

Management Principles Assessment Report

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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. The course included in assessment is MAN 2021 *Management Principles*. 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.

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2 MAN 2021

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 MAN 2021 is:

- SLO 1 – The measure of this assessment is Discussion 4 where the benchmark of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year.
- SLO 2 – The measure of this assessment is Discussion 8 where the benchmark of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year.
- SLO 3 – The measure of this assessment is Module 5 Writing Assignment where the benchmark of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year.
- SLO 4 – The measure of this assessment is Module 14 Writing Assignment where the benchmark of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year.

During the spring 2017 semester, a range of 86 to 179 artifacts were recorded in the four assessments from 9 of 9 sections of MAN 2021. In a number of courses either the particular assessment was not assigned or a different rubric was used to score. Mean scores for assignments described in the SLO are shown in Table 1. Descriptive statistics for each assignment is described in Table 2. A histogram of all assignments described in the SLO is shown in Figure 1. The SLO 1 goal that 70% of students will

illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year was met. The SLO 2 goal that 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year was met. The SLO 3 goal 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year was met. The SLO 4 goal that 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year was met.

<i>Measure</i>	<i>Overall Mean Score</i>
<i>Module 4 Discussion</i>	92.8
<i>Module 8 Discussion</i>	92.9
<i>Module 5 Writing Assignment</i>	81.0
<i>Module 14 Writing Assignment</i>	85.4

Table 1. Student achievement level by SLO for MAN 2021. The assessments have a maximum of 100 points.

	<i>Module 4 Discussion</i>	<i>Module 8 Discussion</i>	<i>Module 5 Writing Assignment</i>	<i>Module 14 Writing Assignment</i>
<i>Maximum score</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
n	137	87	179	86
Max	100	100	100	100
Min	52	52	40	44
Median	100	100	91	89
Mode	100	100	100	100
Mean	92.8	92.9	81.0	85.4
Standard deviation	10.05	10.70	20.32	13.08
Skewness	-1.54	-1.77	-0.76	-0.68
Kurtosis	2.12	3.28	-1.05	-0.06

Table 2. Descriptive statistics for MAN 2021 common course assessments.

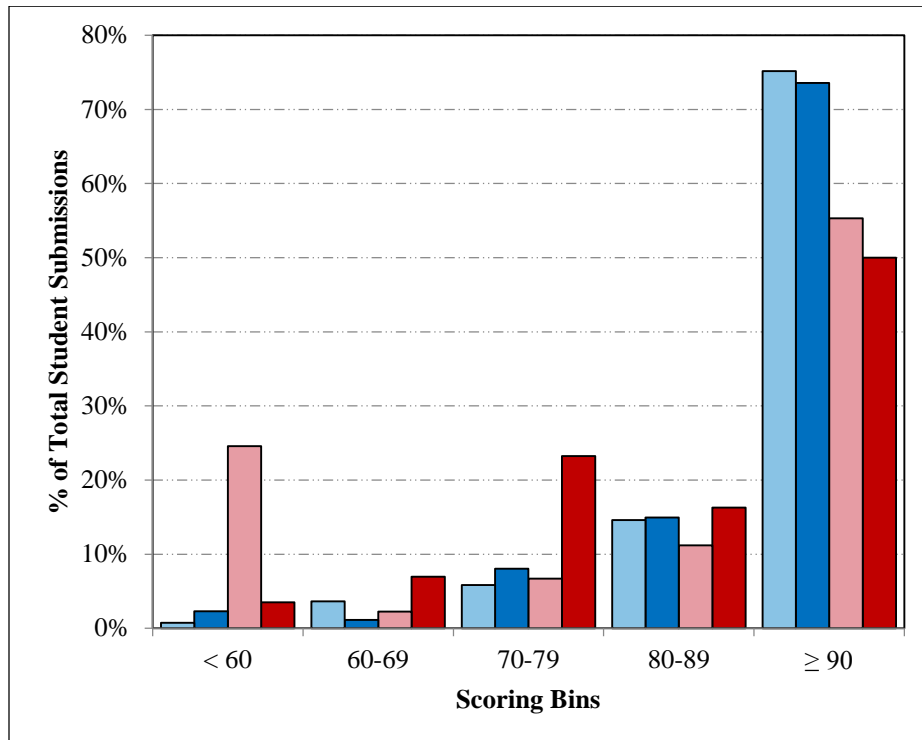


Figure 1. Score distribution for Module 4 Discussion (light blue), Module 8 Discussion (dark blue), Module 5 Writing Assignment (light red), and Module 14 Writing Assignment (dark red).

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 spring 2017 so no comparison study between dual enrollment and non-dual enrollment could be completed.

2.2.2 Online to Traditional Comparison

During the spring 2017 semester, a range of 46 to 102 total online scores were tallied from MAN 2021 and a range of 40 to 77 traditional artifacts were tallied from MAN 2021. A comparison of basic statistics is provided in Table 3. Online artifacts mean scores are lower in three of four assessments but in all cases the percent scoring 70% or greater was higher for traditional artifacts (Figure 2). Differences in the means were tested for significance using a Welch's t-test according to standard methods (Davis, 1973; McDonald, 2009; Wilkinson, 1999). Of the 4 assessments, two were found to be statistically significantly different (Module 4 Discussion & Module 5 Writing). Therefore, we must reject the null hypothesis that the difference in the means of the online and traditional scores of these essays is equal to 0, and we can conclude this with a 95% confidence that the differences in scores are not solely due to chance.

