# NUR 4827 Assessment Report – Fall 2015

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### **1** INTRODUCTION

NUR 4827 *Leadership Theory* is an upper level baccalaureate class covering concepts, theory, and principles of leadership and management in the health care delivery system. Outcomes for the course include describing leadership theory, application of leadership principles, compare/contrast theories and strategies, assessment of leadership skills, and analysis of effective nurse managers/leaders. Students learn about interpersonal skills related to effective leadership in nursing and management/leadership roles in various health care systems.

The assessment targeted for study is the Scholarly Paper. This assessment incorporates integrated theory, research ethics, and demonstration of the role of a nurse manager, all areas outlined as potential Student Learning Outcomes for assessment (note that this is different than learning outcomes on a course syllabus). This assessment plan is designed to evaluate the course and inform faculty upon establishing Student Learning Objectives (SLOs) for future assessment plans. Additional department goals for assessment include comparing results by site, enrollment type (dual enrollment vs. traditional) and modality (online vs. traditional), where possible. These correlative measures will serve as support for instructive improvement (Cole et al., 2011; Elder and Paul, 2007).

For additional detail or further analysis not provided in this report, please contact Dr. Joseph F. van Gaalen, Director of Academic Assessment, Academic Affairs (<u>jfvangaalen@fsw.edu</u>; x16965).

# 2 LEARNING OBJECTIVES & DESCRIPTIVE STATISTICS

### 2.1 LEARNING OBJECTIVES

The Scholarly Paper is scored using a rubric with five dimensions: Addresses Assigned Topic, Evidence of Critical Thinking, Resources, Organization, and APA Format. Each dimension is scored on a scale of 1 to 4. Using this common rubric criterion as an assessment method across all course sections, the Nursing department intends to establish benchmarks to be used in measuring achievement of newly defined Student Learning Outcomes.

During the fall 2015 semester, 52 total artifacts were recorded from the enrollment of 52 for NUR 4827. The mean overall score for the artifacts is 16.3/20, or 81.5% (Table 1). The Resources rubric dimension exhibits the highest mean score (3.9) with 100% of artifacts scored 3 or higher (Figure 1). The APA Format dimension exhibits the lowest (2.9) with only 68% of artifacts scored 3 or higher. In three of five dimensions (Addresses Assigned Topic, Evidence of Critical Thinking, and Resources) achievement at 3 or greater exceeds 95%. All artifacts exceed achievement at 2 or greater in all rubric dimensions. Baseline benchmarks for achievement at 2 or greater and 3 or greater or shown in Table 1. Going forward, goals can be set based on these baseline data.

	Addresses Assigned Topic	Evidence of Critical Thinking	Resources	Organization	APA Format	Overall
mean	3.7	3.7	3.9	3.5	2.9	16.3
standard deviation	0.54	0.56	0.30	0.73	0.71	3.20
<b>Rubric Dimension</b>	%	%	%	%	%	
4	77	73	90	60	19	[
3	19	23	10	27	49	
2	4	5	0	13	32	
1	0	0	0	0	0	
Benchmark Achievement	%	%	%	%	%	
3 or greater	96	95	100	87	68	
2 or greater	100	100	100	100	100	

Table 1. Basic descriptive statistics of fall 2015 NUR 4827 artifacts. Rubric dimensions are also shown with distribution of artifacts by rubric achievement level and by percentage scoring at benchmark levels (2 or greater & 3 or greater).

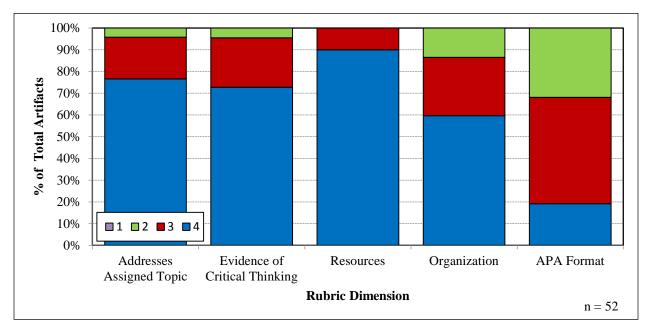


Figure 1. NUR 4827 distribution of rubric scores by dimension.

#### 2.2 DESCRIPTIVE STATISTICS

A histogram of artifact scores for all 52 artifacts is shown in Figure 2. Slightly more than 38% of artifacts are scored at either 19/20 or 20/20. The distribution of the scores is bimodal (two distinct peaks) centered on 19/20 and 15/20. This bimodality is a result of one course section scoring somewhat lower than the other two, with a mean score of 14.9/20 compared with 16.9/20 and 17.5/20. These differences provide a foundation for open discussion on the arrangement and interpretation of the rubric.

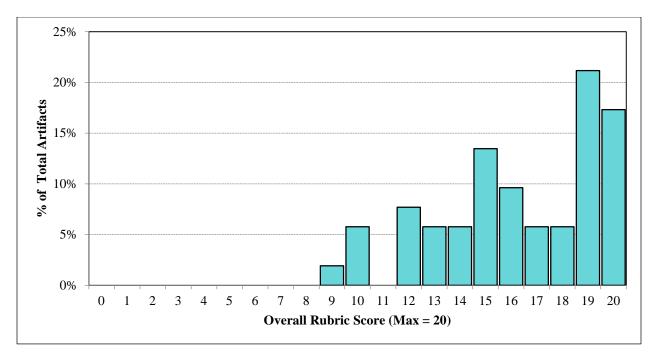


Figure 2. Overall score distribution for NUR 4827 artifacts for fall 2015.

