Intro. to Entrepreneurship Assessment Report Spring 2020

Author: Joseph F. van Gaalen, Ph.D., Asst. VP, Institutional Research, Assessment & Effectiveness

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 in this report is ENT 1000 *Introduction to Entrepreneurship*. 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 (concurrent) 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, Asst. Vice President, Institutional Research, Assessment & Effectiveness, Academic Affairs (jfvangaalen@fsw.edu; x16965).

2 ENT 1000

2.1 LEARNING OUTCOMES, OBJECTIVES, AND DESCRIPTIVE STATISTICS

The FSW Business recently began assessing ENT 1000 in the Fall 2018 term using a tool which was modified for the Spring 2020 term. The outcome which is the focus of this study is that students will successfully pitch a proposal.

The objective for AY 2019-2020 is as follows:

- The measure of this assessment is the Elevator Pitch 3 assessment from the ENT 1000 Introduction to Entrepreneurship course, where the benchmark of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2019-2020 academic year.

Assessment tool (rubric for Elevator Pitch assignment)

- Existing Problem: What is the existing problem, and what value does the venture provide as a solution to the problem?
  - Exceptional (13 pts): Has a clear opening statement that catches audience's interest about the value the venture can provide to solve an existing problem.
  - Satisfactory (9 pts): Has opening statement relevant to topic and gives an outline of an existing problem and a basic value to solve the problem.
  - Unacceptable (0 pts): Has no opening statement or has an irrelevant statement; does not provide value to solve an existing problem
- Solution: The venture provides a solution to the problem.

- Exceptional (13 pts): Demonstrates substance and depth about how the venture will provide a solution to the problem.
- Satisfactory (9 pts): Covers topic; offers a basic method on how the venture will provide a solution to the problem.
- Unacceptable (0 pts): Does not give adequate coverage of topic; lacks information on how the venture will provide a solution to the problem.

❖ The Market: Purchasers of your product or service. Your market segment. Includes call to action.
- Exceptional (13 pts): Has natural delivery; modulates voice; is articulate; projects enthusiasm, interest, and confidence; uses body language effectively with a strong call to action.
- Satisfactory (9 pts): Has appropriate pace; has no distracting mannerisms; is easily understood; Includes a call to action.
- Unacceptable (0 pts): Is often hard to understand; has voice that is too soft or too loud; has a pace that is too quick or too slow; demonstrates one or more distracting mannerisms. Does not include a call to action.

❖ Delivery
- Exceptional (13 pts): Has natural delivery; modulates voice; is articulate; projects enthusiasm, interest, and confidence; uses body language effectively. Has excellent background.
- Satisfactory (9 pts): Has appropriate pace; has no distracting mannerisms; is easily understood.
- Unacceptable (0 pts): Is often hard to understand; has voice that is too soft or too loud; has a pace that is too quick or too slow; demonstrates one or more distracting mannerisms and/or distracting background.

During the Spring 2020 semester, 89 artifacts were collected from 4 of 4 sections of ENT 1000 although rubric scores for each rubric dimension were not collected for any artifacts because this information was not recorded in the Learning Management System (LMS). Descriptive statistics for achievement of outcomes are shown in Table 1. The goal that 70% of students will illustrate a proficiency of 70% or higher was met for the overall score. No data was available to measure the achievement for the rubric dimensions. A graphic representation of achievement is shown in Figure 1.

Rubric Dimensions & Outcomes	***n***	***Mean***	***% Meets Satisfactory***
Elevator Pitch Assignment	*89*	*94.8%*	*97%*
Existing Problem	~	~	~
Solution	~	~	~
The Market	~	~	~
Delivery	~	~	~

Table 1. Student achievement level by outcome for ENT 1000.

