Models of Student Learning Outcomes Reports

BSBA Management Information Systems

BSBAMIS02: Students will demonstrate knowledge of database design and implementation by building databases and queries.

Start (Do Not Change): 7/1/2016
End (Do Not Change): 6/30/2017

Learning Outcome Additional Description

Providing Program/Department: BSBA Management Information Systems

Effectiveness Measure

The instruments used to assess student mastery of this learning outcome are open-ended questions on multiple exams and a project, focusing on the concepts below, require the student to show competence in three areas which gauge a student’s ability to design and use databases.

1. Students will demonstrate the ability to design and develop a business database.
2. Students will demonstrate the ability to build SQL queries.
3. Students will be able to explain the principles of designing and implementing business databases.

Methodology

This SLO is measured in INFO 3233, Business Database Systems, every other spring semester. Students are assessed using both open-ended questions on multiple exams and a project.

To measure achievement on the first effectiveness measure students are required to complete a project involving the design and implementation of a database for a business. A total of 100 points is possible; students that receive 70 points or higher (70%) are deemed to have demonstrated the ability to design and develop a business database.

To measure achievement on the second effectiveness measure students are required to answer a set of database questions embedded in an exam. A total of 100 points is possible; students that receive 70 points or higher (70%) are deemed to have demonstrated the ability to build SQL queries.

To measure achievement on the third effectiveness measure students are required to solve problems and answer a set of questions embedded into two exams. A total of 193 points is possible, so students that receive 135 points or higher (70%) are deemed to have demonstrated the ability to explain the principles of designing and implementing a business database.

Program faculty members are responsible for collecting assessment data. Program faculty report(s) individual student assessment results to the Belk College of Business Assurance of Learning [AoL] Data Center. The Data Center collects and combines the program’s assessment data from across multiple courses. The Data Center then aggregates the data and returns statistical results to all program faculty. Program faculty members analyze these results and hold a closing the loop meeting following the semester in which assessment was conducted to complete the continuous improvement process. At this meeting, program faculty determines what changes or improvements should be made to instruction, the program, individual courses, or to the assessment process. UCALC reviews the
undergraduate majors reports to ensure continuous improvement is resulting from the AoL process and assessment results support curriculum revisions and shares any recommendations with the department faculty for consideration. Relevant changes are implemented the next time the course is taught.

**Expected Performance Outcome**

- 70% of students assessed will receive 70 points out of 100 (70%) or higher on the database design and implementation project.
- 70% of students assessed will receive 70 points out of 100 (70%) or higher on the exam questions related to writing SQL queries.
- 70% of students assessed will receive 134 points out of 192 (70%) or higher on the exam questions related to the principles of designing and implementing a business database.

**Performance Outcome Met?:**

**Current Year's Assessment Data**

This SLO will be assessed in Fall 2017

**Changes to be Implemented Next Year as Result of This Year's Assessment**

As identified last time this SLO was assessed, given the continued weakness related to the second effectiveness measure, MIS faculty suggest students may be further motivated by an increased weight allocation to the SQL homework. Additional thoughts include covering some of the basic SQL concepts earlier in the semester, capturing and making available to students the video from the class sessions, and giving “mini” quizzes on SQL.

**Changes to Academic Process:** No Academic Process Changes Planned

**Changes to Curriculum:** Other implemented or planned change

**Changes to Assessment Plan:** Plan has been reviewed and no changes made

**Reflection on the Continuous Improvement of Student Learning**

1. With regards to SLO 2, the professor teaching the course in which this SLO is assessed has prepared materials for students describing an optimal studying and learning approach for the course. He also invited a past student who earned an A in the course to share his approach with students, and started giving quizzes to motivate students to read the material ahead of time. These practices were planned to continue.
2. The planned changes were implemented.
3. Student learning improved by four percentage points for the first effectiveness measure, one percentage point for the second effectiveness measure, and 13 percentage points for the third effectiveness measure. However, student learning related to the second effectiveness measure continues to be below target and additional plans are in place to improve future student learning.

**BSBA Operations and Supply Chain Management**

**BSBAOSCM02:** Students will demonstrate the ability to apply analytical tools to service operations and select appropriate production processes.

- **Start (Do Not Change):** 7/1/2016
- **End (Do Not Change):** 6/30/2017
Learning Outcome Additional Description
Providing Program/Department: BSBA Operations and Supply Chain Management

Effectiveness Measure
The instrument used to assess student mastery of this learning outcome is open ended questions embedded in exams. Specifically, the questions test students mastery of the two concepts below which jointly effectively gauge overall student understanding:

1. Students will demonstrate the ability to apply the critical path method and critical path analysis to managing projects;
2. Students will demonstrate the ability to apply process design concepts to selecting types of layout and production systems as well as their design.
3. Students will demonstrate the ability to apply statistical process control and continuous improvement in services.

Methodology
This SLO is measured in OPER 3204, Management of Service Operations, every other spring semester. Students are assessed using multiple choice questions embedded in course exams.

To measure achievement of the first effectiveness measure, students are asked to answer nine equally weighted multiple choice questions. Students answering seven out of the nine questions correctly (more than 70%) are deemed to have demonstrated the ability to apply the critical path method and critical path analysis to managing projects.

