Areas of Emphasis Programs Assessment Report

December 2013

Background

In 2007-2008, the Riverside Community College District (of which Norco College is a part) developed seven interdisciplinary majors (called "Area of Emphasis" programs, or AOEs) in order to come into compliance with Title V guidelines on degrees. Counseling faculty (particularly those with expertise in transfer requirements) helped to provide the foundation for these new degrees, but faculty in each of the seven degree areas met and developed the AOEs themselves, along with their program learning outcomes (PLOs). These degrees went into effect in fall 2008, with some previously existing degrees still available to students who had been enrolled in district courses before a specified time. The following table lists the AOE degrees with the number of Norco College graduates in each over the past three years. (More detailed information about requirements for the degrees may be found in the 2013 -2014 Norco College Catalog, pp. 35 – 39.) Although students will presumably be more likely to graduate with (even more newly developed) Associate Degree for Transfer (ADT) degrees as more and more are created (six are now active at the college, with seven more under development), and some obtain CTE A.S. degrees, the vast majority of students currently graduate in one of these seven AOEs, and this is likely to be the case in the foreseeable future.

AOE Degree	2011	2012	2013
Social and Behavioral Studies	125	213	239
Math and Science	62	115	139
Humanities, Philosophy, and the Arts	68	84	88
Administration and Information Systems	38	59	68
Communication, Media, and Languages	23	40	42
Kinesiology, Health, and Wellness	16	24	12
Fine and Applied Arts	8	7	10
Total number of A.A./A.S. degrees granted	654	1010	1034
Percent AOE degrees of total degrees	85.2	88.0	82.7

Norco College undertook an initial project to assess these degrees in spring 2012, by administering learning gains surveys to graduates that asked them about the extent to which they thought they had achieved each of the program learning outcomes for the AOE which they were completing. (The results of this survey are summarized in the Annual Assessment Report 2011-2012, pp. 9 – 12.) Baseline assessment data were generated for each of the 31 outcomes that enabled faculty teaching in those areas to identify specific learning deficiencies (as seen by students) for attention. But the college knew it needed to develop a more direct and sustainable method of assessing learning in these programs.

AOE Assessment Project 2012-13: Overview

Under the leadership of the Norco Assessment Committee (NAC) and with significant support from the president, a vigorous AOE assessment project was developed and implemented during the 2012-13

academic year. Faculty leaders for each of the AOEs were identified (three per program) and invited to a planning meeting on November 1, 2012 (see Appendix A). Each of the participants was paid a $200 for their work. The components of the plan are as follows:

1. The AOE leaders were asked to collaborate and involve their discipline colleagues as much as possible in the mapping of their program's course SLOs to the program learning outcomes for the AOE. The alignment of curriculum is captured in matrices that are now visible on the college Curriculum Map website. AOE leaders were also asked to scrutinize the maps to see where there were alignment problems or PLOs in need of modification, elimination, and creation.

2. As part of an initial project to assess learning in the AOE directly, the AOE leaders were asked to identify a particular PLO to be assessed and a number of courses in the program with at least one SLO mapping to this PLO, courses which students majoring in the AOE would be likely to take. Eventually, instructors from 31 courses (96 different sections) were asked to provide data about how well their students demonstrated achievement of the chosen PLO in a particular assignment. (See Appendix B for a sample set of instructions to participants.) Data were received for 76 of these 96 sections and analyzed during summer 2013.

3. Data were provided to the AOE leaders in October 2013 and responses collected in November, thus leading to the present report.

Interpreting the data

Instructors scored student work according to the following scale: 4 = clear evidence the outcome has been demonstrated; 3 = adequate evidence; 2 = inadequate evidence; 1 = no evidence. Mean scores were derived but disaggregated in three categories: Group 1 = students who had completed nine or fewer units in the program; Group 2 = students who had completed between nine and 17.9 units; Group 3 = students who had completed 18 or more units.

AOE in Administration and Information Systems (AIS)

Leaders: Peter Boelman (Economics), Judy Perry (CIS), Patty Worsham (Business)

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

Courses from which data gathered: CIS 1A (four sections), CIS 1B (one), BUS 10 (five), ECO-7 (two).

