Computer Information Systems

Division: School of Business, College of Business and Technology

Prepared by: Dr. Curtis Penrod

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Approved by: Dr. Lily Pharris

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Northwestern Mission. Northwestern State University is a responsive, studentoriented institution committed to acquiring, creating, and disseminating knowledge through innovative teaching, research, and service. With its certificate, undergraduate, and graduate programs, Northwestern State University prepares its increasingly diverse student population to contribute to an inclusive global community with a steadfast dedication to improving our region, state, and nation.

College of Business and Technology Mission. The College of Business and Technology is dedicated to providing a high quality – market responsive business and technology education, preparing our diverse student population for successful careers and enriched lives in the public, private and nonprofit sectors, and enhancing our students' academic experiences through our research and scholarly activities.

School of Business Mission. The mission of the School of Business is to provide our diverse student population with innovative skills in business and technology to prepare them for successful careers and responsible citizenship roles to have a positive societal impact in the world of business. (Adopted 2017-2018 – mission wording was revised to include "our diverse population"; Adopted 2020-2021 – mission wording was revised to reflect societal impact)

As such, NSU's School of Business is committed to ...

Providing students with a business education. This means that we strive to provide students with opportunities to become effective communicators, critical thinkers, develop knowledge across the business disciplines, and global perspective.

Preparing them for successful careers and citizenship roles. This means that we provide education experience and opportunities.

...In the world of Business. This implies developing a global perspective that involves managing activities that foster the transfer of goods and services in organizations of all types wherever found.

Computer Information Systems Program Mission Statement: The mission of the BS in Computer Information Systems in the School of Business at Northwestern State is to prepare our diverse student populations for careers as information

systems and technology professionals in the public, private and nonprofit sectors, and/or for advancement into graduate programs. This purpose will be met by providing quality online and face-to-face business and technology instruction and academic support with high academic standards, superior teaching, quality research, significant service, and effective use of technology for the citizens of our region. (Approved by CIS faculty on 4/5/2017, 4/13/2018).

Purpose: To prepare students for careers as business professionals in the public, private and nonprofit sectors, and/or for advancement into graduate programs.

Methodology: The assessment process for the School of Business includes:

- (1) The School of Business and Technology alternates the assessment of its SLO yearly. SLO's 1-4, which are shared among the programs is assessed during one assessment cycle. SLO 5, which is unique to each program is assessed during another assessment cycle. This approach allows for a complete program assessment every two years.
- (2) A variety of assessment tools (quantitative, qualitative, direct, and indirect) are used to collect data for analysis for each of the five Student Learning Outcomes (SLOs).
- (3) Data is collected and returned to the SLO Chairs.
- (4) Summary results are analyzed to determine if students have achieved or "met" the measurable outcomes. When necessary, proposed action steps are created by each SLO chairman in collaboration with the SLO committee members, faculty teaching core courses, and the program coordinator.
- (5) Following discussion and review by appropriate faculty, if needed, proposed recommended action steps, and recommended changes are implemented by the faculty responsible for teaching the courses tied to the SLO.
- (6) Individual meetings are held with faculty and staff as required (show cause).
- (7) In consultation with the staff and senior leadership, proposed changes to measurable outcomes, assessment tools for the next assessment period and, where needed, service changes will be recommended.
- (8) These proposed recommended action steps and recommended changes are implemented by the faculty responsible for teaching the courses tied to the SLO.

Student Learning Outcomes (SLOs):

SLO 1. Effective Communicators. Students should be able to:

- Objective 1a: Produce professional quality business documents;
- Objective 1b: Deliver professional quality oral presentations; and
- Objective 1c: Demonstrate communication skills in team settings.

Course Map (Tied to course syllabus objectives):

BUAD 2200	Business Reports and Communication (Foundational Course)
MGT 4300	Strategic Management and Policies (Capstone Course)
CIS 4600	Advanced Systems Development (Capstone Course)
UNIV 1000	The University Experience (Support Course)
MKTG 3230	Principles of Marketing (Foundational Course)

Measure 1a.1 (Direct – Exam; BUAD 2200 Objective Measures)

Details/Description: In BUAD 2200, a pre-test that includes an objective exam and a written email letter was developed to provide a comprehensive overview of the business communication requirements and contained such topics as: (1) Laying communication foundations, (2) Using the writing process, (3) Corresponding at work, (4) Reporting workplace data, and (5) Developing speaking and technology skills. This same test is given as a post-test at the end of the semester. The results of the post-test are provided.

Acceptable Target: At least 75% of the students must earn 70% or better on the posttest.

Ideal Target: At least 85% of the students must earn 70% or better on the post-test.

Implementation Plan (timeline): This measurement is completed each semester in BUAD 2200. The data would only be reported every other academic year.

Key/Responsible Personnel: School of Business faculty teaching BUAD 2200 are responsible for this measurement.

Finding: The acceptable target was <u>not</u> met.

Analysis: The table below shows the results for the 2018-2019 and 2020-2021 assessment cycles for Measure 1a.1. The acceptable target was <u>not met</u> in AC 2018-2019 and was <u>not met</u> in AC 2020-2021. There was a 3% decrease in performance from 69% to 66%.

Measure 1a.1					
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results	
2018-2019	179	75%	85%	69%	
2020-2021 97 75% 85% 66%					
Percentages in	Percentages indicate the percent of students scoring 70% or better on the measure.				

Table 1: AC 2018-2019 through AC 2020 Fall Results

*SLOs 1-4 are measured every other assessment cycle.

AC 2018-2019: In AC 18-19, 179 students were given the BUAD 2200 objective measure (post-test). Of these students, 69% scored 70% or better on the post-test. This indicated a decline of 6% from the previous testing cycle. <u>The acceptable target was not met</u>.

Based on the analysis of the AC 2017-2018 assessment results, the rigor of the four online sections was strengthened to better ensure parity with the face-to-face sections. When comparing the results of 2017-2018 and 2018-2019 we expected a decline in average test scores due to this strengthening. It should be noted for the AC 18-19, a new faculty member was added during the Spring 2019 semester. The professor reviewed the course, realigned and strengthened assessment procedures.

AC 2020-2021: In AC20-21, 195 students were given the BUAD 2200 objective measure (post-test). Of these students, 66% scored 70% or better on the post-test. <u>The acceptable target was not met</u>; the ideal target was not met.

Data was not reported for the AC 2019-2020, as it was decided that data for this SLO would only be reported every two years. Based on analysis of the AC 2018-2019 results, corrective actions were taken in AC 2019-2020. The faculty provided an additional comprehensive overview of the business communication requirements in both the face-to-face and online courses in AC Fall 2019-2020 and AC 2020-2021. However, it must be noted that with the shutdown of university classes during the Spring 2020 semester, data collection was affected due to the COVID-19 pandemic. Course delivery and assignments were drastically changed during the latter part of Spring 2020. These changes then had a continued effect on the 2020-2021 assessment cycle courses and data. There were additional weather-related events during AC 2020-2021 that disrupted classes and delivery of materials. The number of students not participating in the pre-test post-test exams was larger in AC 2020-2021 than in past semesters. A total of 237 students were graded for the BUAD 2200 courses. Eighty-two percent (n=195) students took the final exam/post-test.

Decision:

In 2020-2021 <u>the target was not met</u>. Based on the analysis of the AC 2020-2021 results, corrective action will be taken in AC 2021-2022. The faculty will implement the following changes in 2021-2022 to drive the cycle of improvement:

The instructors of the course will attempt to lower the number of students not participating in the pre-test-post-test exams, as the 18% non-participation rate is higher than the 10% range from past years. The instructors will deliver information to the students at the beginning of the Fall 2021 semester about the expectations of the students. Students will be asked to indicate their understanding of the requirements for this course.

The instructors of the Business Communications course will continue to meet regularly to examine scoring and grading issues and to review any issues with attendance and

participation. Examples of short instructional videos will continue to be added to the course. Short chapter quizzes will be offered after each chapter.

The faculty will be providing an additional comprehensive overview of the business communication requirements in both the face-to-face and online courses in AC 2021-2022. To continue the strengthening of the course topics and assessment, the instructors will collaborate to insure course consistency. Also, ALL students will be directed to the Bossier Parish Community College-Open Campus [Free online non-credit courses] to aid instruction in the grammar mechanics area.

Using data from AC 2020-2021, adjustments will be made for AC 2021-2022. We anticipate more reliable data for the AC 2021-2022 term. Faculty members teaching BUAD 2200 will continue to utilize a variety of pedagogical methods to assist students. Best practices include professors continuing to embed model examples of various business report documents into the course and voice-narrated videos. These videos provide step by step project/assignment directions for use by students.

These changes are an attempt to improve the student's ability to understand the communication process and therefore, become a better communicator. This in turn should push the cycle of improvement forward into other business courses.

Measure 1a.2 (Direct – Student Artifact; MGT 4300/CIS 4600 Written Document)

Details/Description: In MGT 4300/CIS 4600, students are required to create a business letter addressing a business problem and deliver the letter as an attachment.

Acceptable Target: At least 75% of the students must earn 70% or better on the final business document.

Ideal Target: At least 85% of the students must earn 70% or better on the final business document.

Implementation Plan (timeline): This measure should be completed each semester as part of the School of Business Common Body Knowledge Exam (SoBUSKE).

Key/Responsible Personnel: The School of Business faculty teaching MGT 4300 / CIS 4600 are responsible for completing this measurement.

Finding: The acceptable target was met.

Analysis: The table below demonstrates the results of the findings for AC 2018-2019 and AC 2020-2021 for Measure 1a.2. The target was not met in AC 2018-2019 but was met in 2020-2021. There was a sizable increase in student performance.

Measure 1a.2				
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results
2018-2019	20	75%	85%	45%
2020-2021 15 75% 85% 80%				
Dereenteges ind	ionto the persent o	f students scoring 70	% or bottor on	the measure

Table 2: AC 2018-2019 through AC 2020-2021 Results

Percentages indicate the percent of students scoring 70% or better on the measure.

*SLOs 1-4 are measured every other assessment cycle.

AC 2018-2019: Beginning in AC 2018-2019 this measurement was taken as part of the School of Business Common Body Knowledge Exam (SoBUSKE). The updated comprehensive exam provided a more directly comparable evidence of student learning than previous assessments. In 2017-2018, students were given a chance to revise their assignment and had peer review of their work. In 2018-2019, students were given one chance at the assignment as part of the SoBUSKE. Student performance dropped dramatically, and the acceptable target was NOT met. Based on the analysis of the results, it is likely that changes to the peer intervention assignment affected the results negatively. The pilot was highly successful, but the follow up year was not.

Based on the analysis of these results, the faculty teaching the course implemented a review of the basic elements of a business letter, including email attachments. This lesson was provided to students to help them prepare for the SOB Knowledge Test. A new instructor was added to teach the course, and current and new instructors reinforced the importance of the business letter and assignment prior to students taking the SoBUSKE.

AC 2020-2021: As in 2018-2019, this measurement was taken as part of the School of Business Common Body Knowledge Exam (SoBUSKE) at the <u>end</u> of the semester. This exam does not count toward the student's final grade in the courses. During the Fall 2020 semester only 11 students from the MGT 4300 course returned the letter assessment as directed on the exam. Of those 11, 9 scored a 75% or above on the measurement.