To measure achievement of the second effectiveness measure, students are asked to answer six equally weighted multiple choice questions. Students answering 5 out of the 6 questions correctly (more than 70%) are deemed to have demonstrated the ability to apply process design concepts of selecting types of layout and production systems as well as their design.

To measure achievement of the third effectiveness measure, students are asked to answer 15 equally weighted multiple choice questions. Students answering 11 out of the 15 questions correctly (more than 70%) are deemed to have demonstrated the ability to apply statistical process control and continuous improvement in services.

Program faculty members are responsible for collecting assessment data. Program faculty report(s) individual student assessment results to the Belk College of Business Assurance of Learning [AoL] Data Center. The Data Center collects and combines the program’s assessment data from across multiple courses. The Data Center then aggregates the data and returns statistical results to all program faculty. Program faculty members analyze these results and hold a closing the loop meeting following the semester in which assessment was conducted to complete the continuous improvement process. At this meeting, program faculty determines what changes or improvements should be made to instruction, the program, individual courses, or to the assessment process. UCALC reviews the undergraduate majors reports to ensure continuous improvement is resulting from the AoL process and assessment results support curriculum revisions and shares any recommendations with the department faculty for consideration. Relevant changes are implemented the next time the course is taught.

Expected Performance Outcome
• 70% of students will correctly answer 7 out of 9 questions (70%) pertaining to critical path method and critical path analysis.
• 70% of students will correctly answer 5 out of 6 questions (more than 70%) pertaining to applying process design concepts of selecting types of layout and production systems as well as their design.
• 70% of students will correctly answer 11 out of 15 questions (70%) pertaining to applying statistical process control and continuous improvement in services.

Performance Outcome Met?: Yes

Current Year's Assessment Data

• Students will demonstrate the ability to apply critical path method and critical path analysis to managing projects.
  o Percent of students meeting performance outcome: 80% (n=69)

• Students will demonstrate the ability to apply the process design concepts to selecting types of layout and production systems as well as their design.
  o Percent of students meeting performance outcome: 86% (n=71)

• Students will demonstrate the ability to apply statistical process control and continuous improvement in services.
  o Percent of students meeting performance outcome: 83% (n=71)

Changes to be Implemented Next Year as Result of This Year's Assessment
Although student performance exceeded the target for all three effectiveness measures, there is still room for improvement, particularly in the first measure. Also, given the below target performance in the second measure in 2014, BISOM faculty would like to see additional data points to ensure that the improvements made are lasting.

Changes to Academic Process: No Academic Process Changes Planned
Changes to Curriculum: No Curriculum Changes Planned
Changes to Assessment Plan: Plan has been reviewed and no changes made

Reflection on the Continuous Improvement of Student Learning

1. With regards to SLO 2, to promote knowledge transfer related to process design between OPER 3100, a core course, and OPER 3204, a major course, the professor teaching the course planned to give more homework and expand practice problems assigned in class to help improve student learning related to process design concepts.
2. All recommendations were implemented. Considerably more homework and coverage related to process design was given.
3. With regards to SLO 2, the percentage of students meeting the target increased by nearly 20 percentage points.
Master of Science in Real Estate

MSRE01: Students will demonstrate a working knowledge of important terminology used in the real estate industry.

Start (Do Not Change): 7/1/2016
End (Do Not Change): 6/30/2017

Learning Outcome Additional Description
Providing Program/Department: Master of Science in Real Estate

Effectiveness Measure
The following effectiveness measures are used to effectively gauge overall student understanding of this SLO:

1. Students will demonstrate knowledge of commercial mortgage structures, contractual terms, and underwriting standards.
2. Students will demonstrate knowledge of terminology and metrics used in the real estate valuation process.
3. Students will demonstrate knowledge of terminology and metrics used to evaluate the strength of a real estate market.
4. Students will demonstrate knowledge of legal interests in real estate, essential elements of real estate contracts, lease provisions, and sources of legal authority to regulate the use of land.

Methodology
This SLO is measured in MSRE 6158 (Real Estate and Investment) and MSRE 6159 (Real Estate Development) every other fall semester and MSRE 6120 (Real Estate Law and Land Use Policy) and every other spring semester.

To measure achievement of the first effectiveness measure, students are asked to answer two multi-part questions by which they compute various metrics for different mortgage structures. The questions are worth a total of 22 points. Students who earn 17.5 points (80%) or higher are deemed to have demonstrated knowledge of commercial mortgage structures, contractual terms, and underwriting standards.

To measure achievement of the second effectiveness measure, students are asked to complete three computational questions worth a total of 12 points. Students that earn 9.5 points (80%) or higher are deemed to have demonstrated knowledge of terminology and metrics used in the real estate valuation process.

To measure achievement of the third effectiveness measure, students are asked to use a financial analysis template to construct an Excel workbook to analyze a case study. The case study analysis is scored using a 40-point scale. Students that earn 32 points (80%) or higher are deemed to have demonstrated knowledge of terminology and metrics used to evaluate the strength of a real estate market.

To measure achievement of the fourth effectiveness measure, students are required to answer 70 true/false and multiple choice questions and 10 short answer questions embedded in a course exam. The true/false and multiple choice questions are worth one point each and the
short answer questions are worth a total of 30 points. Students who earn 80 points (80%) or higher) are deemed to have demonstrated knowledge of legal interests in real estate, essential elements of real estate contracts, lease provisions, and sources of legal authority to regulate the use of land.

