.5%	23.0%	23.2%	43.5%	
				C	F				HJ		L			M	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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ORAL COMMUNICATION

Oral Communication: Outcome 1 of 4
 Messsage
(Limited To Students Rated On ALL Scales)

		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	3.09	2.15	2.93	3.17	3.11	2.93	3.29	3.07	3.56	2.91	3.14	2.95	2.88	3.24	–
			B	B					HJ		L			M	
STANDARD ERROR	0.038	0.107	0.123	0.040	0.042	0.085	0.286	0.042	0.166	0.160	0.045	0.070	0.060	0.048	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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ORAL COMMUNICATION
Oral Communication: Outcome 2 of 4
 Language
(Limited To Students Rated On ALL Scales)

	TOTAL	GENDER		AGE GROUP					ETHNICITY								
		Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	452	304	144	6	130	138	88	90	26	9	15	202	26	4	2	157	11
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%	100%
Emerging or Below (Net)	23	13	10	–	3	9	3	8	4	–	–	9	–	–	–	10	–
	5.1%	4.3%	6.9%		2.3%	6.5%	3.4%	8.9%	15.4%			4.5%				6.4%	
								E									
0 Below Emerging	1	1	–	–	–	–	–	1	–	–	–	1	–	–	–	–	–
	0.2%	0.3%						1.1%				0.5%					
1 Emerging	22	12	10	–	3	9	3	7	4	–	–	8	–	–	–	10	–
	4.9%	3.9%	6.9%		2.3%	6.5%	3.4%	7.8%	15.4%			4.0%				6.4%	
2 Developing	95	67	27	–	24	29	18	24	10	3	1	57	3	–	–	18	3
	21.0%	22.0%	18.8%		18.5%	21.0%	20.5%	26.7%	38.5%	33.3%	6.7%	28.2%	11.5%			11.5%	27.3%
									KMP			KMP					
Proficient or Above (Net)	334	224	107	6	103	100	67	58	12	6	14	136	23	4	2	129	8
	73.9%	73.7%	74.3%	100%	79.2%	72.5%	76.1%	64.4%	46.2%	66.7%	93.3%	67.3%	88.5%	100%	100.0%	82.2%	72.7%
				EFGH	H						IL	I	IL	IJLPQ	IJLPQ	IL	
3 Proficient	196	144	51	4	55	58	43	36	8	3	8	85	11	3	–	71	7
	43.4%	47.4%	35.4%	66.7%	42.3%	42.0%	48.9%	40.0%	30.8%	33.3%	53.3%	42.1%	42.3%	75.0%		45.2%	63.6%
		C															

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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NOTE: Faculty applied a rubric to assign student work samples a rating ranging
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		GENDER			AGE GROUP					ETHNICITY								
				<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	TOTAL	Female	Male														
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
4 Exemplary	138	80	56	2	48	42	24	22	4	3	6	51	12	1	2	58	1
	30.5%	26.3%	38.9%	33.3%	36.9%	30.4%	27.3%	24.4%	15.4%	33.3%	40.0%	25.2%	46.2%	25.0%	100.0%	36.9%	9.1%
			B		H						Q	ILQ	ILQ		KLMNPQ IJ	ILQ	
MEAN	2.99	2.95	3.06	3.33	3.14	2.96	3.00	2.79	2.46	3.00	3.33	2.88	3.35	3.25	4.00	3.13	2.82
					H						ILQ	I	ILQ	I	JKLMPQ I	IL	
STANDARD ERROR	0.040	0.047	0.077	0.211	0.070	0.075	0.084	0.099	0.186	0.289	0.159	0.060	0.135	0.250	0.000	0.068	0.182

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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	TOTAL	Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
		None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	452	54	98	89	79	45	87	48	81	86	79	46	112
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Emerging or Below (Net)	23	4	8	4	5	1	1	3	8	2	7	–	3
	5.1%	7.4%	8.2%	4.5%	6.3%	2.2%	1.1%	6.2%	9.9%	2.3%	8.9%		2.7%
			G						JM				
0 Below Emerging	1	–	1	–	–	–	–	–	–	–	1	–	–
	0.2%		1.0%								1.3%		
1 Emerging	22	4	7	4	5	1	1	3	8	2	6	–	3
	4.9%	7.4%	7.1%	4.5%	6.3%	2.2%	1.1%	6.2%	9.9%	2.3%	7.6%		2.7%
			G						JM				
2 Developing	95	13	22	19	13	12	16	10	19	21	14	8	23
	21.0%	24.1%	22.4%	21.3%	16.5%	26.7%	18.4%	20.8%	23.5%	24.4%	17.7%	17.4%	20.5%
Proficient or Above (Net)	334	37	68	66	61	32	70	35	54	63	58	38	86
	73.9%	68.5%	69.4%	74.2%	77.2%	71.1%	80.5%	72.9%	66.7%	73.3%	73.4%	82.6%	76.8%
												I	
3 Proficient	196	24	40	40	32	23	37	23	32	34	36	21	50
	43.4%	44.4%	40.8%	44.9%	40.5%	51.1%	42.5%	47.9%	39.5%	39.5%	45.6%	45.7%	44.6%
4 Exemplary	138	13	28	26	29	9	33	12	22	29	22	17	36
	30.5%	24.1%	28.6%	29.2%	36.7%	20.0%	37.9%	25.0%	27.2%	33.7%	27.8%	37.0%	32.1%
					F		F						

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
MEAN	2.99	2.85	2.89	2.99	3.08	2.89	3.17 BCF	2.92	2.84	3.05	2.91	3.20 I	3.06
STANDARD ERROR	0.040	0.119	0.095	0.088	0.100	0.111	0.082	0.122	0.105	0.089	0.105	0.106	0.075

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	452	26	41	385	390	55	7	396	18	22	339	113	181	271	-
	100%	100.0%	100%	100.0%	100.0%	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	
Emerging or Below (Net)	23	6	6	11	23	-	-	23	-	-	22	1	15	8	-
	5.1%	23.1%	14.6%	2.9%	5.9%			5.8%			6.5%	0.9%	8.3%	3.0%	
		D	D								L		N		
0 Below Emerging	1	-	-	1	1	-	-	1	-	-	1	-	-	1	-
	0.2%			0.3%	0.3%			0.3%			0.3%			0.4%	
1 Emerging	22	6	6	10	22	-	-	22	-	-	21	1	15	7	-
	4.9%	23.1%	14.6%	2.6%	5.6%			5.6%			6.2%	0.9%	8.3%	2.6%	
		D	D								L		N		
2 Developing	95	15	9	71	81	12	2	86	-	6	71	24	53	42	-
	21.0%	57.7%	22.0%	18.4%	20.8%	21.8%	28.6%	21.7%		27.3%	20.9%	21.2%	29.3%	15.5%	
		CD											N		
Proficient or Above (Net)	334	5	26	303	286	43	5	287	18	16	246	88	113	221	-
	73.9%	19.2%	63.4%	78.7%	73.3%	78.2%	71.4%	72.5%	100%	72.7%	72.6%	77.9%	62.4%	81.5%	
			B	B					HJ					M	
3 Proficient	196	5	16	175	162	32	2	170	13	11	131	65	70	126	-
	43.4%	19.2%	39.0%	45.5%	41.5%	58.2%	28.6%	42.9%	72.2%	50.0%	38.6%	57.5%	38.7%	46.5%	
				B		E			H			K			
4 Exemplary	138	-	10	128	124	11	3	117	5	5	115	23	43	95	-
	30.5%		24.4%	33.2%	31.8%	20.0%	42.9%	29.5%	27.8%	22.7%	33.9%	20.4%	23.8%	35.1%	
					F						L			M	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
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| | TOTAL | COURSE LEVEL | | | LOCATION | | | INSTRUCT METHOD | | | DAY or EVE | | FACULTY TYPE | | |
| | | BSkill | AA | Transfer | SnMarc | Escon | Other | Lec | Lab | iNet | Day | Eve | Cntrct | Hourly | Unkwn |
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	2.99	1.96	2.73	3.09	2.99	2.98	3.14	2.96	3.28	2.95	3.00	2.97	2.78	3.13	–
			B	BC					H					M	
STANDARD ERROR	0.040	0.130	0.156	0.041	0.045	0.088	0.340	0.044	0.109	0.154	0.049	0.063	0.067	0.048	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
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		GENDER			AGE GROUP				ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	452	304	144	6	130	138	88	90	26	9	15	202	26	4	2	157	11
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%	100%
Emerging or Below (Net)	24	12	12	–	5	8	4	7	2	–	1	9	3	–	–	6	3
	5.3%	3.9%	8.3%		3.8%	5.8%	4.5%	7.8%	7.7%		6.7%	4.5%	11.5%			3.8%	27.3%
0 Below Emerging	1	1	–	–	–	–	–	1	–	–	–	1	–	–	–	–	–
	0.2%	0.3%						1.1%				0.5%					
1 Emerging	23	11	12	–	5	8	4	6	2	–	1	8	3	–	–	6	3
	5.1%	3.6%	8.3%		3.8%	5.8%	4.5%	6.7%	7.7%		6.7%	4.0%	11.5%			3.8%	27.3%
2 Developing	101	68	32	1	25	36	19	20	10	4	4	52	2	–	–	26	3
	22.3%	22.4%	22.2%	16.7%	19.2%	26.1%	21.6%	22.2%	38.5%	44.4%	26.7%	25.7%	7.7%			16.6%	27.3%
									MP	M		MP					
Proficient or Above (Net)	327	224	100	5	100	94	65	63	14	5	10	141	21	4	2	125	5
	72.3%	73.7%	69.4%	83.3%	76.9%	68.1%	73.9%	70.0%	53.8%	55.6%	66.7%	69.8%	80.8%	100%	100.0%	79.6%	45.5%
												IQ	KLMPQ	JKLMPQ		ILQ	
													IJ	I			
3 Proficient	163	127	35	3	43	42	37	38	9	3	3	83	8	1	–	54	2
	36.1%	41.8%	24.3%	50.0%	33.1%	30.4%	42.0%	42.2%	34.6%	33.3%	20.0%	41.1%	30.8%	25.0%		34.4%	18.2%
		C															

