NUR 4827 Assessment Report – Spring 2016

Author: Joseph F. van Gaalen, Ph.D., Director, Academic Assessment

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 (jfvangaalen@fsw.edu; 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 is establishing benchmarks to be used in measuring achievement of newly defined Student Learning Outcomes moving forward.

During the spring 2016 semester, 28 total artifacts were recorded from the enrollment of 28 for NUR 4827. The mean overall score for the artifacts is 16.0/20, or 80% (Table 1). It should be noted, however, that many artifacts did not include clearly marked scores (i.e. scores not consistent with rubric scoring were used). These scenarios occurred at some point across all five dimensions (21 of 28 cases). As a result, the overall score statistics are based on just seven of 28 artifacts. The Resources rubric dimension exhibits the highest mean score (3.8) with 100% of artifacts scored 3 or higher (Figure 1). The APA Format dimension exhibits the lowest (2.3) with only 28% of artifacts scored 3 or higher. In four of five dimensions achievement at 3 or greater is 100%. All artifacts exceed achievement at 2 or greater in all rubric dimensions. Baseline benchmarks for achievement at 2 or greater and 3 or greater are shown in Table 1.

	Addresses Assigned Topic	Evidence of Critical Thinking	Resources	Organization	APA Format	Overall
mean	3.8	3.5	3.8	3.5	2.3	16.0
standard deviation	0.44	0.52	0.40	0.51	0.56	1.83
Rubric Dimension	**%**	**%**	**%**	**%**	**%**	
4	76%	50%	81%	55%	4%	
3	24%	50%	19%	45%	24%	
2	0%	0%	0%	0%	72%	
1	0%	0%	0%	0%	0%	
Benchmark Achievement	**%**	**%**	**%**	**%**	**%**	
3 or greater	100%	100%	100%	100%	28%	
2 or greater	100%	100%	100%	100%	100%	

Table 1. Basic descriptive statistics of spring 2016 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).
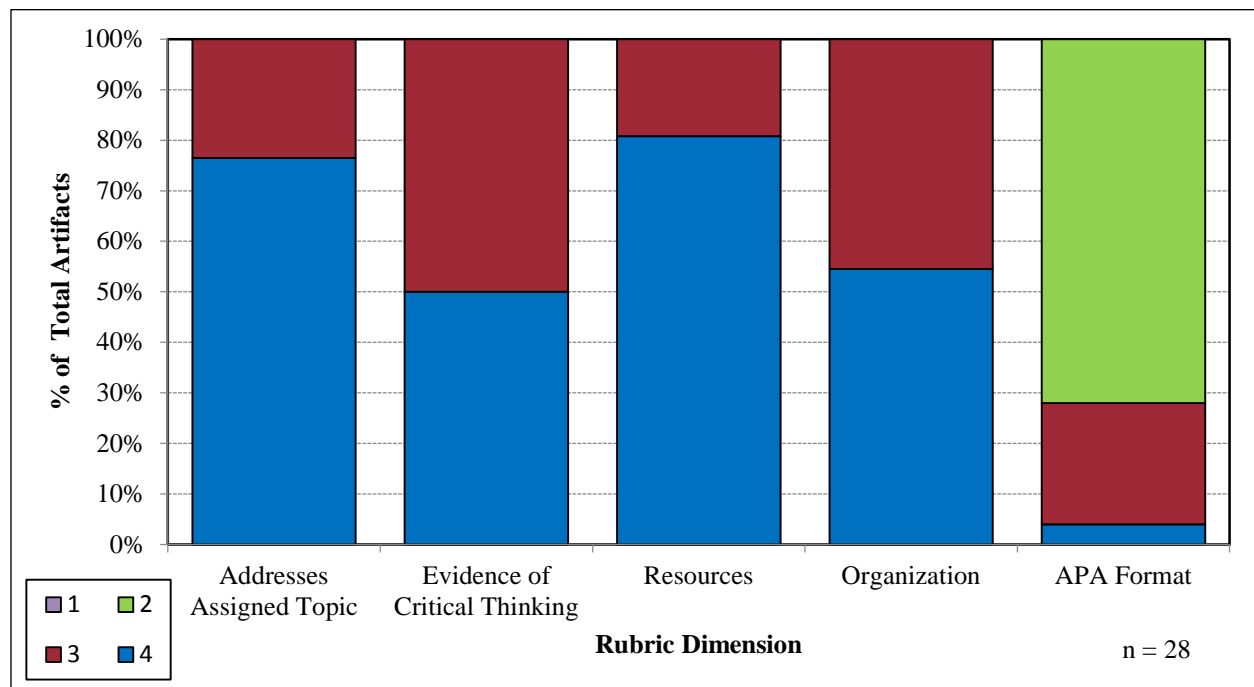

Figure 1. NUR 4827 distribution of rubric scores by dimension.