Program faculty members are responsible for collecting assessment data. Program faculty report(s) individual student assessment results to the Belk College of Business Assurance of Learning [AoL] Data Center. The Data Center collects and combines the program’s assessment data from across multiple courses. The Data Center then aggregates the data and returns statistical results to all program faculty. Program faculty members analyze these results and hold a closing the loop meeting following the semester in which assessment was conducted to complete the continuous improvement process. At this meeting, program faculty determines what changes or improvements should be made to instruction, the program, individual courses, or to the assessment process. Changes are implemented the next time the course is taught.

**Expected Performance Outcome**

1. 80% of students assessed will earn 17.5 points (80%) or higher on the open ended questions related to commercial mortgage structures, contractual terms, and underwriting standards.
2. 80% of students assessed will earn 9.5 points (80%) or higher on the computational questions related to terminology and metrics used in the real estate valuation process.
3. 80% of students assessed will earn 32 points (80%) or higher on the case analysis related to terminology and metrics used to evaluate the strength of a real estate market.
4. 80% of students assessed will earn 80 points (80%) or higher on the exam questions related to legal interests in real estate, essential elements of real estate contracts, lease provisions, and sources of legal authority to regulate the use of land.

**Performance Outcome Met?: Yes**

**Current Year’s Assessment Data**

Students will demonstrate knowledge of commercial mortgage structures, contractual terms, and underwriting standards.

- Percentage of students meeting performance target: 85% (n=26)

Students will demonstrate knowledge of terminology and metrics used in the real estate valuation process.

- Percentage of students meeting performance target: 81% (n=26)

Students will demonstrate knowledge of terminology and metrics used to evaluate the strength of a real estate market.

- Percentage of students meeting performance target: 83% (n=12)
Students will demonstrate knowledge of legal interests in real estate, essential elements of real estate contracts, lease provisions, and sources of legal authority to regulate the use of land.

- This effectiveness measure will be assessed in Spring 2017

**Changes to be Implemented Next Year as Result of This Year's Assessment**

Student learning exceeded the target for each of the effectiveness measures that were assessed this year. Moving forward, one of the prerequisite courses for the program will spend additional course time on real estate fundamentals so that course instructors can spend additional time on real estate markets and valuation in MSRE 6159 and MSRE 6158, respectively.

**Changes to Academic Process:** No Academic Process Changes Planned  
**Changes to Curriculum:** Revise Course Content  
**Changes to Assessment Plan:** Plan has been reviewed and no changes made

**Reflection on the Continuous Improvement of Student Learning**

1. With regards to SLO 1, to improve student learning related to the second effectiveness measure, the faculty member planned to place greater emphasis on explaining the terminology, particularly with non-native English speaking students.
2. The proposed changes were implemented.
3. With regards to SLO 1, student learning related to the second effectiveness measure improved by four percentage points.

**Masters in Business Administration**

MBA02: Students will demonstrate the ability to apply critical thinking and analytical decision-making skills to business decisions.

**Start (Do Not Change):** 7/1/2016  
**End (Do Not Change):** 6/30/2017  
**Learning Outcome Additional Description**

Providing Program/Department: Masters in Business Administration  
Effectiveness Measure

The instruments used to assess student mastery of this learning outcome include projects, exam embedded questions and an essay question. Specifically these instruments gauge students’ mastery of the following concepts:

1. Students will demonstrate the ability to reason systematically in support of an argument using relevant support and examples.
2. Students will demonstrate knowledge of the differences between fact, assumption, and opinion.
3. Students will demonstrate the ability to approach complex problems to determine effective recommendations.
4. Students will demonstrate the ability to identify opportunities and threats when evaluating a business scenario.
5. Students will demonstrate the ability to make operational and financial decisions based on the analysis of financial statements.

**Methodology**
This SLO is assessed in MBAD 6112, Economics for Business Decisions, MBAD 6141, Operations Management, MBAD 6152, Financial Management, and MBAD 6270, Marketing Management, every other fall semester.

Student performance of the first effectiveness measure is assessed in MBAD 6112. Students are required to make an argument for a recommendation they made in their group project using relevant support and examples. A scoring rubric is used to assess each individual student’s argument using a one to five scale, where a one represents “fully successful” and a five represents “failed to demonstrate success”. Students earning a one, two, or three are deemed to have demonstrated the ability to reason systematically in support of an argument using relevant support and examples.

Student performance of the second effectiveness measure is assessed in MBAD 6112. Students are required to discuss how they were able to successfully discriminate between fact, assumption, and opinion when looking at potential sources for their group project. A scoring rubric is used to assess student responses using a one to five scale, where a one represents “fully successful” and a five represents “failed to demonstrate success”. Students earning a one, two, or three are deemed to have demonstrated knowledge of the differences between fact, assumption, and opinion.

Student performance of the third effectiveness measure is assessed in MBAD 6141 using one part of multi-part question embedded in a course exam. The question is worth five points. Students who earn four points or higher out of the possible five points (80%) are deemed to have demonstrated the ability to approach complex problems to determine effective recommendations.

Student performance of the fourth effectiveness measure is assessed in MBAD 6270 using a term project. Students are required to identify opportunities and threats. This section of the term project is scored using a rubric in which students can earn a score of “poor”, “below expectations”, or “meets expectations”. Students who earn a “meets expectations” are deemed to have demonstrated the ability to identify opportunities and threats when evaluating a business scenario.