Assessment Type	Module 4 Discussion	Module 8 Discussion	Module 5 Writing Assignment	Module 14 Writing Assignment
<i>Maximum score</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>100</i>
Traditional				
n	77	40	77	40
Mean	94.5	94.8	93.5	84.4
% above 70	99%	100%	100%	98%
Online				
n	60	47	102	46
Mean	90.6	91.4	71.5	86.2
% above 70	92%	94%	53%	83%

Table 3. Comparison of basic statistics for assessments of traditional sections and online sections. Statistically significant results denoted in bold/italics.

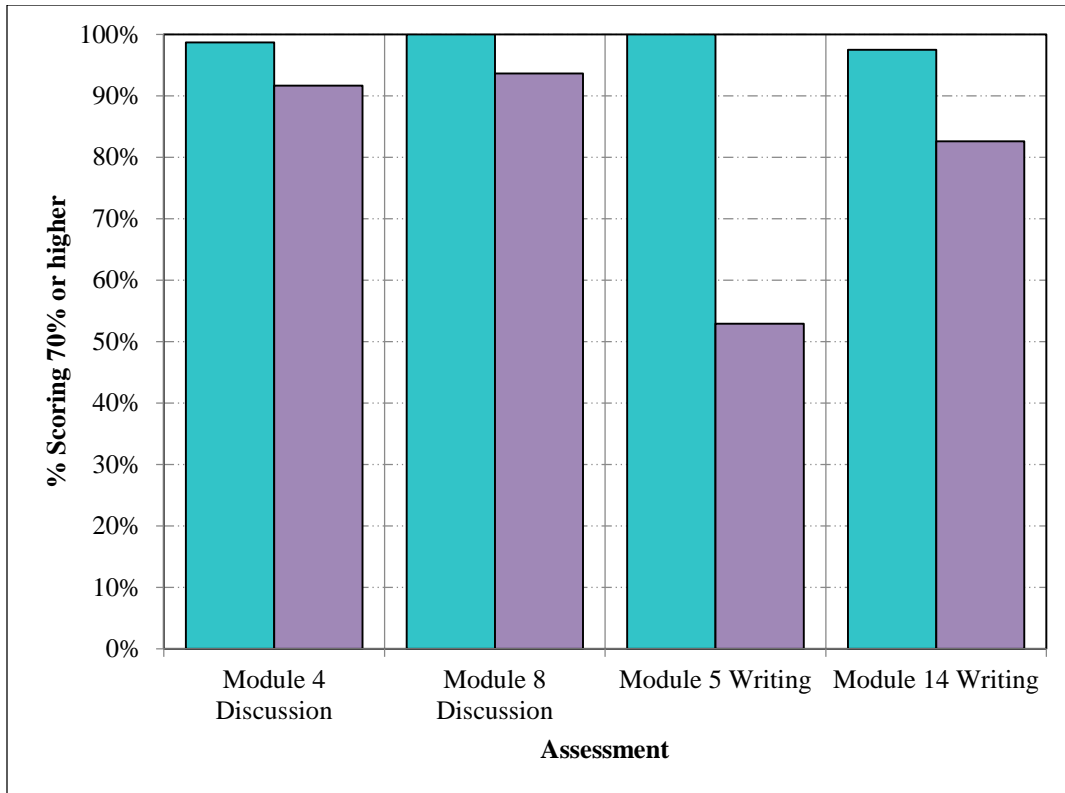


Figure 2. Comparison of percent of scores achieving 70% or higher by modality with Traditional (aqua) and Online (purple).

Effect size was calculated using a method devised by Rosenthal and Rosnow (1991) for meta-analytical purposes in potential comparisons with other institutions (Lipsey and Wilson, 1993). The statistically significant results exhibit range from what Cohen (1988) would consider small-to-large effect sizes. In other words, non-overlap score distribution from online artifacts to traditional artifacts is approximately 10% to 69%.

2.2.3 Comparison by Campus/Site

Of the artifacts collected from MAN 2021, 19 originated from Collier campus, a range of 0 to 15 originated from Charlotte campus, a range of 46 to 102 originated from FSW Online, and a range of 21 to 43 originated from the Thomas Edison (Lee) campus. A comparison of percent of artifacts scoring 70% or higher by site is shown in Figure 3. Of the onsite locations, Charlotte and/or Collier both exhibit the highest percentage achieving 70% or higher (both at 100%) in three of four assessments. The Thomas Edison campus exhibits the highest in the fourth (100%).