2.2 DESCRIPTIVE STATISTICS

A histogram of artifact scores for the 7 fully scored artifacts of the 28 total collected artifacts is shown in Figure 2. It is difficult to make any interpretation from the paucity of samples (de Winter, 2013; Kenny, 1987). All seven fully scored artifacts reached a score of 14/20 or higher. It is unclear how the remaining 21 artifacts fair, however, achievement across rubric dimensions (Section 2.1) suggests the distribution for the full suite of data would not be altered too greatly from that shown in the figure.
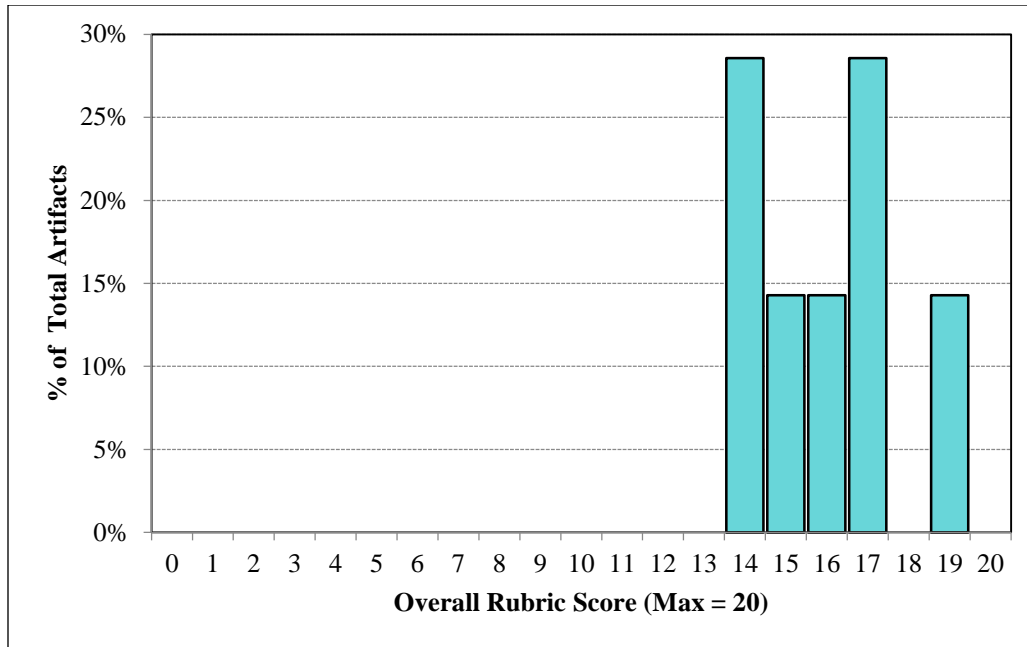
Figure 2. Overall score distribution for NUR 4827 artifacts for spring 2016.

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 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 vis FSW Online) 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 typically a color map, or binary raster image, can be created by calculating the mean scores for each rubric dimension as a function of combined (overall) score. However, since only seven data points exist which provide all five rubric dimensions scored (and therefore an overall score), no colormap can be generated.

3.2.2 Longitudinal Study

Description of achievement over time in NUR 4827 for spring 2016 is provided in a comparison with fall 2015 data (Table 2). A graphic comparison of mean scores through time is shown in Figure 3. The overall mean score (as percentage) exhibits a steady, if slight, decline over time. It is too early in the data capturing to determine if any trends exist, although the 0.6/4 drop in APA Format from fall 2015 to spring 2016 may be of some interpretive significance, if only for the substantial difference from one term to the next when compared with the other, more fixed dimensions.