Student performance of the fifth effectiveness measure is assessed in MBAD 6152. Students answer seven questions related to a case analysis. A ten point scale is used to evaluate each question, for a total of 70 points. Students who earn 56 points or higher are deemed to have demonstrated the ability to make operational and financial decisions based on the analysis of financial statements.
Program faculty members are responsible for collecting assessment data. Program faculty report(s) individual student assessment results to the Belk College of Business Assurance of Learning [AoL] Data Center. The Data Center collects and combines the program’s assessment data from across multiple courses. The Data Center then aggregates the data and returns statistical results to all program faculty. Program faculty members analyze these results and hold a closing the loop meeting following the semester in which assessment was conducted to complete the continuous improvement process. At this meeting, program faculty determine what changes or improvements should be made to instruction, the program, individual courses, or to the assessment process. Changes are implemented the next time the course is taught.

**Expected Performance Outcome**

With respect to each of the effectiveness measures,

1. 80% of students assessed will either earn a one, two or three on the rubric to demonstrate the ability to reason systematically in support of an argument using relevant support and examples.
2. 80% of students assessed will either earn a one, two or three on the rubric to demonstrate knowledge of the differences between fact, assumption, and opinion.
3. 80% of students assessed will earn 4 out of 5 points (80%) or higher on the exam questions to demonstrate the ability to approach complex problems to determine effective recommendations.
4. 80% of students will earn “meets expectations” (greater than 80%) on the section of the term project related to identifying opportunities and threats to demonstrate the ability to identify opportunities and threats when evaluating a business scenario.
5. 80% of students will either answer 8 out of 10 questions correctly (80%) or earn 33 points or higher (80%) on the case questions or written recommendation assignments to demonstrate the ability to make operational and financial decisions based on the analysis of financial statements.

**Performance Outcome Met?:** Yes

**Current Year’s Assessment Data**

Students will demonstrate the ability to reason systematically in support of an argument using relevant support and examples.

- Percent of students meeting performance target: 92% (n=64)

Students will demonstrate knowledge of the differences between fact, assumption, and opinion.

- Percent of students meeting performance target: 92% (n=64)

Students will demonstrate the ability to approach complex problems to determine effective recommendations.

- Percent of students meeting performance target: 76% (n=49)
Students will demonstrate the ability to identify opportunities and threats when evaluating a business scenario.

- Percent of students meeting performance target: 97% (n=30)

Students will demonstrate the ability to make operational and financial decisions based on the analysis of financial statements.

- Percent of students meeting performance target: 88% (n=56)

**Changes to be Implemented Next Year as Result of This Year's Assessment**

For MBAD 6112: Things are going well with the assessment. It is helping to maintain quality in the course, and it is focusing on the group project, which is a valuable piece of assessment. It is recommended to continue assessing the same effectiveness measures.

For MBAD 6141: Faculty have made two recommended actions for 2018. First they will increase the time devoted to problem solving with stronger emphasis on dealing with uncertainty. Second, they will increase the number and complexity of assigned homework problems.

For MBAD 6152: The teaching faculty will continue using the same capital budgeting case and rubric for the next AoL cycle. In addition, for comprehensiveness, the teaching faculty plan to include multiple choice questions as extra measuring instruments, as they provide absolute assessment and can be pinpointed to target specific effectiveness measures.

For MBAD 6270: In the past three assessments, the percentage of students that have met the target for this effectiveness measure has been 85%, 84% and 97% respectively. While the number of students that have met the target during the most recent assessment is 97%, the previous two assessments are only slightly above the 80% benchmark. Thus, it is recommended to continue assessing this effectiveness measure as is.

**Changes to Academic Process: No Academic Process Changes Planned**

**Changes to Curriculum: Revise Course Content**

**Changes to Assessment Plan: Plan has been reviewed and no changes made**

**Reflection on the Continuous Improvement of Student Learning**

1. With regards to SLO 2, faculty teaching MBAD 6141 planned to update the assessment instrument to increase the number of problems used for assessment and to better measure what is intended. Faculty teaching MBAD 6141 planned to break down problems in class into parts and describe the approach to solve each of the parts as well as describe the process for evaluating the options for decision making and then relate this to the parameters being calculated in the example problems.

2. Yes, the faculty member teaching MBAD 6141 revised the assessment instrument and was able to obtain better measurement of student performance and devise action plans for continuous improvements.
3. The changes resulted in significant improvement of student learning as student learning for SLO 2, effectiveness measure 3 increased from 51% of students meeting the target to 76% of students meeting the target.

**Masters in Business Administration**

**MBA06: Students will demonstrate the ability to consider environmental and social impacts of decisions in business solutions.**

- **Start (Do Not Change):** 7/1/2016
- **End (Do Not Change):** 6/30/2017

**Learning Outcome Additional Description**

**Providing Program/Department:** Masters in Business Administration

**Effectiveness Measure**

The instruments used to assess student mastery of this learning outcome are multi-part questions. Specifically, the questions gauge students’ mastery of the following concepts:

1. Students will be able to consider the impact of different actions on stakeholders.
2. Students will be able to identify actions with outcomes that reflect a balanced approach to improving sustainability.

