El Camino College and Compton Center SLO Assessment Results Core Competency III: Communication and Comprehension

In the spring of 2010, El Camino College's Core Competency III was assessed to determine how well exiting students¹ have mastered the following "Communication and Comprehension" competency.

III. Students effectively communicate in written, spoken or signed, and artistic forms to diverse audiences. Students comprehend and respectfully respond to the ideas of others.

Methodology

El Camino College assessed the Communication and Comprehension core competency in courses that are typically taken as students exit the college (either through degree/certificate completion or transfer to a 4-year institution) in order to create the greatest opportunity to gain such skills through interaction with the College. These included advanced career/technical courses, transfer-level courses, and transferrable English and math courses.

The assessment of this core competency was conducted in three ways:

- 1. Student self-assessment of aspects of the Communication and Comprehension core competency,
- Faculty assessment of students' overall competency of Communication and Comprehension, and
- 3. Academic performance of exiting students courses with an emphasis in communication and comprehension.

Sample Selection

Student self-assessments and faculty assessments of students were carried out for a sampling of sections from courses that students typically take towards the end of their time at El Camino College (see Section H of the Appendix, p. 11). Two samples of sections were taken:

- 1. Random sample of sections: Both Student and Faculty Assessments
- 2. Purposeful sample of sections (aka "volunteers"): Student Self-Assessment Only

The intention of adding a second, purposeful sample was to gather more information and promote greater discussion of results by including sections of faculty participants who serve on

¹ Exiting students are defined as those who appear to be in their last semester at El Camino College, enrolling in courses that students typically take during their last term.

the Assessment of Learning Committee or are active in Student Learning Outcomes assessment at El Camino College or Compton Center. This first assessment also serves as a pilot to determine how best the College should evaluate each core competency in the future. Therefore, active contribution from faculty on the design and results of the assessment was important. Since the student self-assessment is the primary source of detailed competency feedback, only this portion of the assessment was distributed to the volunteers.

Final Sample Size

For the Spring 2010 assessment, faculty from a total of 16 sections returned the student surveys. Eight faculty completed the faculty assessment of students. A total of 440 students submitted self-evaluations (margin of error: ±4.6%). Faculty submitted evaluations on 287 students (margin of error: ±5.7%).

Table 1: Sample Selection and Size

Surveyed Group – Section Count			Evaluation	s Received
Location	Random	Volunteers	Student	Faculty
Compton	1	3	*	81
Torrance	7	5	*	206
Total	8	8	440	287

^{*}Student self-assessments not identified by location.

Student Self-Assessment Results

Students were asked to rate their own competence with respect to five skills or activities that reflect aspects of Communication and Comprehension. Students rated themselves using the following scale:

- 5 = very competent (easily able to do the activity at school or work)
- 4 = mostly competent
- 3 = somewhat competent
- 2 = slightly competent
- 1 = not competent

Mean scores were calculated from 412 valid responses for each activity (Table 2, "Mean" column). All mean scores rated well above 3 ("somewhat competent"), with all but one activity rating over 4 ("mostly competent"). The lowest scoring item was "communicating a message through art" and the highest by far was "expressing your own ideas." Of note were the mean scores that were close to 4 which include "delivering a presentation" and "communicating ideas to diverse audiences." No students believed that they were "not competent" in "writing a paper" and "respectfully critiquing and discussing ideas of others" (Appendix, Section A, p. 6).

It is very likely that all students exiting El Camino College would rating themselves above 3.5 on the art communication activity, above 3.8 on delivering a presentation and communicating to diverse audiences, and above 4.0 on all others (Table 2, "Population Means" columns).

Table 2: Mean Scores by Activity – Student Self-Assessment

Activity/Skill		Populatio	n Means*
Writing a paper	4.25	4.06	4.45
Delivering a presentation	4.01	3.82	4.19
Communicating a message through art	3.70	3.53	3.87
Expressing your own ideas		4.21	4.61
Respectfully critiquing and discussing the ideas of others	4.27	4.07	4.46
Communicating an idea to diverse audiences	4.06	3.87	4.25

^{*} The "Mean" column represents the self-assessment rating from the sample. The mean rating of ALL students (had they all been surveyed) would likely fall inside the range of scores under "Population Means." Additional descriptive statistics can be found in section A of the Appendix of this report.

In terms of raw percentage responses (see Appendix, Section I, p. 12), over 74% of students indicated that they were "mostly" or "very competent," except for communicating a message through art at 58%. Further, well over 80% of students assessed themselves in these categories in terms of writing a paper, expressing one's own ideas, respectfully critiquing, and discussing ideas of others.