Assessment results: Group 1 (N = 173), 3.24; Group 2 (N = 97), 3.36; Group 3 (N = 33), 3.70. Overall mean was 3.33. (Student cohort [N = 14] from spring 2012 survey averaged 3.93 on this PLO.) Of 340 students assessed, 272 (80%) demonstrated competency in this outcome.

Conclusions: There was a statistically significant difference between average AOE score for Group 1 and the average score for Group 3. There is sufficient evidence that students in the program generally achieve the PLO by virtue of their coursework in the program.

Observations on Curriculum Alignment: Only three courses in the program have SLOs that map to PLO 1 ("Categorize basic administrative terms, theories, and principles"). This PLO should either be eliminated or modified, or elective courses made required. Several courses (COM-1/1H; COM-12; COM-13; COM-9) do not map to any PLO; suggest elimination from the program.

Recommendations for Future Work: Assess the other five PLOs in a rotating basis. Consider developing a capstone course (or modifying existing courses with strong mapping to most PLOs, like BUS-18AB) to permit assessment of all PLOs within one class. A repository of student work for assessment purposes might also be considered.

AOE in Communication, Media, and Languages (CML)

Leaders: Tami Comstock (English), Dominique Hitchcock (Spanish and French); Ana-Marie Olaerts (Communication Studies)

PLO Assessed: "Evaluate purpose and audience to create well-developed, supported, and stylistically fluent responses in written or verbal form."

Courses from which data gathered: COM-1 (eight sections), ENG-1B (seven), ENG-15 (one), ENG-44 (one)

Assessment results: Group 1 (N = 186), 3.25; Group 2 (N = 162), 3.25; Group 3 (N = 28), 3.29. Overall mean was 3.25. (Student cohort [N = 19] from spring 2012 survey averaged 3.63 on this PLO.) Of 395 students assessed, 319 (80.1%) demonstrated competency in this outcome.

Conclusions: Although Group 3 did slightly better than groups 1 and 2, the difference was not statistically significant. It's possible that this was due in part to the fact that 15 of the 17 sections surveyed were introductory classes.

Observations on Curriculum Alignment: Some courses (AMY-1,2; ANT-8) do not map to any PLO and should be eliminated. Some PLOs would benefit from revision and clarification: e.g., phrases like "understand and apply themes," "evaluate purpose and audience," "evaluate and apply appropriate evidence." Some PLOs overlap, covering similar elements. Consensus on the part of the AOE leaders that I and 5 are especially confusing. One recommendation that 2, 4, and 5 be combined into a single "communication" PLO, with perhaps 1 and 6 also combined.

Recommendations for Future Work: Several courses in this program map to every PLO (COM-3 and most of the foreign languages courses) and could serve as capstones, permitting assessment of the program via the course. Suggest, alternatively, that in the next assessment project, sample student work be pulled from several classes and PLO achievement measured.

AOE in Fine and Applied Arts (FAA)

Leaders: Barbara May (Art), Vonetta Mixson (Music), Buck Stevens (Theater)—with later help from new full-time faculty members Kim Kamerin (Music) and Quinton Bemiller (Art)

PLO Assessed: "Demonstrate basic knowledge and skills (technique) in one discipline of the fine and applied arts."

Courses from which data gathered: ART-5, ART-17 (two sections), ART-18, THE-33, PHO-20, COM-11

Assessment results: Group 1 (N = 112), 3.38; Group 2 (N = 45), 3.64; Group 3 (N = 12), 3.67. Overall mean was 3.47. (Student cohort [N = 3] from spring 2012 survey averaged 4.00 on this PLO.) Of 189 students assessed, 158 (83.6%) demonstrated competency in this outcome.

Conclusions: Although Group 2 had a higher AOE mean score than Group 1, it was not statistically significant; neither was the difference between Groups 1 and 3 statistically significant (perhaps in part because of the low N with Group 3). Still, there exists some noticeable differences between 1 and 2, which may warrant attention in the future. One issue is that data were not returned by instructors of ART-44 and MUC-1, as requested. Since ART-44 requires other Art prerequisites, the lack of ART-44 AOE scores may have disproportionately decreased the number of students in Group 3.

