

Assurance of Learning Process and Interventions – Undergraduate Learning

The CBPA has introduced specific required assignments (course-embedded measures) in key required courses to determine how well the students meet the learning goals. Whenever the findings are below the targeted level, the CBPA develops and implements an educational intervention that can positively affect those outcomes, and then measures student performance again to evaluate the effect of the intervention (AoL Loops).

The following is a detailed description of the AoL process since 2010 for each learning goal.

Have a fundamental knowledge of basic business concepts & practices (UC1)

Since 2010 the CBPA has accomplished three (3) AoL loops regarding this goal. The first intervention was in Fall of 2011, the second in Spring of 2013, and the third in Spring of 2014. All three interventions have been deemed to be successful.

Intervention: Include Business Simulation and exam in Strategic Management (MGMT 4900)

Late in the 2010-2011 academic year, faculty from the capstone course (MGMT 4900 Strategic Management) met to discuss the course and the ETS Major Field Test (MFT) that was part of it. Faculty agreed that the course needed to be more of a “capstone experience” that would integrate most of the material learned in the program. Faculty also agreed that students did not appreciate the MFT as many would submit it within minutes of receiving it. It was decided that the MFT would be eliminated, and that the course would use the CAPSTONE business simulation from CAPSIM and its embedded exam COMPXM. Since Fall of 2011 all sections of MGMT 4900 have included this business simulation and the exam.

Students (through informal feedback and the Student Evaluation of Instruction Surveys) have reported high satisfaction with the integrating experience of CAPSTONE and the results from the COMPXM exam have been much more consistent compared to those obtained from MFT.

Intervention: Curricular change in ACCT 2110, ACCT 2111, and FIN 3110

Data collected using COMPXM in MGMT 4900 from Fall of 2011 to Summer of 2012 was analyzed by the accounting and finance faculty on November 2, 2012. Student scored an average of 50% in the accounting questions and 51% in the finance ones. It was further found (based on the questions that students failed to answer correctly) that students were performing poorly in “cash management” and “financial statement analysis.” Faculty developed curricular changes in ACCT 2110 Financial Accounting, ACCT 2111 Managerial Accounting, and FIN 3110 Principles of Financial Management to increase the coverage of both topics. Data collected again in Fall 2014 showed a slight but not significant increase to 53% for accounting and 55% for finance. Results will be monitored for another year before making a decision since many students who underwent the intervention have not yet gotten to the capstone course.

Intervention: Curricular change in MGMT 4900

Data collected using COMPXM in MGMT 4900 from Fall of 2011 to Summer of 2013 was analyzed by strategy faculty on November 4, 2013. Student scored an average of 25% in the strategy questions. Students did not demonstrate a good understanding of the “strategic groups” concept (based on the questions that students failed to answer correctly). Faculty developed curricular changes in MGMT 4900 to enhance coverage of the topic. Similar data was collected

between Spring of 2014 and Fall of 2014 showing a slight but not significant increase to 28%. Faculty will discuss the findings during the summer.

Have effective communication skills (UC2)

Students' average writing score is expected to be at least 2.75 (on a 4-point scale) in four dimensions of a customized *AAC&U Written Communications Value Rubric* (context and purpose of writing, content development, genre and disciplinary conventions, and control of syntax and mechanics). Their average presentation score is also expected to be at least 2.75 (on a 4-point scale) in the five dimensions of a customized *AAC&U Oral Communications Value Rubric* (organization, language, delivery, supporting material, and central message). Since 2010 the CBPA has accomplished four (4) AoL Loops regarding this goal. The first intervention was in Fall 2013 and the other three started in Spring 2014. Three of these interventions have been deemed to be successful while one was unsuccessful.

Intervention: WriteExperience System in MGMT 3200

Papers from MGMT 4900 collected from Fall 2010 to Fall 2012 were assessed using the *AAC&U Written Communications Value Rubric* (pre-test). The assessment was completed during two separate "Assessment of Writing Days" in which at least 10 faculty members participated. The average student score of 2.63 was below the expected level. During the debriefing sessions of the assessment, faculty agreed that students needed more practice and more intermediate feedback in order to improve their writing skills.

In Fall 2013 an electronic system called *WriteExperience* was added to the MGMT 3200 Business Communications course. A student survey (see Appendix C), as well as direct faculty observation of the feedback provided by the tool, showed that the system was very useful for students with poor or intermediate writing skills, but detrimental to those who already were good writers. For the latter group of students, the changes suggested by the tool detracted from the learning experience instead of improving their writing skills. Therefore, the faculty decided to immediately discontinue the use of the tool.

Intervention: Add Formative Feedback and Revisions to MGMT 3200

Immediately following the aborted intervention, a new intervention was developed using the earlier baseline pre-test. In Spring 2014 a writing assignment was added to MGMT 3200 where students were asked to submit a preliminary draft, and then received faculty feedback before submitting the final draft of the assignment.