Faculty Assessment of Students

Faculty from selected sections (described above) were asked to give a holistic rating of general competence of their students in the areas of communication and comprehension. A total of 8 faculty submitted student assessments in 8 sections (N=281 valid assessments).

Table 3: Overall Mean Rating – Faculty Assessment of Students

Assessment	Mean*	Populatio	n Means*
Faculty Rating of Students' Overall Communication & Comprehension	3.52	3.32	3.72

^{*} The "Mean" column represents the holistic faculty rating from the sample. The mean rating of ALL students (had they all been surveyed) would likely fall inside the range of scores under "Population Means."

Using the same scale as the student self-assessment, the average rating was 3.52 (If all students were assessed, the average rating would fall within the 3.32 - 3.72 range), placing El Camino College's exiting students into the "somewhat" to "mostly competent" range of the scale as

assessed by faculty. This overall rating is lower than most of the *students'* average scores for the activities associated with this competency on the self-assessment.

Course Grades

During the student self-assessment phase, ID numbers were collected so that historical enrollments and course grade performance could be collected from exiting students. Due to the fact that course enrollment and grade information are divided by instructional location, parallel course grade information is provided for both the ECC Torrance campus and Compton Center—its purpose is to inform rather than compare. Overall, exiting students performed well in their courses where Communication and Comprehension were emphasized (courses that were "mapped" with a maximum score of 4 in terms of coverage of this Core Competency were included in this analysis).

For the Torrance campus, success and retention rates were 81% and 90%, respectively, for these courses. At the Compton Center, students achieved success and retention rates of 74% and 85%, respectively, in these courses. Although these rates are higher than overall college rates, comparison is inappropriate since this analysis does not include all courses that students take during their college careers. Overall GPAs in Communication and Comprehension courses were healthy for ECC and Compton at 3.20 and 2.83, respectively.

On average, exiting students at the Torrance campus enrolled in 8 to 9 courses that emphasized this core competency during their career. At Compton Center, students enrolled in between 5 and 6 Communication and Comprehension courses.

Table 4: Grades and Course Performance – Communication and Comprehension Courses (ECC)

Grade	Count	% Tot
Α	977	36%
В	694	26%
С	340	13%
Р	176	7%
D	95	4%
F	118	4%
Inc.	12	<1%
NP	22	1%
DR	39	1%
W	220	8%
Total	2693	100%

Overall Outcomes	
Success Rate	81%
Retention Rate	90%
GPA*	3.20
Undup students	313
Avg courses taken	8.6

^{*} GPA excludes P, NP, DR, & W notations

Table 5: Grades and Course Performance – Communication and Comprehension Courses (Compton)

Grade	Count	% Tot
Α	98	18%
В	111	20%
С	101	18%
Р	92	17%
D	28	5%
F	25	5%
Inc.	0	0%
NP	10	2%
DR	20	4%
W	61	11%
Total	546	100%

Overall Outcomes	
Success Rate	74%
Retention Rate	85%
GPA*	2.83
Undup students	97
Avg courses taken	5.6

^{*} GPA excludes P, NP, DR, & W notations

Conclusion

This report summarized the assessment process for Core Competency III: Communication and Comprehension, the first in a series of assessments of El Camino College's core competencies. In general, the vast major of exiting ECC students rate themselves as mastering skills of communication and comprehension, except in areas such as the arts, a field of study in which perhaps fewer students have participated. Highest rated skills include writing, and the expression and discussion of ideas. Holistic competency ratings of respondents by their instructors yielded somewhat lower average assessments of competency, but with an average well above "somewhat" competent. Finally, analysis of course grades in this competency showed high performance in terms of course success, retention and GPA for exiting students in courses with greater emphasis on communication and comprehension. On average, students enrolled in a larger number of courses with this emphasis at both locations. Student comments are classified and summarized in the Appendix (Section B, p. 6). Individual (anonymous) student comments will be available at a later date. The remaining core competencies will be assessed in future years according to the *Core Competency Assessment Plan*.

Addendum

A follow-up assessment took place in early Fall 2010 for this core competency that involves a parallel assessment of "entering" students. This assessment was intended to estimate the growth that students experience in this competency during the course of their ECC experience. Results from this assessment compared to exiting students are provided below (Section F, p. 10).

Appendix - Additional Information

This appendix contains additional statistical information for each assessment, analysis of student comments, and exploratory analysis to inform future assessments.