Observations on Curriculum Alignment: Some courses (COM-1/1H, COM-3, MUS-23, MUS-31, MUS-35, MUS-37, MUS-51, <US-89) do not map to any PLOs and should be eliminated unless PLOs are added. DAN courses have not been mapped because they are not taught at Norco. PLOs seem vague and imprecise, combining too many disparate elements and not sufficiently defining what students can do or have done by the end of the program. Suggest something much more specific, e.g., "students will able to create a work of art (poem or story, painting or sculpture, musical composition, etc.) that X."

Recommendations for Future Work: Many courses map to all PLOs and could be considered as capstones for assessment purposes. Suggest that sample work be taken from several of these courses and evaluated against a rubric in the next assessment project.

AOE in Humanities, Philosophy, and the Arts (HPA)

Leaders: Sharon Crasnow (Philosophy), Arend Flick (English), Stephany Kyriakos (History)

PLO Assessed: "Interpret key philosophical, religious, and literary texts, as well as creative works, in historical and cultural contexts and interpret that interpretation persuasively in oral and/or written form."

Courses from which data gathered: ENG 15, HUM 5, PHI 10.

Assessment results: Group 1 (N = 93), 2.55; Group 2 (N = 61), 3.13; Group 3 (N = 20), 2.50. Overall mean was 2.75. (Student cohort [N = 36] from spring 2012 survey averaged 3.61 on this PLO.) Of 187 students assessed, 103 (55.1%) demonstrated competency in this outcome.

Conclusions: Between groups 1 and 2, there was a statistically significant difference between mean AOE scores. The falloff from group 2 to 3 is striking, however, and not easy to explain. The sample size may be a factor, but it obviously calls for further study to determine whether this is an anomaly or somehow meaningful. There was also a sizable gap between the mean score with this AOE (2.75) and that of every other AOE. This is perhaps attributable to the fact that the instructors were focused on interpretative skills in written form: critical thinking and academic writing are two challenging learning outcomes across the disciplines, as other Norco College assessment projects have shown.

Observations on Curriculum Alignment: A number of courses do not map to any PLOs and should be thus eliminated from the program, unless a PLO is added: ANT-7, 8; ARE-36; COM-1/1H, 11, 13, 3, 9; LIB-1; POL-11. A number of courses only map to one or two PLOs, and since there are no required courses in the program, there appears to be some chance that students could find curricular patterns that would not expose them to all PLOs. PLO 4 is especially problematic, since only the Art and History courses map to it. Thus a minimum of three units in either Art or History would need to be a requirement if the PLO is to be kept. Alternatively, PLO 4 might be reworded to make it possible to map other courses to it. PLO 2 is vague.

Recommendations for Future Work:

Recommend that sample essays be pulled from designated courses and read against a rubric to assess specific PLOs. Capstone or quasi-capstone courses might also be considered.

AOE in Kinesiology, Health, and Wellness KHW)

Leaders: Marisa Iliscupidez (Counseling), Tim Wallstrom (Kinesiology), Bev Wimer (Kinesiology)

PLO Assessed: "Recognize and understand the role of individual decision-making processes to the development of strategies concerning health and wellness."

Courses from which data gathered: GUI 47 (four sections); HES 1 (eight sections); KIN 36 (two sections); KIN 38 (two sections)

Assessment results: Group 1 (N = 534), 3.30; Group 2 (N = 112), 3.27; Group 3 (N = 9), 3.78. Overall mean was 3.30. (Student cohort [N = 3] from spring 2012 survey averaged 4.00 on this PLO.) Of 728 students assessed, 578 (79.4%) demonstrated competency in this outcome.

Conclusions: There was no statistically significant difference in the scores of group 1 and group 2. Group 3 did show a markedly higher PLO achievement rate, but the sample size is too small to draw valid conclusions. An obvious problem in assessing this AOE is that while many students enroll in its classes, very few graduate from the program itself

Observations on Curriculum Alignment: BIO 34 does not map to any PLO and should be eliminated from the program unless the PLOs themselves change.