During the Spring 2021, 4 students from the CIS 4600 section completed the letter assessment as requested on the exam. Three of the four students that submitted the letter assessment scored over the acceptable 75% target (75% met the target). Finally, combined results for the full AC 20-21 do show a positive outcome. When both semesters are combined, <u>the target score is met</u>. Fall 2020 and Spring 2021 results yield the following: a total of 15 students (n=15) submitted the letter assessment. Out of those 15 students, 12 scored 75% of higher for a Fall 20 – Spring 21 total of 80% of the students meeting the acceptable target.

Decision:

In AC 2020-2021 the target <u>was met</u>. In Fall 2020, the measurement was again taken as part of the School of Business Common Body of Knowledge exam. Though the sample of students was small, the students met the target amidst COVID, two hurricanes and a

new instructor. The instructor reinforced the importance of the business letter and implement an assignment for the 2021-2022 study. In the Spring of 2021, the measurement was also assigned as part of the School of Business Common Body of Knowledge Exam. Eighteen students completed the SoBUSKE but only four submitted the required letter assessment. Students had no previous preparation for the assessment, and they completed it at the <u>end</u> of the semester. Based on the low participation on the letter assessment compared to the full SoBUSKE, faculty have decided to assign this measure to the students earlier during the semester and separate it from the SoBUSKE. This change will be beneficial in two different ways: (1) students will be encouraged to complete the assessment as part of their midterm grade so participation will be mandatory; (2) instructors will have more time to assess if the results need immediate remediation. Results from the AC 2022-23 will help faculty determine if these changes have the expected outcomes.

In 2021-2022, the program will further implement these developments in MGT 4300 and other classes. The peer learning exercise has been especially beneficial as it allows students to recognize different quality levels of writing in other students in such a way that it helps them to improve their own writing. Faculty will examine data and teaching methods from the AC 2017-2018 pilot study, the AC 2018-2019 results, and the AC 2020-21 results to help determine what caused the changes in results and participation.

These changes should help improve the participation rate on this measurement and help to improve the student's ability to successfully write a business letter and email. Changes to our instruction are designed to help students communicate in increasingly varied business environments as well as push the cycle of improvement forward.

Measure 1a.3 (Direct – Student Artifact; UNIV1000 Written Document)

Details/Description: In UNIV1000 (The University Experience), students are required to create a business letter addressing a business problem and deliver the letter as an email attachment.

Acceptable Target: At least 75% of the students must earn 70% or better on the final business document.

Ideal Target: At least 85% of the students must earn 70% or better on the final business document.

Implementation Plan (timeline): This written document is part of the SoBUSKE and will be given each semester beginning in 2020-2021.

Key/Responsible Personnel: School of Business Faculty Teaching UNIV1000 School of Business Freshman Interest Group (FIG).

Findings: The target was <u>not</u> met.

Analysis: The table below demonstrates the results of the findings for AC 2018-2019 and AC 2020-2021 for Measure 1a.3.

Measure 1a.3					
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results	
2018-2019	51	75%	85%	0%	
2020-2021 52 75% 85% 0%					
Percentages ind	Percentages indicate the percent of students scoring 70% or better on the measure.				

Table 3: AC 2018-2019 and AC 2020-2021 Results

*SLOs 1-4 are measured every other assessment cycle.

AC 2018-2019: As planned, a pilot version of the new SoBUSKE was created and introduced to UNIV 1000 students in the business Freshman Interest Group (FIG). This class introduces students to college life and is required of all students. However, one section of the class is reserved for students majoring in business. Thus, this section provides a baseline for students' beginning knowledge and ability. The class does not necessarily cover the creation of business documents and the results indicate their lack of initial experience. Of the 51 students in the class, only 12 attempted the assignment.

Instructors used this data to establish a benchmark for business students and to further aid in the development of the business communications curriculum.

AC 2020-2021: 52 students were enrolled in UNIV 1000 during the fall 2020 semester. These students were given the SoBUSKE exam; however, the instructor did not give the written letter assignment portion of the exam. Therefore, there was no data available for this measure and the resulting statistic is 0% passing. This course is not offered during the Spring semester. The acceptable and the ideal targets were not measurable because the data was not captured for AC 2020-21.

Decision:

<u>The acceptable target was not met.</u> Based on the analysis of the AC 2018-2019 assessments results, the instructors of the course will administer the assessment in the Fall of 2021 and 2022 to assess the viability of the assessment. Instructors will use this data to establish a benchmark for business students and to further aid in the development of the business communications curriculum. The faculty had hoped that this assessment would provide a benchmark of student skills as incoming freshmen. The first assessment cycle (Fall 2019) revealed that students either would not attempt the assessment or could not write a mailable letter. The second assessment (Fall, 2020) produced no usable data at all. The course is not offered during spring semesters. It must be noted that during the fall 2020 semester there were two major hurricanes and an ongoing pandemic which all affected the class delivery and class schedule. The information about business letters had to be omitted.

Measure 1a.4 (Direct – Student Artifact; BUAD 2200 Written Document)

Details/Description: In BUAD 2200 students are required to create a business letter addressing a business problem and deliver the letter as an email attachment.

Acceptable Target: At least 75% of the students must earn 70% or better on the final business document.

Ideal Target: At least 85% of the students must earn 70% or better on the final business document.

Implementation Plan (timeline): This assignment is given in BUAD 2200 each semester as part of the final exam.

Key/Responsible Personnel: The School of Business faculty teaching BUAD 2200 are responsible for this measure.

Findings: The acceptable target was <u>not</u> met. The Ideal target was <u>not</u> met.

Analysis: The acceptable target was met in AC 18-19 and was **not met** in AC 20-21. The table demonstrates the results of the findings for 2018-2019 and 2020-2021 assessment cycles for Measure 1a.4.

Table 4: AC 2018-2019 through AC 2020-2021 Results

Measure 1a.4					
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results	
2018-2019	174	75%	85%	78%	
2020-2021 180 75% 85% 68%					
Percentages ind	icate the percent of	f students scoring 70°	% or better on	the measure.	

*SLOs 1-4 are measured every other assessment cycle.

AC 2018-2019: A sample of 174 students from BUAD 2200 was used to measure this part of the objective. Students wrote a letter as a part of the final exam. It was found that 78% of the students (n=136), scored 70% or better on the written letter. <u>The acceptable target was met. The ideal target was not met</u>.

The faculty made mini reviews available to students and repeated exposure to assignments involving core skills. Additionally, a School of Business Faculty Lunch and Learn provided all faculty an opportunity to participate in recognizing and discussing the need for additional business writing assignments in the classroom. A copy of the rubric used to evaluate the assignment in BUAD 2200 was made available to score the written document for faculty wishing to assist in the continuous improvement of the student written communication skills within their classroom environment. A review of the instruction given in BUAD 2200 was also made available to faculty members in other classes. To further aid instruction in the writing process for the BUAD 2200 (Business

Reports and Communication) students, instructors will provide opportunities for students to have one-on-one feedback on preliminary written assignments prior to the final written document assignment.

AC 2020-2021: In AC 2020-2021, 180 of 237 enrolled students (76%) completed the BUAD 2200 written document measure during the BUAD 2200 (Business Reports and Communications) final exam. Twenty-four percent (n=57) of the enrolled students either did not take the final exam at all or chose not to complete the final letter assignment. It was found that only 68% of the students who completed the assessment (n=82), scored 70% or better on the written letter.

Decision:

In 2020-2021 the target was not met. Based on an analysis of the Fall 2020 results, several improvements will be made for 2021-2022. An analysis of the results indicated that only 68% of the students were able to demonstrate an appropriate use of business communication knowledge and skill by providing an acceptable form of written communication, i.e., the formal business letter. The percentage dropped from 78% to 68%, a 10% drop when compared to the last assessment cycle.

It is important to note that BUAD 2200 classes had to be reconfigured due to the ongoing pandemic. Classes were offered online and through web-ex during the fall 2020 semester. The rate of absenteeism in the face-to-face class was extremely high with many students having COVID-19 or having to quarantine due to exposure. Some students had to quarantine multiple times. With this many absences, it was expected that the grades would decline, and they did. School was also closed for two hurricanes during the fall semester, with some students losing power for several weeks in their homes. The drop from 78% (2018-2019) to 68% was significant.

To address this significant drop, the faculty teaching the course will deliver more information about writing sales letters. The rubric for the assignment will be discussed more thoroughly with the students before the assignment and an additional writing assignment will be added.

These changes will further aid instruction in the writing process for the BUAD 2200 (Business Reports and Communication) students, instructors will provide more opportunities for students to have one-on-one feedback on preliminary written assignments prior to the final written document assignment. It is hoped that these changes will improve the student's ability to write a mailable business letter.

Measure 1b (Direct – Student Artifact; BUAD 2200 Oral Presentation)

Details/Description: In BUAD 2200 (Business Reports and Communication), students are required to develop and deliver a 20-minute presentation about conducting business in a foreign country. This presentation is graded with a rubric shared with all students and

the professors. Scores of all the raters are compared to a provided final grade.

Acceptable Target: : On the final class presentation, a minimum of 90% of students will score at least acceptable (70%).

Ideal Target: On the final class presentation, a minimum of 95% of students will score at least acceptable (70)%.

Implementation Plan (timeline): This measurement is completed each semester in BUAD2200.

Key/Responsible Personnel: School of Business Faculty teaching BUAD 2200 are responsible for this measurement.

Findings: The ideal target was met.

Analysis: The table below presents the AC 2018-2019 and the AC 2020-2021 results for Measure 1b.

Measure 1b				
Academic Year	n (# of students)	Acceptable Target	Ideal Target	Actual Results
2018-2019	177	90%	95%	95%
2020-2021	184	90%	95%	94%
Percentages indi	cate the percent of	f students scoring 70°	% or better on	the measure.

*SLOs 1-4 are measured every other assessment cycle.

AC 2018-2019: In AC 2018-2019, <u>the ideal target was met</u> as scores improved from a 91% to a 95%. Based on these results, in addition to maintaining the course steward framework and standardizing interrator scoring, faculty expanded their use of best practices. For example, professors embedded model examples of various business presentation documents into the course and voice-narrated videos. These videos provided step by step project/assignment directions for use by students. To capture these successes across the curriculum, other courses with multiple instructors have also implemented the course steward framework, including as ACCT 2000 and BUAD 1800).

AC 2020-2021: In AC 2020-2021, the <u>acceptable and targe was met. The ideal target</u> was not met. 94% of the students (n=173), scored 70% or better on the final presentation. This is a slight (1%) decline over the results from AC 2018-2019.

Decision:

In 2020-2021 the target was <u>met</u>. It should be noted that there were 237 graded students during AC 2020-2021, meaning 22% (n-64) of the enrolled students either did

not complete the course or chose NOT to participate in the presentation assignment. These students received a zero on the assignment but were removed from data analysis. Only students completing the assignment were included. Fall 2020 had several obstacles that hindered students from fully participating in the course. There were two major hurricanes and an ongoing pandemic.