Mean score	Addresses Assigned Topic	Evidence of Critical Thinking	Resources	Organization	APA Format	Overall
Fall 2015 (n=52)	3.7	3.7	3.9	3.5	2.9	16.3
Spring 2016 (n=28)	3.8	3.5	3.8	3.5	2.3	16.0
Achievement (3 or greater)	**%**	**%**	**%**	**%**	**%**	
Fall 2015 (n=52)	96%	95%	100%	87%	68%	
Spring 2016 (n=28)	100%	100%	100%	100%	28%	

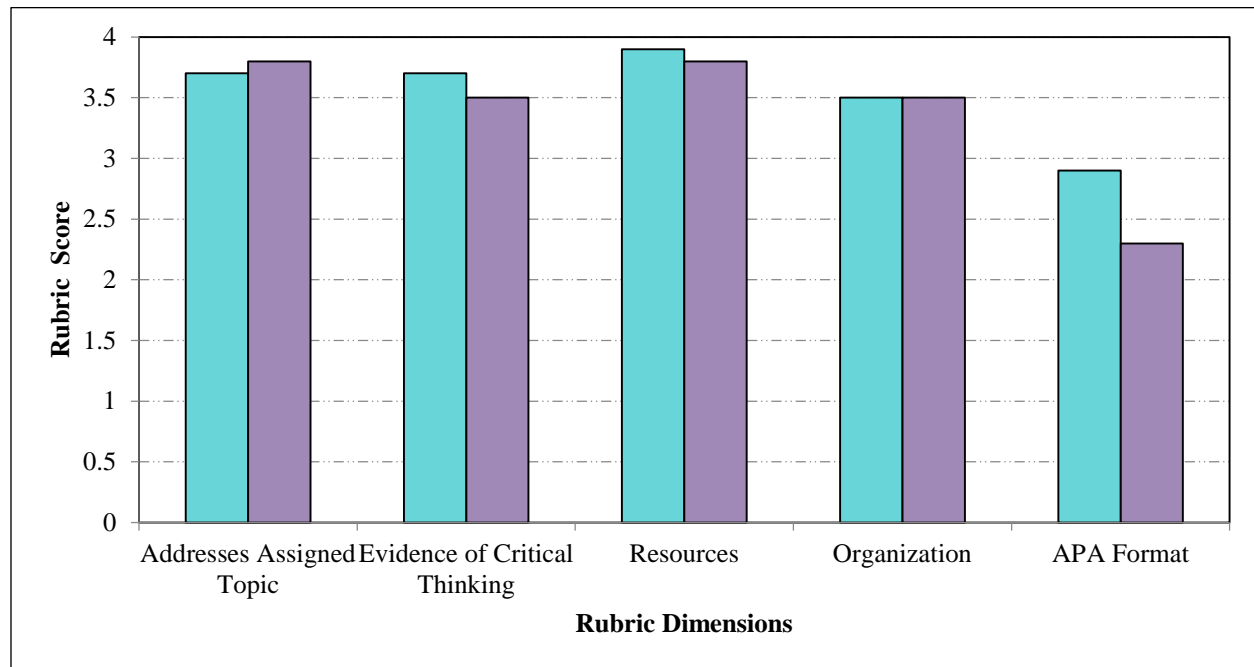Table 2. Comparison of mean scores and achievement at 3 or greater on the rubric dimension over time for NUR 4827.

Figure 3. Comparison of mean scores by rubric dimension over time for NUR 4827. Fall 2015 (teal), Spring 2016 (purple).

4 CONCLUSIONS

The objective of spring 2016 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 four of five dimensions (Addresses Assigned Topic, Evidence of Critical Thinking, Resources, and Organization) achievement at 3 or greater was 100%. The APA Format dimension exhibits the lowest mean score (2.3) with only 28% of artifacts scored 3 or higher.
3. In a study of score distribution, many artifacts did not include clearly marked scores (i.e. scores not consistent with rubric scoring were used). These scenarios occurred at some point across all five dimensions for 21 of 28 cases. As a result, the overall score statistics are based on just seven of 28 artifacts. All seven fully scored artifacts reached a score of 14/20 or higher.
4. No dual enrollment sections of NUR 4827 are offered 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 by way of FSW Online) so no comparison by site is made.
7. In a longitudinal study, the overall mean score (as percentage) exhibits a steady, if slight, decline over time and there exists a 0.6/4 drop in mean rubric score in APA Format from the fall 2015 to spring 2016 terms.

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.

de Winter, J.C.F. 2013. Using the Student's T-Test with Extremely Small Sample Sizes. Practical Assessment, Research, and Evaluation, 18(10), 1-12.

Elder, L, and Paul, R. 2007. Consequential Validity: Using Assessment to Drive Instruction. In: Foundation For Critical Thinking. Retrieved from http://www.criticalthinking.org/pages/consequential-validity-using-assessment-to-drive-instruction/790.

Kenny, D. 1987. The two group design. In: Statistics for the Social and Behavioral Sciences. Little Brown, Boston, MA: 1987: 203-223.