Comparison Groups: BC/DEFGH/IJKLMNOPQ
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		GENDER			AGE GROUP					ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
4 Exemplary	164	97	65	2	57	52	28	25	5	2	7	58	13	3	2	71	3
	36.3%	31.9%	45.1%	33.3%	43.8%	37.7%	31.8%	27.8%	19.2%	22.2%	46.7%	28.7%	50.0%	75.0%	100.0%	45.2%	27.3%
			B		H								IL	IJL	JKLMPQ	IL	
															I		
MEAN	3.03	3.01	3.06	3.17	3.17	3.00	3.01	2.89	2.65	2.78	3.07	2.94	3.19	3.75	4.00	3.21	2.45
					H								I	IJQ	JKLMPQ	IL	
															I		
STANDARD ERROR	0.042	0.049	0.084	0.307	0.077	0.080	0.091	0.098	0.175	0.278	0.267	0.061	0.200	0.250	0.000	0.068	0.366

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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	TOTAL	Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
		None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	452	54	98	89	79	45	87	48	81	86	79	46	112
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Emerging or Below (Net)	24	3	6	3	3	4	5	3	5	1	4	4	7
	5.3%	5.6%	6.1%	3.4%	3.8%	8.9%	5.7%	6.2%	6.2%	1.2%	5.1%	8.7%	6.2% J
0 Below Emerging	1	-	1	-	-	-	-	-	-	-	1	-	-
	0.2%		1.0%								1.3%		
1 Emerging	23	3	5	3	3	4	5	3	5	1	3	4	7
	5.1%	5.6%	5.1%	3.4%	3.8%	8.9%	5.7%	6.2%	6.2%	1.2%	3.8%	8.7%	6.2% J
2 Developing	101	13	29	15	13	12	19	11	25	18	12	8	27
	22.3%	24.1%	29.6% DE	16.9%	16.5%	26.7%	21.8%	22.9%	30.9% K	20.9%	15.2%	17.4%	24.1%
Proficient or Above (Net)	327	38	63	71	63	29	63	34	51	67	63	34	78
	72.3%	70.4%	64.3%	79.8% C	79.7% C	64.4%	72.4%	70.8%	63.0%	77.9% I	79.7% I	73.9%	69.6%
3 Proficient	163	22	26	38	29	18	30	18	22	35	35	12	41
	36.1%	40.7%	26.5%	42.7% C	36.7%	40.0%	34.5%	37.5%	27.2%	40.7%	44.3% IL	26.1%	36.6%

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
4 Exemplary	164	16	37	33	34	11	33	16	29	32	28	22	37
	36.3%	29.6%	37.8%	37.1%	43.0% F	24.4%	37.9%	33.3%	35.8%	37.2%	35.4%	47.8%	33.0%
MEAN	3.03	2.94	2.95	3.13 F	3.19 F	2.80	3.05	2.98	2.93	3.14	3.09	3.13	2.96
STANDARD ERROR	0.042	0.119	0.100	0.086	0.095	0.137	0.098	0.131	0.107	0.085	0.099	0.148	0.086

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
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		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	452	26	41	385	390	55	7	396	18	22	339	113	181	271	–
	100%	100.0%	100%	100.0%	100.0%	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	
Emerging or Below (Net)	24	2	2	20	23	1	–	15	9	–	16	8	5	19	–
	5.3%	7.7%	4.9%	5.2%	5.9%	1.8%		3.8%	50.0% H		4.7%	7.1%	2.8%	7.0% M	
0 Below Emerging	1	–	–	1	1	–	–	1	–	–	1	–	–	1	–
	0.2%			0.3%	0.3%			0.3%			0.3%			0.4%	
1 Emerging	23	2	2	19	22	1	–	14	9	–	15	8	5	18	–
	5.1%	7.7%	4.9%	4.9%	5.6%	1.8%		3.5%	50.0% H		4.4%	7.1%	2.8%	6.6% M	
2 Developing	101	19	7	75	90	10	1	88	5	6	81	20	54	47	–
	22.3%	73.1% CD	17.1%	19.5%	23.1%	18.2%	14.3%	22.2%	27.8%	27.3%	23.9%	17.7%	29.8% N	17.3%	
Proficient or Above (Net)	327	5	32	290	277	44	6	293	4	16	242	85	122	205	–
	72.3%	19.2%	78.0% B	75.3% B	71.0%	80.0%	85.7%	74.0% I	22.2%	72.7% I	71.4%	75.2%	67.4%	75.6%	
3 Proficient	163	5	21	137	129	31	3	143	4	11	104	59	71	92	–
	36.1%	19.2%	51.2% B	35.6% B	33.1%	56.4% E	42.9%	36.1%	22.2%	50.0%	30.7%	52.2% K	39.2%	33.9%	
4 Exemplary	164	–	11	153	148	13	3	150	–	5	138	26	51	113	–
	36.3%		26.8%	39.7%	37.9% F	23.6%	42.9%	37.9%		22.7%	40.7% L	23.0%	28.2%	41.7% M	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
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		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	3.03	2.12	3.00	3.10	3.03	3.02	3.29	3.08	1.72	2.95	3.07	2.91	2.93	3.10	-
			B	B				I		I				M	
STANDARD ERROR	0.042	0.101	0.126	0.046	0.047	0.095	0.286	0.044	0.195	0.154	0.050	0.078	0.062	0.057	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		GENDER			AGE GROUP					ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	452	304	144	6	130	138	88	90	26	9	15	202	26	4	2	157	11
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%	100%	100%
Emerging or Below (Net)	16	10	6	–	5	5	2	4	2	–	–	5	1	–	–	8	–
	3.5%	3.3%	4.2%		3.8%	3.6%	2.3%	4.4%	7.7%			2.5%	3.8%			5.1%	
0 Below Emerging	1	1	–	–	1	–	–	–	–	–	–	1	–	–	–	–	–
	0.2%	0.3%			0.8%							0.5%					
1 Emerging	15	9	6	–	4	5	2	4	2	–	–	4	1	–	–	8	–
	3.3%	3.0%	4.2%		3.1%	3.6%	2.3%	4.4%	7.7%			2.0%	3.8%			5.1%	
2 Developing	101	71	30	–	22	31	21	27	14	1	1	54	2	–	1	24	4
	22.3%	23.4%	20.8%		16.9%	22.5%	23.9%	30.0% E	53.8% JKLMP	11.1%	6.7%	26.7% KMP	7.7%		50.0%	15.3%	36.4%
Proficient or Above (Net)	335	223	108	6	103	102	65	59	10	8	14	143	23	4	1	125	7
	74.1%	73.4%	75.0%	100% EFGH	79.2% H	73.9%	73.9%	65.6%	38.5%	88.9% I	93.3% IL	70.8% I	88.5% IL	100% ILPQ	50.0%	79.6% I	63.6%
3 Proficient	224	155	66	4	63	73	47	37	8	7	7	106	14	2	–	75	5
	49.6%	51.0%	45.8%	66.7%	48.5%	52.9%	53.4%	41.1%	30.8%	77.8% IP	46.7%	52.5% I	53.8%	50.0%		47.8%	45.5%
4 Exemplary	111	68	42	2	40	29	18	22	2	1	7	37	9	2	1	50	2
	24.6%	22.4%	29.2%	33.3%	30.8%	21.0%	20.5%	24.4%	7.7%	11.1%	46.7% IJL	18.3%	34.6% I	50.0%	50.0%	31.8% IL	18.2%

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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	TOTAL	GENDER		AGE GROUP					ETHNICITY								
		Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
MEAN	2.95	2.92	3.00	3.33	3.05	2.91	2.92	2.86	2.38	3.00	3.40	2.86	3.19	3.50	3.00	3.06	2.82
										I	IL	I	IL	I		IL	
STANDARD ERROR	0.037	0.044	0.068	0.211	0.072	0.065	0.078	0.089	0.148	0.167	0.163	0.053	0.147	0.289	1.000	0.066	0.226