Papers from MGMT 3200 collected at the end of Spring and Summer of 2014 were used for analyzing the intervention. This was not an ideal dataset because the papers used for the pretest came from MGMT 4900, the capstone course taken by seniors, while MGMT 3200 was taken by juniors. Students would generally be expected to write better at the end of an academic program than the beginning. However, it was decided that the college obtain at least some indication of the students' writing ability rather than waiting another year-and-a-half to collect new data.

Papers were assessed by the majority of the faculty during the general CBPA Faculty Meeting on October 17, 2014. The average student score was 2.63 (identical to the baseline, but slightly improving in context while slightly declining in syntax). This result was encouraging, given that we were comparing juniors with seniors, who scored at similar levels. Nevertheless, we believe that we need a more systematic measurement strategy in the future—by either taking a pretest from students early in the MGMT 3200 course, or waiting until these students get to MGMT 4900 to assess them.

Intervention: Provide a Guidance Rubric for Writing-Across-the-Curriculum

Another intervention was implemented for writing, a critical skill for business students. Our debriefing during the 'writing assessment day' (see above) determined that students did not have a well-rounded understanding of what would be considered good or bad writing. As rubrics can be used both to facilitate grading and as a teaching tool (Andrade 2000, 2005) the faculty agreed to distribute and explain the *AAC&U Written Communications Value Rubric* in all courses that have substantive written assignments (beginning Spring 2014).

This intervention was implemented across the curriculum. Although proper evaluation would require a minimum of three semesters, the faculty decided that an intermediate measurement could prove useful in the short term. Papers from MGMT 4600 Globalization of Business were assessed by the majority of the faculty during the general CBPA Faculty Meeting on October 17, 2014. The average student score was 2.48 (below the baseline score but not significantly different). This intervention will be ongoing. Reassessment is scheduled for Fall 2015.

Intervention: Provide a Guidance Rubric for Oral Communications Across the Curriculum

Presentations made in MGMT 3200 during Spring 2013 were evaluated using the AAC&U Oral Communications Value Rubric as a pre-test. Average student score was 2.74. The faculty decided that having students perform critical evaluations of their peers' presentations could have the potential of improving their own presentation skills. Thus, beginning with the Spring 2014 semester, a peer evaluation rubric (the same AAC&U value rubric mentioned above) was distributed and explained to students prior to all student class presentations. Faculty evaluations of student presentations that used the same rubric were collected during Fall 2014 (in MGMT 4600 International Business and ECON 3404 Managerial Economics). The average student score improved significantly to 3.14 (post-test).

Have a well-developed ethical perspective (UC3)

Practitioners and scholars alike agree that an effective business ethics education at the undergraduate level can have a positive influence on a range of critical business outcomes (Floyd, Xu, Atkins, & Caldwell, 2013). An expectation was established by CBPA faculty that 70% of undergraduate students should attain a score of at least 3.00 (on a 4-point scale) on the *Ethical Self-Awareness* and *Understanding Different Ethical Perspectives/Concepts* dimensions of the AAC&U Ethical Competence Value Rubric.

Since 2010 the CBPA has accomplished two (2) AoL Loops regarding the ethical perspective learning goal. The first intervention took place in Fall 2013 and the second in Fall 2014.

Intervention: Program change requiring Ethics Course (MGMT 3210)

Forty-eight essays from an assignment associated with ethics in marketing (from MKTG 3200 in fall of 2012) were evaluated by 2 faculty members using the AAC&U Ethical Competence Rubric to establish a pre-test assessment level. For the dimension of Ethical Self-Awareness, 50.1% of students scored at least 3 out of 4. For the dimension of Application of Ethical Perspectives/Concepts, 30.9% of students scored at least 3 out of 4. MGMT 3210 was added to the curriculum requirements for all undergraduate programs except BA and BS in Economics, effective in fall of 2013. Forty essays from the assignment associated with ethics in marketing (from MKTG 3200 in spring of 2014) were evaluated by 2 faculty members using the AAC&U Ethical Competence Rubric to establish a post-test assessment level. For the dimension of Ethical Self-Awareness, 90% of students scored at least 3 out of 4. For the dimension of

Understanding Different Ethical Perspectives/Concepts, 72.5% of students scored at least 3 out of 4.

Intervention: Enhancing Instruction of Ethics of Marketing (MKTG 2100)

As a result of discussion during Brownbag hosted by the Faculty/Student Development committee focusing on Ethics Across the Curriculum, marketing faculty members decided to enhance the instruction of ethics in Introduction to Marketing Management (MGMT 2100). During the Fall 2014 and Spring 2015 semesters, these enhancements were executing in this course and essays associated with the ethics of marketing were collected. The post-test assessment for described above (in 16.3.3.1) served as the pre-test for these interventions. XX essays from the assignment associated with the ethics of marketing were evaluated by 2 faculty members using the AAC&U Ethical Competence Rubric to establish a post-test assessment level. For the dimension of Ethical Self-Awareness, 75% of students scored at least 3 out of 4. For the dimension of Understanding Different Ethical Perspectives/Concepts, 55% of students scored at least 3 out of 4.

