# Corrections and Juvenile Delinquency 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 courses included in assessment are CJC 1000 Introduction to Corrections and CJJ 2002 Juvenile Delinquency. 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 (<a href="mailto:ifvangaalen@fsw.edu">ifvangaalen@fsw.edu</a>; x16965).

# 2 CJC 1000

#### 2.1 LEARNING OBJECTIVES AND DESCRIPTIVE STATISTICS

The FSW Business faculty defined one area of interest for evaluation in support of the state framework. The outcome and the measure of success related to CJC 1000 is:

➤ Outcome 1 – 80% of candidates will earn a grade of 80 or higher on the essay assignments associated with the program outcome "Apply knowledge of the field of corrections." during AY 2016-2017.

During the fall 2016 semester, 29 scores were tallied from 1 of 1 sections of CJC 1000. Descriptive statistics for achievement of outcomes are shown in Table 1. The distribution of scores is presented in Table 2 and Figure 1.

Module Essays	% Scoring 80% or Higher	Module Essays	% Scoring 80% or Higher
Module 1 Essay	93%	Module 8 Essay	83%
Module 2 Essay	100%	Module 9 Essay	86%
Module 3 Essay	93%	Module 10 Essay	83%
Module 4 Essay	90%	Module 11 Essay	76%
Module 5 Essay	97%	Module 12 Essay	83%
Module 6 Essay	90%	Module 13 Essay	90%
Module 7 Essay	86%	Module 14 Essay	90%

Table 1. Student achievement level by Essay for CJC 1000.

Essay #	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Maximum score	350	350	350	350	350	350	350	350	350	350	350	350	350	350
n	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Max	350	335	350	335	350	350	335	335	335	350	350	350	350	335
Min	0	280	0	0	0	0	0	0	0	0	0	0	0	0
Median	312.5	312.5	315	320	320	320	320	320	320	320	320	320	320	320
Mode	335	312.5	315	320	320	320	320	320	320	320	320	320	320	320
Mean	302.0	308.7	291.9	289.4	304.5	299.8	284.2	287.7	279.9	273.6	272.0	267.8	290.1	290.3
Standard deviation	62.46	16.39	82.67	100.60	61.66	85.04	99.87	83.99	101.11	113.02	112.86	124.73	100.92	100.57
Skewness	-4.29	-0.41	-3.32	-2.69	-4.57	-3.33	-2.60	-3.03	-2.45	-2.09	-2.06	-1.81	-2.68	-2.73
Kurtosis	20.92	-0.56	10.44	5.77	23.03	10.36	5.39	8.88	4.56	2.79	2.68	1.41	5.74	5.88

Table 2. Descriptive statistics for CJC 1000 module essays.

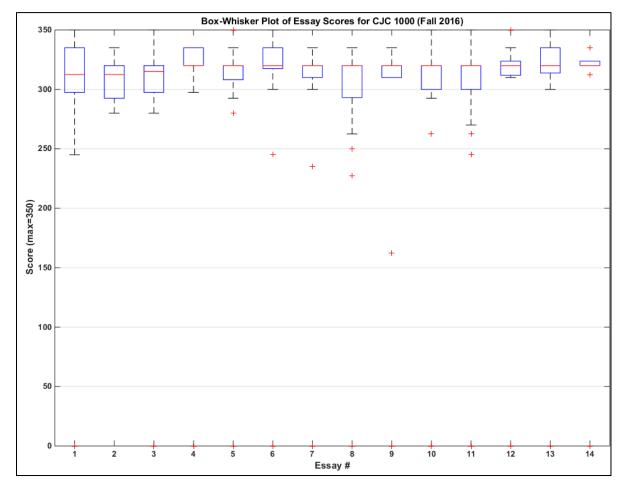


Figure 1. Box-Whisker plot of scores distributed by Essay # for CJC 1000. Red line depicts median score. Upper and lower box boundaries indicate 75% quartile and 25% quartile (box represents central 50% of the scores). Vertical lines represent remaining scores outside central 50% that are not outliers. Red '+'s denote outliers.