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	452	54	98	89	79	45	87	48	81	86	79	46	112
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Emerging or Below (Net)	16	4	5	3	3	–	1	3	6	1	5	–	1
	3.5%	7.4%	5.1%	3.4%	3.8%		1.1%	6.2%	7.4%	1.2%	6.3%		0.9%
									JM				
0 Below Emerging	1	1	–	–	–	–	–	1	–	–	–	–	–
	0.2%	1.9%						2.1%					
1 Emerging	15	3	5	3	3	–	1	2	6	1	5	–	1
	3.3%	5.6%	5.1%	3.4%	3.8%		1.1%	4.2%	7.4%	1.2%	6.3%		0.9%
									JM				
2 Developing	101	9	28	16	16	11	21	8	20	19	17	10	27
	22.3%	16.7%	28.6%	18.0%	20.3%	24.4%	24.1%	16.7%	24.7%	22.1%	21.5%	21.7%	24.1%
Proficient or Above (Net)	335	41	65	70	60	34	65	37	55	66	57	36	84
	74.1%	75.9%	66.3%	78.7%	75.9%	75.6%	74.7%	77.1%	67.9%	76.7%	72.2%	78.3%	75.0%
3 Proficient	224	27	43	51	36	23	44	23	37	45	40	19	60
	49.6%	50.0%	43.9%	57.3%	45.6%	51.1%	50.6%	47.9%	45.7%	52.3%	50.6%	41.3%	53.6%
4 Exemplary	111	14	22	19	24	11	21	14	18	21	17	17	24
	24.6%	25.9%	22.4%	21.3%	30.4%	24.4%	24.1%	29.2%	22.2%	24.4%	21.5%	37.0%	21.4%

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
MEAN	2.95	2.93	2.84	2.97	3.03	3.00	2.98	2.98	2.83	3.00	2.87	3.15 I	2.96
STANDARD ERROR	0.037	0.124	0.084	0.077	0.092	0.105	0.078	0.131	0.096	0.078	0.093	0.112	0.066

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
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	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	452	26	41	385	390	55	7	396	18	22	339	113	181	271	–
	100%	100.0%	100%	100.0%	100.0%	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	
Emerging or Below (Net)	16	3	5	8	16	–	–	16	–	–	15	1	10	6	–
	3.5%	11.5%	12.2%	2.1%	4.1%			4.0%			4.4%	0.9%	5.5%	2.2%	
											L				
0 Below Emerging	1	–	–	1	1	–	–	1	–	–	1	–	–	1	–
	0.2%			0.3%	0.3%			0.3%			0.3%			0.4%	
1 Emerging	15	3	5	7	15	–	–	15	–	–	14	1	10	5	–
	3.3%	11.5%	12.2%	1.8%	3.8%			3.8%			4.1%	0.9%	5.5%	1.8%	
			D								L				
2 Developing	101	18	7	76	83	17	1	87	1	6	74	27	53	48	–
	22.3%	69.2%	17.1%	19.7%	21.3%	30.9%	14.3%	22.0%	5.6%	27.3%	21.8%	23.9%	29.3%	17.7%	
		CD						I		I			N		
Proficient or Above (Net)	335	5	29	301	291	38	6	293	17	16	250	85	118	217	–
	74.1%	19.2%	70.7%	78.2%	74.6%	69.1%	85.7%	74.0%	94.4%	72.7%	73.7%	75.2%	65.2%	80.1%	
			B	B					HJ					M	
3 Proficient	224	5	21	198	192	30	2	196	11	11	163	61	80	144	–
	49.6%	19.2%	51.2%	51.4%	49.2%	54.5%	28.6%	49.5%	61.1%	50.0%	48.1%	54.0%	44.2%	53.1%	
			B	B											
4 Exemplary	111	–	8	103	99	8	4	97	6	5	87	24	38	73	–
	24.6%		19.5%	26.8%	25.4%	14.5%	57.1%	24.5%	33.3%	22.7%	25.7%	21.2%	21.0%	26.9%	
					F		F								

Comparison Groups: BCD/EFG/HIJ/KL/MNO
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		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	2.95	2.08	2.78	3.03	2.96	2.84	3.43	2.94	3.28	2.95	2.95	2.96	2.81	3.04	–
			B	B					H					M	
STANDARD ERROR	0.037	0.110	0.142	0.038	0.041	0.089	0.297	0.040	0.135	0.154	0.044	0.066	0.062	0.045	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
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		GENDER			AGE GROUP					ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	452	304	144	6	130	138	88	90	26	9	15	202	26	4	2	157	11
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.0%	100%	100%
Emerging or Below (Net)	9	6	3	-	3	2	2	2	1	-	-	4	1	-	-	3	-
	2.0%	2.0%	2.1%		2.3%	1.4%	2.3%	2.2%	3.8%			2.0%	3.8%			1.9%	
0 Below Emerging	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1 Emerging	9	6	3	-	3	2	2	2	1	-	-	4	1	-	-	3	-
	2.0%	2.0%	2.1%		2.3%	1.4%	2.3%	2.2%	3.8%			2.0%	3.8%			1.9%	
2 Developing	96	61	34	-	20	33	15	28	11	2	-	57	2	-	-	20	4
	21.2%	20.1%	23.6%		15.4%	23.9%	17.0%	31.1%	42.3%	22.2%		28.2%	7.7%			12.7%	36.4%
								EG	MP			MP					
Proficient or Above (Net)	347	237	107	6	107	103	71	60	14	7	15	141	23	4	2	134	7
	76.8%	78.0%	74.3%	100%	82.3%	74.6%	80.7%	66.7%	53.8%	77.8%	100%	69.8%	88.5%	100%	100.0%	85.4%	63.6%
				EFGH	H		H				ILPQ		IL	ILPQ	ILPQ	IL	
3 Proficient	208	156	51	4	54	62	52	36	11	5	8	91	12	3	-	73	5
	46.0%	51.3%	35.4%	66.7%	41.5%	44.9%	59.1%	40.0%	42.3%	55.6%	53.3%	45.0%	46.2%	75.0%		46.5%	45.5%
		C					EFH										
4 Exemplary	139	81	56	2	53	41	19	24	3	2	7	50	11	1	2	61	2
	30.8%	26.6%	38.9%	33.3%	40.8%	29.7%	21.6%	26.7%	11.5%	22.2%	46.7%	24.8%	42.3%	25.0%	100.0%	38.9%	18.2%
			B		GH						I		I		KLMNPQ IJ	IL	

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		GENDER			AGE GROUP					ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
MEAN	3.06	3.03	3.11	3.33	3.21 GH	3.03	3.00	2.91	2.62	3.00	3.47 ILQ	2.93	3.27 IL	3.25	4.00 JKLMPQ I	3.22 IL	2.82
STANDARD ERROR	0.036	0.042	0.070	0.211	0.069	0.066	0.074	0.086	0.148	0.236	0.133	0.055	0.152	0.250	0.000	0.059	0.226

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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Oral Communication: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

	TOTAL	Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
		None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	452 100%	54 100%	98 100%	89 100%	79 100%	45 100%	87 100%	48 100%	81 100%	86 100%	79 100%	46 100%	112 100%
Emerging or Below (Net)	9 2.0%	3 5.6%	4 4.1%	1 1.1%	1 1.3%	–	–	3 6.2%	3 3.7%	–	3 3.8%	–	–
0 Below Emerging	–	–	–	–	–	–	–	–	–	–	–	–	–
1 Emerging	9 2.0%	3 5.6%	4 4.1%	1 1.1%	1 1.3%	–	–	3 6.2%	3 3.7%	–	3 3.8%	–	–
2 Developing	96 21.2%	11 20.4%	28 28.6%	15 16.9%	16 20.3%	11 24.4%	15 17.2%	8 16.7%	24 29.6%	16 18.6%	16 20.3%	11 23.9%	21 18.8%
Proficient or Above (Net)	347 76.8%	40 74.1%	66 67.3%	73 82.0% C	62 78.5%	34 75.6%	72 82.8% C	37 77.1%	54 66.7%	70 81.4% I	60 75.9%	35 76.1%	91 81.2% I
3 Proficient	208 46.0%	25 46.3%	37 37.8%	50 56.2% CE	31 39.2%	21 46.7%	44 50.6%	22 45.8%	31 38.3%	44 51.2% L	37 46.8%	14 30.4%	60 53.6% IL
4 Exemplary	139 30.8%	15 27.8%	29 29.6%	23 25.8%	31 39.2%	13 28.9%	28 32.2%	15 31.2%	23 28.4%	26 30.2%	23 29.1%	21 45.7% M	31 27.7%

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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Spring 2013 General Education / Institutional Learning Outcomes Study
ORAL COMMUNICATION

Oral Communication: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

	TOTAL	Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
		None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
MEAN	3.06	2.96	2.93	3.07	3.16	3.04	3.15	3.02	2.91	3.12	3.01	3.22 I	3.09
STANDARD ERROR	0.036	0.115	0.087	0.073	0.089	0.110	0.074	0.125	0.095	0.075	0.091	0.120	0.064

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
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ORAL COMMUNICATION