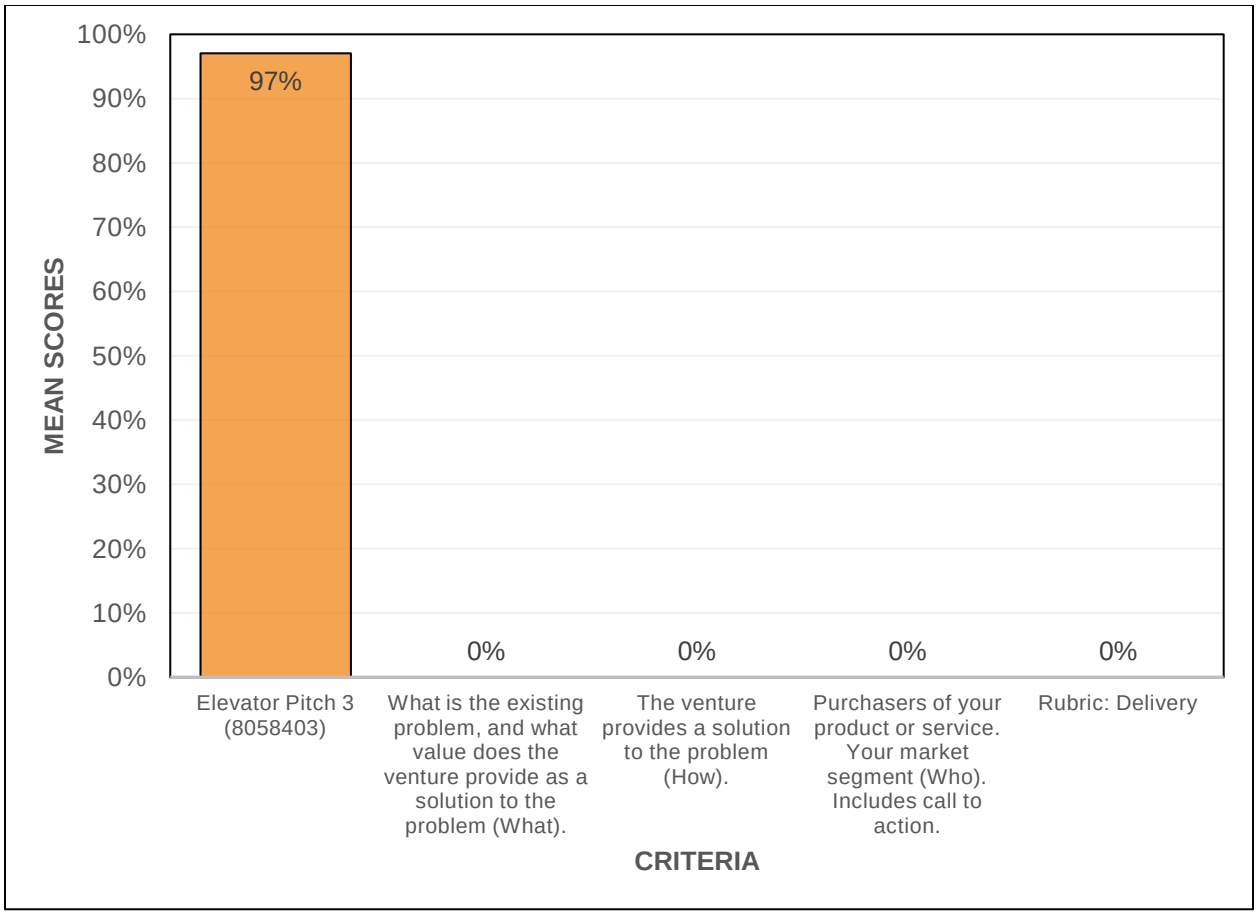

Figure 1. Bar graph of percentage of students meeting expectations of 70% or higher.

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 (Concurrent) to Non-Dual Enrollment Comparison

No dual enrollment (concurrent) sections of the course were run during spring 2020 so no comparison study between dual enrollment and non-dual enrollment could be completed.