# 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 run during fall 2016 (an online section) so no comparison study between online and traditional sections could be completed.

## 2.2.3 Comparison by Campus/Site

Only one section of the course was run during fall 2016 (an online section) 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 CJJ 2002

# 3.1 LEARNING OBJECTIVES AND DESCRIPTIVE STATISTICS

The FSW Business faculty defined one area of interest for evaluation in support of the state framework. The outcome and the measure of success related to CJJ 2002 is:

➤ Outcome 1 – 80% of candidates will earn a grade of 80 or higher on the essay assignments associated with the program outcome "Interpret the causes of juvenile delinquency and their impact on society." during AY 2016-2017.

During the fall 2016 semester, 38 scores were tallied from 2 of 2 sections of CJJ 2002. Descriptive statistics for achievement of outcomes are shown in Table 3. The distribution of scores is presented in Table 4 and Figure 2.

Module Essays	% Scoring 80% or Higher	Module Essays	% Scoring 80% or Higher
Module 1 Essay	79%	Module 8 Essay	87%
Module 2 Essay	92%	Module 9 Essay	82%
Module 3 Essay	89%	Module 10 Essay	82%
Module 4 Essay	76%	Module 11 Essay	66%
Module 5 Essay	89%	Module 12 Essay	76%
Module 6 Essay	92%	Module 13 Essay	68%
Module 7 Essay	89%	Module 14 Essay	84%

Table 3. Student achievement level by Essay for CJJ 2002.

Essay #	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Maximum score	350	350	350	350	350	350	350	350	350	350	350	350	350	350
n	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Max	350	350	350	350	350	350	350	350	350	350	350	350	350	350
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Median	320	320	325	325	312.5	312.5	320	320	320	320	316	320	309	321
Mode	350	320	350	350	320	312.5	320	320	320	320	320	320	350	350
Mean	291.3	298.8	302.7	285.8	294.7	296.3	299.6	291.6	282.9	279.5	256.7	264.3	262.4	284.5
Standard deviation	93.94	90.01	92.15	105.91	75.52	77.73	92.07	88.64	115.37	116.08	117.53	129.31	118.73	113.96
Skewness	-2.51	-3.08	-2.98	-2.08	-3.35	-3.23	-2.92	-2.99	-2.03	-1.96	-1.64	-1.58	-1.71	-2.14
Kurtosis	5.67	8.34	7.87	3.19	11.60	10.49	7.49	7.94	2.55	2.23	1.19	0.70	1.39	2.96

Table 4. Descriptive statistics for CJJ 2002 module essays.

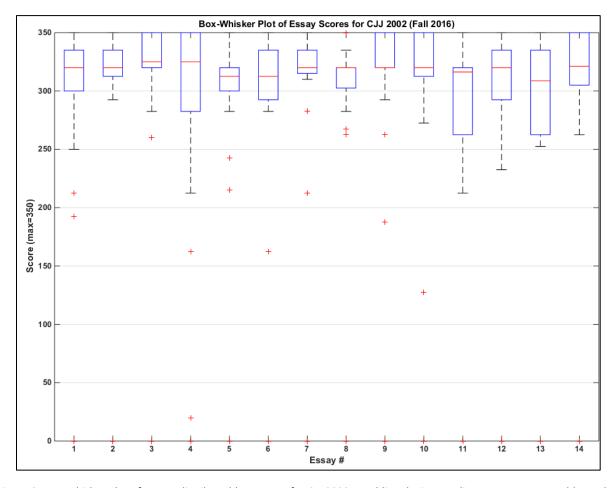


Figure 2. Box-Whisker plot of scores distributed by Essay # for CJJ 2002. Red line depicts median score. Upper and lower box boundaries indicate 75% quartile and 25% quartile (box represents central 50% of the scores). Vertical lines represent remaining scores outside central 50% that are not outliers. Red '+'s denote outliers.