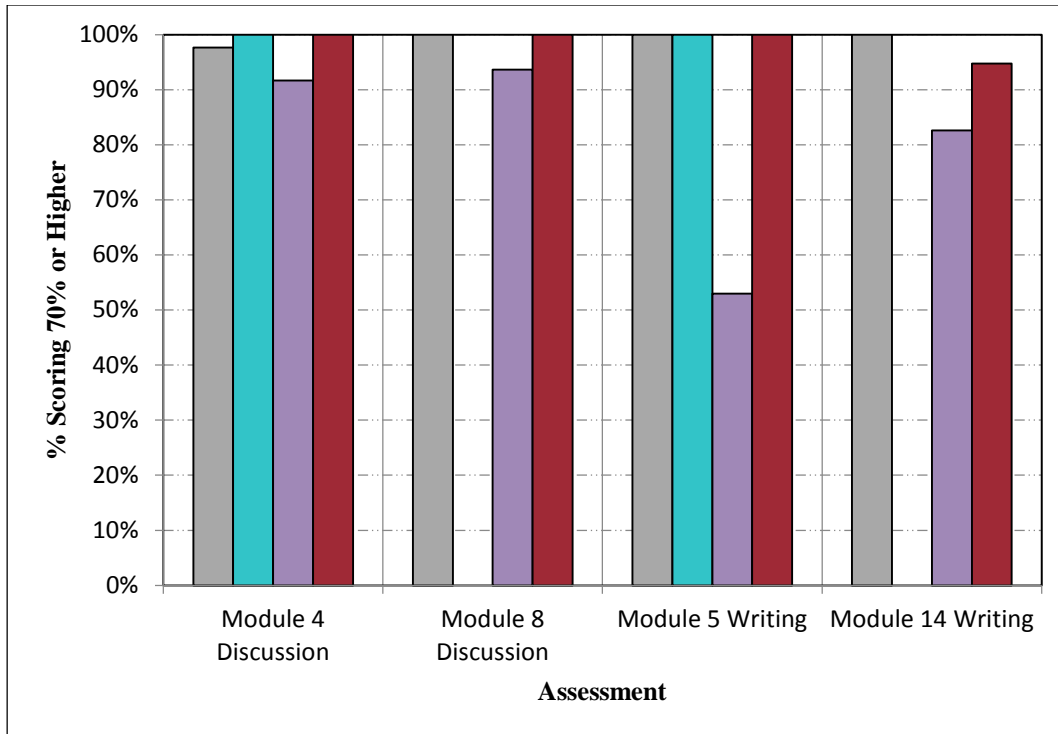


Figure 3. Comparison of percent scoring 70% or higher on assessments for Thomas Edison (gray), Charlotte (aqua), FSW Online (purple), and Collier (red).

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 MAN 2021 *Management Principles*. The results are intended to provide a baseline achievement moving forward.

3.1 MAN 2021

A drill-down of MAN 2021 results are as follows:

1. In a study of outcome, "The measure of this assessment is Discussion 4 where the benchmark of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year", the results exhibit 93% of artifacts for the discussion forum achieve a score of 70% or higher.
2. In a study of outcome, "The measure of this assessment is Discussion 8 where the benchmark of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year", the results exhibit 93% of artifacts for the discussion forum achieve a score of 70% or higher.

3. In a study of outcome, “The measure of this assessment is Module 5 Writing Assignment where the benchmark of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year”, the results exhibit 81% of artifacts for the discussion forum achieve a score of 70% or higher.
4. In a study of outcome, “The measure of this assessment is Module 14 Writing Assignment where the benchmark of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2016-2017 academic year”, the results exhibit 85% of artifacts for the discussion forum achieve a score of 70% or higher.
5. No dual enrollment sections of the course were run during spring 2017 so no comparison study between dual enrollment and non-dual enrollment could be completed.
6. In a comparison study between online and traditional courses, online artifacts mean scores are lower in three of four assessments but in all cases the percent scoring 70% or greater was higher for traditional artifacts. Differences in the means were tested for significance using a Welch’s t-test according to standard methods and were found to be significant in two of four cases (both writing assignments).
7. In a cross-campus comparison study, apart from FSW Online which has the highest scores, Charlotte and/or Collier both exhibit the highest percentage achieving 70% or higher (both at 100%) in three of four assessments. The Thomas Edison campus exhibits the highest in the fourth (100%).

4 REFERENCES

- Cohen, J. 1988. *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Earlbaum Associates, Hillsdale, NJ.
- Davis, J.C. 1973. *Statistics and Data Analysis in Geology*. John Wiley & Sons, New York, New York, 564 pp.
- Lipsey, M.W. and Wilson, D.B. 1993. The efficacy of psychological, educational, and behavioral treatment: Confirmation from meta-analysis. *American Psychologist*, 48, 1181-1209.
- McDonald, J.H. 2009. *Handbook of Biological Statistics* (2nd ed.). Sparky House Publishing, Baltimore, Maryland.
- Rosenthal, R. and Rosnow, R.L. 1991. *Essentials of behavioral research: Methods and data analysis* (2nd ed.). McGraw Hill, New York, NY.
- Wilkinson, L. 1999. APA Task Force on Statistical Inference. *Statistical Methods in Psychology Journals: Guidelines and Explanations*. *American Psychologist* 54 (8), 594–604.