



Annual Assessment Report

2016-2017

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ANNUAL ASSESSMENT REPORT

2016-2017

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INTRODUCTION

In the 2016-17 academic year, assessment continued to focus on completing course-level outcomes assessment, but even greater focus was placed on assessment at the program level. An approach was taken that introduced the faculty to a streamlined process for completing program assessment through collaboration with the Dean of Institutional Effectiveness' office (DIE). In addition to this effort, much of the year revolved around identifying an approach that would ensure that 100% completion of the assessment in Student Learning Outcomes (SLO) would be achieved by the upcoming Accreditation visit in spring 2020. The last key focus in 2016-17 was on aligning the rotation of assessment to the shift in approach in the Program Review timeline for the college.

Previous assessment reports have included sections from the Administration and Student Services, but this was not possible in 2016-17 due to the fact that each lead position, Dean of Student Services, and Vice President of Academic Affairs, were held by interim managers that weren't present during the time period that the report would cover.

PROGRAM LEVEL OUTCOME ASSESSMENT IN ADT, AOE, CTE AND GE

A total of 22 programs were targeted for assessment in fall 2016, including 7 Associate Degrees for Transfer (ADT), 3 Area of Emphasis Degrees (AOE), 12 CTE (Career Technical Education) programs, and 1 General Education (GE) Outcome. A combination of over 70 full and part time faculty members were invited to participate in the planned program level assessments. The participating faculty were encouraged to use the same approach that been successfully piloted in previous years with General Education and Area of Emphasis degree program assessments. This approach not only proved to be successful, but it was also an efficient use of time, utilized a systematic approach in an authentic manner, while also facilitating the disaggregating of data.

The approach used the Dean of Institutional Effectiveness' office to help faculty gather data and generate reports in relation to their program level assessment. The process included first identifying courses with SLOs that aligned to each program identified as needing assessment; second, identifying the faculty

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teaching those courses and a Lead Faculty to oversee the assessment, and third generating an email that was sent via TRACDAT with an embedded assessment rubric to every faculty member identified. The rubric listed all of the students enrolled in the pre-identified classes, with the following a four point rating scale.

- 1: Little or no evidence of competency
- 2: Limited evidence of competency
- 3: Adequate evidence of competency
- 4: Strong evidence of competency

Faculty were asked to rate their students on their proficiency in an identified assignment, quiz, project etc. that aligned and could be associated to the identified Program Level Outcome. Any score given (on the 4 point scale) that was above a 3 is considered proficiency in the PLO.

Once the Likert scale was completed it was returned to the Dean's office for analysis. The analysis was comprised of the total # of students involved in the assessment, the average number of total units and program units completed, and the percent of all students who scored at 3.0 or above on the assessment. More depth was attained by utilizing either t-tests or ANOVAs on two or three groups of students who were divided into Program Beginners, Intermediate (where possible) and Program completers based on the number of program units completed. These tests told whether the groups had significantly different assessment score means. From this it was possible to infer whether a student learns more as they progress through the program. Finally a disproportionate impact analysis of all students in the program assessment disaggregated by ethnicity, age, and gender was conducted. The data sets were then shared with the Lead Faculty for analysis and report writing. Final reports for each of these program level assessments are anticipated to be completed in spring 2018. This will give the different faculty team's time to meet and discuss the data generated by the DIE's office, and generate any appropriate action plans for the future.

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Table 1. *Programs conducting PLO assessment fall 2016*

Programs	Term Assessment Conducted Fall 2016	Plan in TracDat	Results in TracDat
Area of Emphasis Assessment (AOE)	Business Administration and Information Systems	No	No
	Math and Sciences	No	No
	Kinesiology, Health and Wellness	No	No
		No	No
Associate Degree for Transfer (ADT)	Anthropology	Yes	No
	Computer Science	Yes	No
	Math	Yes	Yes
	Philosophy	Yes	Yes
	Physics	No	No
	Political Science	Yes	Yes
	Sociology	Yes	Yes
Career Technical Education (CTE)	Business Administrations – Real Estate Focus	No	No
	Music Industry Studies - Audio Production	Yes	Yes
	Music Industry Studies - Performance	Yes	Yes
	Computer Mobile Apps	No	No
	Construction Technology	Yes	Yes
	Drafting Technology	No	No
	Electrical Dig Elec	No	No