Have a well-developed cross-cultural perspective (UC4)

Students are expected to demonstrate the ability to integrate global perspectives in business decisions by scoring an average of 3 points (and a minimum of 2 points) on a 4-point scale consisting of each of the following dimensions of a revised version of the *AAC&U Global Learning Value Rubric*: (1) Assess the interconnectedness of the global economy, (2) Identify how political/social/cultural, economic and legal factors impact business decisions, and (3) Apply knowledge to real-world business challenges.

Since 2010 the CBPA has accomplished two (2) AoL Loops regarding this goal. The first intervention was in Fall 2011 and the second in Fall 2014. We currently lack sufficient proof to demonstrate whether these interventions have significantly improved students' accomplishment of the learning goal.

Intervention: Program change requiring Globalization of Business (MGMT4600)

A review of the 2008-2010 MFT results on "International Knowledge" showed that our students' knowledge of the subject was below faculty expectations. MGMT 4600 Globalization of Business was added as a required core course for all undergraduate programs starting in Fall 2011. Students' papers from MGMT 4600 were collected in Spring 2014 and analyzed using a customized version of the *AAC&U Global Learning Value Rubric*. The student average score of 3.05 was below expectations. As the MFT had already been discontinued, we were not able to conduct an ideal pre-post comparison.

Intervention: Curricular change in Globalization of Business (MGMT 4600)

Starting in Fall 2014 we began implementing a "cultural intelligence" self-assessment early in MGMT 4600. Students' final papers were collected and analyzed using the same rubric as before. This time the average score was 3.06 (better than—but not significantly different from—the pre-test).

Have appropriate accounting knowledge and skills (UACC1)

Since 2010 the CBPA has accomplished three (3) AoL Loops regarding this goal. The first and second interventions (in different courses and different topics) were completed in Spring 2014 and the third in Fall 2014. All three interventions were successful. Additional loops are ongoing in various courses.

Intervention: Curricular change in Intermediate Accounting I (ACCT 3151)

During Fall 2013 54 students in ACCT 3151 Intermediate Accounting I were assessed using an embedded examination (pre-test). Results showed a deficiency in “liabilities and contingencies” (39% well developed, 22% developed, and 39% underdeveloped). Starting Spring 2014 faculty altered the course to increase the class time dedicated to the topic by one hour, added two problems for homework, and three CPA exam questions to the homework and the class review. The same exam was then administered in the same course in Spring and Fall 2014 (with a total sample size of 76). Students’ performance increased considerably (49% well developed, 41% developed, and 10% underdeveloped).

Intervention: Curricular change in Auditing (ACCT 4354)

During Fall 2013 22 students in ACCT 4354 Auditing were assessed using a course embedded exam (pre-test). Students were found to be below expectations in “audit opinion” (14% well developed, 41% developed, and 45% underdeveloped). Starting Spring 2014 faculty decided to alter the course and increase the class time dedicated to the topic, also adding five problems, and ten relevant CPA exam questions to the related homework. At the end of that semester students took the same exam (post-test). Significant improvement was observed towards the upper end of the curve (36% well developed, 21% developed, and 43% underdeveloped).

Intervention: Additional curricular change in Auditing (ACCT 4354)

Given the post-test results of the prior loop, the faculty decided that additional curricular changes were needed in ACCT 4354 Auditing. Starting Fall 2014 another hour of class time was dedicated to the topic. The timing of coverage of the material was also shifted—from the end of the course to early in the course—with an additional emphasis later in the course for reinforcement. As a result of these efforts, the total number of students in the underdeveloped category decreased significantly (31% well developed, 50% developed, and 19% underdeveloped).

Have well-developed opportunity creation and recognition skills (UENT1)

BAE Intervention: Curriculum Changes in ENTR 4100

Five specific skills were identified as necessary for meeting this objective. These include the ability to: (1) identify specific personal knowledge sources, (2) locate specific information channels, (3) locate groups of opportunity rich consideration sets, (4) locate a significant number of signals within consideration sets, and (5) conduct preliminary feasibility and desirability analyses. As there is currently no nationally recognized means of assessing these abilities, a new rubric was created and used in conjunction with the final project in ENTR 4100 Entrepreneurial Opportunity (All BAE students are required to take this class). The majority of students (75% or more) were expected to demonstrate competency with an average score of good (3.0) or excellent (4.0), based on a 4-point scale.