Oral Communication: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	452	26	41	385	390	55	7	396	18	22	339	113	181	271	–
	100%	100.0%	100%	100.0%	100.0%	100%	100%	100%	100%	100%	100%	100%	100.0%	100.0%	
Emerging or Below (Net)	9	2	2	5	9	–	–	9	–	–	8	1	6	3	–
	2.0%	7.7%	4.9%	1.3%	2.3%			2.3%			2.4%	0.9%	3.3%	1.1%	
0 Below Emerging	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1 Emerging	9	2	2	5	9	–	–	9	–	–	8	1	6	3	–
	2.0%	7.7%	4.9%	1.3%	2.3%			2.3%			2.4%	0.9%	3.3%	1.1%	
2 Developing	96	20	11	65	86	9	1	84	3	6	75	21	50	46	–
	21.2%	76.9%	26.8%	16.9%	22.1%	16.4%	14.3%	21.2%	16.7%	27.3%	22.1%	18.6%	27.6%	17.0%	
		CD											N		
Proficient or Above (Net)	347	4	28	315	295	46	6	303	15	16	256	91	125	222	–
	76.8%	15.4%	68.3%	81.8%	75.6%	83.6%	85.7%	76.5%	83.3%	72.7%	75.5%	80.5%	69.1%	81.9%	
			B	B										M	
3 Proficient	208	4	19	185	170	35	3	180	10	11	141	67	83	125	–
	46.0%	15.4%	46.3%	48.1%	43.6%	63.6%	42.9%	45.5%	55.6%	50.0%	41.6%	59.3%	45.9%	46.1%	
			B	B		E						K			
4 Exemplary	139	–	9	130	125	11	3	123	5	5	115	24	42	97	–
	30.8%		22.0%	33.8%	32.1%	20.0%	42.9%	31.1%	27.8%	22.7%	33.9%	21.2%	23.2%	35.8%	
					F						L			M	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
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ORAL COMMUNICATION

Oral Communication: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	3.06	2.08	2.85	3.14	3.05	3.04	3.29	3.05	3.11	2.95	3.07	3.01	2.89	3.17	–
			B	BC										M	
STANDARD ERROR	0.036	0.095	0.129	0.037	0.040	0.082	0.286	0.039	0.159	0.154	0.044	0.062	0.059	0.045	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
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Table FACTOR01 Page 1

Critical Thinking: Outcome 1 of 5
 Conceptualize
(Limited To Students Rated On ALL Scales)

		GENDER			AGE GROUP				ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	353	190	163	2	111	134	49	57	19	8	7	123	16	–	3	169	8
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		100.0%	100%	100%
Emerging or Below (Net)	52	19	33	–	21	20	8	3	1	2	1	21	1	–	–	25	1
	14.7%	10.0%	20.2%		18.9%	14.9%	16.3%	5.3%	5.3%	25.0%	14.3%	17.1%	6.2%			14.8%	12.5%
			B		H		H										
0 Below Emerging	5	2	3	–	2	3	–	–	–	1	–	3	–	–	–	1	–
	1.4%	1.1%	1.8%		1.8%	2.2%				12.5%		2.4%				0.6%	
1 Emerging	47	17	30	–	19	17	8	3	1	1	1	18	1	–	–	24	1
	13.3%	8.9%	18.4%		17.1%	12.7%	16.3%	5.3%	5.3%	12.5%	14.3%	14.6%	6.2%			14.2%	12.5%
			B		H												
2 Developing	87	42	45	1	26	37	11	12	5	4	3	31	6	–	1	37	–
	24.6%	22.1%	27.6%	50.0%	23.4%	27.6%	22.4%	21.1%	26.3%	50.0%	42.9%	25.2%	37.5%		33.3%	21.9%	
Proficient or Above (Net)	214	129	85	1	64	77	30	42	13	2	3	71	9	–	2	107	7
	60.6%	67.9%	52.1%	50.0%	57.7%	57.5%	61.2%	73.7%	68.4%	25.0%	42.9%	57.7%	56.2%		66.7%	63.3%	87.5%
		C							EF	J		J				J	JKLP
3 Proficient	119	71	48	–	39	47	14	19	4	1	1	38	5	–	2	65	3
	33.7%	37.4%	29.4%		35.1%	35.1%	28.6%	33.3%	21.1%	12.5%	14.3%	30.9%	31.2%		66.7%	38.5%	37.5%

JComparison Groups: BC/

Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
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Table FACTOR01 Page 2
                                                    (Continued)
Spring 2013 General Education / Institutional Learning Outcomes Study
CRITICAL THINKING

 Conceptualize
(Limited To Students Rated On ALL Scales)

				AGE GROUP					ETHNICITY								
	GENDER			18 to 19	20 to 22	23 to 29	30+										
	TOTAL	Female	Male	<18	19	22	29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
4 Exemplary	95	58	37	1	25	30	16	23	9	1	2	33	4	–	–	42	4
	26.9%	30.5%	22.7%	50.0%	22.5%	22.4%	32.7%	40.4%	47.4%	12.5%	28.6%	26.8%	25.0%			24.9%	50.0%
								EF	J								
MEAN	2.71	2.87	2.53	3.00	2.59	2.63	2.78	3.09	3.11	2.00	2.57	2.65	2.75	–	2.67	2.73	3.25
		C						EF	J								J
STANDARD ERROR	0.056	0.071	0.085	1.000	0.102	0.090	0.155	0.121	0.228	0.423	0.429	0.099	0.233		0.333	0.078	0.366

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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Spring 2013 General Education / Institutional Learning Outcomes Study
CRITICAL THINKING

Critical Thinking: Outcome 1 of 5
 Conceptualize
(Limited To Students Rated On ALL Scales)

		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	353	36	98	60	60	41	58	31	86	53	52	54	77
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Emerging or Below (Net)	52	5	18	9	11	5	4	3	12	9	11	9	8
	14.7%	13.9%	18.4% G	15.0%	18.3%	12.2%	6.9%	9.7%	14.0%	17.0%	21.2%	16.7%	10.4%
0 Below Emerging	5	1	2	-	2	-	-	1	1	-	1	1	1
	1.4%	2.8%	2.0%		3.3%			3.2%	1.2%		1.9%	1.9%	1.3%
1 Emerging	47	4	16	9	9	5	4	2	11	9	10	8	7
	13.3%	11.1%	16.3%	15.0%	15.0%	12.2%	6.9%	6.5%	12.8%	17.0%	19.2%	14.8%	9.1%
2 Developing	87	5	25	13	11	17	16	4	24	12	9	17	21
	24.6%	13.9%	25.5%	21.7%	18.3%	41.5% BDE	27.6%	12.9%	27.9%	22.6%	17.3%	31.5% H	27.3%
Proficient or Above (Net)	214	26	55	38	38	19	38	24	50	32	32	28	48
	60.6%	72.2%	56.1% F	63.3%	63.3%	46.3%	65.5%	77.4% IL	58.1%	60.4%	61.5%	51.9%	62.3%
3 Proficient	119	15	32	17	24	9	22	13	28	18	20	14	26
	33.7%	41.7%	32.7%	28.3%	40.0% F	22.0%	37.9%	41.9%	32.6%	34.0%	38.5%	25.9%	33.8%

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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CRITICAL THINKING

Critical Thinking: Outcome 1 of 5
 Conceptualize
(Limited To Students Rated On ALL Scales)

		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
4 Exemplary	95	11	23	21	14	10	16	11	22	14	12	14	22
	26.9%	30.6%	23.5%	35.0%	23.3%	24.4%	27.6%	35.5%	25.6%	26.4%	23.1%	25.9%	28.6%
MEAN	2.71	2.86	2.59	2.83	2.65	2.59	2.86	3.00	2.69	2.70	2.62	2.59	2.79
STANDARD ERROR	0.056	0.179	0.109	0.139	0.142	0.156	0.119	0.185	0.111	0.144	0.153	0.148	0.114

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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Critical Thinking: Outcome 1 of 5
 Conceptualize
(Limited To Students Rated On ALL Scales)

	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	353 100%	–	–	353 100.0%	353 100.0%	–	–	260 100%	–	93 100%	307 100%	46 100%	133 100.0%	220 100.0%	–
Emerging or Below (Net)	52 14.7%	–	–	52 14.7%	52 14.7%	–	–	40 15.4%	–	12 12.9%	50 16.3%	2 4.3% L	18 13.5%	34 15.5%	–
0 Below Emerging	5 1.4%	–	–	5 1.4%	5 1.4%	–	–	3 1.2%	–	2 2.2%	5 1.6%	–	3 2.3%	2 0.9%	–
1 Emerging	47 13.3%	–	–	47 13.3%	47 13.3%	–	–	37 14.2%	–	10 10.8%	45 14.7%	2 4.3% L	15 11.3%	32 14.5%	–
2 Developing	87 24.6%	–	–	87 24.6%	87 24.6%	–	–	66 25.4%	–	21 22.6%	68 22.1%	19 41.3% K	33 24.8%	54 24.5%	–
Proficient or Above (Net)	214 60.6%	–	–	214 60.6%	214 60.6%	–	–	154 59.2%	–	60 64.5%	189 61.6%	25 54.3%	82 61.7%	132 60.0%	–
3 Proficient	119 33.7%	–	–	119 33.7%	119 33.7%	–	–	84 32.3%	–	35 37.6%	95 30.9%	24 52.2% K	56 42.1% N	63 28.6%	–
4 Exemplary	95 26.9%	–	–	95 26.9%	95 26.9%	–	–	70 26.9%	–	25 26.9%	94 30.6%	1 2.2% L	26 19.5%	69 31.4% M	–

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
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CRITICAL THINKING

Critical Thinking: Outcome 1 of 5
 Conceptualize
(Limited To Students Rated On ALL Scales)