Recommendations for Future Work: Recommend disaggregating data to see how well KIN 36 and 38 students did with the PLO, since GUI 47 and HES 1 are taken by large numbers of students who are not in the program. Most KIN classes map to all of the PLOs and work from students de facto enrolled in the KHW program could be identified and their work assessed in the next project.

AOE in Social and Behavioral Studies (SBS)

Leaders: Sarah Burnett, Alexis Gray, Deborah Makin

PLO Assessed: "Demonstrate an ability to apply the theories and principles of human development, human interaction, cultural diversity, and global awareness to their everyday lives."

Courses from which data gathered: ECO 8, PSY 9, SOC 10, SOC 1.

Assessment results: Group 1 (N = 233), 3.25; Group 2 (N = 207), 3.41; Group 3 (N = 90), 3.52. Overall mean was 3.33. (Student cohort [N = 14] from spring 2012 survey averaged 3.72 on this PLO.) Of 569 students assessed, 485 (85.2%) demonstrated competency in this area.

Conclusions: There was a statistically significant difference between the mean AOE score of Groups 1 and 3. The difference provides sufficient evidence that students in the program generally achieve the PLO by virtue of their coursework in the program.

Observations on Curriculum Alignment: Com 1/1H, Com 3,GEG-1, and Lib 1 do not map to the PLOs and all should therefore be eliminated from the program, unless an additional PLO is added. The PLOs themselves are broad but reasonably clear and distinct.

Recommendations for Future Work: Assess the other three outcomes on a rotating basis, perhaps employing a form of the method used for the present study, since it seems to have worked well. Only one course in the program (EAR 42) maps to every PLO, but perhaps it or other modified courses could be used as capstones, thus permitting the assessment of the program by means of the class.

AOE in Math and Science (MS)

Leaders: Brian Johnson (Mathematics), Monica Gutierrez (Biology), Stanley Tyler (Chemistry),

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

Courses from which data gathered: CHE 1A, MAT 1A, PHY 4A

Assessment results: Group 1 (N = 5), 3.20; Group 2 (N = 13), 3.69; Group 3 (N = 51), 3.53. Overall mean was 3.54. (Student cohort [N = 30] from spring 2012 survey averaged 3.83 on this PLO.) Of 69 students assessed, 61 (88.4%) demonstrated competency in this area.

Conclusions: As with the HPA program, there was a marked difference between groups 1 and 2 that may be a product of low numbers, but warrant future attention. However, the falloff from group 2 to 3 is not easy to explain except perhaps by the supposition that the group 2 sample size was too small. Further investigation seems to be indicated. Overall, it may be that too few introductory science and math courses were sampled for this project, particularly given the number of biology and anatomy sections the college offers, none of which were used.

Observations on Curriculum Alignment: Course SLO-PLO alignment seems good.

Recommendations for Future Work: Unless more courses can be utilized, an alternate method of assessment is suggested. Some classes (e.g., AMY2A, CHE 1A and 1B, CHE 2A, CIS 17ABC, etc.) map to all PLOs and samples of work done by students in the major could be taken for assessment purposes.

Demographic Data

Appendix C provides detailed breakdown of student achievement by ethnic category. The following table summarizes those data as percentage of students in each category demonstrating PLO achievement (with scores of 3 or 4):

	AIS	CML	FAA	HPA	KHW	MS	SBS	Average
African-American	54.2	87.5	71.5	35.3	80.4	100	88.5	74.7
Asian-Pacific Islander	85.2	66	100	58.8	74.4	83.4	98.1	80.5
Caucasian	82.5	88.6	90.6	54.9	86.7	95	88.9	84.9
Hispanic	80.5	79.4	78.1	54.5	75.3	84	80.3	76.7
Other	85.7	78.6	80	78.6	87.3	100	91.9	85.5
Average	80	80.8	83.6	55.1	79.4	88.4	85.2	79.8

General Conclusions

As a first effort to assess program-level learning, this project was reasonably successful. Colleges and universities across the country are struggling with interdisciplinary program assessment, often discovering, as we did with some of our AOE programs, that there is no statistically significant correlation between units completed in the major and learning achievement. The fact that most students demonstrated achievement of these PLOs in all seven AOEs gives us some cause for at least muted celebration.