An initial assessment of the program was attempted using data collected between Fall 2012 and the end of the Spring 2013 semester. Evaluation of data showed that only 11% of the data needed to complete the assessment was available because specific components of the project (those needed for assessment) were not listed in submission requirements as part of the supporting documentation for student projects. An intervention was conducted by adding 3 assignments and a modification of the final project requiring students to supply supporting documentation. A second assessment was conducted in Fall 2014. This assessment showed that 70% of the students were found to be competent in the location of personal knowledge sources, 79% on information channels, 73% on consideration sets, 64% on signals, and 47% on feasibility and desirability analyses. An additional intervention was conducted using the results of the Fall 2014 assessment. To address the weakness relating to ‘signal location’ more class discussion time was allotted to this topic. New lessons related to preliminary feasibility and

desirability analyses were also added to the curriculum. These new changes are scheduled to be assessed upon completion of the Spring 2015 semester.

Have a fundamental knowledge of economic concepts and theory (UECO1)

The BA/BS in Economics Program began in Fall 2014. There are currently 4 students enrolled in the program (based on the official Fall 2014 figures). An assessment plan has been developed to ensure curriculum alignment with program goals. An initial assessment of *economics knowledge* occurred in ECON 2302 Principles of Macroeconomics in Fall 2014. Additional assessment, analyses, and interventions will be implemented as the upper division economics courses start being taught in the next several years.

Assurance of Learning Process and Interventions – Master’s Level Learning Goals

The CBPA has introduced specific required assignments (course-embedded measures) in key master’s level courses to determine how well the students meet the learning goals. Whenever the findings are below the targeted level, the CBPA develops an educational intervention that can positively affect those outcomes, and then measures student performance again to evaluate the effect of the intervention (AoL Loops).

The following is a detailed description of the AoL process since 2010 for each learning goal.

Be effective communicators in all relevant business media (GC1)

Students’ average writing score is expected to be at least 3.00 (on a 4-point scale) on four dimensions of a customized *AAC&U Written Communications Value Rubric* (context and purpose of writing, content development, genre and disciplinary conventions, and control of syntax and mechanics). Their average presentation score is also expected to be at least 3.00 (on a 4-point scale) in the five dimensions of a customized *AAC&U Oral Communications Value Rubric* (organization, language, delivery, supporting material, and central message). Since 2010 the CBPA has accomplished two (2) AoL Loops regarding this goal. The interventions have been running in parallel (affecting two different types of media) since Spring 2014. Both are ongoing, and partial results have shown them to be effective.

Intervention: Provide a guidance rubric for writing-across-the-curriculum

Papers from MGMT 8900 Strategic Management in the Global Context collected from Fall 2010 to Fall 2012 were assessed using a customized *AAC&U Written Communications Value Rubric* (pre-Test). The assessment was conducted in two separate “Assessment of Writing Days” in which at least 10 faculty members participated. The average students score was 2.89 (below expectations). During the debriefing sessions of the assessment, the faculty concluded that students might not have a well-rounded understanding of what would be considered good or bad writing. As rubrics can be used both to facilitate grading and as a teaching tool (Andrade 2000, 2005) the faculty agreed to distribute and explain the *AAC&U Written Communications Value Rubric* in all MBA courses that have substantive written assignments (beginning Spring 2014).

This intervention was implemented across the curriculum. Although proper evaluation would require a minimum of three semesters, the faculty decided that an intermediate measurement could prove useful in the short term. Papers from MGMT 7500 Organizational Behavior in the Global Context and MGMT 8900 Strategic Management in the Global Context were assessed by the majority of the faculty during the general CBPA Faculty Meeting on November 7, 2014. The average student score was 2.95 (higher, but not significantly different than the pre-test score).

Intervention: Provide a guidance rubric for oral communications across the curriculum

Presentations made in MGMT 7500 during Spring 2013 were evaluated using the *AAC&U Oral Communications Value Rubric*. The average student scored was 3.03. The faculty decided that having students perform critical evaluations of their peers’ presentations could have the potential of improving their own oral presentation skills. Beginning with the Spring 2014 semester, a peer evaluation rubric was distributed and explained to students prior to all student class presentations.

This intervention was also implemented across the curriculum. Although proper evaluation would require a minimum of three semesters, the faculty again decided that an intermediate measurement could prove useful in the short term. Presentations made by students in MKTG 7100 Strategic Marketing and ECON 7500 Managerial Economics and Forecasting in Fall 2014 were evaluated by instructors. The average student score increased significantly to 3.52. Student performance on each dimension was significantly higher than the pre-test level, particularly in the “organization” and “delivery” dimensions.

Have a well-developed ethical perspective (GC2)

The ethical perspectives of employees, managers, executives, and other business stakeholders play a critical role in long-term business success. An expectation was established by faculty that 70% of graduate students should attain a minimum score of 3.00 (on a 4-point scale) on the *Ethical Issue Recognition* and *Application of Ethical Perspectives/Concepts* dimensions of the *AAC&U Ethical Competence Value Rubric*. Since 2010 the CBPA has accomplished two (2) AoL Loops regarding this goal. The first intervention was initiated in Spring 2014 and the second in Fall 2014. Both interventions have been effective.