	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	2.71	–	–	2.71	2.71	–	–	2.70	–	2.76	2.74	2.52 L	2.65	2.75	–
STANDARD ERROR	0.056			0.056	0.056			0.065		0.107	0.062	0.092	0.086	0.073	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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Spring 2013 General Education / Institutional Learning Outcomes Study
CRITICAL THINKING

Critical Thinking: Outcome 2 of 5
 Evidence
(Limited To Students Rated On ALL Scales)

		GENDER			AGE GROUP					ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	353	190	163	2	111	134	49	57	19	8	7	123	16	–	3	169	8
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		100.0%	100%	100%
Emerging or Below (Net)	68	29	39	–	23	29	9	7	3	3	3	24	3	–	–	31	1
	19.3%	15.3%	23.9%		20.7%	21.6%	18.4%	12.3%	15.8%	37.5%	42.9%	19.5%	18.8%			18.3%	12.5%
			B														
0 Below Emerging	13	7	6	–	7	4	1	1	–	2	2	4	–	–	–	5	–
	3.7%	3.7%	3.7%		6.3%	3.0%	2.0%	1.8%		25.0%	28.6%	3.3%				3.0%	
1 Emerging	55	22	33	–	16	25	8	6	3	1	1	20	3	–	–	26	1
	15.6%	11.6%	20.2%		14.4%	18.7%	16.3%	10.5%	15.8%	12.5%	14.3%	16.3%	18.8%			15.4%	12.5%
			B														
2 Developing	87	44	43	–	28	34	14	11	4	4	1	30	4	–	1	41	2
	24.6%	23.2%	26.4%		25.2%	25.4%	28.6%	19.3%	21.1%	50.0%	14.3%	24.4%	25.0%		33.3%	24.3%	25.0%
Proficient or Above (Net)	198	117	81	2	60	71	26	39	12	1	3	69	9	–	2	97	5
	56.1%	61.6%	49.7%	100%	54.1%	53.0%	53.1%	68.4%	63.2%	12.5%	42.9%	56.1%	56.2%		66.7%	57.4%	62.5%
		C		EFGH					F	J		J	J			J	J
3 Proficient	97	56	41	1	28	40	13	15	2	–	1	37	4	–	2	49	2
	27.5%	29.5%	25.2%	50.0%	25.2%	29.9%	26.5%	26.3%	10.5%		14.3%	30.1%	25.0%		66.7%	29.0%	25.0%
												I			I	I	

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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CRITICAL THINKING

Critical Thinking: Outcome 2 of 5
 Evidence
(Limited To Students Rated On ALL Scales)

		GENDER			AGE GROUP				ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
4 Exemplary	101	61	40	1	32	31	13	24	10	1	2	32	5	–	–	48	3
	28.6%	32.1%	24.5%	50.0%	28.8%	23.1%	26.5%	42.1%	52.6%	12.5%	28.6%	26.0%	31.2%			28.4%	37.5%
								F	JLP								
MEAN	2.62	2.75	2.47	3.50	2.56	2.51	2.59	2.96	3.00	1.62	2.00	2.59	2.69	–	2.67	2.64	2.88
		C						EF	J								
STANDARD ERROR	0.062	0.082	0.092	0.500	0.116	0.098	0.160	0.146	0.276	0.460	0.655	0.103	0.285		0.333	0.087	0.398

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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Critical Thinking: Outcome 2 of 5
 Evidence
(Limited To Students Rated On ALL Scales)

		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	353	36	98	60	60	41	58	31	86	53	52	54	77
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Emerging or Below (Net)	68	5	17	13	15	10	8	3	13	12	13	12	15
	19.3%	13.9%	17.3%	21.7%	25.0%	24.4%	13.8%	9.7%	15.1%	22.6%	25.0%	22.2%	19.5%
0 Below Emerging	13	2	3	2	3	1	2	1	2	2	3	2	3
	3.7%	5.6%	3.1%	3.3%	5.0%	2.4%	3.4%	3.2%	2.3%	3.8%	5.8%	3.7%	3.9%
1 Emerging	55	3	14	11	12	9	6	2	11	10	10	10	12
	15.6%	8.3%	14.3%	18.3%	20.0%	22.0%	10.3%	6.5%	12.8%	18.9%	19.2%	18.5%	15.6%
2 Developing	87	8	32	9	11	11	16	8	24	13	11	12	19
	24.6%	22.2%	32.7% DE	15.0%	18.3%	26.8%	27.6%	25.8%	27.9%	24.5%	21.2%	22.2%	24.7%
Proficient or Above (Net)	198	23	49	38	34	20	34	20	49	28	28	30	43
	56.1%	63.9%	50.0%	63.3%	56.7%	48.8%	58.6%	64.5%	57.0%	52.8%	53.8%	55.6%	55.8%
3 Proficient	97	14	24	11	19	10	19	11	24	9	15	15	23
	27.5%	38.9% D	24.5%	18.3%	31.7%	24.4%	32.8%	35.5%	27.9%	17.0%	28.8%	27.8%	29.9%
4 Exemplary	101	9	25	27	15	10	15	9	25	19	13	15	20
	28.6%	25.0%	25.5%	45.0% BCEFG	25.0%	24.4%	25.9%	29.0%	29.1%	35.8%	25.0%	27.8%	26.0%

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
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(Limited To Students Rated On ALL Scales)

		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
MEAN	2.62	2.69	2.55	2.83	2.52	2.46	2.67	2.81	2.69	2.62	2.48	2.57	2.58
STANDARD ERROR	0.062	0.186	0.112	0.165	0.157	0.182	0.142	0.188	0.118	0.173	0.170	0.162	0.131

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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Critical Thinking: Outcome 2 of 5
 Evidence
(Limited To Students Rated On ALL Scales)

		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	353	–	–	353	353	–	–	260	–	93	307	46	133	220	–
	100%			100.0%	100.0%			100%		100%	100%	100%	100.0%	100.0%	
Emerging or Below (Net)	68	–	–	68	68	–	–	48	–	20	65	3	31	37	–
	19.3%			19.3%	19.3%			18.5%		21.5%	21.2%	6.5%	23.3%	16.8%	
											L				
0 Below Emerging	13	–	–	13	13	–	–	3	–	10	13	–	11	2	–
	3.7%			3.7%	3.7%			1.2%		10.8%	4.2%		8.3%	0.9%	
										H			N		
1 Emerging	55	–	–	55	55	–	–	45	–	10	52	3	20	35	–
	15.6%			15.6%	15.6%			17.3%		10.8%	16.9%	6.5%	15.0%	15.9%	
											L				
2 Developing	87	–	–	87	87	–	–	62	–	25	70	17	32	55	–
	24.6%			24.6%	24.6%			23.8%		26.9%	22.8%	37.0%	24.1%	25.0%	
Proficient or Above (Net)	198	–	–	198	198	–	–	150	–	48	172	26	70	128	–
	56.1%			56.1%	56.1%			57.7%		51.6%	56.0%	56.5%	52.6%	58.2%	
3 Proficient	97	–	–	97	97	–	–	68	–	29	76	21	43	54	–
	27.5%			27.5%	27.5%			26.2%		31.2%	24.8%	45.7%	32.3%	24.5%	
												K			
4 Exemplary	101	–	–	101	101	–	–	82	–	19	96	5	27	74	–
	28.6%			28.6%	28.6%			31.5%		20.4%	31.3%	10.9%	20.3%	33.6%	
								J			L			M	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	2.62	–	–	2.62	2.62	–	–	2.70 J	–	2.40	2.62	2.61	2.41	2.74 M	–
STANDARD ERROR	0.062			0.062	0.062			0.070		0.128	0.069	0.114	0.105	0.075	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
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		GENDER		AGE GROUP					ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	353	190	163	2	111	134	49	57	19	8	7	123	16	-	3	169	8
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		100.0%	100%	100%
Emerging or Below (Net)	53	22	31	-	18	25	7	3	1	2	2	19	1	-	-	27	1
	15.0%	11.6%	19.0%		16.2% H	18.7% H	14.3%	5.3%	5.3%	25.0%	28.6%	15.4%	6.2%			16.0%	12.5%
0 Below Emerging	9	3	6	-	2	5	1	1	-	2	-	2	-	-	-	5	-
	2.5%	1.6%	3.7%		1.8%	3.7%	2.0%	1.8%		25.0%		1.6%				3.0%	
1 Emerging	44	19	25	-	16	20	6	2	1	-	2	17	1	-	-	22	1
	12.5%	10.0%	15.3%		14.4% H	14.9% H	12.2%	3.5%	5.3%		28.6%	13.8%	6.2%			13.0%	12.5%
2 Developing	103	53	50	1	34	38	15	15	6	5	2	36	8	-	1	45	-
	29.2%	27.9%	30.7%	50.0%	30.6%	28.4%	30.6%	26.3%	31.6%	62.5% P	28.6%	29.3%	50.0%		33.3%	26.6%	
Proficient or Above (Net)	197	115	82	1	59	71	27	39	12	1	3	68	7	-	2	97	7
	55.8%	60.5%	50.3%	50.0%	53.2%	53.0%	55.1%	68.4% EF	63.2% J	12.5%	42.9%	55.3% J	43.8%		66.7%	57.4% J	87.5% JKLMP
3 Proficient	99	61	38	-	27	39	13	20	2	-	-	34	3	-	2	54	4
	28.0%	32.1%	23.3%		24.3%	29.1%	26.5%	35.1%	10.5%			27.6% I	18.8%		66.7% I	32.0% I	50.0% I