Preliminary conclusions from the demographic data suggest that African-American and Hispanic students are underperforming slightly against average scores (by 5.1% for African-Americans, 3.1% for Hispanics). African-Americans outperformed the average in four of seven AOEs, but more study is indicated to determining why performance is particularly weak in Administration and Information Systems; Fine and Applied Art; and Humanities, Philosophy, and the Arts. Hispanics underperformed against the average by five percentage points or more in only one AOE (FAA) and by four percentage points in two others (KHW and SBS); they outperformed the average in AIS.

A number of future steps are indicated:

- The data invite and permit further scrutiny. Why, for example, are the scores for HPA so low compared to the other AOEs? What other data analysis is possible to determine what categories of students might be associated with higher success?
- We need to revise and sharpen the PLOs themselves for most of the AOEs, probably reducing them in number in some instances and clarifying their intent. Some need to be eliminated or made more assessable.
- In some cases (e.g., HPA) we need to consider adding directed required courses to ensure that students achieve all of the PLOs.
- With some of the AOEs, our methodology was probably too crude to capture learning achievement as accurately as we could wish. In some cases, the data are probably cluttered by the presence of too many non-majors in the assessed courses. So we need to consider alternate assessment methodologies: perhaps capstone or quasi-capstone courses; perhaps (as with HPA) sampling written work from more specialized courses to be read against a rubric.
- We have some difficulty convincing an arguably over-worked faculty to take ownership of these programs and to recognize they have a professional obligation to assess them. The problem is compounded by the fact that we share these programs with our sister colleges. It may be worthwhile to consider assigning the programs to particular departments and charge chairs and assistant chairs with some responsibility for them. Alternatively, we might want to consider the creation of a college committee charged with administering the interdisciplinary programs, including general education.
- The Riverside Community College District may want to consider clarifying the procedure for modification of the AOEs, either the addition or subtraction of courses or the modification of PLOs.
- The college has tentatively placed AOE (and ADT) assessment on a three-year cycle, with data gathered in spring semesters and analyzed in fall. We may want to reconsider this timeline.

Appendix A: letter of invitation to initial planning session for AOE assessment project

NORCO COLLEGE

Office of the President

October 24, 2012

Dear Faculty,

I am pleased to invite you to participate in an exciting developmental pilot assessment project. The first aspect of this project will begin in November and focus on mapping and aligning our courses to the program level outcomes of our Areas of Emphasis (AOE). The second aspect of this project includes gathering data from instructors who teach these courses, in an effort to assess student learning achievement of the AOEs.

You have been highly recommended to be part of a faculty work group who will represent each of the seven AOEs. Though we expect very few meetings to be associated with this project, we will launch this pilot project with a meeting on Thursday, November 1, at 12:50-1:50 in IT 209.

Because of the developmental nature of this project, and in light of our upcoming accreditation visit, I consider this to be one of our highest priorities in keeping our college in good standing with ACCJC for accreditation. Therefore, I have authorized a small stipend for each of you in the amount of $200. Though I know your commitment and contribution to the college cannot be quantified, I hope this small stipend will demonstrate my appreciation of your time, expertise, and dedication to get this project started.

Please RSVP your attendance to Debra Creswell at ext 7016 or debra.creswell@norcocollege.edu.

Sincerely,

Paul Parnell

Paul Parnell, Ph.D.
President

2001 Third Street Norco, CA 92860 (951) 372-7015 www.NorcoCollege.edu

Appendix B: Sample instructions for providing AOE assessment data

Instructions for Completing AOE Assessment Scantron

Thanks for participating in our pilot project to assess learning in the Social and Behavioral Studies area of emphasis (AOE) at Norco College, from which 115 of our students graduated in 2012. As mentioned in the March 22 email, the AOE leaders for this major—Sarah Burnett, Alexis Gray, and Debbie Makin—decided to ask you to focus on the fourth PLO for this project: Students will be able to "Demonstrate a knowledge and understanding that the development, maintenance, and adaptation of the individual self and he personality is a product of the interaction between the individual and their social environment." Please take the following steps to provide us with data on student achievement of this outcome in your course:

1. Identify the end-of-term assignment you'll be assessing. Please use an assignment you give as part of the normal business of the course—not an additional one developed for this project. In your field, this is likely to be the final exam, but a late-term project, essay, or presentation might work as well. The PLO is obviously open to some interpretation. We counsel that yours be expansive, and that you give credit to students who seem to you to demonstrate competency in some part of it as you understand it. Please address questions about the PLO to your AOE leaders.