Intervention: Enhancing Instruction of Ethical Leadership in Organizational Behavior in a Global Context (MGMT 7500)

Forty-two essays from an assignment associated with organizational justice (from Fall 2012, Spring 2013, and Summer 2013 sections of MGMT 7500) were evaluated by 2 faculty members using the *AAC&U Ethical Competence Rubric* in order to establish a pre-test assessment level. In the dimension of *Ethical Issue Recognition*, 26.2% of students scored at least 3 points (based on a 4-point scale). In the dimension of *Application of Ethical Perspectives/Concepts*, 30.9% of students scored at least 3 points. Faculty who teach Organizational Behavior in the Global Context collaborated to enhance the instruction of ethics in this course and developed learning materials and an assignment focusing on *Ethical Leadership*. These continue to be used since their first implementation in Spring 2014. Forty-nine essays from the assignment associated with ethical leadership were evaluated by 2 faculty members using the *AAC&U Ethical Competence Rubric* to establish a post-test assessment level. For the dimension of *Ethical Issue Recognition*, 82% of students scored at least 3 points. For the dimension of *Application of Ethical Perspectives/Concepts*, 72% of students scored at least 3 points.

Intervention: Enhance ethics instructions in MGMT 7400 and MIS 7101

The intervention for enhancing the instruction of MGMT 7500, which was communicated to faculty at a brownbag hosted by the Faculty/Student Development Committee, culminated in a broader discussion on enhancing the teaching of ethics in other courses. Faculty for Operations Management: Strategies and Techniques (MGMT 7400) and Information Systems and Technology (MIS 7101) subsequently introduced related instructional enhancements to their courses. These continue to be used since their first implementation in Fall 2014. The post-test assessment for the intervention in MGMT 7500 served as the pre-test for these interventions. Fifty-eight essays from the assignment associated with the ethics of global supply chain management and management information systems were evaluated by 2 faculty members using the *AAC&U Ethical Competence Rubric* to establish a post-test assessment level. In the dimension of *Ethical Issue Recognition*, 65.5% of students scored at least 3 points (on a 4-point scale). In the dimension of *Application of Ethical Perspectives/Concepts*, 70.4% of students scored at least 3 points.

Have a well-developed cross-cultural perspective (GC3)

Students are expected to demonstrate the ability to integrate global perspectives in business decisions by scoring an average of 3.5 points (and a minimum of 3 points) on a 4-point scale consisting of each of the following dimensions of a revised version of the *AAC&U Global Learning Value Rubric*: (1) Assess the interconnectedness of the global economy, (2) Identify how political/social/cultural, economic and legal factors impact business decisions, and (3) Apply knowledge to real-world business challenges. Since 2010 the CBPA has accomplished two (2) AoL Loops regarding the cross-cultural perspective goal. The first intervention was implemented in Fall 2011 and the second in Spring 2014.

Intervention: Program change requiring International Business Course (MGMT 7600)

Analysis of the curriculum and comparisons with other schools indicated a need for more instruction regarding international business. Faculty decided to add MGMT 7600 International Business as a required core course for all MBA students starting in Fall 2011. Students' papers from MGMT 7600 International Business were collected in Spring 2013 and analyzed using a customized version of the *AAC&U Global Learning Value Rubric*. Average student scores were 3.6, 3.4, and 3.3 in the *assessment*, *identification*, and *application* dimensions respectively.

Intervention: Curricular change in MGMT 7600

The ending results from the prior loop were used as a pre-test. In an effort to continue improving the students' cross-cultural perspective, a "cultural intelligence" self-assessment was added early in the semester in MGMT 7600 (Spring 2014). Students' final papers from MGMT 7600 were again collected in Fall 2014 and analyzed using the same customized version of the *AAC&U Global Learning Value Rubric*. Average student scores were 3.0, 3.2, and 2.8 in respective dimensions of the rubric.

Have a well-integrated knowledge of the functional areas of business (GMBA1)

Since 2010 the CBPA has accomplished two (2) AoL Loops regarding this learning goal. The first intervention was initiated in Fall 2011 and the second in Spring 2014.

Intervention: Include Business Simulation and exam in MGMT 8900

Faculty teaching the capstone course had a meeting at the end of the 2010-11 academic year to discuss both the course content and the ETS Major Field Test (MFT) that was a part of it. It was agreed that the course needed a "capstone experience" that would integrate most of the material taught in the program. It was decided that the MFT would be replaced by the CAPSTONE business simulation from CAPSIM and its embedded exam COMPXM. Since Fall 2011 all sections of MGMT 8900 have included this business simulation and exam. Students have reported high satisfaction with the integrating experience of CAPSTONE. The results from the COMPXM exam have been much more consistent compared to those obtained from MFT.