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	Game Art – Character Design	Yes	Yes
	Game Programming	Yes	No
	Industrial Automation	No	No
	Retail Management	Discontinued	
	Supply Chain Technology	Yes	Yes
General Education (GE)	Critical Thinking	No	No

Associate Degree for Transfer (ADT)

A total of 7 ADTs were scheduled for assessment in fall 2016 including Anthropology, Computer Science, Math, Philosophy, Physics, Political Science, Sociology. Each discipline was provided with access to the TracDat generated Likert scale surveys, from the Office of Institutional Effectiveness to collect data, and were then furnished with results. Each discipline was expected to review and discuss the data and then generate a completed report. Completed assessment plans were input into TracDat for six of the seven degrees and results have been input for four of the seven.

Area of Emphasis (AOE)

Norco College students can pursue an Associate of Arts or Science Degree in an Area of Emphasis. There are currently seven areas in which students can focus their AOE degree. To earn the degree students must complete 18 units in any three disciplines to determine their personalized, or focus area in the degree pattern, and then balance the remaining 42 units with courses from one of three general education plans offered at the college.

AOE Administration and Information Systems

The AOE degree in Administration/Information Systems entails the study of theories, procedures and practices and the acquisition of skills necessary to function productively and effectively in an administrative work environment. Career paths chosen by students pursuing undergraduate studies in Administration/Information Systems typically include managerial positions

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in business and the public sector, administrative support positions, customer service, sales, accounting/bookkeeping and public relations. (Norco College Catalog, p.39)

PLO Assessed: *Implement the fundamental concepts from courses in business, public administration, economics and/or information systems.*

Courses Involved: BUS-10, ECO-7, ECO-8

Summary of Program Assessment Results

Total number of students involved in PLO assessment:	154
Average number of total units completed prior to Fall 2016:	38.14
Average number of units completed in program:	4.53
Percent of all students at 3.0 or above on PLO Assessment:	76.6%

PLO Score	Frequency	Percent
1	11	7.1%
2	25	16.2%
3	38	24.7%
4	80	51.9%

The program results were divided into two groups defined as follows:

- GROUP 1—Program Beginners: 0-3 units completed in the program at the beginning of the fall semester.
- GROUP 2—Program (almost) Completers: More than 3 units completed in the program at the beginning of the fall semester.

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	% AT OR ABOVE 3 ON PLO	AVERAGE PLO SCORE	TOTAL # IN GROUP
GRP 1-PROGRAM BEGINNERS	71.3%	3.13	94
GRP 2-PROGRAM (almost) COMPLETERS	85.0%	3.35	60

Group 2 average PLO assessment score was not significantly higher than Group 1. (t=1.401, p>.05)

* If a group's average PLO assessment score was significantly higher than the other group, there was less than 5% probability that this occurred by chance. We are inferring that a significantly higher average PLO assessment score for a group indicates greater mastery of the PLO.

AOE KINESIOLOGY, HEALTH & WELLNESS

These courses emphasize the principles for the growth and development of a healthy lifestyle. Students will acquire the knowledge and understanding of these principles to integrate and promote personal, individual or group behavior conducive to the maintenance or restoration of mental and physical wellness. This emphasis will provide students with an understanding of physical skills and their development related to physical activity, exercise and sport. Students will also acquire knowledge of decision making and problem solving strategies for self-management as it pertains to leading a productive and healthful lifestyle. This area of emphasis is designed for students interested in making positive life choices and in the study of health, nutrition, and wellness; physical education/kinesiology; athletic training; sport performance, officiating and coaching; career planning and life management; and the biology, anatomy and physiology of the human body.