**Methodology**

This SLO is assessed in MBAD 6141, Operations Management, every other fall semester.

Student performance of the first effectiveness measure is assessed using a four-point question in which, after reading a statement, students are asked to justify which response option they would take, keeping sustainability and social responsibility in mind, and justify their response. Students who earn three or more points (75%) are deemed to have demonstrated the ability to consider the impact of different actions on stakeholders.

Student performance of the second effectiveness measure is assessed using a different four-point question in which, after reading a statement, students are asked to make a recommendation, identifying benefits and sources to support their recommendation. Students who earn three or more points (75%) are deemed to have demonstrated the ability to identify actions with outcomes that reflect a balanced approach to improving sustainability.

Program faculty members are responsible for collecting assessment data. Program faculty report(s) individual student assessment results to the Belk College of Business Assurance of Learning [AoL] Data Center. The Data Center collects and combines the program’s assessment data from across multiple courses. The Data Center then aggregates the data and returns statistical results to all program faculty. Program faculty members analyze these results and hold a closing the loop meeting following the semester in which assessment was conducted to complete the continuous improvement process. At this meeting, program faculty determine what changes or improvements should be made to instruction, the program, individual courses, or to the assessment process. Changes are implemented the next time the course is taught.

**Expected Performance Outcome**
With respect to each effectiveness measure,

1. 80% of students assessed will earn three or more points on the question related to considering the impact of different actions on stakeholders.
2. 80% of students assessed will earn three or more points on the question related to identify actions with outcomes that reflect a balanced approach to improving sustainability.

**Performance Outcome Met?: Yes**

**Current Year's Assessment Data**

Students will be able to consider the impact of different actions on stakeholders.

- Percent of students meeting performance target: 92% (n=49)

Students will be able to identify actions with outcomes that reflect a balanced approach to improving sustainability.

- Percent of students meeting performance target: 92% (n=49)

**Changes to be Implemented Next Year as Result of This Year's Assessment**

Students’ performance meets the stated objective for the first time. The teaching faculty will maintain time devoted to problem solving with emphasis on dealing with decisions involving trade off between stakeholders and on sustainability to obtain a second measurement.

The MBA Program Committee will also engage discussion on searching for additional core courses that are potential fits for assessing this SLO.

**Changes to Academic Process**: No Academic Process Changes Planned

**Changes to Curriculum**: No Curriculum Changes Planned

**Changes to Assessment Plan**: Other Planned Changes

**Reflection on the Continuous Improvement of Student Learning**

1. With regards to SLO 6, faculty teaching MBAD 6141 planned to revise the assessment question used so that each part of the question only measures one effectiveness measure and to ensure that the different parts of the question are not interdependent.
2. Yes, the faculty member teaching MBAD 6141 revised the assessment instrument and was able to obtain better measurement of student performance and devise action plans for continuous improvements.
3. The changes resulted in significant improvement of student learning as student learning for SLO 6, effectiveness measures 1 and 2 increased from 51% of students meeting the target to 92% of students meeting the target.
BS Accounting

ACCTBS01: Students will demonstrate the ability to analyze typical business transactions for their impact on the financial statements.

Start (Do Not Change): 7/1/2016
End (Do Not Change): 6/30/2017

Learning Outcome Additional Description
Providing Program/Department: BS Accounting

Effectiveness Measure
The instruments used to assess student mastery of this learning outcome are questions embedded in the course final exam. Specifically, the questions include extended numerical problems which test the two concepts below which, together, effectively gauge overall student understanding:

1. Students will be able to apply accrual based recognition, measurement, and reporting requirements for financial transactions under current accounting standards.
2. Students will demonstrate the ability to prepare a statement of cash flows.

Methodology
This SLO is measured in multiple sections of ACCT 3312, Intermediate Financial Accounting II, every other spring semester. Students are assessed using two questions (revenue recognition problem and cash flow problem) embedded in course exams. To measure achievement of the first effectiveness measure, students are required to analyze a 34-point problem, preparing journal entries and analyzing various aspects of two different investments. Students who earn 24 points or higher (70%) are deemed to be able to apply accrual based recognition, measurement, and reporting requirements for financial transactions under current accounting standards.

To measure achievement of the second effectiveness measure, students are required to complete a 35-point cash flow statement. Students who earned 24.5 points or higher (70%) are deemed to demonstrated the ability to prepare a statement of cash flows.

Program faculty members are responsible for collecting assessment data. Program faculty report(s) individual student assessment results to the Belk College of Business Assurance of Learning [AoL] Data Center. The Data Center collects and combines the program’s assessment data from across multiple courses. The Data Center then aggregates the data and returns statistical results to all program faculty. Program faculty members analyze these results and hold a closing the loop meeting following the semester in which assessment was conducted to complete the continuous improvement process. At this meeting, program faculty determines what changes or improvements should be made to instruction, the program, individual courses, or to the assessment process. UCALC reviews the undergraduate majors reports to ensure continuous improvement is resulting from the AoL process and assessment results support curriculum revisions and shares any recommendations with the department faculty for consideration. Relevant changes are implemented the next time the course is taught.

Expected Performance Outcome

1. 70% of students assessed will earn 24 points or higher (70%) on the investment portfolio problem.
2. 70% of students assessed will earn 24.5 points or higher (70%) on the cash flow problem.