Intervention: Curricular change in MGMT 8900

Data that was collected using COMPXM between Fall 2011 and Spring 2013 was analyzed by the strategy faculty on November 4, 2013. Student scored an average of 33% in the strategy questions. Students did not demonstrate a good understanding of the "strategic groups" concept (based on the questions that students failed to answer correctly). Faculty developed curricular changes in MGMT 8900 to enhance coverage of the topic. Similar data was collected between Summer 2014 and Spring 2015 showed a not significant increase to 34%. Faculty will discuss the findings during the summer.

Assurance of Learning Process and Interventions – Specialized Master’s Degree Learning Goals

The CBPA uses direct assessment methods, identifying specific required course-embedded assignments and standardized exams in key required courses to determine how well the students meet program learning goals. Whenever the findings are below the targeted level, the CBPA develops an educational intervention that can positively affect outcomes, and then repeats the measurement process in order to evaluate the effect of the intervention. Input from indirect assessment methods (i.e., alumni and employer surveys) and key stakeholders (e.g., Dean’s Advisory Board, Business Community) is also used to complement the assessment. The following sections provide examples of the assurance of learning process related to graduate specialized programs.

Well-integrated Knowledge

MSMIS Intervention: Curricular Change in MIS 7700 and MIS 7101

In order to assess the objectives related to knowledge integration, the Information Systems Analyst (ISA) Exam was introduced in the MIS 8979 capstone course in Spring 2013. All MSMIS students are required to take the capstone course which is only offered once a year. The ISA exam is linked to the IS2010 Information Systems Model Curriculum published by the Association for Information Systems and the Association for Computing Machinery. The performance target is the 50th percentile as compared with the national average. The ISA exam results from the Spring 2013 capstone course are displayed in Table 1. In Spring 2013, the students met the 50th percentile only in the area related to IS Project management. An intervention was subsequently developed to improve student performance. More specifically, the MIS 7700 ERP Systems was added to the MSMIS core program requirements. Another assessment was conducted in Spring 2014 in the MIS 8979 capstone course. These results demonstrated considerable improvement, with student scores exceeding the 50th percentile in every area except *IS Strategy, Management, & Acquisition*, which was only 1% below expectations.

Assessment results from Spring 2014 were used as a pre-test. Despite considerable overall improvement, student performance in the areas *information systems strategy, management, and acquisition* and *foundations of information systems* was found to be lacking. To address these weaknesses in student performance a new IT Foundations module was added to the beginning of a required course (MIS 7101 Information Systems & Technology). This is a self-paced online module called “IT for Managers”, available through Harvard Business School Press. Additional assessment using the ISA Exam is scheduled to take place in MIS 8979 in Spring 2015.

MSA Intervention: More coverage of details in class (ACCT 6201)

An initial assessment (pre-test) conducted in Fall 2013 based in-class quizzes (0% Inventory, 39% PPE and 34% Taxes) determined that student performance did not meet the target. The results varied greatly between take-home and in-class quizzes. The analysis indicated that students had problems retaining their knowledge of concepts. The professor implemented an intervention increasing the number of exercises and providing more detailed coverage of the material. A second assessment (post-test) was conducted in Fall 2014. Results demonstrated improvement in student performance (18% Inventory, 88% PPE, and 61% Taxes).

MSA Intervention: Coverage of System Development Life Cycle (ACCT 6331)

An initial assessment (pre-test) in Spring 2013 showed that students had problems in the design and implementation of a relational database. An intervention was implemented to cover the topic of *System Development Life Cycle*. Students were also required to present the design and implementation of the relational database project separately. A second assessment (post-test) conducted in Spring 2014 confirmed that student performance met expectations. Assessments will be conducted again in Spring 2015 to ensure that students continue to meet expectations.

MSA Intervention: Seminar in Auditing Standards and Applications (ACCT 6355)

An initial assessment (pre-test) conducted in Fall 2013 showed that student performance failed to meet the target on Materiality, Fraud, and Responsibilities objectives. An intervention was developed to include more cases in the course starting Fall 2014. A second assessment (post-test) was implemented in Fall 2014. This time the students performed according to expectations.

Communication

As oral and written communications are vital in the field of business, the CBPA faculty established an expectation that graduate students should be able to write at a level of 3.5 or higher (on a 4-point scale) in all dimensions of the *AAC&U Written Communication Value Rubric* (context and purpose of writing, content development, genre and disciplinary conventions, sources and evidence, and control of syntax and mechanics). Similarly, students should be able to present at a level of 3.5 or higher (on a 4-point scale) in all dimensions of the *AAC&U Oral Communications Value Rubric* (organization, language, delivery, and supporting material).