(Norco College Catalog, p.41)

PLO Assessed: *Recognize the positive impact of physical activity in fostering optimal health and apply this knowledge to lifestyle choices.*

Courses involved: HES 1, KIN 10, 36

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Summary of Program Assessment Results

Total number of students involved in PLO assessment:	316
Average number of total units completed:	28.62
Average number of units completed in program:	1.71
Percent of all students at 3.0 or above on PLO Assessment:	74.1%

PLO Score	Frequency	Percent
1	25	7.9%
2	57	18%
3	120	38%
4	114	36.1%

The program results were divided into two groups defined as follows:

- GROUP 1—Program Beginners: 0 units completed in the program at the beginning of the fall semester.
- GROUP 2—Program (almost) Completers: More than 1 unit completed in the program at the beginning of the fall semester.

Results

	% AT OR ABOVE 3 ON PLO	AVERAGE PLO SCORE	TOTAL # IN GROUP
GRP 1-PROGRAM BEGINNERS	74.7%	3.02	194
GRP 2-PROGRAM (almost) COMPLETERS	73%	3.02	122

Group 2 average PLO assessment score was not significantly higher than Group 1. (t=-.037, p>.05)

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* If a group's average PLO assessment score was significantly higher than the other group, there was less than 5% probability that this occurred by chance. We are inferring that a significantly higher average PLO assessment score for a group indicates greater mastery of the PLO.

Summary of Program Assessment Results Disaggregated by Ethnicity, Age, and Gender

		% AT OR ABOVE 3 ON PLO	TOTAL # IN GROUP	DISPROPORTIONATE IMPACT (Not calculated if less than 20 students in group)
ETHNICITY	African-American	83.3%	12	N/A
	Asian	81%	21	.93
	Hispanic	67.2%	189	.78*
	White	86.3%	80	1.0
	Filipino	66.7%	3	N/A
	American Indian	100%	1	N/A
	Pacific Islander	100%	1	N/A
	Two or more	83.3%	6	N/A
	Unknown	66.7%	3	N/A
AGE	24 and below	71.8%	252	.86
	25 and above	82.8%	64	1.0
GENDER	Female	72.8%	191	.96
	Male	76%	125	1.0
	Unknown			N/A

*Disproportionately impacted group

PROGRAM: AOE Math and Sciences

These courses emphasize the natural sciences, which examine the physical universe, its life forms, and its natural phenomena. Courses in Math emphasize mathematical, analytical, and reasoning skills beyond the level of intermediate algebra. Courses in science emphasize an understanding of the process of science and the scientific method. All courses emphasize the use of mathematics and science as investigative tools, the role of mathematics and science as part of human civilization and society, and the inherent value of both inductive and deductive reasoning as part of the human experience. (Norco College Catalog, p.42)

PLO Assessed: *Recognize and determine the role of mathematics and the sciences as investigative and reasoning tools of human societies.*

Courses Involved: CHE-2A, BIO-34, **BIO-36**, MAT-25

Summary of Program Assessment Results

Total number of students involved in PLO assessment:	314
Average number of total units completed prior to Fall 2016:	40.86
Average number of units completed in program:	6.36
Percent of all students at 3.0 or above on PLO Assessment:	51.6%

PLO Score	Frequency	Percent
1	119	37.9%
2	33	10.5%
3	59	18.8%
4	103	32.8%

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The program results were divided into two groups defined as follows:

- GROUP 1—Program Beginners: 0-6 units completed in the program at the beginning of the fall semester.
- GROUP 2—Program (almost) Completers: More than 6 units completed in the program at the beginning of the fall semester.

	% AT OR ABOVE 3 ON PLO	AVERAGE PLO SCORE	TOTAL # IN GROUP
GRP 1-PROGRAM BEGINNERS	46.8%	2.32	173
GRP 2-PROGRAM (almost) COMPLETERS	57.4%	2.65	141

Group 2 average PLO assessment score was significantly higher than Group 1. (t=2.249, p<.05)

* If a group's average PLO assessment score was significantly higher than the other group, there was less than 5% probability that this occurred by chance. We are inferring that a significantly higher average PLO assessment score for a group indicates greater mastery of the PLO

Career Technical Education (CTE)

Norco College offers various and numerous certificates and programs in Career and Technical Education. In fall 2016, the following programs were assessed:

Business Administrations (Real Estate Focus), Music Industry Studies (Audio Production and Performance), Computer Mobile Apps, Construction Technology, Drafting Technology, Electrical Dig Elec, Game Art (Character Design and Programming), Industrial Automation, Retail Management, and Supply Chain Technology.