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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				AGE GROUP					ETHNICITY								
	GENDER			18 to 19	20 to 22	23 to 29	30+										
	TOTAL	Female	Male	<18					Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
4 Exemplary	98	54	44	1	32	32	14	19	10	1	3	34	4	–	–	43	3
	27.8%	28.4%	27.0%	50.0%	28.8%	23.9%	28.6%	33.3%	52.6% JLP	12.5%	42.9%	27.6%	25.0%			25.4%	37.5%
MEAN	2.66	2.76	2.55	3.00	2.64	2.54	2.67	2.95 F	3.11 J	1.75	2.57	2.66	2.62	–	2.67	2.64	3.12 J
STANDARD ERROR	0.058	0.074	0.090	1.000	0.105	0.097	0.155	0.126	0.241	0.453	0.528	0.097	0.239		0.333	0.084	0.350

Comparison Groups: BC/DEFGH/IJKLMNOPQ
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 Context
(Limited To Students Rated On ALL Scales)

		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	353	36	98	60	60	41	58	31	86	53	52	54	77
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Emerging or Below (Net)	53	5	15	11	9	7	6	4	10	9	11	7	12
	15.0%	13.9%	15.3%	18.3%	15.0%	17.1%	10.3%	12.9%	11.6%	17.0%	21.2%	13.0%	15.6%
0 Below Emerging	9	3	2	1	1	-	2	2	2	-	2	1	2
	2.5%	8.3%	2.0%	1.7%	1.7%		3.4%	6.5%	2.3%		3.8%	1.9%	2.6%
1 Emerging	44	2	13	10	8	7	4	2	8	9	9	6	10
	12.5%	5.6%	13.3%	16.7%	13.3%	17.1%	6.9%	6.5%	9.3%	17.0%	17.3%	11.1%	13.0%
2 Developing	103	6	35	13	19	15	15	5	30	15	15	19	19
	29.2%	16.7%	35.7% B	21.7%	31.7%	36.6% B	25.9%	16.1%	34.9% H	28.3%	28.8%	35.2% H	24.7%
Proficient or Above (Net)	197	25	48	36	32	19	37	22	46	29	26	28	46
	55.8%	69.4% CF	49.0%	60.0%	53.3%	46.3%	63.8%	71.0%	53.5%	54.7%	50.0%	51.9%	59.7%
3 Proficient	99	15	25	11	15	9	24	12	23	12	12	13	27
	28.0%	41.7% D	25.5%	18.3%	25.0%	22.0%	41.4% CDF	38.7%	26.7%	22.6%	23.1%	24.1%	35.1%
4 Exemplary	98	10	23	25	17	10	13	10	23	17	14	15	19
	27.8%	27.8%	23.5%	41.7% CG	28.3%	24.4%	22.4%	32.3%	26.7%	32.1%	26.9%	27.8%	24.7%

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
MEAN	2.66	2.75	2.55	2.82	2.65	2.54	2.72	2.84	2.66	2.70	2.52	2.65	2.66
STANDARD ERROR	0.058	0.197	0.107	0.155	0.140	0.164	0.132	0.208	0.113	0.151	0.164	0.145	0.122

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
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		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	353 100%	–	–	353 100.0%	353 100.0%	–	–	260 100%	–	93 100%	307 100%	46 100%	133 100.0%	220 100.0%	–
Emerging or Below (Net)	53 15.0%	–	–	53 15.0%	53 15.0%	–	–	36 13.8%	–	17 18.3%	50 16.3%	3 6.5% L	26 19.5%	27 12.3%	–
0 Below Emerging	9 2.5%	–	–	9 2.5%	9 2.5%	–	–	5 1.9%	–	4 4.3%	9 2.9%	–	6 4.5%	3 1.4%	–
1 Emerging	44 12.5%	–	–	44 12.5%	44 12.5%	–	–	31 11.9%	–	13 14.0%	41 13.4%	3 6.5%	20 15.0%	24 10.9%	–
2 Developing	103 29.2%	–	–	103 29.2%	103 29.2%	–	–	76 29.2%	–	27 29.0%	82 26.7%	21 45.7% K	35 26.3%	68 30.9%	–
Proficient or Above (Net)	197 55.8%	–	–	197 55.8%	197 55.8%	–	–	148 56.9%	–	49 52.7%	175 57.0%	22 47.8%	72 54.1%	125 56.8%	–
3 Proficient	99 28.0%	–	–	99 28.0%	99 28.0%	–	–	68 26.2%	–	31 33.3%	78 25.4%	21 45.7% K	44 33.1%	55 25.0%	–
4 Exemplary	98 27.8%	–	–	98 27.8%	98 27.8%	–	–	80 30.8% J	–	18 19.4%	97 31.6% L	1 2.2%	28 21.1%	70 31.8% M	–

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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 Context
(Limited To Students Rated On ALL Scales)

	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	2.66	–	–	2.66	2.66	–	–	2.72	–	2.49	2.69	2.43	2.51	2.75	–
											L			M	
STANDARD ERROR	0.058			0.058	0.058			0.067		0.113	0.065	0.097	0.097	0.072	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
from 0-Below Emerging, 1-Emerging, 2-Developing, 3-Proficient to 4-Exemplary.

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CRITICAL THINKING

Critical Thinking: Outcome 4 of 5
 Position
(Limited To Students Rated On ALL Scales)

	TOTAL	GENDER		AGE GROUP					ETHNICITY								
		Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	353	190	163	2	111	134	49	57	19	8	7	123	16	–	3	169	8
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		100.0%	100%	100%
Emerging or Below (Net)	66	32	34	–	24	30	7	5	4	2	4	22	4	–	–	30	–
	18.7%	16.8%	20.9%		21.6%	22.4%	14.3%	8.8%	21.1%	25.0%	57.1%	17.9%	25.0%			17.8%	
					H	H					LP						
0 Below Emerging	8	2	6	–	4	3	1	–	–	1	1	3	–	–	–	3	–
	2.3%	1.1%	3.7%		3.6%	2.2%	2.0%			12.5%	14.3%	2.4%				1.8%	
1 Emerging	58	30	28	–	20	27	6	5	4	1	3	19	4	–	–	27	–
	16.4%	15.8%	17.2%		18.0%	20.1%	12.2%	8.8%	21.1%	12.5%	42.9%	15.4%	25.0%			16.0%	
					H												
2 Developing	91	45	46	1	27	38	16	9	4	5	–	36	4	–	1	39	2
	25.8%	23.7%	28.2%	50.0%	24.3%	28.4%	32.7%	15.8%	21.1%	62.5%		29.3%	25.0%		33.3%	23.1%	25.0%
					H	H				IP							
Proficient or Above (Net)	196	113	83	1	60	66	26	43	11	1	3	65	8	–	2	100	6
	55.5%	59.5%	50.9%	50.0%	54.1%	49.3%	53.1%	75.4%	57.9%	12.5%	42.9%	52.8%	50.0%		66.7%	59.2%	75.0%
								EFG	J			J	J			J	J
3 Proficient	100	55	45	–	30	38	13	19	2	–	–	32	5	–	2	56	3
	28.3%	28.9%	27.6%		27.0%	28.4%	26.5%	33.3%	10.5%			26.0%	31.2%		66.7%	33.1%	37.5%
												I			I		

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
Upper case letters indicate significance at the 95% level.
NOTE: Faculty applied a rubric to assign student work samples a rating ranging
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	TOTAL	GENDER		AGE GROUP					ETHNICITY								
		Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
4 Exemplary	96	58	38	1	30	28	13	24	9	1	3	33	3	–	–	44	3
	27.2%	30.5%	23.3%	50.0%	27.0%	20.9%	26.5%	42.1% F	47.4% J	12.5%	42.9%	26.8%	18.8%			26.0%	37.5%
MEAN	2.62	2.72	2.50	3.00	2.56	2.46	2.63	3.09 EFG	2.84	1.88	2.14	2.59	2.44	–	2.67	2.66	3.12 J
STANDARD ERROR	0.059	0.079	0.089	1.000	0.111	0.095	0.153	0.128	0.289	0.398	0.670	0.101	0.273		0.333	0.084	0.295

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	353 100%	36 100%	98 100%	60 100%	60 100%	41 100%	58 100%	31 100%	86 100%	53 100%	52 100%	54 100%	77 100%
Emerging or Below (Net)	66 18.7%	4 11.1%	18 18.4%	14 23.3%	12 20.0%	7 17.1%	11 19.0%	3 9.7%	13 15.1%	12 22.6%	14 26.9% H	8 14.8%	16 20.8%
0 Below Emerging	8 2.3%	1 2.8%	3 3.1%	-	3 5.0%	-	1 1.7%	1 3.2%	1 1.2%	1 1.9%	2 3.8%	2 3.7%	1 1.3%
1 Emerging	58 16.4%	3 8.3%	15 15.3%	14 23.3% B	9 15.0%	7 17.1%	10 17.2%	2 6.5%	12 14.0%	11 20.8% H	12 23.1% H	6 11.1%	15 19.5% H
2 Developing	91 25.8%	7 19.4%	29 29.6%	12 20.0%	14 23.3%	16 39.0% D	13 22.4%	5 16.1%	24 27.9%	14 26.4%	11 21.2%	17 31.5%	20 26.0%
Proficient or Above (Net)	196 55.5%	25 69.4% F	51 52.0%	34 56.7%	34 56.7%	18 43.9%	34 58.6%	23 74.2% JKLM	49 57.0%	27 50.9%	27 51.9%	29 53.7%	41 53.2%
3 Proficient	100 28.3%	16 44.4% D	28 28.6%	13 21.7%	15 25.0%	12 29.3%	16 27.6%	14 45.2% JKM	27 31.4%	12 22.6%	12 23.1%	16 29.6%	19 24.7%