A. Descriptive Statistics – Student Self-Assessment

Activity/Skill	N	Min.	Max.	Mean	Std. Dev.
Writing a paper	436	2	5	4.25	0.774
Delivering a presentation	414	1	5	4.01	0.930
Communicating a message through art	405	1	5	3.70	1.056
Expressing your own ideas	426	1	5	4.41	0.762
Respectfully critiquing/discussing others' ideas	405	2	5	4.27	0.813
Communicating an idea to diverse audiences	436	1	5	4.06	0.874

B. Comments - Student Self-Assessment

Students were asked to list one to three experiences that *contributed most to their skills in communication and comprehension*. These experiences were combined into one list and categorized by theme and summarized. The table below shows 688 out of the 900 individual comments categorized (76%). Only categories with more than 10 responses were included. Some overlap occurred since in some cases multiple themes are found in a single response.

Category	Sub-Categories*	Count
English Class	8	156
Communication Studies Class	7	97
Other Classes	14	65
Library / Library Svcs	6	76
Counseling & Student Services	10	85
Good Teachers **	9	53
Clubs / Extracurricular Activities	12	52
Online Classes	3	31
Doing Presentations	2	27
Writing Center	2	27
Group Projects	6	25
Workshops	8	23
Fine Arts / Performances	2	22
HTP / Honors Classes	3	16

^{*&}quot;Sub-Categories" refers to the number of ways each category was referenced by students. "Other Classes" reflects the number of unique course subjects cited by students.

^{**&}quot;Good teachers" include both general and specific references to college professors at ECC and Compton Center.

Note: Sections C-E of this Appendix reflect exploratory follow-up analysis and record information only about Torrance campus participants since they represent the largest sub-group of respondents. The purpose of these sections is to inform the development of this and other core competency assessments; they are not part of the regular assessment plan.

C. Student Self-Assessment Ratings by Ethnicity

In follow-up analysis, ratings were compared by student-identified ethnic group. Some differences between groups were found. Based on an Analysis of Variance (ANOVA), the following statistically significant differences were identified among the groups indicated.

- 1. African American students showed higher ratings than Latino students on "writing a paper" and "expressing one's own ideas,"
- 2. Asian or Asian American students had lower ratings than some other groups on "expressing own ideas" (lower than Black and White students), "respectfully critiquing" (lower than Black and Latino students), and "communicating to diverse audiences" (lower than Black students).

Count of Survey Responses by Ethnicity

Ethnic Group	Count	%
Asian	65	21%
African Amer.	39	12%
Amer. Indian	1	0%
Latino	89	28%
Pacific Islander	2	1%
White	79	25%
Two or More	4	1%
Unknown	34	11%
Total	313	100%

Student Self-Assessment Average Responses by Ethnicity

Ethnic Group	Writing Paper	Presenta- tion	MsgThru Art	Own Ideas	Critiquing	Diverse Audience
Asian	4.2	3.9	3.6	4.1	3.9	3.8
African Amer.	4.4	4.0	3.7	4.7	4.4	4.2
Amer. Indian	*	*	*	*	*	*
Latino	4.1	4.0	3.8	4.3	4.4	4.1
Pacific Islander	*	*	*	*	*	*
White	4.3	3.9	3.5	4.4	4.2	4.0
Two or More	*	*	*	*	*	*
Unknown	4.3	4.2	3.5	4.5	4.3	4.2
Response Count	312	288	282	305	282	312

^{*}Data suppressed due to student counts <5 per group.

D. Cumulative Units - Descriptive Statistics & Average Student Rating by Unit Level

Although the core competency assessment was administered in courses typically taken by students who are about to graduate or transfer, student participants had accumulated widely varying levels of college units. About one-quarter of the sample was found at each level of cumulative units in the second table below.

In a correlation analysis, the level of units correlated weakly on only "delivering a presentation" (r(360)=.159, p<.005). No other statistically significant correlations were found. Interestingly, the *faculty* rating showed moderate correlation with number of units students had earned (r(263)=.267, p<.001).

Cumulative Units of Exiting Student Participants – Descriptive Statistics

Min Units	Max Units	Avg	Std. Dev.	Count
0	141	37.5	26.6	385

Student Self-Assessment Average Responses by Cumulative Units

Cum. Units *	Writing Paper	Presenta- tion	Msg Thru Art	Own Ideas	Critiquing	Diverse Audience
>=54	4.2	4.2	3.5	4.4	4.3	4.1
31-53.5	4.3	4.0	3.7	4.4	4.3	4.1
18-30.5	4.3	4.0	3.8	4.4	4.3	4.1
<18	4.1	3.8	3.6	4.3	4.2	3.9

^{*}Between 23% and 28% of the sample was found in each of the cumulative unit categories in this table.