Based on an analysis of the 2020-2021 results, the faculty will address the issue of nonparticipation. The instructors will deliver information to the students at the beginning of AC 2021-2022 about the expectations of the students. Students will be asked to indicate their understanding that the final presentation is a mandatory requirement for this course. In business, the ability to present facts and intelligently follow a formal presentation protocol are essential. The faculty will continue to utilize the steward mentoring program and expand on best practices such as embedding additional model examples of various business presentation documents into the course and voicenarrated videos. The faculty expects to see continuation of the results shown during AC 2020-2021.

Measure 1c (Direct – Student Artifact; MKTG 3230 Team Presentation)

Details/Description: In MKTG 3230, students are divided into small groups (3 to 4 students) and are required to develop a marketing plan for a new product. In addition to developing a written report, the groups are required to orally present their reports. The presentations were evaluated as Exemplary, Good, Satisfactory, or Unacceptable.

Acceptable Target: At least 75% of the groups will earn an Exemplary or Good score on at least three of the four areas of the grading rubric.

Ideal Target: At least 85% of the groups will earn an Exemplary or Good score on at least three of the four areas of the grading rubric.

Implementation Plan (timeline): This measurement is completed each semester in MKTG 3230.

Key/Responsible Personnel: School of Business Faculty teaching MKTG 3230 are responsible for this measurement.

Findings: The ideal target was met.

Analysis: The table below presents the 2018-2019 and 2020-2021 assessment cycle results for Measure 1c.

	Measure 1c							
Academic	n (# of student	Acceptable Target	Ideal Target	Actual				
Year*	teams)		_	Results**				
2018-2019	13	75%	85%	84.6%				
2020-2021	16	75%	85%	94%				
*SLOs 1-4 are measured every other assessment cycle.								
**Percentages ir	idicate the percent	of students scoring 7	0% or better o	**Percentages indicate the percent of students scoring 70% or better on the measure.				

Table 6: AC 2018-2019 and AC 2020-2021 Results

AC 2018-2019: <u>The acceptable target was met</u> as 11 of the 13 (84.6%) groups achieved a score of Good or Exemplary on 3 of the 4 rubrics. In other words, the <u>students surpassed the acceptable target</u> of 75%, but just missed the ideal target of 85%. This data is from the Spring 2019 semester.

Based on the results of the AC 2018-2019 assessment results, the faculty performed a yearly review of the rubrics and determined they were still valid. Additionally, to reach the target, the MKTG 3230 faculty reviewed best practices for professional business presentations with the students in the weeks before they presented. This review appears to have been helpful in helping students reach the ideal target and the review will be continued in the future.

AC 2020-2021: The acceptable target <u>was met</u>. In Fall 2020, 10 out of 11 groups (90.9%) groups earned an Exemplary or Good score on at least three of the four areas of the grading rubric. In Spring 2021, 5 out of 5 groups (100%) made groups earned an Exemplary or Good score on at least three of the four areas of the grading rubric. Overall, in AC 2020-2021, 15 out of 16 groups (93.75%) earned an Exemplary or Good score on at least three of the grading rubric.

Note: Usually, only data from the spring semester is used for this measure. However, fewer face-to-face sections were offered in Spring 2021 due to the COVID-19 pandemic, so mid-year data (Fall 2020) data was included this assessment cycle as well to give a more robust data set.

The 2020-2021 assessment cycle for this measure was greatly affected by the COVID-19 pandemic of 2020-2021. Many of the peer review and workshop scenarios meant for this assessment cycle were unable to be properly implemented due to the pandemic, social distancing guidelines, and quarantining protocols. Group presentations, especially among face-to-face students, usually involve the close physical presence of the group members, especially during the actual presentation. Again, social distancing guidelines, the implementation of teleteaching by the instructor, and an increased number of online sections affected the results. Many students in face-to-face sections were quarantined or allowed to not attend class for extended periods of time during the fall semester. In fact, even students in online sections were affected by social distancing procedures as these students are normally required to have an audience physically present for their presentation. As such, the audience requirement was physically suspended for this assessment cycle for online classes. In the face-to-face section that was sampled, students were given the option to record their presentation similarly to how an online class would (using video submissions or live video presentations, depending on the situation) to facilitate social distancing or quarantining restrictions.

Overall, the results reached the ideal target, but the less-strict presentation format (no physical audience required) may have alleviated some presentation nervousness, and perhaps that helped student performance. Additionally, more students than normal simply did not turn in a presentation and received a 0 on it, which was not included in the group scores above. This was likely a side effect of the pandemic. Less conscientious students that might have otherwise presented, may have simply chosen not to as the pandemic has created an unusual academic environment, as well as an unusual and more stressful external environment, which may affect academic performance.

In summary, this assessment cycle is an anomaly due to the COVID-19 pandemic. While the results improved, the execution of the assignment and associated grading rubric had to be adapted to the situation, and number of students non-participating also increased. Therefore, the increased positive results, while encouraging, should also be examined with prudence and an understanding of the academic and social environment in which assessment was conducted this semester.

Decision:

In 2020-2021 the target was met. Based on an analysis of the 2020-2021 results, additional temporary minor alternations to the assignment or class might be necessary if COVID-19 restrictions continue. These changes might include more one-on-one attention such as emails, phone calls, or video chats encouraging students to participate in the presentation. Regardless of whether the COVID-19 pandemic subsides by the next assessment cycle, the instructor might develop a series of example video presentations or a series of instruction videos showing how to best present in a virtual environment. Letting students view and critique a past video presentations in the context of a class discussion might also be beneficial to their development of presentation skills. The instructor will also emphasize the need for students to practice several times before they present.

These changes will improve the students' presentation abilities and will be especially beneficial to their online presentation skills. In addition to increased reliance on online education caused by COVID-19, the business world was also affected by the pandemic, with presentations, meetings, and conferences often moving online. Therefore, the changes to our instruction are designed to help students communicate in increasingly varied business environments as well as push the cycle of improvement forward.

SLO 2. <u>Integration of Knowledge across Business Disciplines</u>. Students should be able to: Demonstrate understanding of key concepts and theories in various functional areas of business.

Course Map: Tied to course syllabus objectives.

BUAD 2120Basic Business Statistics (Foundational Course)CIS 4600Advanced Systems Development (Capstone Course)FIN 2150Personal Finance (Foundational Course)MGT 4300Strategic Management and Policies (Capstone Course)MKTG 3230Principles of Marketing (Foundational Course)UNIV 1000The University Experience (Supporting Course)

A note on the School of Business Knowledge Exam (SoBUSKE):

Data for SLO2 measures 1a.2, 1a.3, 2.1, 2.2, 2.3, and 4.3 are usually gathered through the NSU School of Business Knowledge Exam (SoBUSKE). This exam was administered for over <u>ten years</u>. However, as part of our plan at the end of AC 2016-2017, the exam was only partially administered in AC 2017-2018. During the 2017-2018 academic cycle, an updated SoBUSKE was developed and implemented in Spring 2019. The results from the first official implementation of the test were in spring 2019.

Measure: 2.1. (Direct – Exam; Partial School of Business Knowledge Exam)

Details/Description: Portions of the School of Business Knowledge Exam (SoBUSKE) are given in the following classes: BUAD 2120 (Basic Business Statistics), FIN 2150 (Personal Finance), and MKTG 3230 (Principles of Marketing). These classes provide intermediatemeasurements for specific components of the School of Business Knowledge Exam.

Note: In accordance with the school of business' assessment plan, the SoBUSKE is given every other year. Therefore, testing data from AC 2019-2020 is typically the same data as from the 2018-2019 assessment cycle.

Acceptable Target: At least 75% of students will score higher than the ETS average in the knowledge area.

Ideal Target: At least 85% of students will score higher than the ETS average in the knowledge area.

Implementation Plan (timeline): These partial School of Business Knowledge Examsare given each semester the class is offered.

Key/Responsible Personnel: School of Business faculty teaching these courses are responsible for the measurement.

Findings: Two of the three subject areas <u>met</u> the target.

Analysis: The national Education Testing Systems (ETS) Major Field Test (MFT) was taken in the spring of 2019 to be used as a national baseline norm over the course of the next 5 years examining the students' comprehensive knowledge of materials over 9 school of business areas of discipline. The ETS exam was administered again in Spring 2019. Additionally, every other year students are given the SoBUSKE, our internal exam, focusing on the specific discipline areas. We compare these results against corresponding discipline areas of the nationally normed ETS MFT in business.

The results of the 2019 Spring ETS exam and the results of the AC 2020-2021 SoBUSKE are summarized in the table below. <u>Two of three subject areas met the target</u>.

Subject	2019 ETS Mean % Correct (n=13)	AC 18-19 SoBUSKE Mean % Correct	AC 18-19 Acceptable Target Met?	AC 20-21 SoBUSKE Partial Exam % Correct	AC 20-21 Acceptable Target Met
Quantitative Business Analysis	28%	46% n=99	No 66% scored better than the ETS' 28%.	57% n=65	Yes 98.2% scored better than the ETS' 28%
Finance	44%	39% n=42	No 57% scored better than the ETS' 44%	41% n=81 (Fall 20)	No 49.3% scored better than the ETS' 44%
Marketing	45%	82% n=47	No 70% scored better than the ETS' 45%	87% n=16 (Spring 21)	Yes 100% scored better than the ETS' 45%

Table 7: SLO 2 Summary Table

Finding: BUAD 2120 Basic Business Statistics: The target was met.

Analysis (BUAD only): Results from the ETS exam (2019) and SoBUSKE (AC 2020-2021) are compared for business statistics in the table below. This table refers to Measure 2.1a.

Discipline	NSU ETS 2019	SoBUSKE AC 18-19	SoBUSKE AC 20-21		
Statistics	28%	46%	57%		
Percentages indicate the student mean percentage on the discipline area test. Data was collected incourses where the partial SoBUSKE was normally embedded as part of the course materials.					

Table 8: Measure 2.1a: Basic Business Statistics

Note: The scores in the chart above are the unprocessed student mean scores. These are presented for easy interpretation of student trends.

AC 2018-2019: 99 students were given the partial of the SoBUSKE that relates only to the area of statistics. Following compilation of these results, it was determined the SoBUSKE mean score in statistics was 46%. The NSU ETS MFT mean score was 28%.Comparing the results between the Spring 2019 SoBUSKE and the NSU student ETS MFT mean scores, it was determined that 66% of the students scored above 28% on therevised SoBUSKE. <u>The target was not met</u>. Instead of 66%, the acceptable target was 75%.

A new member joined the statistics faculty in Spring 2018 and was introduced to assessment, coordination of teaching efforts and the exchange of knowledge among peers. Additionally, in AC 2018-2019 statistics faculty implemented a "Providing EvidenceProcess (PEP)" creating teaching methods for core information tested in the SoBUSKE and fortifying in the curriculum and classroom to assure beneficial changes were made in the classroom to support key concept learning and improved student learning outcomes.