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
4 Exemplary	96	9	23	21	19	6	18	9	22	15	15	13	22
	27.2%	25.0%	23.5%	35.0%	31.7%	14.6%	31.0%	29.0%	25.6%	28.3%	28.8%	24.1%	28.6%
				F	F		F						
MEAN	2.62	2.81	2.54	2.68	2.63	2.41	2.69	2.90	2.66	2.55	2.50	2.59	2.60
STANDARD ERROR	0.059	0.168	0.112	0.153	0.158	0.148	0.150	0.182	0.113	0.161	0.173	0.148	0.130

Comparison Groups: BCDEFG/HIJKLM
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		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	353	–	–	353	353	–	–	260	–	93	307	46	133	220	–
	100%			100.0%	100.0%			100%		100%	100%	100%	100.0%	100.0%	
Emerging or Below (Net)	66	–	–	66	66	–	–	51	–	15	58	8	27	39	–
	18.7%			18.7%	18.7%			19.6%		16.1%	18.9%	17.4%	20.3%	17.7%	
0 Below Emerging	8	–	–	8	8	–	–	4	–	4	8	–	5	3	–
	2.3%			2.3%	2.3%			1.5%		4.3%	2.6%		3.8%	1.4%	
1 Emerging	58	–	–	58	58	–	–	47	–	11	50	8	22	36	–
	16.4%			16.4%	16.4%			18.1%		11.8%	16.3%	17.4%	16.5%	16.4%	
2 Developing	91	–	–	91	91	–	–	68	–	23	73	18	28	63	–
	25.8%			25.8%	25.8%			26.2%		24.7%	23.8%	39.1% K	21.1%	28.6%	
Proficient or Above (Net)	196	–	–	196	196	–	–	141	–	55	176	20	78	118	–
	55.5%			55.5%	55.5%			54.2%		59.1%	57.3%	43.5%	58.6%	53.6%	
3 Proficient	100	–	–	100	100	–	–	70	–	30	80	20	44	56	–
	28.3%			28.3%	28.3%			26.9%		32.3%	26.1%	43.5% K	33.1%	25.5%	
4 Exemplary	96	–	–	96	96	–	–	71	–	25	96	–	34	62	–
	27.2%			27.2%	27.2%			27.3%		26.9%	31.3%		25.6%	28.2%	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	2.62	–	–	2.62	2.62	–	–	2.60	–	2.66	2.67 L	2.26	2.60	2.63	–
STANDARD ERROR	0.059			0.059	0.059			0.069		0.117	0.066	0.110	0.100	0.074	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
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	TOTAL	GENDER		AGE GROUP					ETHNICITY								
		Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	353	190	163	2	111	134	49	57	19	8	7	123	16	-	3	169	8
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		100.0%	100%	100%
Emerging or Below (Net)	60	26	34	-	20	28	7	5	3	2	3	21	1	-	-	30	-
	17.0%	13.7%	20.9%		18.0%	20.9%	14.3%	8.8% H	15.8%	25.0%	42.9%	17.1%	6.2%			17.8%	
0 Below Emerging	8	4	4	-	3	4	-	1	-	2	-	2	-	-	-	4	-
	2.3%	2.1%	2.5%		2.7%	3.0%		1.8%		25.0%		1.6%				2.4%	
1 Emerging	52	22	30	-	17	24	7	4	3	-	3	19	1	-	-	26	-
	14.7%	11.6%	18.4%		15.3%	17.9%	14.3%	7.0% H	15.8%		42.9%	15.4%	6.2%			15.4%	
2 Developing	102	54	48	1	32	43	15	11	5	3	1	39	7	-	2	43	2
	28.9%	28.4%	29.4%	50.0%	28.8%	32.1%	30.6%	19.3%	26.3%	37.5%	14.3%	31.7%	43.8%		66.7%	25.4%	25.0%
Proficient or Above (Net)	191	110	81	1	59	63	27	41	11	3	3	63	8	-	1	96	6
	54.1%	57.9%	49.7%	50.0%	53.2%	47.0%	55.1%	71.9% EF	57.9%	37.5%	42.9%	51.2%	50.0%		33.3%	56.8%	75.0%
3 Proficient	98	55	43	-	33	34	12	19	2	2	1	35	5	-	1	50	2
	27.8%	28.9%	26.4%		29.7%	25.4%	24.5%	33.3%	10.5%	25.0%	14.3%	28.5% I	31.2%		33.3%	29.6% I	25.0%

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		GENDER			AGE GROUP					ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
4 Exemplary	93	55	38	1	26	29	15	22	9	1	2	28	3	–	–	46	4
	26.3%	28.9%	23.3%	50.0%	23.4%	21.6%	30.6%	38.6% EF	47.4% JL	12.5%	28.6%	22.8%	18.8%			27.2%	50.0%
MEAN	2.61	2.71	2.50	3.00	2.56	2.45	2.71	3.00 EF	2.89	2.00	2.29	2.55	2.62	–	2.33	2.64	3.25
STANDARD ERROR	0.058	0.078	0.087	1.000	0.104	0.096	0.152	0.135	0.275	0.500	0.522	0.095	0.221		0.333	0.085	0.313

Comparison Groups: BC/DEFGH/IJKLMNOPQ
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	TOTAL	Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
		None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	353	36	98	60	60	41	58	31	86	53	52	54	77
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Emerging or Below (Net)	60	6	13	12	11	9	9	4	10	10	9	11	16
	17.0%	16.7%	13.3%	20.0%	18.3%	22.0%	15.5%	12.9%	11.6%	18.9%	17.3%	20.4%	20.8%
0 Below Emerging	8	2	2	1	2	-	1	1	2	-	2	2	1
	2.3%	5.6%	2.0%	1.7%	3.3%		1.7%	3.2%	2.3%		3.8%	3.7%	1.3%
1 Emerging	52	4	11	11	9	9	8	3	8	10	7	9	15
	14.7%	11.1%	11.2%	18.3%	15.0%	22.0%	13.8%	9.7%	9.3%	18.9%	13.5%	16.7%	19.5%
2 Developing	102	8	35	13	13	17	16	7	28	14	15	16	22
	28.9%	22.2%	35.7%	21.7%	21.7%	41.5% DE	27.6%	22.6%	32.6%	26.4%	28.8%	29.6%	28.6%
Proficient or Above (Net)	191	22	50	35	36	15	33	20	48	29	28	27	39
	54.1%	61.1% F	51.0%	58.3%	60.0% F	36.6% F	56.9% F	64.5%	55.8%	54.7%	53.8%	50.0%	50.6%
3 Proficient	98	12	26	16	21	8	15	10	25	16	16	14	17
	27.8%	33.3%	26.5%	26.7%	35.0%	19.5%	25.9%	32.3%	29.1%	30.2%	30.8%	25.9%	22.1%
4 Exemplary	93	10	24	19	15	7	18	10	23	13	12	13	22
	26.3%	27.8%	24.5%	31.7%	25.0%	17.1%	31.0%	32.3%	26.7%	24.5%	23.1%	24.1%	28.6%

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
MEAN	2.61	2.67	2.60	2.68	2.63	2.32	2.71	2.81	2.69	2.60	2.56	2.50	2.57
STANDARD ERROR	0.058	0.195	0.105	0.149	0.145	0.158	0.146	0.199	0.113	0.146	0.154	0.156	0.130

Comparison Groups: BCDEFG/HIJKLM
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	353	–	–	353	353	–	–	260	–	93	307	46	133	220	–
	100%			100.0%	100.0%			100%		100%	100%	100%	100.0%	100.0%	
Emerging or Below (Net)	60	–	–	60	60	–	–	45	–	15	54	6	26	34	–
	17.0%			17.0%	17.0%			17.3%		16.1%	17.6%	13.0%	19.5%	15.5%	
0 Below Emerging	8	–	–	8	8	–	–	3	–	5	8	–	6	2	–
	2.3%			2.3%	2.3%			1.2%		5.4%	2.6%		4.5%	0.9%	
1 Emerging	52	–	–	52	52	–	–	42	–	10	46	6	20	32	–
	14.7%			14.7%	14.7%			16.2%		10.8%	15.0%	13.0%	15.0%	14.5%	
2 Developing	102	–	–	102	102	–	–	81	–	21	81	21	34	68	–
	28.9%			28.9%	28.9%			31.2%		22.6%	26.4%	45.7% K	25.6%	30.9%	
Proficient or Above (Net)	191	–	–	191	191	–	–	134	–	57	172	19	73	118	–
	54.1%			54.1%	54.1%			51.5%		61.3%	56.0%	41.3%	54.9%	53.6%	
3 Proficient	98	–	–	98	98	–	–	66	–	32	79	19	45	53	–
	27.8%			27.8%	27.8%			25.4%		34.4%	25.7%	41.3% K	33.8%	24.1%	
4 Exemplary	93	–	–	93	93	–	–	68	–	25	93	–	28	65	–
	26.3%			26.3%	26.3%			26.2%		26.9%	30.3%		21.1%	29.5%	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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CRITICAL THINKING