MSA Intervention: Provide guidance rubric for writing across-the-curriculum

Student papers from ACCT 6201 Seminar in Financial Accounting Theory and Practice (Fall 2013) were assessed (pre-test) by the accounting faculty using the corresponding Value rubric. Student performance was below expectations. Faculty debriefing concluded that students might not have a well-rounded understanding of what is considered good or bad writing. Therefore faculty decided to distribute and explain the *AAC&U Written Communication Value Rubric* in all MSA courses that have substantive written assignments starting in Spring 2014.

Although proper evaluation of this across-the-curriculum intervention would require a minimum of three semesters, the faculty decided that an intermediate measurement could be useful in the short term. Papers from ACCT 6201 were assessed by the majority of the faculty during the general CBPA Faculty Meeting on November 7, 2014. Results showed an improvement over the initial assessment.

MSMIS Intervention: Provide guidance rubric for writing across-the-curriculum

MSMIS students are expected to be effective communicators in all relevant business media. The communication goal has two learning objectives, one related to written communication, and the other related to oral communication. Written Communication was assessed in MIS 7601 IT Infrastructure, a required course for MSMIS students. Student written paper artifacts on an IT infrastructure project was submitted as part of the class requirements in the Spring 2013 course, and subsequently used an assessed using the *AAC&U Written Communication Value Rubric*. Assessment of student artifacts revealed that the performance target 3.0 points or higher (on a 4-point scale) was met by 2 out of 6 students. The grand mean for the class was 2.7 across all dimensions.

The MIS 7601 instructor shared the writing rubric with students as an intervention in the Spring 2014 class as a way to help students structure and focus their writing. Results based on student papers collected in the Spring 2014 section of MIS 7601 showed improvement over the previous year with a grand mean of 3.25; but only 2 out of 4 students met the performance target. The

writing rubric was subsequently provided to students in another course, MIS 7101 Information Systems and Technology, as an intervention. While the performance target was met, the MIS faculty continue to discuss ways to help all students meet and exceed the performance target.

MSA Intervention: Provide guidance rubric for oral communications across-the-curriculum
Presentations made in ACCT 6201 during fall of 2013 were evaluated using the *AAC&U Oral Communication Value Rubric*. Results on the Language, Vocalization, Nonverbal, and Supporting objectives did not meet the target (i.e., 75% of students will score at least 3-“Good”). Evaluation results suggested that students did not seem to understand the rubric. CBPA faculty decided that students’ oral presentation skills could be improved by having each student critically evaluate their peers’ presentations. Thus, a peer evaluation rubric developed by the college was distributed and explained to students before their class presentations in ACCT 6331 in Spring 2014.

Presentations made by students in ACCT 6331 in Spring 2014 on a database design project were evaluated and analyzed. Results on the Language, Vocalization, Nonverbal, and Supporting objectives did not meet the performance target (62%, 62%, 43%, and 53% respectively). The analysis suggested that students were not serious about the guidelines or providing feedback. A subsequent intervention placed increased emphasis on the quality of the feedback provided by peer evaluators in determining student grades. In the ensuing assessment in the same class in Spring 2014, students appeared to have a better understanding of the rubric. Results on Vocalization, Nonverbal, and Supporting did not meet the performance target (67%, 67%, and 52% respectively). The analysis showed that students seemed to lack sufficient experience and/or practice in presentation.

MSMIS Intervention: Provide guidance rubric for oral communications across-the-curriculum
The second learning objective for the effective communication learning goal focuses on the delivery of an effective oral presentation related to an information systems project. The *AAC&U LEAP Value Rubric on Oral Communication* was used to assess the oral communication learning objective. The performance target was defined as 3.0 points (on a 4-point scale) on this rubric.

Student presentations from the MIS7401 Database Development & Application course were assessed (pre-test) in Fall 2013, revealing an average score of 1.76. The intervention of peer review of oral presentations was implemented in the required MIS classes.

In Spring 2014, oral presentations from the MIS 8979 capstone course were assessed (post-test) using the *AAC&U Oral Communication Rubric*. All students exceeded the performance target, with a grand mean of 3.5 points.

The difference in results may be due to the usage of a peer review system, as well as the fact that the pre-test and post-test assessments were made in two different classes using two different assignments. For example, students in the MIS 8979 course (as compared to those in MIS 7401) may have placed greater importance on the presentations of their final capstone project.

Additional anecdotal responses from faculty members in the core MIS courses led to a change in the study plan assignment for international students who were admitted with borderline TOEFL scores. These students are now required to take an additional business communications course that is not a requirement for most MSMIS students. In a meeting on October 15, 2014, MIS faculty discussed the possibility of adding an oral communications

course as a prerequisite to the program, similar to the existing written communications course requirement.