AC 2020-2021: Based on the AC 2018-2019 results, in AC 2019-2020 and 2020-2021, faculty were reminded about core concepts for statistics that are included on the SoBUSKE and asked to review the exam data to see which areas the students found most troublesome. Those content areas were focused on leading up to the 2020-2021 assessment cycle.

65 students were given the portion or partial of the SoBUSKE that relates only to the area of statistics. Six of these students were removed from the sample because they responded to no questions. Following compilation of these scores, it was determined the SoBUSKE mean score in statistics was 57%. The NSU ETS MFT meanscore was 28%. Comparing the results between the SoBUSKE and the NSU student ETSMFT mean scores, it was determined that 98.2% of the students scored above 28% on the SoBUSKE. The target was met.

Decision (BUAD only):

Based on the results of 2020-2021 assessment cycle, the faculty will review the chosen topics related to business statistics for the School of Business Knowledge Exam and

ensure these topics are highlighted in BUAD2120 – Basic Business Statistics. Between 2018-2019 and the 2020-2021, the faculty member teaching the BUAD2120 classes refined the topics covered in the class to make sure certain topics were covered in more depth while the discussion of some other topics was eliminated. Going forward, other strategies for student success the course faculty will employ include:

- Development and implementation of a strategic communication plan to emphasize specific learning resources available to students.
- Production of instructor-led videos available on-demand to all students demonstrating concepts and techniques taught in the course.
- Increased focus on the hypothesis testing procedure theory in relation to decision-making
- Creation and dissemination of a mapped-out flow chart depicting the decision process on the selection of specific inferential tests.

Further focus on the areas covered on the discipline area test could lead to further gains in the percentage.

Finding: FIN 2150 Personal Finance: Target not met.

Analysis (FIN only): Results from the past ETS exam (2019) and SoBUSKE (AC 2020-2021) are compared below. This table refers to measure 2.1b covering finance.

Discipline	NSU ETS 2019	SoBUSKE AC 18-19	SoBUSKE AC 20-21		
Finance	44%	39%	41%		
Percentages indicate the student mean percentage on the measure. Data collected where the partialSoBUSKE was integrated into the course.					

Table 9: Measure 2.1b: Finance

Note: The scores in the chart above are the unprocessed student mean scores. These are presented for easy interpretation of student trends.

AC 2018-2019: 42 students were given the partial of the revised SoBUSKE that relates only to the area of finance. Following compilation of these results, it was determined the SoBUSKE mean score in finance was 39%. The NSU ETS MFT mean score was 44%. Comparing the results between the Spring 2019 SoBUSKE and the NSU student ETS MFT mean scores, it was determined that 57% of the students scored above 39% on therevised SoBUSKE. <u>The target was not met</u>. Instead of 57%, the acceptable target was 75%.

The ETS and SoBUSKE results indicate that the curriculum may have become better at teaching concepts found on the standardized ETS exam. While not listed in the table above, the ETS exam increase from 31% (2015) to 44% (2019) is substantial, but the 2019 sample size (n=13) may cause the results to be misleading. The SoBUSKE

results did not meet the acceptable target.

AC 2020-2021: Based on the analysis of the AC 2018-2019 assessment results, in 2019-2020 the faculty examined the most missed questions on the SoBUSKE finance section and increased coverage of those topics during the 2019-2020 AC.

81 students were given the partial of the revised SoBUSKE that relates only to the area of finance. Six of these students were removed from the sample because they responded to no questions. Following compilation of these results, it was determined the SoBUSKE mean score in finance was 41%. The NSU ETS MFT mean score was 44%. Comparing the results between the 2020-2021 AC SoBUSKE and the NSU student ETS MFT mean scores, it was determined that 49.3% of the students scored above 44% on the revised SoBUSKE. The target was not met. Instead of 49.3%, the acceptable target was 75%.

Decision (FIN only):

Although the acceptable target was not met, the scores on the Finance section of the SoBUSKE improved from 39% to 41%. Many of the finance topics tested on the SoBUSKE are covered in a later required class (FIN 3090). Additionally, ACCT and CIS majors are not required to take FIN 2150 and are not represented in the exam. For these reasons, the faculty has decided that a transition to the measurement being taken in FIN 3090. For the 2021-22 school year, the finance portion of the SoBUSKE will be given to both FIN 2150 and FIN 3090 students to provide comparability in future assessments.

Finding: MKTG 3230 Principles of Marketing: The target was met.

Analysis (MKTG only): Results from the ETS exam (2019) and the SoBUSKE (AC 2020-2021) are compared in the table below. This table refers to measure 2.1c, which discusses marketing.

Discipline	NSU ETS 2019	SoBUSKE AC 18-19	SoBUSKE AC 20-21			
Marketing	45%	82%	87%			
Percentages indicate the student mean percentage on the measure. Data collected where the partialSoBUSKE was integrated into the course.						

Table 10: Measure 2.1c: Marketing

Note: The scores in the chart above are the unprocessed student mean scores. Theseare presented for easy interpretation of student trends.

AC 2018-2019: 47 students were given the marketing portion or partial of the SoBUSKE. It was determined the mean score in marketing was 82%. In comparison, the NSU ETS MFT (2019) mean score in marketing was 45%. It was determined 70%

of the students scored above 45% on the SoBUSKE. As the acceptable target was 75% of the students scoring higher than the ETS average of 45% in this knowledge area, the target was missed by 5%. <u>The acceptable target was not met</u>.

AC 2020-2021: Based on the improvements in the AC 2017-2018 assessment process, the Spring 2019 SoBUSKE individual question results were examined and content areas where students struggled received additional instruction in these areas. This resulted in a mean score of 87% on the SoBUSKE partial exam in marketing. 100% of students scored higher than the 45% mean score on the ETS exam (2019). The target was met.

It should be noted that while the results were good, the sample size of students taking the SoBUSKE partial in marketing was much smaller than in a normal semester as only 16 students took the exam in AC 2020-2021. The smaller sample size is due to the smaller number of face-to-face sections available in Spring 2021 due to scheduling changes due to COVID-19. The face-to-face class that was taught was taught over tele-teaching, and lecture videos for each chapter were provided to help students review the material. Additionally, the face-to-face section that was offered tended to have slightly lower enrollment that normal. All these factors – the smaller class size, the review videos, and multiple in-class reviews of core concepts – likely resulted in positive assessment results for the 2020-2021 assessment cycle.

Decision (MKTG only):

Based on the results of the 2020-2021 assessment cycle, the faculty will hold multiple review sessions over core content in Marketing 3230. This strategy was successful in the 2020-2021 AC. However, the return to face-to-face classes and traditional classroom environments may result in difficulty in maintaining the 100% results achieved in 2020-2021. Therefore, the faculty will research and participate in in-class activities shown to engage larger class sizes. With the sample size likely increasing back to normal levels in AC 2021-2022, it may be difficult to maintain the 100% "target met" rating.

Measure 2.2 (Direct – Exam; UNIV 1000 Complete School of Business Knowledge Exam)

Details/Description: The entire School of Business Knowledge exam (SoBUSKE) should be given in UNIV 1000 business classes. The following areas are covered in this exam: Accounting, Economics, Management, Quantitative (Statistics and Operations Management), Finance, Marketing, Legal, Information Systems, International Business, and Ethics.

Note: In accordance with the school of business' assessment plan, the SoBUSKE is given every other year. Therefore, testing data from AC 2019-2020 is typically the same data as from the 2018-2019 assessment cycle.

Acceptable Target: At least 75% of students will score higher than the ETS average inthe knowledge area.

Ideal Target: At least 85% of students will score higher than the ETS average in theknowledge area.

Implementation Plan (timeline): These partial School of Business Knowledge Examsare given each semester the class is offered.

Key/Responsible Personnel: School of Business faculty teaching these courses are responsible for the measurement.

Findings: The target was <u>not</u> met.

Analysis: The first set of data for this measure was gathered in UNIV 1000, a course for entering freshmen, in Fall 2020. The data from that semester is below.

ETS Subject Area	2019 ETS Mean Percent Correct (n=13)	AC 20-21 SoBUSKE Results from UNIV 1000 (n=46)	Target met?
Accounting	41%	28%	No (8.7% scored higher than 41%)
Economics	30%	29%	No (28% score higher than 30%)
Management	52%	30%	No (6.5% scored higher than 52%)
Quantitative Business Analysis	28%	37%	Yes (80.4% scored higher than 28%)
Finance	44%	25%	No (10% scored higher than 44%)
Marketing	45%	32%	No (13% scored higher than 45%)
Legal and Social Environment	36%	45.% (Avg of 3 law classes)	No (73.9% scored higher than 36%)

Information Systems	47%	30%	No (17% scored higher than 47%)
International Issues	35%	24%	No (13% scored higher than 35%)
Ethics	N/A	35%	N/A

AC 2020-2021: The target was <u>not met</u>. This is the initial set of data gathered for Measure 2.2. As expected, incoming students did not fare well on the SoBUSKE. Only the Quantitative Business Analysis section met the target, and that result is an unexpected anomaly that will be investigated further. Overall, this was the initial data gathering assessment cycle for this measure, and there is no data for comparison.

Decision:

It is unclear if continuing Measure 2.2 is a worthwhile endeavor. Incoming students know little about business, as expected. The usefulness of this measure will be discussed at future SLO #2 committee meetings. No action will be taken regarding UNIV 1000 classes teaching business material as this measure is for incoming freshman baseline scores (no university level business courses taken yet) only.

Measure 2.3 (Direct - Student Artifact; MGT 4300/CIS 4600 Complete School of Business Knowledge Exam)

Details/Description: The entire School of Business Knowledge exam (SoBUSKE) (https://www.surveymonkey.com/r/N8DNVXT) should be given in either MGT 4300 orCIS 4600. The following areas are covered in this exam: Accounting, Economics, Management, Quantitative (Statistics and Operations Management), Finance, Marketing, Legal, Information Systems, International Business, and Ethics.

Note: In accordance with the school of business' assessment plan, the SoBUSKE is given every other year. Therefore, testing data from AC 2019-2020 is typically the same data as from the 2018-2019 assessment cycle.

Acceptable Target: Average score on School of Business Knowledge exam should behigher in all areas of the exam than the ETS Mean Percentage.

Ideal Target: Average scores on School of Business Knowledge exam should be 10% higher in all areas of the exam than the ETS Mean Percentage.

Implementation Plan (timeline): The School of Business Knowledge exam is giveneach semester MGT 4300 and/or CIS 4600 is offered.

Key/Responsible Personnel: School of Business Faculty teaching either MGT

4300 orCIS 4600 are responsible for this measure.

Findings: Target not met.

Analysis: The full SoBUSKE was administered in AC 2020-2021 in MGT 4300 and CIS 4600. These classes typically have many students who are nearing graduation. A breakdown of those students' average scores is shown and compared to the 2019 ETS exam results in the table below.