At this time 5 out of 13 of the programs have input their assessment plans and results into TracDat.

General Education Program

Four General Education Learning Outcomes (GELO) comprise the General Education program: 1) critical thinking, 2) information competency and

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technology literacy, 3) communication, and 4) self-development and global awareness. These GE learning outcomes have been assessed multiple times in an authentic way since they were adopted by the Board of Trustees in fall 2013.

The procedure used to assess GELOs was the original assessment approach that used the representative sample of courses with a four-point rubric scale.

Faculty rubric scorings on the identified PLO for each student are then exported from TracDat into a spreadsheet for analysis. PLO scores for students are then merged with student enrollment data, and total units of successfully completed general education coursework are then calculated for each student. Once this student-level data is derived, significance testing analysis (through statistical models called analysis of variance, or ANOVA) is applied to three groups of students:

Group 1: fewer than 12 units of GE

Group 2: 12-24 units of GE

Group 3: more than 24 units of GE

Through the results of ANOVA, significant differences among the mean GELO competency scores of the three groups can be derived. If Group 2's scores are significantly greater than those in Group 1, and Group 3's scores are significantly greater than those in Group 2, learning for the GELO can be attributed to increased exposure to general education courses. In other words, general education courses appear to be making a difference in learning for that outcome. This linear relationship is occasionally found, but sometimes the relationship is not so clear. Thus, faculty are called together to help explain data patterns and also to make plans for improvement in learning, if warranted. In addition to the ANOVA data, learning outcomes were disaggregated by ethnicity, gender, and age for the 2015-2016 academic year, and a disproportionate impact analysis was conducted to determine if any of these groups are experiencing learning gaps.

GE Assessment Project Fall 2016 – Critical Thinking

In fall 2016, the disciplines of English, Philosophy, and Communication were invited to participate in the GE PLO assessment for Critical Thinking.

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PLO Assessed: *Students will be able to demonstrate higher order thinking skills about issues, problems, and explanations for which multiple solutions are possible*

Courses Involved: ENG 1B, COM 3, PHI 11

Summary of Program Assessment Results

Total number of students involved in PLO assessment:	245
Average number of total units completed:	33.98
Average number of units completed in program:	25.44
Percent of all students at 3.0 or above on PLO Assessment:	70%

PLO Score	Frequency	Percent
1	25	10.2%
2	51	20.8%
3	108	44.1%
4	61	24.9%

The program results were divided into two groups defined as follows:

- GROUP 1—Program Beginners: 0-9 units completed in the program at the beginning of the fall semester.
- GROUP 2—Intermediate: 10-30 units completed in the program at the beginning of the fall semester.
- GROUP 2—Program (almost) Completers: More than 31 units completed in the program at the beginning of the fall semester.

	% AT OR ABOVE 3 ON PLO	AVERAGE PLO SCORE	TOTAL # IN GROUP
GRP 1-PROGRAM BEGINNERS	67.2%	2.74	61
GRP 2-PROGRAM INTERMEDIATE	67%	2.78	88

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GRP 3- PROGRAM (almost) COMPLETERS	71.9%	2.95	96
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There were no statistically significant differences between group means as determined by one-way ANOVA. ($f=1.207$, $p>.05$)

If a group's average PLO assessment score was significantly higher than the other group, there was less than 5% probability that this occurred by chance. We are inferring that a significantly higher average PLO assessment score for a group indicates greater mastery of the PLO.