2. As you grade these assignments, or immediately after you grade them, assign a score ranging from 4 to 1 to each student based on how well this particular assignment contains evidence of the student's achievement of this skill. Use the Scantron sheet (provided) for this purpose. A few reminders:

    a. Leave blank any student who dropped the course or failed to submit this assignment.
    b. Score the student *based on this assignment alone*, even if you believe s/he did more poorly or much better on this assignment than on previous work.
    c. The scoring key is as follows: 4 = clear evidence the outcome has been demonstrated (e.g., equivalent to "A" or "B" work); 3 = adequate evidence the outcome has been achieved (e.g., equivalent to "C" work); 2 = inadequate evidence the outcome has been achieved (e.g., equivalent to "C-" to "D") work; and 1 = little or no evidence the outcome has been achieved.
    d. If the assignment consists of multiple objective questions (e.g., multiple choice, True/False, etc.), focus on only those that clearly map to the PLO. You would then want to develop cut scores as seem appropriate for your discipline to determine what number to assign the student: e.g., 85% or higher correct = 4; 70 – 84% = 3; etc.
    e. The score you give each student is likely to be correlated to an extent with the grade you give each student on the assignment. But since grades tend to be aggregates of multiple skills, it's quite possible that you will be assigning some scores that are significantly higher or lower than the grades you give.
    f. If you have multiple sections, we ask you to score them all. Scantrons have been provided for that purpose.
    g. If your course is also up for assessment this semester, you can correlate the PLO with one or more SLOs for the course and use these data as part of the course assessment effort if you choose.

3. After you have completed the Scantron, please return it to Greg Aycock, Dean of Institutional Effectiveness, ideally by June 10, 2013. This will help ensure we get enough time to analyze the data over summer. We will be asking you to look at these data (and at the project itself) and make recommendations before the final report is written in fall.

We'll be correlating student scores with various demographic factors, including number of units completed in the major. But please be reminded: *we are not going generate section-specific scores that might be construed as a form of instructor evaluation*. You can be honest and accurate in your scores without fearing that a low-scoring class will be seen as evidence of problematic instruction.

Appendix C: AOE PLOs by Rubric Score

		Level				Total
		1	2	3	4	
SBS--Demonstrate an ability to apply the theories and principles of	Count	31	53	196	289	569
	Percent	5.4%	9.3%	34.4%	50.8%	100.0%
FAA--Demonstrate basic knowledge	Count	10	21	51	107	189
	Percent	5.3%	11.1%	27.0%	56.6%	100.0%
CML--Evaluate purpose and audience to create well-developed	Count	22	54	131	188	395
	Percent	5.6%	13.7%	33.2%	47.6%	100.0%
AIS--Implement the fundamental concepts from courses in	Count	32	36	108	164	340
	Percent	9.4%	10.6%	31.8%	48.2%	100.0%
HPA--Interpret key philosophical, religious, and literary texts, as well as creative works	Count	41	43	46	57	187
	Percent	21.9%	23.0%	24.6%	30.5%	100.0%
MS--Recognize and determine the role of	Count	6	2	10	51	69
	Percent	8.7%	2.9%	14.5%	73.9%	100.0%
KHW--Recognize and understand the role of individual	Count	57	93	223	355	728
	Percent	7.8%	12.8%	30.6%	48.8%	100.0%
Total	Count	199	302	765	1211	2477
	Percent	8.0%	12.2%	30.9%	48.9%	100.0%

AIS PLO

Level

	N	Mean
Grp 1 < 9 units	173	3.24
Grp 2 9-17.9	97	3.36
Grp 3 18 or	33	3.70
Total	303	3.33
Grp 3-1 difference is		