Table 12: Measure 2.3: SoBUSKE and ETS Exam Results (Exit)

ETS Subject Area	2019 ETS Mean Percent Correct (n=13)	AC 19-20 SoBUSKE (n=23)	Target met?	AC 20-21 SoBUSKE Results (n=75)	Target met?
Accounting	41%	57%	Yes	35%	No 28.4% scored higher than 41%
Economics	30%	37%	No	33%	No 39.7% scored higher than 30%
Management	52%	58%	No	38%	No 21.9% scored higher than 52%
Quantitative Business Analysis	28%	53%	Yes	38%	Yes 76% scored higher than 28%
Finance	44%	38%	No	28%	No 15.7% scored higher than 44%
Marketing	45%	69%	Yes	43%	No 37% scored higher than 45%
Legal and		49%		50.5%	Yes
Social Environment	36%	(Avg of 3 law courses)	Yes	(Avg of 3 law courses)	80% scored better than 36%
Information Systems	47%	68%	Yes	45%	No 42.4% scored higher than 47%
International Issues	35%	43%	No	31%	No 29.5% scored higher than 35%
Ethics	N/A	64%	N/A	42%	N/A

In AC 2018-2019, five individual subject areas, including accounting, quantitative analysis, marketing, legal and social environment, and information systems, met or exceeded the target, four (economics, management, finance, and international issues) did not. However, in the 2020-2021 AC, only legal and social environment and quantitative business analysis met or exceeded the target. The ETS exam does not have an Ethics section. Therefore, those scores as listed as N/A in the table above.

Note: The law section of the exam is now measured across three separate law courses, each one tailored to meet the needs of the specific major (Information Systems, Accounting, or Business Administration). This change was intended to give students in each major customized law content more in line with their specific field of

study. While the average reported above is an average of all three, the instructors of each course canexamine the results in each course or by each major and even more specific detail. If any individual law course did not meet the assessment results, corrective action may beimplemented in that specific law course.

AC 2018-2019: <u>The target was not met</u>. This is the first full set of data gathered for the newly revised SoBUSKE. As stated previously, in AC 2018-2019, five individual subject areas, including accounting, quantitative analysis, marketing, legal and social environment, and information systems, met or exceeded the target, four (economics, management, finance, and international issues) did not. As per the assessment plan, faculty examined weak areas among the test results and emphasize those in their classes in preparation for the next assessment cycle.

AC 2020-2021: <u>The target was not met</u>. Results were not as good they were in the previous assessment cycle, with only legal and social environment and quantitative business analysis meeting or exceeding the target. These results were potentially brought on by the COVID-19 pandemic which necessitated social distancing, masks in classrooms, more online classes and teleteaching, and other health and safety precautions. During this unprecedented time of change, both faculty and students may have had difficult adapting to the situation brought about by the pandemic. Pedagogical methods changed unexpectedly to meet the crisis, and those new pedagogical methods may not have been as effective as pre-coronavirus educational techniques.</u>

Decision:

Based on the results of the 2020-2021 assessment results, faculty will likely return to pre-pandemic classroom and teaching methods. However, faculty will be encouraged to keep any techniques or innovations they learned during the pandemic that may be helpful when classes return to normal, which will ideally occur in the Fall 2021 semester of AC 2021-2022. Faculty will review the SoBUSKE results along with the results from the prior assessment cycle to see what material is causing difficulties for students. Those areas will be emphasized in class and depending on the discipline, additional assignments or practice will be assigned.

SLO 3. <u>**Critical Thinking.</u>** The objectives of SLO3 Critical Thinking are that students should be able to:</u>

- Objective 3a: Demonstrate the ability to draw on knowledge and insights from a variety of disciplines when analyzing and formulating solutions to problems and opportunities.
- Objective 3b: Demonstrate the ability to generate and compare alternatives solutions to business problems.

• Objective 3c: Demonstrate the ability to select feasible solutions to complex business problems.

Course Map: Tied to course syllabus objectives.

Business Finance (Foundational Course)
Financial Policies and Practices (Foundational Course)
Strategic Management and Policies (Foundational Course)
The University Experience (Supporting Course)
,

Measure 3.1 (Direct – Other; FIN 3090 Critical Thinking Quiz)

Details/Description: To access critical thinking skills, two articles related to current topics in business is given to students along with a 10-question quiz covering the arguments made in the articles, evidence supporting the arguments, and deductive reasoning based on the arguments. The questions were a bonus opportunity for students so that they would be motivated to do their best.

Acceptable Target: The acceptable target is an average of 75% and 70% of the students achieving a 70% or greater.

Ideal Target: The ideal target is an average of 80% and 80% of the students achieving a 70% or greater.

Implementation Plan (timeline): This measure is given annually each semester in the FIN 3090 class.

Key/Responsible Personnel: School of Business faculty teaching FIN 3090 are responsible for this measure.

Findings: The acceptable target was NOT met. The ideal target was NOT met.

Analysis: The table below provides the 2019-2020 through 2020-2021academic year results for Measure 3a.

Measure 3a					
Academic Year	n (# of students)	Acceptable Target	Average	Percentage	
			Score	passing	
2019-2020	41	75%	63.7%	44%	
2020-2021	45	75%	70.0	69%	

AY2019-20: <u>The acceptable target was NOT met.</u> There was a concerning drop in performance in AY 2019-20. Possible explanations include the pandemic and sudden

transition to all online learning resulted in lower grades. Participation in the spring semester was lower than the fall. Based on the analysis of the results, a decision was made to expand the use of regulatory discussion and debate and include current events as a component of the class grade.

AY 2020-21: <u>The Acceptable target was NOT met.</u> While there was improvement in the scores of students in 2020-21 relative to 2019-2020, the acceptable target was still not met. The move to virtual instruction reduced the quality of in-class discussion of current topics (getting people to talk over WebEx was excruciating).

Decision:

In the Fall of 2020, a new service called Packback was introduced. This required students to include a discussion of the articles they posted, and it was auto graded and given a 'critical thinking' score. Based on the analysis of the 2020-21 results, a decision was made to increase the weighting of the article submissions and discussion of current topics with an eye towards recognizing faulty reasoning. To encourage more thoughtful discussion, a more stringent grading system based on the quality of the submission and discussion will be introduced.

Measure 3.2 (Direct – Other; FIN 4200 Business Simulation Game)

Details/Description: In AY 2017-2018, a business simulation game was added to FIN 4200 as a method for students to make business decisions, analyze results, and modify their decisions. The business simulation game is called GoVentureCEO. In this game students choose are given an initial budget and allocate those funds to Production, Distribution, R&D, Marketing, Human Resources, and Ethics. Students determine how many units to produce, how much to invest in R&D to make a better product, how much to charge per unit, whether to expand to new areas, and how much to spend on marketing of the product. The game takes place over 6-8 periods and students update their decisions each period after analyzing their results. Students compete against each other to be the most profitable and decisions made by other students affect results. Credit is given for activity and bonus points are given to the top performers.

Acceptable Target: 50% of the students will be profitable over the course of the game.

Ideal Target: 75% of the students will be profitable.

Implementation Plan (timeline): Game is offered each semester in FIN 4200.

Key/Responsible Personnel: School of Business Faculty teaching FIN 4200

Findings: The Acceptable and Ideal Target were both met.

Analysis: The table below provides the 2019-20 through 2020-21 academic year results for Measure 3b.

Measure 3b					
Academic Year	n (# of students)	Percent Profitable	Avg. Profit	Avg. Profit	
			Period 1	Period 8	
2019-2020	43	72%	4.87	11.2	
2020-2021	39	76%	2.66	16.8	

Table 14: AY 2019-20 through AY 2020-21 Results

AY2019-20: <u>The acceptable target was met.</u> Student performance on the simulation game has shown steady improvement and has received positive feedback in evaluations. One drawback of the game is that there is an expense associated with the game. As such, some students opt to write a paper rather than participate the game. This may result in a selection bias where the game results are biased in favor of students interested in the game. Based on these results, the game was expanded to include multiple games involving different types of companies and decisions.

AY 2020-21: <u>The Acceptable and Ideal target were both met.</u> In the Fall semester, three students performed better than the instructor for the first time.

Decision: Student feedback on the expansion to using multiple games involving different types of companies and decisions was mostly positive as one of the games involved a crypto consulting company. The business simulation game administered has been a successful addition to the FIN 4200 class. Based on the analysis of the 2020-21 results, a wider variety of businesses will be offered so that students can experience different decisions.

Measure 3.3 (Direct – Other; FIN 3090 Case Analysis)

Details/Description: Case studies link financial ideas to real events and real policies. Finance 3090 examines corporate financing, investment decisions and related issues in financial strategy. The student must deal with the situation described in the case, in the role of the manager or decision maker facing the situation. By engaging in the case, students apply the concepts, techniques and methods of the discipline and improve their ability to apply them. Students are required to identify the principal questions of the case and perform an analysis using the appropriate tools and knowledge to identify challenges and ambiguities in the case. Students learn the material more deeply when they are active generators rather than passive recipients of knowledge and retain more of the material as they apply the concepts and methods. Cases compel students to work on real world problems that are complicated and messy which require students to hone skills in identifying and using evidence, choosing which concepts, theories and methods are relevant, and ignoring extraneous and irrelevant material. Case analysis develops skills in problem solving, quantitative and/or qualitative analytical tools, decision making in complex situations, and coping with ambiguities.

Acceptable Target: The acceptable target is an average of 75% and 70% of the students achieving a 70% or greater.

Ideal Target: The ideal target is an average of 80% and 80% of the students achieving a 70% or greater.

Implementation Plan (timeline): This assignment measure is given each semester in the FIN 3090 class.

Key/Responsible Personnel: School of Business faculty teaching FIN 3090 are responsible for this measure.

Findings: The Acceptable target was met.

Analysis: The following table presents the results for 2019-20 through 2020-21 academic years.

Measure 3c				
Academic Year	# of Students	Acceptable Target	ldeal Target	Percentage passing
2019-20	82	70%	80%	90.2
2020-21	65	70%	80%	83.4

Table 15: AY 2019-20 through AY 2020-21 Results

AY 2019-20: The acceptable and ideal targets were <u>met</u>, but the ideal target was <u>not</u> <u>met</u> as 82.9% of the students achieved a passing grade of 70% or higher.

AY 2020-21: The acceptable and the ideal targets were met.

Decision. Although the targets were met, there was a decline in scores relative to 2019-20. The shift to virtual classrooms due to the Covid pandemic had a greater effect on some types of learning, especially group projects and case analyses that have greater dependence on group interaction. The decline in scores for 2020-21 were an indication of this effect. A return to more in-class instruction and normalized student learning should improve scores in 2021-22. Additionally, students will be introduced to XBRL in FIN 3090 and this will be used to gather current and historical company data. It is believed that this new technology will allow students to better see the impact of company decisions which will lead to improve ability to perform case analyses.

SLO 4. <u>Global, Cultural, and Ethical Perspective</u>. Students should be able to: Identify cultural/global challenges facing management in doing business in the international arena.

Course Map: Tied to course syllabus below.

ACCT 2000	Financial Accounting (Foundational Course)
BUAD 2200	Business Reports and Communications (Foundational Course)
BUAD 3270	International Business (Foundational Course)
CIS 4600	Advanced Systems Development (Capstone Course)
MGT 4300	Strategic Management and Policies (Capstone Course)
UNIV 1000	The Student Experience (Supporting Course)

Measure 4.1. (Direct – Exam; BUAD 2200 – Country Report

Details/Description: Written document measure (BUAD 2200)

Acceptable Target: 70% of the students will score 70% or better.