Summary of Program Assessment Results Disaggregated by Ethnicity, Age, and Gender

		% AT OR ABOVE 3 ON PLO	TOTAL # IN GROUP	DISPROPORTIONATE IMPACT (Not calculated if less than 20 students in group)
ETHNICITY	African-American	36.8%	19	N/A
	Asian	74.1%	27	1.0
	Hispanic	68.9%	119	.93
	White	73.4%	64	.99
	Filipino	50%	4	N/A
	American Indian			N/A
	Pacific Islander	100%	1	N/A
	Two or more	88.9%	9	N/A
	Unknown	100%	2	N/A
AGE	24 and below	70%	203	1.0
	25 and above	64.3%	42	.92
GENDER	Female	68.3%	145	.97
	Male	70%	100	1.0
	Unknown			N/A

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No groups were shown to be disproportionately impacted in regard to this GE Outcome.

COURSE LEVEL (SLO) ASSESSMENT 2016-17

The Norco Assessment Committee (NAC) spent time in the fall of 2016 and spring of 2017 discussing how to ensure that all SLOs would be assessed by spring 2020. It was also discussed, that the current system by which faculty were notified of which courses were due for assessment in each major term, was not possibly sustainable and that the presence of TracDat made it possible to implement a substantial change in procedure.

In the past, the Assessment Coordinator and the Dean of Institutional Effectiveness would determine which courses were due for assessment in each discipline. They would identify the specific course and notify the faculty, who would then identify an SLO or multiple SLOs to assess. All of this tracking was being followed on an excel spreadsheet. TracDat provides an opportunity for faculty in each discipline to take more ownership and decision making around which courses, which SLOS, and in which semester assessment should take place.

Once the decision was made to give faculty more ownership and responsibility for planning and tracking their own assessment, it was decided to create a simple charting system that would be filled in by each discipline identifying when they planned to assess every course, every SLO, and every PLO between fall 2017 and spring 2020. The hope was this would provide the college and faculty with a clear pathway to completion of assessment in the short term, and would then facilitate the start of a new assessment cycle once the college receives accreditation in 2020.

The ongoing assessment cycle for SLOs and PLOs is now based upon the newly revised Program Review (PR) cycle of three years. The NAC determined that in order to align with PR that assessment would be shifted to a six year cycle. This decision was made for two reasons, one it was felt that a three year cycle would be too short to meet the needs of many disciplines that are overburdened with SLOs, and two, a six year cycle is in line with our accreditation timelines. In 2020 all disciplines will be asked again to generate a plan for assessment of all SLOs

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and PLOs over a six year period. The hope is that this plan will also be input into TracDat so that faculty are provided with visual reminders in the form of “flags” that indicate when assessment is due and when it has been completed.

Summary of SLOs Assessed Fall 2016-Spring 2017

of Courses in selected time frame: 625

of Courses without identified SLOs: 0

of Courses with Assessment Results between fall 2016-spring 2017: 128

% of Courses Assessed: 20.5%

A report was generated inside of TracDat that lists all disciplines, the total number of courses in each discipline, the number of completed assessments (results) and the percentage of the overall discipline related courses that were assessed in fall 2016-spring 2017. Reporting functions of TracDat show that at this time 60% of the SLOs in all courses offered at the college have been assessed as of spring 2017. However, with the support of TracDat and the engagement of all disciplines in setting a cycle of assessment, 100% of courses that are offered within the six-year assessment cycle are engaged in ongoing assessment and will be assessed by 2020. There is confidence though that now that faculty are more engaged in the process that they will be more aware of planning assessment when they build their course offerings, taking into consideration their predetermined plan for assessing each course, each SLO, and each subsequent PLOs.

SUMMARY

2016-17 was a year in which assessment seemed to coalesce into a new entity on campus. With an influx of new faculty and a stronger intensity and focus on completing PLO assessment, faculty were introduced to new systems and processes that were intended to provide more support and lead to more clarity around how to complete assessment. In addition to this, the impetus to ensure that all SLOs are assessed by 2020 led to a much stronger campus wide understanding and acceptance of ownership and responsibility for discipline specific completion of assessment. This movement has been in the making for a

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number of years and bodes well for increased involvement and engagement with assessment in the coming years.