CML PLO

Level

	N	Mean
Grp 1 < 9 units	186	3.25
Grp 2 9-17.9	162	3.25
Grp 3 18 or	28	3.29
Total	376	3.25

FAA PLO

Level

	N	Mean
Grp 1 < 9 units	112	3.38
Grp 2 9-17.9	45	3.64
Grp 3 18 or	12	3.67
Total	169	3.47

HPA PLO

Level

	N	Mean
Grp 1 < 9 units	93	2.55
Grp 2 9-17.9	61	3.13
Grp 3 18 or	20	2.50
Total	174	2.75
Grp 2-1		

KHW PLO

Level

	N	Mean
Grp 1 < 9 units	534	3.30
Grp 2 9-17.9	112	3.27
Grp 3 18 or	9	3.78
Total	655	3.30

MS PLO

Level

	N	Mean
Grp 1 < 9 units	5	3.20
Grp 2 9-17.9	13	3.69
Grp 3 18 or	51	3.53
Total	69	3.54

SBS PLO

Level

	N	Mean
Grp 1 < 9 units	233	3.25
Grp 2 9-17.9	207	3.41
Grp 3 18 or	90	3.52
Total	530	3.36
Grp 3-1 difference is		

Ethnicity * Level * Area_Emphasis Crosstabulation

Area_Emphasis				AOE Score 1	2	3	4	Total
AIS	Ethnicity	African-American	Count	4	7	6	7	24
			% within Ethnicity	16.7%	29.2%	25.0%	29.2%	100.0%
		Asian/Pacific Island	Count	2	2	4	19	27
			% within Ethnicity	7.4%	7.4%	14.8%	70.4%	100.0%
		Caucasian	Count	10	9	30	60	109
			% within Ethnicity	9.2%	8.3%	27.5%	55.0%	100.0%
		Hispanic	Count	16	15	61	67	159
			% within Ethnicity	10.1%	9.4%	38.4%	42.1%	100.0%
		Other	Count	0	3	7	11	21
			% within Ethnicity	0.0%	14.3%	33.3%	52.4%	100.0%
	Total		Count	32	36	108	164	340
			% within Ethnicity	9.4%	10.6%	31.8%	48.2%	100.0%
CML	Ethnicity	African-American	Count	0	5	16	19	40
			% within Ethnicity	0.0%	12.5%	40.0%	47.5%	100.0%
		Asian/Pacific Island	Count	5	12	15	18	50
			% within Ethnicity	10.0%	24.0%	30.0%	36.0%	100.0%
		Caucasian	Count	5	6	33	53	97
			% within Ethnicity	5.2%	6.2%	34.0%	54.6%	100.0%
		Hispanic	Count	9	28	63	80	180
			% within Ethnicity	5.0%	15.6%	35.0%	44.4%	100.0%
		Other	Count	3	3	4	18	28
			% within Ethnicity	10.7%	10.7%	14.3%	64.3%	100.0%
	Total		Count	22	54	131	188	395
			% within Ethnicity	5.6%	13.7%	33.2%	47.6%	100.0%
FAA	Ethnicity	African-American	Count	1	3	4	6	14