Critical Thinking: Outcome 5 of 5
 Conclusions
(Limited To Students Rated On ALL Scales)

		COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
	TOTAL	BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	2.61	-	-	2.61	2.61	-	-	2.59	-	2.67	2.66 L	2.28	2.52	2.67	-
STANDARD ERROR	0.058			0.058	0.058			0.067		0.119	0.065	0.102	0.097	0.073	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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CRITICAL THINKING

Critical Thinking: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

		GENDER			AGE GROUP					ETHNICITY								
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
Students Who Were Rated	353	190	163	2	111	134	49	57	19	8	7	123	16	-	3	169	8
	100%	100.0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		100.0%	100%	100%
Emerging or Below (Net)	58	24	34	-	19	27	7	5	3	2	2	20	1	-	-	29	1
	16.4%	12.6%	20.9%		17.1%	20.1%	14.3%	8.8%	15.8%	25.0%	28.6%	16.3%	6.2%			17.2%	12.5%
			B			H											
0 Below Emerging	8	4	4	-	3	4	-	1	-	2	-	2	-	-	-	4	-
	2.3%	2.1%	2.5%		2.7%	3.0%		1.8%		25.0%		1.6%				2.4%	
1 Emerging	50	20	30	-	16	23	7	4	3	-	2	18	1	-	-	25	1
	14.2%	10.5%	18.4%		14.4%	17.2%	14.3%	7.0%	15.8%		28.6%	14.6%	6.2%			14.8%	12.5%
			B			H											
2 Developing	96	50	46	1	31	38	14	12	5	5	2	34	8	-	1	40	1
	27.2%	26.3%	28.2%	50.0%	27.9%	28.4%	28.6%	21.1%	26.3%	62.5%	28.6%	27.6%	50.0%		33.3%	23.7%	12.5%
										LPQ			PQ				
Proficient or Above (Net)	199	116	83	1	61	69	28	40	11	1	3	69	7	-	2	100	6
	56.4%	61.1%	50.9%	50.0%	55.0%	51.5%	57.1%	70.2%	57.9%	12.5%	42.9%	56.1%	43.8%		66.7%	59.2%	75.0%
								EF	J			J				J	J
3 Proficient	108	62	46	-	35	40	15	18	2	-	1	39	3	-	2	58	3
	30.6%	32.6%	28.2%		31.5%	29.9%	30.6%	31.6%	10.5%		14.3%	31.7%	18.8%		66.7%	34.3%	37.5%
												I			I	I	

Comparison Groups: BC/DEFGH/IJKLMNOPQ
Independent T-Test for Means (unequal variances), Independent Z-Test for Percentages
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CRITICAL THINKING

Critical Thinking: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

		GENDER			AGE GROUP					ETHNICITY							
	TOTAL	Female	Male	<18	18 to 19	20 to 22	23 to 29	30+	Asian	Black	Filip	Hisp	Multi	NatAm	PacIsl	White	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
4 Exemplary	91	54	37	1	26	29	13	22	9	1	2	30	4	–	–	42	3
	25.8%	28.4%	22.7%	50.0%	23.4%	21.6%	26.5%	38.6% EF	47.4% J	12.5%	28.6%	24.4%	25.0%			24.9%	37.5%
MEAN	2.63	2.75 C	2.50	3.00	2.59	2.50	2.69	2.98 EF	2.89	1.75	2.43	2.63	2.62	–	2.67	2.64	3.00
STANDARD ERROR	0.058	0.076	0.087	1.000	0.103	0.095	0.146	0.136	0.275	0.453	0.481	0.095	0.239		0.333	0.083	0.378

Comparison Groups: BC/DEFGH/IJKLMNOPQ
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CRITICAL THINKING

Critical Thinking: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

	TOTAL	Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
		None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
Students Who Were Rated	353	36	98	60	60	41	58	31	86	53	52	54	77
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Emerging or Below (Net)	58	5	15	13	12	7	6	3	10	12	12	9	12
	16.4%	13.9%	15.3%	21.7%	20.0%	17.1%	10.3%	9.7%	11.6%	22.6%	23.1%	16.7%	15.6%
0 Below Emerging	8	2	2	1	2	–	1	1	2	–	2	2	1
	2.3%	5.6%	2.0%	1.7%	3.3%		1.7%	3.2%	2.3%		3.8%	3.7%	1.3%
1 Emerging	50	3	13	12	10	7	5	2	8	12	10	7	11
	14.2%	8.3%	13.3%	20.0%	16.7%	17.1%	8.6%	6.5%	9.3%	22.6% HI	19.2%	13.0%	14.3%
2 Developing	96	7	34	10	12	15	18	6	28	13	12	15	22
	27.2%	19.4%	34.7% DE	16.7%	20.0%	36.6% D	31.0%	19.4%	32.6%	24.5%	23.1%	27.8%	28.6%
Proficient or Above (Net)	199	24	49	37	36	19	34	22	48	28	28	30	43
	56.4%	66.7%	50.0%	61.7%	60.0%	46.3%	58.6%	71.0%	55.8%	52.8%	53.8%	55.6%	55.8%
3 Proficient	108	14	26	16	22	12	18	12	26	13	17	17	23
	30.6%	38.9%	26.5%	26.7%	36.7%	29.3%	31.0%	38.7%	30.2%	24.5%	32.7%	31.5%	29.9%
4 Exemplary	91	10	23	21	14	7	16	10	22	15	11	13	20
	25.8%	27.8%	23.5%	35.0% F	23.3%	17.1%	27.6%	32.3%	25.6%	28.3%	21.2%	24.1%	26.0%

Comparison Groups: BCDEFG/HIJKLM
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CRITICAL THINKING

Critical Thinking: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

		Prior Units EARNED ("D" or Better)						Prior Units TAKEN (Any Grade)					
	TOTAL	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+	None	<15	15 to 29.9	30 to 44.9	45 to 59.9	60+
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
MEAN	2.63	2.75	2.56	2.73	2.60	2.46	2.74	2.90	2.67	2.58	2.48	2.59	2.65
STANDARD ERROR	0.058	0.188	0.107	0.154	0.145	0.153	0.134	0.188	0.112	0.156	0.159	0.151	0.121

Comparison Groups: BCDEFG/HIJKLM
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Critical Thinking: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
Students Who Were Rated	353	–	–	353	353	–	–	260	–	93	307	46	133	220	–
	100%			100.0%	100.0%			100%		100%	100%	100%	100.0%	100.0%	
Emerging or Below (Net)	58	–	–	58	58	–	–	41	–	17	56	2	26	32	–
	16.4%			16.4%	16.4%			15.8%		18.3%	18.2%	4.3%	19.5%	14.5%	
											L				
0 Below Emerging	8	–	–	8	8	–	–	3	–	5	8	–	6	2	–
	2.3%			2.3%	2.3%			1.2%		5.4%	2.6%		4.5%	0.9%	
1 Emerging	50	–	–	50	50	–	–	38	–	12	48	2	20	30	–
	14.2%			14.2%	14.2%			14.6%		12.9%	15.6%	4.3%	15.0%	13.6%	
											L				
2 Developing	96	–	–	96	96	–	–	72	–	24	73	23	30	66	–
	27.2%			27.2%	27.2%			27.7%		25.8%	23.8%	50.0%	22.6%	30.0%	
												K			
Proficient or Above (Net)	199	–	–	199	199	–	–	147	–	52	178	21	77	122	–
	56.4%			56.4%	56.4%			56.5%		55.9%	58.0%	45.7%	57.9%	55.5%	
3 Proficient	108	–	–	108	108	–	–	77	–	31	87	21	49	59	–
	30.6%			30.6%	30.6%			29.6%		33.3%	28.3%	45.7%	36.8%	26.8%	
												K			
4 Exemplary	91	–	–	91	91	–	–	70	–	21	91	–	28	63	–
	25.8%			25.8%	25.8%			26.9%		22.6%	29.6%		21.1%	28.6%	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
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CRITICAL THINKING

Critical Thinking: OVERALL EVALUATION
(Limited To Students Rated On ALL Scales)

	TOTAL	COURSE LEVEL			LOCATION			INSTRUCT METHOD			DAY or EVE		FACULTY TYPE		
		BSkill	AA	Transfer	SnMarc	Escon	Other	Lec	Lab	iNet	Day	Eve	Cntrct	Hourly	Unkwn
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)
MEAN	2.63	–	–	2.63	2.63	–	–	2.67	–	2.55	2.67	2.41 L	2.55	2.69	–
STANDARD ERROR	0.058			0.058	0.058			0.066		0.118	0.065	0.086	0.097	0.071	

Comparison Groups: BCD/EFG/HIJ/KL/MNO
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