2.2.2 Online to Traditional Comparison

During the Spring 2020 term, a total of 39 artifacts were collected from online sections and 29 artifacts were collected from traditional sections. The mean score and percentage meeting achievement are both higher for traditional artifacts. Differences in the means were tested for significance using a Welch's t-test according to standard methods (Davis, 1973; McDonald, 2009; Wilkinson, 1999) and were found to not be statistically significantly different. Therefore, we cannot reject the null hypothesis that the difference in the means of the online and traditional artifacts are equal to 0, and we cannot conclude this with a 95% confidence that the differences in scores are not solely due to chance.

Rubric Dimensions & Outcomes	*N*	*Mean*	*% Meets Satisfactory*	*n*	*Mean*	*% Meets Satisfactory*
	Online			*Traditional*		
Elevator Pitch Assignment	*39*	*93.6%*	*95%*	*29*	*96.4%*	*100%*
Existing Problem	~	~	~	~	~	~
Solution	~	~	~	~	~	~
The Market	~	~	~	~	~	~
Delivery	~	~	~	~	~	~

Table 2. Comparison between online and traditional artifacts of student achievement level by outcome for ENT 1000.

2.2.3 Comparison by Campus/Site

During the Spring 2020 term, a total of 39 artifacts were collected from online sections, 15 from the Thomas Edison (Lee) campus, and 14 from the Collier campus. The mean score and percentage meeting achievement are all above the stated goals for each site. Differences in the means were tested for significance using an analysis of variance (ANOVA) according to standard methods (Davis, 1973; McDonald, 2009; Wilkinson, 1999) and were found to not be statistically significantly different. Therefore, we cannot reject the null hypothesis that the difference in the means of the online and traditional artifacts are equal to 0, and we cannot conclude this with a 95% confidence that the differences in scores are not solely due to chance.

Rubric Dimensions & Outcomes	*N*	*Mean*	*% Meets Satisfactory*	*n*	*Mean*	*% Meets Satisfactory*	*n*	*Mean*	*% Meets Satisfactory*
	Online			*Lee*			*Collier*		
Elevator Pitch Assignment	*39*	*93.6%*	*95%*	*15*	*100%*	*100%*	*14*	*97.9%*	*100%*
Existing Problem	~	~	~	~	~	~	~	~	~
Solution	~	~	~	~	~	~	~	~	~
The Market	~	~	~	~	~	~	~	~	~
Delivery	~	~	~	~	~	~	~	~	~

Table 3. Comparison between online and traditional artifacts of student achievement level by outcome for ENT 1000.

2.3 LONGITUDINAL STUDY

Assessment analysis utilizing these rubric criteria began in fall 2018. A longitudinal study was intended to begin with data collection following spring 2020. However, as data collection issues have been present through these early terms of study, this must be delayed until at least fall 2020.

3 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. The course included in assessment in this report is ENT 1000 *Introduction to Entrepreneurship*. The assessment outcomes are intended to provide a baseline and measurement of achievement moving forward.

3.1 ENT 1000

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

1. In a study of outcome achievement, "The measure of this assessment is the Elevator Pitch 3 assessment from the ENT 1000 Introduction to Entrepreneurship course, where the benchmark

of 70% of students will illustrate a proficiency of 70% or higher within this assessment during the 2019-2020 academic year." the goal that 70% of students will illustrate a proficiency of 70% or higher was met for the overall score. No data was available to measure the achievement for the rubric dimensions.

2. In a comparison between online and traditional artifacts the mean score and percentage meeting achievement are both higher for traditional artifacts. Differences in the means were found to not be statistically significantly different.
3. In a comparison by site, the mean score and percentage meeting achievement are all above the stated goals for each site. Differences in the means were tested for significance using an analysis of variance (ANOVA) and were found to not be statistically significantly different.
4. Assessment analysis utilizing these rubric criteria began in spring 2019. A longitudinal study will begin with data collection following fall 2020.

4 REFERENCES

McDonald, J.H. 2009. Handbook of Biological Statistics (2nd ed.). Sparky House Publishing, Baltimore, Maryland.

Wilkinson, L. 1999. APA Task Force on Statistical Inference. Statistical Methods in Psychology Journals: Guidelines and Explanations. American Psychologist 54 (8), 594–604.