Ideal Target: 90% of the students will score 70% or better.

Implementation Plan (timeline): Ongoing in BUAD 2200.

Key/Responsible Personnel: School of Business Faculty Teaching BUAD 2200.

Finding: The acceptable target was met.

Analysis: The table below directly compares the 2018-2019 and 2020-2021 academic year results for Measure 4.1.

Measure 4.1					
Academic Year	n (# of teams)	Acceptable Target	Ideal Target	Actual Results	
2018-2019	45	70%	90%	96%	
2020-2021	50	70%	90%	88%	
Percentages indicate the percent of teams scoring 70% or better on the measure.					

Table 16: AC 2018-2019 vs. AC 2020-2021 Comparison

AC 2018-2019: During the school term 45 groups (n-180 students) completed the BUAD 2200 Country Report and 96% of the students in the teams (45), scored 70% or better on the BUAD 2200 2200 Country Report. <u>Both the acceptable target and ideal target were met.</u>

Based on the analysis of these results, the faculty members teaching BUAD 2200 utilized a variety of pedagogical methods to assist students with their group written country reports. Best practices included professors continuing to embed model examples of various business report documents into the course and voice-narrated videos. These videos provide step by step project/assignment directions for use by students. Faculty also re-evaluated the existing rubric to determine to increase its rigor as was deemed appropriate.

AC 2020-2021: <u>The acceptable target was met.</u> <u>The ideal target was not met.</u> During the 2020-2021 term 50 groups (n=237) completed the BUAD 2200 Country Report assignment and 88% of the teams (n=50), scored 70% or better. This score does indicate a drop of 8% from the 2018-2019 assessment cycle.

The number of students enrolled in the 10 sections was 237. There were 2 face-to-face sections and 3 online sections of BUAD 2200 offered during each of the Fall and Spring semesters. These 237 students were placed into 50 groups for the purpose of completing this assignment for the assessment. Though the average group score (88%) indicates that the Acceptable target was met, it must be noted that of the 237 students enrolled in ten sections of BUAD 2200, only 184 students could be included in the data collection process. Fifty-three students (22%) did not complete the assessment piece for this objective. The data from recent academic years shows that about 10% of the students enrolled in the course usually do not complete the assessment. This 22% is a large increase from past data collection results. Eleven of the students completed only the written portion but chose not to complete the oral part of the assignment, while 42 students did not attempt either the written or oral part of the assessment. When questioned about their non-participation some of the students cited COVID related issues or hurricane related issues. Some stated that job related time issues caused them not to participate. However, many chose not to respond to attempts from the instructors to find out why they were not completing the assessment and/or course.

Based on the analysis of the 2020-2021 results faculty are considering strengthening the targets. Instructors of the Business Communications course will continue to meet regularly to examine scoring and grading issues and to review any issues with group dynamics etc. Examples of short instructional videos will continue to be added to the course. A reading list of possible book sources will be added earlier in the semester so that students can begin to read about cultural differences, social and business etiquette, political patterns, family life, etc. in foreign countries. Any new instructors of the course will be assigned a course mentor during their first semester of teaching the course.

The instructors of the course will also attempt to lower the number of students not participating in the assessment project back down to the 10% range from past years. The instructors will deliver information to the students at the beginning of the Fall 2021 semester about the expectations of the students. Students will be asked to indicate their understanding of the requirements for this course. The report project will be mandatory for all students (both the written and oral portions). Also, the assessment project will be introduced earlier in the semester and students will be made to submit portions of the assessment for review by the instructors.

To further aid students in their ability to demonstrate a basic awareness and understanding of cultural differences, we will increase instruction in the areas of business and social etiquette in foreign countries. Areas such as social customs, political patterns, family life and the way these contexts are different from Americans will be expanded.

These changes will improve the student's ability to effectively communicate and present their business ideas in a global business environment and thereby continuing to push the cycle of improvement forward.

Measure 4.2 (Direct – Exam; BUAD 3270 International Business Plan)

Details/Description: Middle measure of student knowledge of cultural/global perspectives; a written document measure in BUAD 3270.

Acceptable Target: 70% of the students will score 70% or better.

Ideal Target: 90% of the students will score 70% or better.

Implementation Plan (timeline): Ongoing in BUAD 3270 class.

Key/Responsible Personnel: School of Business Faculty Teaching BUAD 3270.

Finding: The ideal target was met

students)

180

164

Cycle

2018-2019

Analysis: The table on the next page directly compares AC 2018-2019 and AC 2020-2021 academic year results for Measure 4.2.

				-	
		Measur	e 4.2		
Assessment	n (# of	Acceptable	Ideal	Actual	Maa

Target

90%

90%

2020-2021 *Percentages indicate the percent of teams scoring 70% or better on the measure.

Target

70%

70%

AC 2018-2019: In AC 2018-2019, the ideal target was met. In AY 2018-2019, 180 students participated in the written final report of the International Business Plan group project. The average grade of these 180 students for the written document results was 85%, 96% of students scored 70% or better.

Based on the analysis of the AC 2018-2019 data, the faculty responsible for BUAD 3270 provided coaching and provided model examples of success for this project in each class. Since fall 2019 a sample APA style report assignment has been required in course orientation to help students review the latest APA style so there were much fewer mistakes in the final report format. The faculty also separated the previous one-document project instructions into four documents – General, Part A, Part B, and Part C. General Instructions must be finished reading during the course orientation to unlock the Moodle drop box for submitting the sample APA format. Part A and Part B reports must be submitted in the formal correct APA style. One instructor also required each group to

Mean

85%

89%

Results*

96%

100%

submit a cover letter with the final report to describe the group's modifications in Part A and Part B according to the instructor's feedback in Part A and B. All reports, including Part A, Part B, and Final Report were required to be submitted to the Turn-it-in drop box to enhance academic integrity.

AC 2020-2021: In AC 2020-2021, <u>the ideal target was met.</u> 164 students participated in the written final report of the International Business Plan group project. The average grade of the 164 students for the written document was 89%. 100% of students scored 70% or better.

Compared to AC 2018-2019, the mean final report grade of AC2020-2021 increased by 4%; the percentage of students achieving 70% or better increased by 4%.

Based on the analysis of the 2020-2021 results the faculty will continue to use Microsoft Teams to facilitate the teamwork and ensure the quality of the final business report. Faculty will also require all groups to make improvements for Part A and B after receipt of the instructor's feedback. Additionally, instructors will introduce international business research databases and tools in class to enhance the quality research for the international business plan. These changes will improve the student's ability of communications, analysis, and teamwork in the global business environment thereby continuing to push the cycle of improvement forward.

Measure 4.3 (Direct – Exam, Partial School of Business Knowledge Exam)

Details/Description: Partial School of Business Knowledge Exam Given in BUAD 3270

Acceptable Target: Average score should be equal or higher than the ETS International Business score.

Ideal Target: Average score should be 10% higher than the ETS International Business score.

Implementation Plan (timeline): Ongoing in BUAD 3270 sections

Key/Responsible Personnel: School of Business Faculty Teaching BUAD 3270 Sections.

Findings: The target was <u>met.</u>

Measure 4.3					
Academic Year	n (# of	Acceptable Target	Ideal Target	Mean	
	students)	(based on ETS data)	(based on ETS data)		
2018-2019	168	35%	45%,	52%	

Table 18: AC 2018-2019 vs. AC 2020-2021 Comparison

2020-2021	88	35%	45%	49%
			•	

Analysis: The table compares AC 2018-2019 and AC 2020-2021 for Measure 4.3.

AC 2018-2019: In AC 2018-2019, <u>both targets were met</u>. Analysis provided a 52% average score in the International Business Partial SoBUSKE exam. The International Issues score on the ETS exam was 35% so that <u>the acceptable and ideal targets were met</u>. It should be noted that the international score on the SoBUSKE was 43% for the students taking the entire exam in MGT 4300 and 52% for the students in BUAD 3270. This difference is understandable given the emphasis placed in international issues in BUAD 3270. Based on these results, faculty decided to enhance the rigor of the course by removing a model (or sample) report from the course shell. Additionally, changes due to the pandemic enabled faculty to simulate how business was accomplished using MS Teams for course delivery and team meetings. International business faculty also hosted an international business webinar to encourage greater emphasis on international issues in other classes across the curriculum. Last, a new textbook that covers more international business topics than the previous textbook was adopted for the International Business course (BUAD 3270).

AC 2020-2021: In AC 2020-2021, both the acceptable and ideal targets were met. Only 43 students out of 88 passed at or above the acceptable target of 70% for the International Business Partial SoBUSKE exam. Thus, the average score for the year is 49%. In reviewing the 3% loss from AC 2018-2019, some factors to explain this may be that the area experienced two hurricanes and two snowstorms with the resulting loss of water and electricity to the parish in addition to the global pandemic. Moreover, the decision to increase the rigor of the course by removing the model report for students may have come into play as well. The pandemic also affected the ability of faculty to implement some of the desired changes from the AC 2018-19 report. Thus, going forward, the International Business faculty will develop a mini lesson to summarizes the major ideas of International Business which were provided to other faculty to include in their courses and share with students. These changes will improve the student's ability to be agile in the global business environment thereby continuing to push the cycle of improvement forward.

SLO 5: Students will demonstrate the ability to solve problems from an integrated multi-disciplinary business perspective.

Course Map: Tied to course syllabus objectives.

- CIS 1015 Introduction to Computer Information Systems (Foundational Course)
- CIS 1030 Introduction to Software Development (Foundational Course)
- CIS 2050 Essentials of Network Design and Hardware (Foundational Course)
- CIS 2980 Database Systems (Foundational Course)
- CIS 3020 Web Page Development (Foundational Course)
- CIS 3900 Systems Analysis and Development (Capstone Course)
- CIS 4600 Advanced Systems Development (Capstone Course

Measure 5.1. (Direct – knowledge)

The comprehensive computer information systems knowledge exam was given in CIS 1015 – Introduction to Computer Information Systems to establish a baseline. For a midpoint measurement, faculty administered the exam in CIS 3300 – Intermediate Object-Oriented Programming and CIS 3400 – Telecommunications and Networks. For the final measurement, faculty administered the exam in CIS 4600 – Advanced Systems Development. The acceptable target was students would score an 80% or better.

Findings:

AC 2019 – 2020: The 80% target was not met.

Analysis. In the 2016-2017 academic cycle, the Computer Information Systems faculty developed the fifth student learning outcome and its associated measurements. Thus, the 2017-2018 academic cycle represented the baseline year on this student learning outcome.

In 2017-2018, the 80% target was not met. The actual percentages by subject area were as follows for the final measurement in 2017-2018:

- 42% for Introduction to Computer Information Systems
- 36% for Introduction to Software Development
- 47% for Essentials of Network Design and Hardware
- 54% for Database Systems
- 14% for Web Page Development
- 30% for Systems Analysis and Development
- 20% for Advanced Systems Development

The table below shows more detailed results from the comprehensive examination in 2017-2018.

