Introduction to Computer Forensics Assessment Report

Fall 2016

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1 INTRODUCTION

Florida SouthWestern State College's Business Department gathers a multitude of data from various courses as assessment tools in support of the Florida Department of Education Curriculum Framework. These course included in assessment is CGS 2135 *Introduction to Computer Forensics*. The assessment outcomes are intended to provide a baseline and measurement of achievement moving forward as well as investigate the strength and performance of items in the exam. The assessment plan also provides comparisons between dual Enrollment and non-dual enrollment students, online versus traditional students, and by site, where possible. Where data is sufficient, additional analyses are provided including distribution studies and longitudinal studies.

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 CGS 2135

2.1 LEARNING OBJECTIVES AND DESCRIPTIVE STATISTICS

The FSW Business faculty defined one areas of interest for evaluation in support of the state framework. The SLO and the measure of success related to CGS 2135 is:

- SLO 1 – Students will be assessed using common course lab exercises and exams. (Note that no achievement goal or outcome has been specified.)

During the fall 2016 semester, 28 individual lab scores, three midterm examination scores, and two final examination scores were tallied from 1 of 1 sections of CGS 2135. Mean scores for assignments described in the SLO are shown in Table 1. Descriptive statistics for each assignment is described in Table 2. An histogram of all assignments described in the SLO is shown in Figure 1.

Measure	*Overall Mean Score*	*Measure*	*Overall Mean Score*
Module 1 Lab	**86.7**	***Midterm***	**83.0**
Module 2 Lab	**80.0**	***Final***	**65.5**
Module 3 Lab	**86.7**		
Module 4 Lab	**733**		
Module 5 Lab	**100.0**		
Module 6 Lab	**100.0**		
Module 7 Lab	**100.0**		
Module 8 Lab	**100.0**		
Module 9 Lab	**100.0**		
Module 10 Lab	**100.0**		
Module 11 Lab	**100.0**		
Module 12 Lab	**100.0**		
Module 13 Lab	**100.0**		
Module 14 Lab	**100.0**		
Module 15 Lab	**100.0**		

Table 1. Student achievement level by SLO for CGS 2135. The examinations have a maximum of 100 points.

	Sum of all labs	*Midterm*	*Final*
Maximum score	*100*	*100*	*100*
n	28	3	2
Max	~	91	77
Min	~	72	54
Median	~	86	65.5
Mode	~	~	~
Mean	92.1	83.0	65.5
Standard deviation	15.72	9.85	16.26
Skewness	-1.61	-1.24	~
Kurtosis	0.76	~	~

Table 2. Descriptive statistics for CGS 2135 common course assessments.

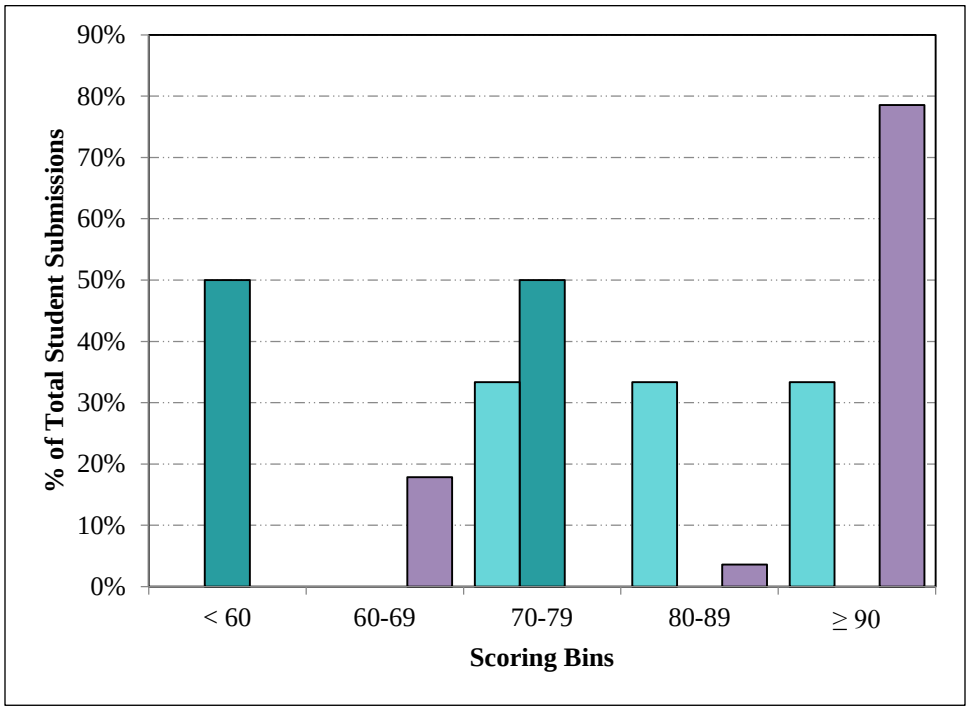

Figure 1. Score distribution for midterm exam (light aqua), final exam (dark aqua), and sum of all lab exercise (purple).

2.2 Exploratory Analysis and Significance Testing

Multiple comparisons of artifact scores across varying formats, campuses, and student types were made, where possible, in order to add depth to the causes of the distribution of the artifacts. Each course was divided into the appropriate subgroups to perform the analysis. In cases where a subgroup is not represented in the course comparisons were not conducted and are noted for comprehensiveness.

2.2.1 Dual Enrollment to Non-Dual Enrollment Comparison

No dual enrollment sections of the course were run during fall 2016 so no comparison study between dual enrollment and non-dual enrollment could be completed.

2.2.2 Online to Traditional Comparison

Only one section of the course was offered during fall 2016 so no comparison study between online and traditional could be completed.

2.2.3 Comparison by Campus/Site

Only one section of the course was offered during fall 2016 so no cross-campus comparison study could be completed.

2.3 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.

3 CONCLUSIONS

FSW's Business Department has employed common finals across multiple courses and in this report focused on CGS 2135 *Introduction to Computer Forensics*. The results are intended to provide a baseline achievement moving forward.

3.1 CGS 2135

A drill-down of CGS 2135 results are as follows:

1. In a study of outcome, "Students will be assessed using common course lab exercises and exams. (Note that no achievement goal or outcome has been specified.)", the results exhibit 82% of artifacts for the lab exercises final exam achieve a score of 80% or higher. The mean score for all lab exercises is 92.1/100. The results of the midterm exhibit 67% (2 of 3) of artifacts achieve a score of 80% or higher. For the final exam that achievement is 0% (0 of 2). Note that only three midterm and two final exam artifacts were recorded.
2. No dual enrollment sections of the course were run during fall 2016 so no comparison study between dual enrollment and non-dual enrollment could be completed.
3. No comparison study between online and traditional courses could be completed because only one section of the course was offered during fall 2016.
4. No cross-campus comparison study could be completed because only one section of the course was offered during fall 2016.