Performance Outcome Met?: No
Current Year's Assessment Data
1. Students will be able to apply accrual based recognition, measurement, and reporting requirements for financial transactions under current accounting standards.
   - Percent of students meeting performance target: 54% (n=189)

2. Students will demonstrate the ability to prepare a statement of cash flows.
   - Percent of students meeting performance target: 77% (n=186)

Changes to be Implemented Next Year as Result of This Year's Assessment
Student performance exceeded the target outcome for one of the two effectiveness measures. This was the first time the material related to accounting for investments has been assessed. The faculty member teaching the course noted that the students did well with the journal entries but could not connect the journal entries with the financial statements. The faculty felt the problem was a little confusing and plans to clean up the questions asked about the problem. They will also spend more time in class explaining the connection between the journal entries and the financial statements.

Changes to Academic Process: No Academic Process Changes Planned
Changes to Curriculum: Revise Course Content
Changes to Assessment Plan: Plan has been reviewed and no changes made
Reflection on the Continuous Improvement of Student Learning
1. With regards to student learning related to SLO 1, faculty planned to give more practice problems and spend more time focusing on cash basis accounting (effectiveness measure 2).
2. The proposed change was implemented.
3. Instructors teaching ACCT 3312 spent more time working with students to help them better understand cash basis accounting, which resulted in a 5% increase in the percent of students meeting the performance target.

BA Computer Science
CSBA01: Students will demonstrate competence in programming skills.
   Start (Do Not Change): 7/1/2016
   End (Do Not Change): 6/30/2017
   Learning Outcome Additional Description
   Providing Program/Department: BA Computer Science
   Effectiveness Measure
   A substantial programming project in ITCS 1213 Introduction to Computer Science II, which requires the student to demonstrate the ability to design and implement a software
solution (program) using programming skills. The students are assessed on their thorough understanding of requirements; use of appropriate data structures and algorithms; solution design and modularization; user interface considerations; testing for correctness; and documentation.

**Methodology**
This outcome goal will be measured every Spring semester. The instructors of ITCS 1213 will assign the project and grade a student’s programming skills using a programming skill scoring rubric [SLO1_Rubric_Programming Project] with a scale of 1-5. Each instructor will fill out an internal CS SLO Assessment Form reporting the performance statistics of the students and submit it to the Assistant Chair. The Assistant Chair will provide additional analysis and comments as needed and will forward all results and suggestions to the Departmental Undergraduate Committee for discussion and analysis. The Committee will evaluate results, identify areas for improvement, and suggest changes to achieve minimum performance targets by submitting a report to the Department Chair, the Assistant Chair, and the College’s Associate Dean for Administration, copying each affected instructor.

**Expected Performance Outcome**
70% of students will achieve “Acceptable” or higher level (average score 3.0~5.0 on the rubric elements) in the programming skills demonstrated in ITCS 1213 programming project.

**Performance Outcome Met?:** Yes

**Current Year's Assessment Data**
76% of students achieved “Acceptable” or higher level (average score 3.0~5.0 on the rubric elements) in the programming skills demonstrated in ITCS 1213 programming project. [sample, n = 21]

**Changes to be Implemented Next Year as Result of This Year's Assessment**
Next year expect to offer this course in an Active Learning Classroom that will help students understand concepts better with daily hands-on activities.

**Changes to Academic Process:** No Academic Process Changes Planned
**Changes to Curriculum:** Other implemented or planned change
**Changes to Assessment Plan:** Other Planned Changes

**Reflection on the Continuous Improvement of Student Learning**

1. SLO-1: Instructor will emphasize resources to aid students (TAs and Tutoring Center) earlier in the semester.

   SLO-4: Redesign assignments so that they can be completed in one class session. Give more instructions for team assignments.

2. All changes were implemented.
3. SLO-1: Impact quite noticeable – 60% to 76%
4. SLO-4: Strong improvement – 58% to 100%, but n was small (n=4).

**NOTE:** The following changes have been approved for Fall 2016-17: there will be a unified CS degree for a BS and one for a BA, with 10 new concentrations (7 for the BS degree and 3 for the BA degree). The rationale for the curriculum reform was to establish a set of courses
that all undergraduate students take in their first two years, with concentrations that specify application domains. These changes are expected to provide more flexibility for the students, and enable us to streamline our course offerings to better handle increased student demand. The updated degrees provide a consistent structure for all concentrations. These modifications will result in changes to SLO reporting in 2017: reduction of SLOs to 5 for the undergraduate degree, with 1 per new concentration. Rubrics have been developed by the CCI Undergraduate Curriculum Committee and will be provided with the 2017 report. The curriculum changes were developed by the CCI Curriculum Committee, approved by CCI Faculty and passed by the University.

**BS Computer Science**

**CSBS06: Students will demonstrate acceptable written communications skills.**

**Start (Do Not Change):** 7/1/2016  
**End (Do Not Change):** 6/30/2017

**Learning Outcome Additional Description**

**Providing Program/Department:** BS Computer Science

**Effectiveness Measure**

Written topic paper in **ITCS 3688 Computers and Their Impact on Society** - written communication skills are evaluated via a topic paper in ITCS 3688 Computers and Their Impact on Society. The students are assessed on their overall organization, grasp of content knowledge, use of proper grammar and spelling, ability to reach a justified conclusion, and use of proper citations.