	<u>Question</u>		<u>CIS 3300 &</u>	
	<u>Type</u>	<u>1015</u>	<u>CIS 3400</u>	<u>4600</u>
Responses		226	63	48
		F	Percentage Correct	t
1015 Q1 - Loop	MC	23%	60%	58%
1015 Q2 - Planning	MC	85%	87%	83%
1015 Q3 - Structured Program				
Characteristics	Essay	10%	21%	14%
1015 Q4 - Benefits of Structures	Essay	4%	10%	14%
CIS 1015 Average		31%	45%	42%

1030 Q1 - Object of a Class	МС	17%	56%	56%
1030 Q2 - Value of X	MC	19%	30%	29%
1030 Q3 - Variable Definition	Essay	16%	24%	29%
1030 Q4 - Types of Control Structures	Essay	18%	42%	29%
	Loody		-12 /0	2070
CIS 1030 Average		17%	38%	36%
2050 Q1 - Type of Computer Network	MC	45%	46%	58%
2050 Q2 - Unit of Clock Speed	MC	44%	63%	63%
2050 Q3 - Microchip on Motherboard	MC	25%	44%	58%
2050 Q4 - Troubleshooting Process	Essay	13%	47%	31%
2050 Q5 - Dual and Quad Channel				
Memory	Essay	18%	32%	26%
		200/	470/	470/
CIS 2050 Average		29%	47%	47%
2980 Q1 - Normalization	MC	66%	71%	71%
2980 Q2 - Many-to-many Relationship	MC	35%	38%	46%
2980 Q3 - Types of Relationships	Essay	20%	55%	58%
2980 Q4 - ERDs	Essay	14%	41%	42%
	LSSdy	14 /0	4170	42 /0
CIS 2980 Average		34%	51%	54%
3020 Q1 - Link	MC	12%	30%	31%
3020 Q2 - Inline Images Attribute	MC	19%	21%	25%
3020 Q3 - Selected Option Button	MC	10%	19%	13%
3020 Q4 - Connecting to External	_			.
CSS File	Essay	0%	0%	0%
3020 Q5 - Creating Rows and		00/	0.0/	00/
Columns	Essay	0%	0%	0%
CIS 3020 Average		8%	14%	14%
3900 Q1 - SDLC Analysis Phase	MC	32%	37%	29%
3900 Q2 - Dynamic Schedule	MC	23%	43%	56%
3900 Q3 - Phases of SDLC	Essay	8%	14%	20%
3900 Q4 - Functional Model Elements	Essay	4%	23%	17%
		470/	200/	200/
CIS 3900 Average		17%	29%	30%
4600 Q1 - Agile Software				
Development	МС	28%	35%	31%

4600 Q2 - Scrum Phases	MC	39%	37%	23%
4600 Q3 - 2nd Value of Agile				
Manifesto	Essay	4%	8%	17%
4600 Q4 - SCRUM framework	Essay	1%	11%	10%
CIS 4600 Average		18%	23%	20%

The expectation for the CIS 1015, CIS 1030, CIS 2050, CIS 2980, and CIS 3020 responses was lower responses from the CIS 1015 test group followed by increased scores at the midpoint. For the final point, the expectation was maintenance or further increase from the midpoint. All five areas saw increases from the baseline to the midpoint. However, two of the five groups saw decreases from the midpoint to the final measurement.

The expectation for the CIS 3900 and CIS 4600 responses was for lower responses from the baseline and midpoint groups with increased responses for the final measurement. A slight increase occurred for the CIS 3900 area with a decrease occurring for the CIS 4600 area.

The results indicated the most difficulties with Web Page Development concepts, Advanced Systems Development concepts, and Systems Analysis & Design concept.

Based on the analysis of the 2017-2018 results, the faculty made the following changes in the 2019-2020 to drive the cycle of improvement. After students showed a lack of effort in the 2017-2018 academic cycle, instructors decided to "grade effort" in the respective classes to increase the effort students were giving. This change seems to have helped with the scores as the percentage increased for every subject area. However, in reviewing the data, some students still did not give much effort in answering the exam, particularly on essay question. Cheating also remains a concern.

The faculty also reviewed the test results to ensure the test questions exhibited clarity as to what the faculty are expecting in the responses. At the time, the faculty decided to leave the questions as they were to determine if additional effort changed the results.

As a result of these changes, in 2019-2020, the target was not met. The actual percentages by subject area are as follows for the final measurement:

- 49% for Introduction to Computer Information Systems
- 43% for Introduction to Software Development
- 51% for Essentials of Network Design and Hardware
- 57% for Database Systems
- 32% for Web Page Development
- 37% for Systems Analysis and Development
- 29% for Advanced Systems Development

The table below shows more detailed results from the comprehensive examination.

Table 2	20
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	Question		CIS 3300 &	
	Type	<u>1015</u>	<u>CIS 3400</u>	<u>4600</u>
Responses		177	60	35
		P	ercentage Correc	t
1015 Q1 - Loop	MC	24%	70%	<u>83%</u>
1015 Q2 - Planning	MC	86%	90%	86%
1015 Q3 - Structured Program	NIC .	0070	5070	0070
Characteristics	Essay	2%	13%	23%
1015 Q4 - Benefits of Structures	Essay	0%	0%	3%
		0,0	0,0	0,0
CIS 1015 Average		28%	43%	49%
1030 Q1 - Object of a Class	МС	20%	52%	60%
1030 Q2 - Value of X	MC	20%	43%	43%
1030 Q2 - Value of X	Essay	3%	38%	23%
		14%		
1030 Q4 - Types of Control Structures	Essay	14%	52%	46%
CIS 1030 Average		15%	46%	43%
2050 Q1 - Type of Computer Network	MC	40%	55%	63%
2050 Q2 - Unit of Clock Speed	MC	36%	70%	66%
2050 Q3 - Microchip on Motherboard	MC	27%	52%	63%
2050 Q4 - Troubleshooting Process	Essay	12%	40%	40%
2050 Q5 - Dual and Quad Channel			_	
Memory	Essay	12%	37%	26%
CIS 2050 Average		25%	51%	51%
<u> </u>				
2980 Q1 - Normalization	MC	68%	80%	74%
2980 Q2 - Many-to-many Relationship	MC	36%	57%	57%
2980 Q3 - Types of Relationships	Essay	16%	75%	54%
2980 Q4 - ERDs	Essay	5%	45%	43%
CIS 2980 Average		31%	64%	57%
ž				
3020 Q1 - Link	MC	9%	38%	40%
3020 Q2 - Inline Images Attribute	MC	20%	22%	29%
3020 Q3 - Selected Option Button	MC	10%	27%	29%
3020 Q4 - Connecting to External	Essay			

CSS File				
3020 Q5 - Creating Rows and				
Columns	Essay			
CIS 3020 Average		13%	29%	32%
3900 Q1 - SDLC Analysis Phase	MC	38%	38%	49%
3900 Q2 - Dynamic Schedule	MC	23%	33%	51%
3900 Q3 - Phases of SDLC	Essay	6%	10%	20%
3900 Q4 - Functional Model Elements	Essay	4%	22%	29%
CIS 3900 Average		18%	26%	37%
4600 Q1 - Agile Software				
Development	MC	27%	30%	34%
4600 Q2 - Scrum Phases	MC	42%	42%	40%
4600 Q3 - 2nd Value of Agile				
Manifesto	Essay	3%	13%	20%
4600 Q4 - SCRUM framework	Essay	3%	8%	20%
CIS 4600 Average		19%	23%	29%

For the 2019-2020 academic cycle, some areas of concern remained that were also identified in the 2017-2018 academic cycle.

As with the 2017-2018 academic cycle, the expectation for the CIS 1015, CIS 1030, CIS 2050, CIS 2980, and CIS 3020 responses was lower responses from the CIS 1015 test group followed by increased scores at the midpoint. For the final point, the expectation was maintenance or further increase from the midpoint. All five areas saw increases from the baseline to the midpoint. However, two of the five groups (CIS 1030 and CIS 2980) saw decreases from the midpoint to the final measurement.

The expectation for the CIS 3900 and CIS 4600 responses was for lower accurate responses from the baseline and midpoint groups with increased accurate responses for the final measurement. In contrast to the 2017-2018 academic cycle, both groups increased for the final measurement.

The results indicated the most difficulties with Web Page Development concepts, Advanced Systems Development concepts, and Systems Analysis & Design concept. For the latter two areas, these results may be due a lack of effort by the seniors participating in the final measurement.

The Web Development responses are partially explained by an error found in the data gathering document. Part of the answers for the questions involved HTML code. In the analysis of results, the faculty found the HTML code was not being outputted correctly to allow for correct analysis.

Overall, while the percentages increased from the 2017-2018 cycle to the 2019-2020 academic cycle, they are still further from the ideal target than desired.

Additionally, while we cannot measure the impact on the results, the COVID-19 crisis could have also impacted the results. Student were removed from normal routines, face-to-face classes were moved to online classes in less than a week, and substantial stress was placed on faculty and students. These changes could have negatively impacted the performance on the assessment.

Decision: In 2019-2020, the target was not met. Based on the analysis of the 2019-2020 results, the faculty will implement the following changes in 2020-2021 to drive the cycle of improvement. First, the faculty will review the Web Development questions to determine how the information can be collected and allow for valid data and analysis.

Additionally, the faculty will again review the mode of testing to determine methods to increase the student effort for the exam and improve the academic integrity of the results. While the lack of effort by students may not fully explain missing the targets, the faculty believe a better effort by students would certainly improve the results of the examination. If the students were able to make this change, the results will provide a better foundation of where weaknesses in the curriculum exist.

Furthermore, the faculty will continue examining the questions on the test as well as the methods they are using in the related classes to ensure they are teaching the students this foundational material. Some changes will take time to reflect in the results. Instructors have made changes to their materials and teaching methodologies in CIS 1015, CIS 2050, and CIS 2980 in the last two years. These changes will not be fully reflected in the results for two to four more years.

Measure 5.2 (Direct – CIS 4600 Advanced Systems Development Project)

Each year, students work in groups to design and create an application related to a realworld project or problem. Students initially design the system in CIS 3900 – Systems Analysis and Development. Students implement the design in CIS 4600 – Advanced Systems Development. The faculty member of the course grades the project based on an existing rubric. Seventy percent (70%) of the students will score 80% or better.

Findings:

AC 2017 – 2018: CIS 4600 target met. 84% of students achieved 80% or higher. AC 2019 – 2020: CIS 4600 target met. 100% of students achieved 80% or higher. **Analysis.** In the 2016-2017 academic cycle, the Computer Information Systems faculty developed the fifth student learning outcome and its associated measurements. The 2017-2018 academic cycle represented the baseline cycle on this student learning outcome.

In 2017-2018, the target was met. 84% of students achieved 80% or higher. This 2017 – 2018 data was examined in more detail as shown in Table 3 and Table 4.