In Fall 2014, an intervention was implemented in MIS 7401 Database Development & Application, where students made two separate presentations. The intervention required students to use an oral communication rubric to evaluate other students. Post-test data was collected from the second of the two presentations, with the instructor applying the rubric to each student's presentation. Student performance improved considerably compared to the Fall 2013 average of 1.76 (on a 4-point scale), with an average score of 3.0. Despite this overall improvement, 66% of the students did not reach the performance target of 3 points. The Oral Communications Intervention and data collection is scheduled to continue in the MIS 8979 Capstone Course in Spring 2015.

Ethical Perspective

MSMIS Intervention: Curricular Change in MIS 7101

Graduates of the MSMIS program are expected to apply an ethical decision-making framework to a specific scenario. The program goal and objective was assessed in the MIS 7101 Information Systems & Technology course in Fall 2013 using an embedded assessment—*Ethical Dilemma Case Scenarios*. In the assignment, students reviewed 5 different case scenarios and applied an ethical framework/theory of their choice to each scenario. To assess the assignment, a rubric (*AAC&U LEAP Value Rubric on Ethical Decision Making*) was used. The performance target was designated as 3.0 points (on a 4-point scale) on the rubric. The grand mean from the Fall 2013 MIS 7101 class was 3.05, meeting the performance target. In Spring 2014 an additional reading assignment was added to the course as part of the continuous improvement effort.

Although data was collected in the Spring 2014 section of MIS 7101, there were only 2 MSMIS students enrolled in the course. The MIS faculty decided that this number was not large enough to conduct post-test assessment of the intervention. Most students in the MIS 7101 course were traditional MBA students. The assessment plan for the program included additional data collection from Summer and Fall 2014 sections of the course, but no MSMIS students registered for the course during those semesters. The plan was modified to add data collection in Spring and Summer 2015. The small number of students in the course is related to a larger concern about the size of the program. Due to the assessment challenges and low enrollment in the MSMIS program, the program was volunteered to go under the CBPA's new internal program review process for 2014-15. The faculty will decide whether the program should be maintained as is, maintained with revisions, or eliminated.

MSA Intervention: Including more real world cases in ACCT 6355

A rubric for the ethics objective (see below) was used for the assessment in ACCT 6355 in Fall 2013. Results on the Understanding, Application and Evaluation objectives did not meet the performance target (i.e., 75% of the students are expected to score at least 3.0 points). The analysis showed that students veered toward the easier solutions in analyzing ethical dilemmas, rather than considering and applying different ethical perspectives. More real world cases were included starting Fall 2014. A second assessment (post-test) was conducted in Fall 2014. Results showed that students met the performance target (i.e., 75% of the students scored at least 3.0 points).

Cross-cultural perspective

ACCT Intervention: Curricular change in ACCT 6201 and ACCT 8965

An initial assessment (pre-test) was conducted in Spring 2014 using a quiz on *International Accounting Standards* in ACCT 8965 Integrative Perspective on Accounting Issues, the capstone course. Upon analyzing the results, the faculty concluded that students needed additional instruction on the subject. A module on International Accounting Standards was introduced in ACCT 8965 early in Fall 2014. The same quiz was administered again (post-test) at the end of the Fall 2014 semester in the same class. The results showed that students met the performance target (i.e., at least 75% of the students performed at or above the 'well-developed' category). Although students' performance met the target, faculty felt that additional research and oral presentation components could be also included in the course as an additional intervention. The same quiz was given again in ACCT 6201 at the end of the Fall 2014 semester. The results showed that student scores met the performance target.

MSMIS Intervention: Curricular change in MIS7101

Graduates of the MSMIS program are expected to have a well-developed cross-cultural perspective. The learning objective tied to this goal is focused on analyzing the local and global impact of computing on individuals, organizations, and society. In Fall 2013, students in MIS 7101 Information Systems and Technology responded to an essay question on cross-cultural issues in the IT context. Artifacts were analyzed using the *AAC&U Value Rubric on Cross-cultural Competence*. The average student scores were 3.0, 2.5, 3.5, 2.75, 2.5, 2.75 on the six dimensions (cultural self-awareness; knowledge of cultural worldview frameworks; empathy; verbal and nonverbal communication; curiosity; and openness), and 2.83 overall.

Based on the test result, an intervention (new reading assignments on cross-cultural issues in the technology sector) was implemented in MIS 7101 starting in Spring 2014. Data was collected in Spring 2014 (post-test) in the same class. As there were only two MSMIS students enrolled in the course, the MIS faculty felt the number was not large enough to provide useful insights. The assessment plan for the program called for additional data collection in the Summer and Fall 2014 sections of the course, but there were no MSMIS students registered for the course during those semesters (most of the students in this program were MBA students). The plan was modified to add data collection in Spring and Summer 2015. The small number of students in the course is related to a larger concern about the size of the program. Due to the assessment challenges and low enrollment in the MSMIS program, the program was volunteered to go under the CBPA's new internal program review process for 2014-15. The faculty will decide whether the program should be maintained as is, maintained with revisions, or eliminated.