*SLO6_Instructions_Writing Assignment*  
*SLO6_Rubric_Writing Assignment*

**Methodology**

The instructor will access students’ written communication skills based on the student final topic paper, using a written communication skill scoring rubric [*SLO6_Rubric_Writing Assignment*] with a scale of 1-5. The assessment will be performed by the ITCS 3688 instructor every Spring semester. Each instructor will fill out an internal CS SLO Assessment Form reporting the performance statistics of the students and submit it to the Assistant Chair. The Assistant Chair will provide additional analysis and comments as needed and will forward all results and suggestions to the Departmental Undergraduate Committee for discussion and analysis. The Committee will evaluate results, identify areas for improvement, and suggest changes to achieve minimum performance targets by submitting a report to the Department Chair, the Assistant Chair, and the College’s Associate Dean for Administration, copying each affected instructor.

**Expected Performance Outcome**

80% of students will achieve “Acceptable” or higher level (average score 3.0~5.0 on the rubric elements) in the written communication skills portion of the final topic paper grade in ITCS 3688.

**Performance Outcome Met?:** Yes

**Current Year's Assessment Data**

94% of students achieved “Acceptable” or higher level (average score 3.0~5.0 on the rubric elements) in the written communication skills portion of the final topic paper grade in ITCS 3688.
Changes to be Implemented Next Year as Result of This Year's Assessment
None required.

Changes to Academic Process:

Changes to Curriculum:

Changes to Assessment Plan:

Reflection on the Continuous Improvement of Student Learning

1. SLO-1: Instructor will emphasize resources to aid students (TAs and Tutoring Center) earlier in the semester.
   SLO-4: Redesign assignments so that they can be completed in one class session. Give more instructions for team assignments.
2. All changes were implemented.
3. SLO-1: Strong improvement – 79% to 89%
4. SLO-4: Strong improvement – 73% to 91%

NOTE: The following changes have been approved for Fall 2016-17: there will be a unified CS degree for a BS and one for a BA, with 10 new concentrations (7 for the BS degree and 3 for the BA degree). The rationale for the curriculum reform was to establish a set of courses that all undergraduate students take in their first two years, with concentrations that specify application domains. These changes are expected to provide more flexibility for the students, and enable us to streamline our course offerings to better handle increased student demand. The updated degrees provide a consistent structure for all concentrations. These modifications will result in changes to SLO reporting in 2017: reduction of SLOs to 5 for the undergraduate degree, with 1 per new concentration. Rubrics have been development by the CCI Undergraduate Curriculum Committee and will be provided with the 2017 report. The curriculum changes were developed by the CCI Curriculum Committee, approved by CCI Faculty and passed by the University.

BS Respiratory

BSRT01: Students will discuss the current professional and clinical roles in respiratory therapy as well as identify potential expanded roles for professionals by examining professional behavior, reviewing the history of respiratory therapy, examining the quality

Start (Do Not Change): 7/1/2016  
End (Do Not Change): 6/30/2017

Learning Outcome Additional Description

Providing Program/Department: BS Respiratory Therapy

Effectiveness Measure

The direct measure used to gauge acquisition of the SLO #1 is completion of the Semester exam for RESP 3101 with a grade of B (80% or higher) or higher scored using the attached rubric.

The indirect measurement used to gauge acquisition of the SLO is the BSRT Senior Student Exit Survey that the students take during the semester they graduate.

Methodology

For the direct measure, The semester exam for RESP 3101 is a 5 to 6 question essay exam that assesses the student’s knowledge of the course objectives relevant to their clinical practice or aspirations.
For the indirect measurement, students are asked to evaluate the program in the BSRT Senior Student Exit Survey, which is administered electronically and addresses many aspects of the educational experience. Question #16 of the exit survey addresses this SLO; it states “The program prepared you to assume new or expanded roles in your professional career.” and asks for student strong agreement through strong disagreement on a Likert scale.

Faculty Data Collection & Review: The RESP 3101 faculty will utilize a standardized rubric to grade the Semester exam and report the student results to the program director. Review of the data will occur at the next program faculty meeting following the end of the semester (usually occurs the first week of January). Changes will be recommended based on the information collected and feedback from all faculty.

Level of Proficiency: Proficiency will be defined as >80% as defined in the RESP 3101 Semester Exam Rubric.

**Expected Performance Outcome**
The Performance Outcome for the direct measure is defined as: More than 80% of students will complete the Semester exam for RESP 3101 with a grade of B (≥ 80%) scored using the attached rubric.

The Performance Outcome for the indirect measurement is defined as: 80% or more of the students agree or strongly agree with the statement: “The program prepared you to assume new or expanded roles in your professional career.”

**Performance Outcome Met?:** Yes

**Current Year's Assessment Data**
For the direct outcome measurement, 95.37% of students completed the RESP 3101 Semester Exam with a grade of B or higher.

For the indirect outcome measure, 94.34% of students agreed (18.87%) or strongly agreed (75.47%) with the statement in question #16 of the BSRT Senior Student Exit Survey, Spring 2016, which states:

“The program prepared you to assume new or expanded roles in your professional career.”

**Changes to be Implemented Next Year as Result of This Year's Assessment**
The goals for the direct and indirect measures were met. The syllabus for RESP 3101, with updated changes, now describes the SLO and is linked to the learning materials and assignments.