Sprint – January 29th	98% Average
Sprint – February 12 th	88% Average
Sprint – February 26 th	81% Average
Sprint – March 12 th	96% Average
Sprint – March 26 th	85% Average
Sprint – April 16 th	82% Average

Table 22

Project Presentation	93% Average
Final Report Submission	89% Average
Project Functionality	89% Average
User Manual	87% Average
Project Personal Narrative	86% Average
Peer Evaluation	86% Average

Based on the analysis of the 2017-2018 results, the faculty made the following changes in 2018-2019 and 2019-2020 to drive the cycle of improvement. First, students practiced their presentations more before the final presentation, including at Research Day (in the 2018-2019 year). Secondly, the faculty member teaching CIS 4600 constructed the teams to balance technical strengths across teams. Finally, the faculty member teaching CIS 4600 incorporated additional networking and security concepts into the final project.

As a result of these changes, in 2019-2020, the target was met.

Students completed the project every academic cycle although this student learning outcome is only measured every other academic cycle. In this academic cycle, every student met the 80% criteria. This increase from the 2017 – 2018 academic cycle can be attributed to changes made by the instructor to increase the students' competency in key areas, particularly in the presentation area.

Analysis also occurred of individual items within the overall score. As students completed the final project, they completed sprints as part of the agile (scrum) systems development methodology. The scores on each sprint decreased followed by an increase and

subsequent decreases as shown in the table below. These scores are individual as each student must complete a specific task for each sprint.

Table 23

Sprint – January 29th	100% Average
Sprint – February 12 th	92% Average
Sprint – February 26 th	97% Average
Sprint – March 12 th	97% Average
Sprint – March 26 th	94% Average
Sprint – April 16 th	94% Average

Additionally, Computer Information Systems faculty analyzed individual components of the project. The table below shows the individual score components.

Table 24

Project Presentation	100% Average
Final Report Submission	100% Average
Project Functionality	100% Average
User Manual	97% Average
Project Personal Narrative	97% Average
Peer Evaluation	98% Average

Every component of the project saw an increase from the 2017-2018 academic cycle. While some modifications occurred due to the COVID-19 pandemic, much of the project expectations remained the same. For example, the face-to-face CIS 4600 class missed two opportunities to practice their presentations, including Research Day presentation that they could have used on their resumes and for practice. All areas saw increases of 5% to 12%.

At least some of the increases should be attributed to changes in the CIS 3900 and CIS 4600 classes as well as the overall program. Students have struggled with nervousness in presentations. As part of their preparation for their final project presentations, students now complete multiple presentations in the class. Additionally, the CIS faculty have incorporated more presentations in other parts of the CIS curriculum to enhance the students' presentation skills.

Another area that increased was the peer evaluation score. In a change from the previous academic cycle, the instructor of the class chose the team members to ensure the team had a diverse range of technical backgrounds based on their various concentrations. The project also now requires components from all concentrations. This change likely led to a more cohesive group where at least one team member should have knowledge regarding a particular area of the project. This change may have led to the increase in the peer evaluation score.

Decision: In 2019-2020, the target was met. Based on the analysis of the 2019-2020 results, the faculty will implement the following changes in 2020-2021 to drive the cycle of improvement. First, the instructor will keep the changes requiring additional presentations, balancing of technical strengths on teams, and incorporating additional technical areas in the final project. These changes seem to have increased the performance of the students on the final project. Secondly, during the next academic cycle, the instructor will monitor these results to ensure that changes made in the other classes are still supporting the final project and that students are still performing at the necessary levels. Finally, one of the two lowest ratings on the final project was the production of a user guide. While still high at 97%, the CIS faculty will discuss if the creation of user guides in other classes preceding these capstone classes would be feasible.

Comprehensive Summary of Key evidence of improvement based on the analysis of results.

Data on the students learning outcomes was collected, analyzed, and reported across multiple disciplines within the School of Business. Instruments used included the complete and partial SoBUSKE, the ETS exam, written and oral projects from students as individuals and as teams, case studies, simulations, and other quizzes or exams.

Six measures were taken for SLO#1 Effective Communication. Of these, <u>three measures</u> <u>met the acceptable target with two also meeting the ideal target.</u> Two measures did not <u>meet the target</u>. Future actions to assist in meeting the targets include attempting to lower non-participation on some activities, including by assigning the business letter earlier in the semester; creating videos to describe assignments, best practices, rubrics, etc.; pointing students to the BPCC Open Campus on grammar mechanics; incorporating more discussion of writing letters; and continuing use of the Steward Mentoring Program.

For SLO#2, <u>one measure was partially met</u>, and the other two measures were not met. The results for SLO#2 Integration of Knowledge were more disappointing as many of the 2020-2021 results showed decreases from the previous administration. On the School of Business Knowledge Exam given in the senior year, decreases occurred in almost every subject area. While faculty will continue reviewing the material covered and emphasizing that materials on projects and other assignments, a strong belief exists that the results were affected by the pandemic, hurricanes, and other extenuating circumstances of the past year. Some changes made due to the analysis of results include more instructor led videos of the material, a create of a flow chart for statistical tests in BUAD2120, and the moving of the partial exam administration from FIN 2150 (Personal Finance) to FIN 3090 (Business Finance).

SLO#3 had more positive results. Two of the three measures for SLO#3 <u>met the</u> <u>acceptable target as well as the ideal target</u>. Changes to the class that included the introduction of Packback as well as a wider variety of businesses found within the simulation game enhanced the outcome in 2020-2021. Again, a belief exists that moving past the pandemic and other extenuating events of the last year should enhance the results moving forward. Additional efforts, such as the introduction of a new technology called XBRL, can also assist in meeting these targets.

For SLO#4, <u>all three measures met the acceptable target, and two of the three measures</u> <u>met the ideal target</u>. The usage of Microsoft Team assisted students with their teamwork on the international business report. Future enhancements include adding more resources such as videos, book resources, and international business research databases. Instructors will continue the use of Microsoft Teams as well as make sure the teams are incorporating instructor feedback based on the various parts of the report.

For SLO#5, <u>one measure met the target while one measure did not meet the target</u>. On Measurement 5.2, students increased their already high performance from the 2017-2018 academic cycle. These results in the capstone class showed students knew how to create information systems projects and go through the systems development process.

Unfortunately, the CIS unit did not meet the target for measurement 5.1 which indicates students still have issues with supporting their abilities with the underlying knowledge and theory. As with the 2017-2018 academic cycle, this contrast fits with what the faculty often find in the classroom where students can complete an assignment but struggle explaining why and how. However, changes made since the 2017-2018 academic cycle do seem to have helped. Scores in every subject area increased from the 2017-2018 academic cycle.

Additionally, we can point to other changes within the program as evidence of continuous improvement. We continued to make changes to the curriculum based on assessment, advisory council feedback, and student needs. In 2020-2021, the unit implemented a new MS in Computer Information Systems. The unit also submitted several prerequisite changes to help ease the path of students to the BS in Computer Information Systems degree.

Plan of Action moving forward.

Based on analysis of the 2020-2021 results, the School of Business has identified several strategies for improving learning outcomes.

A common thread throughout the instructor considerations is more incorporation of instructor-led videos on various areas of the classes. These videos might give more specific information about a specific process or topic. The instructors in these videos might also provide examples of best practices as well as go over rubric that better explain how students might be graded.

Teamwork is both a skill and a challenge. It involves knowledge, critical thinking, communication, and relationship skills. In the various classes, students continue to learn from each other as do faculty members. The stewards of certain classes ensure student learning outcome measurement is consistent from instructor to instructor and allows for the sharing of best practices.

Faculty members also continue to create strategies to address non-participation in many of the activities. Some of the student learning outcome measurements are

greatly affected by the lack of participation by students. While the faculty are trying to make decisions based on the available data, these decisions could be skewed due to the students who are not meaningfully participating.

Another location for best practices moving forward is the Lunch and Learn program the School of Business normally hosts. While cancelled due to the pandemic in the 2020-2021 year, the Senior Coordinator of the School of Business hopes to bring these events back in the 2021-2022 year. During these almost-monthly events, faculty members in the School of Business, as well as faculty and staff from outside the School of Business as appropriate, present on topics. The student learning outcomes, their measurements, and ways to affect these measurements are often key topics.

Faculty will be especially interested in incorporating support for student learning outcomes given a change in the merit sheet. In the 2020-2021 academic year, a new merit sheet was proposed and approved. This merit sheet includes an emphasis on key items that move the School of Business in the direction outlined by our mission statement and vision. One key area where faculty members can receive point is "Demonstration of the incorporation of the outcomes of the SoB's assessment process of student learning expectations into the faculty member's course or courses that highlight either a new design, delivery method, revision, and/or overall improvement for the degree program curricula." Through the promotion of this area, the School of Business faculty hope to have more faculty members supporting the various student learning outcomes. Even though these changes might not be directly measured in the classes, the changes should affect the overall rates once the students enroll in the classes in which measurements are taking place. Other merit sheet areas include the incorporation of experiential learning activities in the classroom as well as the promotion of having a capstone activity in the class that allows a student to showcase what they have learned.

Faculty also are urged to continue utilizing technology to improve learning in their classrooms and online. Faculty utilized a large amount of technology in the last year due to the pandemic. For example, many faculty members had students in their classrooms as well as joining via WebEx or Teams. The use of this technology will continue for many faculty members. For example, in the international business area, the instructor will continue the usage of Microsoft Teams to allow for online students to connect with one another. In another example, a Finance faculty member continues to incorporate more technology into their classes.

Faculty members have also embraced many of the benefits of the IncludED program. Many faculty members are very happy that students can access their materials on the first day of class. This access helps prevent the failure of some students that would have failed in the past due to lack of access to needed materials.

The faculty are also investigating modifications to assignments, rubrics, and targets related to the SLOs so that they better reflect the intent of the measurements. A particular area of interest are the measurements related to the UNIV1000 class. This

class provides a baseline of data, but many students barely try, and a lot of information is lacking from this data collection.

Additional modifications regarding the collection of data and societal impact are also under consideration. Societal impact is a key area of concern under the new AACSB standards and has been incorporated into our AOL#4. Going forward, additional measurements may be necessary to ensure the School of Business is accurately assessing societal impact.

On SLO#5, the faculty will continue to brainstorm and review ways to increase the effort on the comprehensive exam to try to get a better feel of how our students' knowledge is progressing through the program. Additionally, the faculty will monitor how changes to our curriculum and classes affect the exam results. The faculty will also modify the data collection and/or questions for the web development area to ensure we are measuring that area comprehensively.

On the capstone project, the faculty will monitor how changes in the curriculum are affecting student performance on the final project. Faculty will also discuss how more practice for the creation of user guides can be incorporated into the curriculum.

The CIS faculty has developed many initiatives to better serve our students. We have changed prerequisites to assist students in moving through the BS in Computer Information Systems degree. We also continue to discuss and experiment on the best ways for students to pass industry-based certifications. Finally, we have implemented the new MS in Computer Information Systems program in the 2020-2021 academic year.

In conclusion, the School of Business and its faculty strive to improve all aspects of student learning. New initiatives are constantly being introduced and evaluated based on their effectiveness. Measures of student learning outcomes are assessed each semester and compared to previous results to determine progress. The School of Business has a collegial environment and faculty often work together to ensure classes are blending and that appropriate and successful strategies are shared with other faculty members.