		American	% within Ethnicity	7.1%	21.4%	28.6%	42.9%	100.0%
		Asian/Pacific Island	Count	0	0	2	11	13
			% within Ethnicity	0.0%	0.0%	15.4%	84.6%	100.0%
		Caucasian	Count	2	4	18	40	64
			% within Ethnicity	3.1%	6.3%	28.1%	62.5%	100.0%
		Hispanic	Count	7	9	23	34	73
			% within Ethnicity	9.6%	12.3%	31.5%	46.6%	100.0%
		Other	Count	0	5	4	16	25
			% within Ethnicity	0.0%	20.0%	16.0%	64.0%	100.0%
	Total		Count	10	21	51	107	189
			% within Ethnicity	5.3%	11.1%	27.0%	56.6%	100.0%
HPA	Ethnicity	African-American	Count	4	7	4	2	17
			% within Ethnicity	23.5%	41.2%	23.5%	11.8%	100.0%
		Asian/Pacific Island	Count	2	5	3	7	17
			% within Ethnicity	11.8%	29.4%	17.6%	41.2%	100.0%
		Caucasian	Count	11	12	15	13	51
			% within Ethnicity	21.6%	23.5%	29.4%	25.5%	100.0%
		Hispanic	Count	23	17	22	26	88
			% within Ethnicity	26.1%	19.3%	25.0%	29.5%	100.0%
		Other	Count	1	2	2	9	14
			% within Ethnicity	7.1%	14.3%	14.3%	64.3%	100.0%
	Total		Count	41	43	46	57	187
			% within Ethnicity	21.9%	23.0%	24.6%	30.5%	100.0%
KHW	Ethnicity	African-American	Count	4	7	17	28	56
			% within Ethnicity	7.1%	12.5%	30.4%	50.0%	100.0%
		Asian/Pacific Island	Count	3	8	12	20	43
			% within Ethnicity	7.0%	18.6%	27.9%	46.5%	100.0%
		Caucasian	Count	6	17	49	101	173
			% within Ethnicity	3.5%	9.8%	28.3%	58.4%	100.0%
		Hispanic	Count	40	57	127	169	393
			% within Ethnicity	10.2%	14.5%	32.3%	43.0%	100.0%
		Other	Count	4	4	18	37	63
			% within Ethnicity	6.3%	6.3%	28.6%	58.7%	100.0%
	Total		Count	57	93	223	355	728
			% within Ethnicity	7.8%	12.8%	30.6%	48.8%	100.0%
MS	Ethnicity	African-American	Count	0	0	0	1	1

		American	% within Ethnicity	0.0%	0.0%	0.0%	100.0%	100.0%
		Asian/Pacific Island	Count	2	1	3	12	18
			% within Ethnicity	11.1%	5.6%	16.7%	66.7%	100.0%
		Caucasian	Count	1	0	3	16	20
			% within Ethnicity	5.0%	0.0%	15.0%	80.0%	100.0%
		Hispanic	Count	3	1	4	17	25
			% within Ethnicity	12.0%	4.0%	16.0%	68.0%	100.0%
		Other	Count	0	0	0	5	5
			% within Ethnicity	0.0%	0.0%	0.0%	100.0%	100.0%
	Total		Count	6	2	10	51	69
			% within Ethnicity	8.7%	2.9%	14.5%	73.9%	100.0%
SBS	Ethnicity	African-American	Count	2	1	13	10	26
			% within Ethnicity	7.7%	3.8%	50.0%	38.5%	100.0%
		Asian/Pacific Island	Count	1	0	21	31	53
			% within Ethnicity	1.9%	0.0%	39.6%	58.5%	100.0%
		Caucasian	Count	5	11	56	71	143
			% within Ethnicity	3.5%	7.7%	39.2%	49.7%	100.0%
		Hispanic	Count	22	39	95	154	310
			% within Ethnicity	7.1%	12.6%	30.6%	49.7%	100.0%
		Other	Count	1	2	11	23	37
			% within Ethnicity	2.7%	5.4%	29.7%	62.2%	100.0%
	Total		Count	31	53	196	289	569
			% within Ethnicity	5.4%	9.3%	34.4%	50.8%	100.0%
Total	Ethnicity	African-American	Count	15	30	60	73	178
			% within Ethnicity	8.4%	16.9%	33.7%	41.0%	100.0%
		Asian/Pacific Island	Count	15	28	60	118	221
			% within Ethnicity	6.8%	12.7%	27.1%	53.4%	100.0%
		Caucasian	Count	40	59	204	354	657
			% within Ethnicity	6.1%	9.0%	31.1%	53.9%	100.0%
		Hispanic	Count	120	166	395	547	1228
			% within Ethnicity	9.8%	13.5%	32.2%	44.5%	100.0%
		Other	Count	9	19	46	119	193
			% within Ethnicity	4.7%	9.8%	23.8%	61.7%	100.0%
	Total		Count	199	302	765	1211	2477
			% within Ethnicity	8.0%	12.2%	30.9%	48.9%	100.0%