# 3.2 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.

#### 3.2.1 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.

### 3.2.2 Online to Traditional Comparison

During the fall 2016 semester, 19 total online scores were tallied from CJJ 2002 and 18 traditional artifacts were tallied from CJJ 2002. A comparison of basic statistics is provided in Table 5. Online artifacts mean scores are higher for 4 of 14 essay assignments (see Figure 3). 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 14 assignments, two were found to be statistically significantly different (Essay #s 3 and 4). 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.

Essay #	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Maximum score	350	350	350	350	350	350	350	350	350	350	350	350	350	350
Traditional														
n	17	17	18	18	18	18	17	16	15	14	14	14	15	16
Mean	311.8	327.6	335.7	334.2	315.7	317.2	327.8	308.8	321.7	334.3	305.2	328.6	309.7	329.5
% above 80	82%	100%	100%	94%	100%	100%	100%	88%	87%	93%	79%	93%	73%	100%
Online														
n	17	17	18	18	18	18	17	16	15	14	14	14	15	16
Mean	320.4	321.3	321.2	285.0	306.5	308.2	322.9	323.2	329.2	312.6	304.6	320.1	313.2	325.7
% above 80	89%	100%	94%	71%	89%	94%	94%	100%	100%	95%	78%	94%	88%	94%

Table 5. Comparison of basic statistics for essays of traditional sections and online sections. Statistically significant results denoted in bold/italics.

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 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 12% to 47%.

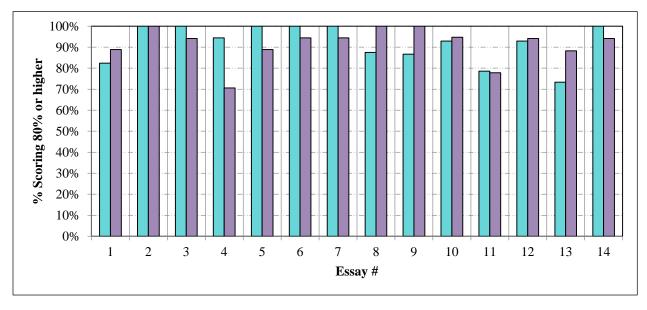


Figure 3. Comparison of percent of scores achieving 80% or higher by modality with Traditional (teal) and Online (purple).

#### 3.2.3 Comparison by Campus/Site

Since the only two sites in which courses were offered was Thomas Edison (Lee) and FSW Online, results of this comparison are exhibited in 3.2.2 (see above).

# 3.3 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.

# 4 Conclusions

FSW'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 courses included in assessment are CJC 1000 *Introduction to Corrections* and CJJ 2002 *Juvenile Delinquency*. 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.

#### 4.1 CJC 1000

A drill-down of CJC 1000 results are as follows:

- 1. In a study of outcome achievement, "80% of candidates will earn a grade of 80 or higher on the essay assignments associated with the program outcome "Apply knowledge of the field of corrections." during AY 2016-2017", 13 of 14 essays exhibit 80% or greater scoring 80%.
- 2. Only one section of the course was run during fall 2016 (an online section) so no comparison study between online and traditional sections could be completed.
- 3. Only one section of the course was run during fall 2016 (an online section) so no cross-campus comparison study could be completed.

## 4.2 CJJ 2002

A drill-down of CJJ 2002 results are as follows:

- In a study of outcome achievement, "80% of candidates will earn a grade of 80 or higher on the
  essay assignments associated with the program outcome "Interpret the causes of juvenile
  delinquency and their impact on society." during AY 2016-2017", 9 of 14 essays exhibit 80% or
  greater scoring 80%.
- 2. In a study comparing Online with Traditional course sections, Online artifacts mean scores are higher for 4 of 14 essay assignments. Of the 14 assignments, two were found to be statistically significantly different (Essay #s 3 and 4).
- 3. Since the only two sites in which courses were offered was Thomas Edison (Lee) and FSW Online, results of this comparison are exhibited in #2 above.

# 5 REFERENCES

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