Student Self-Assessment Average Responses by Academic Level

Academic Level	Count	Writing Paper	Presenta- tion	Msg Thru Art	Own Ideas	Critiquing	Diverse Audience
College degree	22	4.4	4.3	3.7	4.5	4.2	4.1
Sophomore	102	4.2	4.0	3.7	4.4	4.3	4.1
Freshman	210	4.2	3.9	3.7	4.4	4.2	3.9
K-12 Special Admit	<5	*	*	*	*	*	*
Other	48	4.3	4.1	3.5	4.4	4.3	4.1

^{*}Data suppressed due to student counts <5 per group.

E. Student Self-Assessment Ratings by Educational Goal

Further analysis of student ratings was conducted based on entering educational goal. The highest ratings in each category are in bold. Undecided students rated themselves significantly higher than Transfer students on "communicating a message through art" (p<.05). No other differences were statistically significant.

Entering Educational Goal of Exiting Student Participants

Educ Goal Group	Count	%
Basic Skills/GED	10	3%
Degree/Certif.	10	3%
Enrichment	18	6%
Intend to Transfer	110	35%
Retrain/recertif.	12	4%
Undecided	64	20%
Unknown	89	28%
Total	313	100%

Student Self-Assessment Average Responses by Educational Goal

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Educational Goal	Writing Paper	Presenta- tion	MsgThru Art	Own Ideas	Critiquing	Diverse Audience
Basic Skills/GED	4.2	4.1	3.7	4.4	4.1	4.1
Degree/Certif.	4.1	3.6	3.0	4.2	3.6	3.8
Enrichment	4.3	4.2	3.8	4.4	4.4	4.2
Intend to Transfer	4.3	4.1	3.6*	4.3	4.2	4.0
Retrain/recertif.	4.3	4.3	3.5	4.6	4.2	4.2
Undecided	4.3	4.0	4.0*	4.5	4.3	4.2
Unknown	4.1	3.7	3.4	4.4	4.3	3.9
Response Count	312	288	282	305	282	312

^{*}Two groups differed significantly in this category (p<.05).

F. Comparison of Average Responses from Entering and Exiting Student Self-Assessments

In addition to the assessment of "exiting" students conducted in late Spring 2010, a smaller group of "entering" students also participated in the core competency self-assessment. These were predominantly students in a purposeful (volunteer) sample of sections of pre-transfer reading, writing and ESL courses in Fall 2010.

Results below suggest that there are moderate differences at the beginning and end of students' El Camino College experiences in most categories. A faculty assessment was not conducted for the "pre-survey" since faculty would not have a good sense of student competency at the beginning of the semester.

Activity/Skill	Pre-Survey (N=248)	Post-Survey (N=439)	Difference (Post - Pre)
Writing a paper	3.71	4.25	0.54
Delivering a presentation	3.52	3.99	0.47
Communicating a message through art	3.46	3.7	0.24
Expressing your own ideas	4.01	4.41	0.40
Respectfully critiquing and discussing the ideas of others	3.84	4.27	0.43
Communicating an idea to diverse audiences	3.55	4.07	0.52

G. Final Sample Selection and Responses

Sections at both the Compton Center and Torrance campus were selected at random from a list of courses mapped as a "4" for the Communication and Comprehension core competency. Instructors assisted with a student self-assessment in each participating section.

The table below shows the courses of participating faculty at both locations by division (section detail suppressed). Faculty from a subset of sections selected for the student self-assessment also were invited to complete a holistic evaluation of students' competency in Communication and Comprehension.

Location	Division	Course	Student Self- Assess.	Faculty Evaluations*
ECC	BSSC	HIST-1B	Υ	
ECC	BSSC	POLI-1	Υ	Υ
CEC	BSSC	PSYC-5	Υ	Υ
CEC	BUS	CIS-13	Υ	
ECC	FINE	ART-3	Υ	
ECC	FINE	SCOM-25ABCD**	Υ	Υ
ECC	HS&A	RECR-217	Υ	Υ
ECC	HUM	COMM-1abc	Υ	
ECC	HUM	ENGL-1A	Υ	Υ
ECC	HUM	ENGL-1B	Υ	Υ
ECC	HUM	ENGL-1C	Υ	Υ
ECC	HUM	ENGL-1C	Υ	
ECC	HUM	GERM-21AB	Υ	Υ
ECC	ITEC	MTT-103ABCD	Υ	Υ
CEC	MATH	MATH-150	Υ	
ECC	MATH	MATH-150	Υ	
ECC	NATS	BIOL-102	Υ	Υ
ECC	NATS	OCEA-10	Υ	

^{*}Only faculty from a subset of sampled sections were asked to rate their students.

^{**}A different Comm. Studies class was substituted since this course had ended before the assessment process began.