### **3** EXPLORATORY ANALYSIS & SIGNIFICANCE TESTING

### 3.1 COMPARISON BY SITE, FORMAT, OR STUDENT TYPE

#### 3.1.1 Dual Enrollment to non-Dual Enrollment Comparison

No dual enrollment sections of NUR 4827 are offered nor do any dual enrollment students register for the course, so no comparison studies were completed.

#### 3.1.2 Online to Traditional Comparison

Each course section is administered online so no comparison studies were completed.

#### 3.1.3 Comparison by Campus/Site

All sections of the course are offered on one campus (Thomas Edison / Lee) so no comparison by site is made.

#### 3.2 DATA DISTRIBUTION & LONGITUDINAL STUDY

#### 3.2.1 Data Distribution

Results from Section 2 briefly described the distribution in scores among rubric dimension. Varied distributions can contribute to achievement gaps between dimensions at 2 or greater compared with 3 or greater. To describe the behavior of the rubric scores based on overall achievement a color map, or binary raster image, was created by calculating the mean scores for each rubric dimension as a function of combined (overall) score (Figure 3). The color represents the mean rubric score achieved at the overall score as shown in the x-axis. For example, A dark red box at overall score of 17 for Addresses

Assigned Topic means that the average rubric score for artifacts which scored 17/20 was 4/4. Similarly, a light blue box at overall score of 13 for that same rubric dimension means that the average rubric score for artifacts which scored 13/20 was a 2.2/4.

A review of the colormap in Figure 3 shows that APA format, as evidenced by data shown in Section 2, lags substantially behind other dimensions. Of all artifacts scoring 19/20, the single achievement level missing was APA Format in all cases. At lower overall scores the Resources dimension remains strong, with an average score never below 3.5/4, even when overall scores are below 13/20.

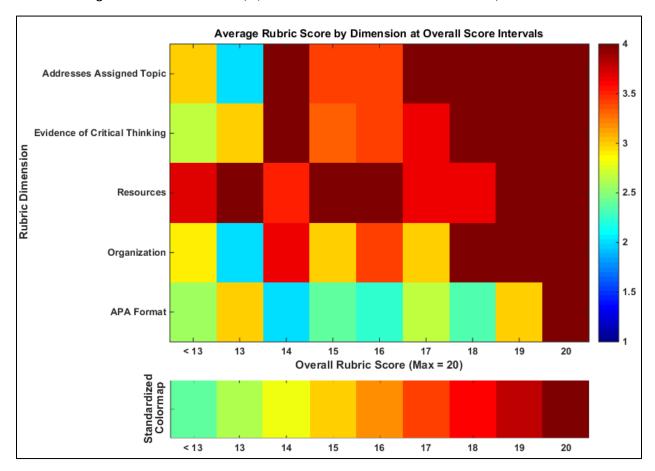


Figure 3. (Top) Colormap of mean scores for each rubric dimension based on overall rubric score for NUR 4827. (Bottom) Comparison rubric dimension if section score percentage is the same as overall (i.e. artifact score is equally distributed across all dimensions). A rubric dimension with hotter colors (reds/yellows) compared with the bottom standardized colormap means that section achievement exceeds the overall score and is an area of strength. A dimension with colder colors (blues/greens) means that section achievement is lower than the overall score and is therefore an area of weakness.

#### 3.2.2 Longitudinal Study

As further data is collected in coming terms, this section will track achievement through time and highlight strengths, weaknesses and any long term trends.

# 4 CONCLUSIONS

The objective of fall 2015 assessment for the FSW Nursing Department was to assess the NUR 4827 *Leadership Theory* course in an effort to evaluate the course and inform faculty upon establishing Student Learning Objectives (SLOs) for future assessment plans as well as provide baseline measurements to establish benchmarking measures for the course.

A drilldown of NUR 4827 results are as follows:

- 1. All five rubric dimensions have 100% achievement at level 2 or higher.
- 2. In three of five dimensions (Addresses Assigned Topic, Evidence of Critical Thinking, and Resources) achievement at 3 or greater exceeds 95%. The APA Format dimension exhibits the lowest (2.9) with only 68% of artifacts scored 3 or higher.
- 3. In a study of score distribution, the artifacts exhibit two distinct peaks centered on 19/20 and 15/20, a result of one course section scoring somewhat lower than the other two.
- 4. No dual enrollment sections of NUR 4827 are offered nor do any dual enrollment students register for the course so no comparison studies were completed.
- 5. Each course section is administered online so no comparison studies were completed.
- 6. All sections of the course are offered on one campus (Thomas Edison / Lee) so no comparison by site is made.
- 7. In a comparison of rubric scores based on overall score, the APA Format rubric dimension lags substantially behind other dimensions. Of all artifacts scoring 19/20, the single achievement level missing was APA Format in all cases. Of those artifacts scoring 13/20 or lower, the Resources dimension remains strong, with an average score of 3.5/4.

### **5 REFERENCES**

- Cole, R., Haimson, J., Perez-Johnson, I., and May, H. 2011. Variability in Pretest-Posttest Correlation Coefficients by Student Achievement Level. NCEE Reference Report 2011-4033. Washington, DC: National Center for Education Evaluation and Regional Assistance, U.S. Department of Education.
- Elder, L, and Paul, R. 2007. Consequential Validity: Using Assessment to Drive Instruction. In: Foundation For Critical Thinking. Retrieved from <u>http://www.criticalthinking.org/pages/consequential-validity-using-assessment-to-drive-instruction/790</u>.