**Changes to Academic Process:**

**Changes to Curriculum:**

**Changes to Assessment Plan:**

**Reflection on the Continuous Improvement of Student Learning**
2016 was the second year of implementation of our SLO curriculum map. As a program, we continued to have the SLOs introduced as part of the program orientation and included in both the Student Handbook as well as in each syllabus in the BSRT program. The Student Handbook and each course syllabus will highlight the course materials and assignments that are reflective of our program’s SLOs. We have modified some elements of the SLOs, implemented the changes created in 2015-2016, and also implemented a sixth SLO at the direction of our Advisory Committee that was implemented in a course in Spring 2016.
Modifications: Upon review of SLO #2, the BSRT faculty felt in order for students to get the most out of the varying demographics of patients the respiratory therapy profession comes in contact with on a regular basis, it would be best to split up RESP 4204 into an adult critical care pathophysiology course and create RESP 4106 as the neonatal/pediatric version of critical care pathophysiology. Having two separate courses would give students the opportunity to have multiple course modules focusing in more thoroughly on the anatomy of various patient demographics as well as the pathophysiology of vast cardiopulmonary disease states the profession of respiratory therapy manages.

SLO #1 & #3: The BSRT program faculty developed standardized rubrics for assessing papers and presentations that will be used across the curriculum to provide consistency in assessment.

SLO #4: On review of this SLO, the faculty felt that the annotated bibliography in RESP 4103 was a developmental assessment and that we should limit the direct measure to the annotated bibliography in RESP 4111. The program faculty developed a standardized rubric that will be used when the material is developed in RESP 4103.

SLO #5: The direct measure for this SLO was changed to better reflect the aspects of project management that the Capstone Project course contains. The BSRT faculty changed the direct measure for SLO #5 to the Capstone Project Management rubric relevant at the end of the RESP 4111 course.

SLO #6: This new SLO was developed at the request of the Advisory Committee to meet the needs of assuring our graduates can work effectively in inter-professional teams and provide care that is patient-centered. The SLO is added to this document, implemented in Spring 2016, and was introduced to the incoming cohort of students at orientation Summer 2016. This SLO was developed and integrated in 2015 and was first offered in 2016 and the initial outcomes will be reported.

BA in Africana Studies

BAAFRS03: Write final papers that conform to the writing styles in the social sciences and/or humanities.

  Start: 1/1/2016
  End: 12/31/2016

Learning Outcome Additional Description

Providing Program/Department: BA Africana Studies

Effectiveness Measure

All the 71 final papers written in the fall and spring of 2016 in Research Methods (AFRS 3290) and Senior Seminar (AFRS 4000) were used for data collection. Each paper results from a semester-long project under the supervision of a professor. Evaluators examine:

1. Content & Development: ideas, examples, reasons & evidence, point of view
2. Organization: focus, coherence, progression of ideas, thesis developed
3. Language: word choice & sentence variety
4. Conventions: grammar, punctuation, spelling, paragraphing, format; and documentation of sources

**Methodology**

The Student Learning Outcomes Assessment covers the calendar year (spring and fall semester) of 2016 following this procedure:

a. A two-member faculty assessment committee (elected at the department’s faculty meeting) collected all the final essays from the instructors of record for Senior Seminar and Research Methods (both are offered every semester).

b. Committee members evaluated 100% of the essays in the two courses and submit one report to the department chair not later than February 15.

c. The assessment committee will use common scoring rubrics to evaluate each essay/presentation paying attention to the four indicators of effective writing (rubrics attached).

d. The chair used the committee's evaluation and the raw data to prepare the annual SLOA report, due in May 2017.

e. The chair will share and discuss the outcome assessment, as well as feedback from the Assessment Office and the Dean's with all faculty members at faculty/staff meetings in spring 2017 and the faculty retreat in fall 2017.

f. At these retreat/meetings, faculty will discuss and provide suggestions on how to address and improve the issues that arise from the SLO Assessment.

g. The chair will use this feedback to finalize a set of action plans aimed at improving the measurement rubrics, curriculum, pedagogy, and student learning experience.

**Expected Performance Outcome**

80% of the student headcounts/products assessed will achieve a score of good or excellent for effective writing.

**Performance Outcome Met?: Yes**

**Current Year's Assessment Data**

Of the 71 student headcounts assessed in the spring and fall of 2016, 93% scored good or excellent, thereby exceeding the expectation by 13%.

**Changes to be Implemented Next Year as Result of This Year's Assessment**

No change. The department has recommended to the chair to limit enrollment in AFRS 3290 and AFRS 4000 to 25 seats each.

**Changes to Academic Process:** No Academic Process Changes Planned

**Changes to Curriculum:** No Curriculum Changes Planned

**Changes to Assessment Plan:** Plan has been reviewed and no changes made

**Reflection on the Continuous Improvement of Student Learning**

93% of the 71 student headcounts/products (papers) assessed scored good or excellent. This is 13 points above the expectation (80%). The course instructors and assessment committee attribute this to the small size of the classes, and the one-on-one pedagogically coaching experience that were put in place. These include detailed review of paper drafts, and scaffolding of feedback on critical and analytical paper writing and oral presentation. The faculty in general also attribute the improvement to the department's curriculum roadmap that enabled these skill sets to be implemented and reinforced throughout the courses in AFRS major.
The department chair will continue to monitor this trend.