Stevens Institute of Technology

School of Business

**AACSB
ASSURANCE OF LEARNING**

**Master of Science in Information Management**

**LEARNING GOAL #3**

**Students will be able to formulate and articulate plans to align business and IT**

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November 20, 2018

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# 1. INTRODUCTION: LEARNING GOAL #3

*Students will be able to formulate and articulate plans to align business and IT.*

This goal is assessed in MIS 760 IT Strategy: Strategic Issues in IT Management, which is one of the required courses in the MIS core curriculum. This learning goal helps students to understand the relationship between IT and the business and the value that IT can bring to the business in enabling competitive positioning. In MIS760, the students have the opportunity to develop strategies to create alignment. This requires a top-level view of the organization (for example, they role play being part of the highest level of management), creative thinking, and the development of strategic initiatives for the business.

MIS760 was redesigned in the Spring of 2012 to have more of a focus on alignment and partnership of the technology organization with the business. The course has been since undated ever year drive by the AoL assessments. This plus addressing current IT management issues makes the course more relevant to the changes in today’s marketplace. The golden thread in the course is IT alignment with the business and then pushing beyond alignment to forming a true partnership with the business. This is overlaid with current strategic IT management issues.

In the previous version of the course, the assessment was performed on the final project for the course which requires students to use a specific strategic analysis process that leads them through a series of elements resulting in recommended strategic initiatives for the organization as a whole, i.e., this is not done for any single department such as the Information Technology (IT) Department. Rather the student must assume the role of the highest level IT executive participating on an organization-wide strategy team, developing business strategies. To complete this final project successfully, students need to master a number of planning techniques including: As-Is/To-Be, Strategic Alignment Maturity Assessment, Stakeholder Analysis, Ansoff Product/Service Matrix, Porter 5-Force and 6 Force Models, Super SWOT (a Stevens variation on SWOT), the application of additional academic and industry analysis methods, the formulation of feasible alternatives, choosing the strongest recommendation, and enumerating the “next steps.”

For the two semesters after the course was redesigned the methods described above for the first of the assignments the techniques play only a part in the new final project. In the course the final project is the development of a new IT strategy, with special emphasis on alignment and partnership taking into account the current issues facing senior IT management. There is a detail template that was used to ensure all aspects of the course are understood and are able to be applied. The detailed document is assessed on their ability to use all the material in the course. The approach used in these two semesters did show positive results however not to the degree expected. Therefore additional changes were made because of the AoL assessments.

The current version of the course uses a newly designed assignment that is focused on the key objectives of alignment, partnership and how IT drives business improvement and competitive advantage.

A key goal here is to enable the student to establish new viewpoints in two key areas: 1) they must think like a top executive (which for most of them is several levels above their current position (if they have any work experience at all) and 2) they must think outside of the IT organization (which is also difficult since the majority of our students have primarily IT experience). As a result they are exercising their creativity and innovative thinking far beyond what they have done to date in their education or work experience.

# 2. LEARNING OBJECTIVES AND TRAITS

The following was used up to the Fall of 2013.

|  |
| --- |
| **Objective 1:** *Students recognize the role of the CIO as a corporate executive and a contributor to the strategic direction of the firm.* |
| **Traits** |   |
| Trait 1: | The student learns to think strategically beyond the IT function alone |
| Trait 2: | The student develops an IT strategy that aligns with the business strategy |
| Trait 3: | The student demonstrates creative and innovative thinking |
| Trait 4: | The student articulates the way in which technology enables business strategy |
| **Objective 2:** *Students complete a strategic analysis process that results in specific recommendations for strategic direction* |
| **Traits** |   |
| Trait 1: | All elements of the process are correctly carried out |
| Trait 2: | Viable alternative strategies are generated |
| Trait 3: | Viable recommendations are presented and supported by the elements of the process |
| Trait 4: | The analysis contains innovative thinking, "stretching" what the firm has done in the past |
| Trait 5: | The overall process presents a strong, convincing argument for top management action |
|  |  |

The following is currently used:

|  |
| --- |
| **Objective 1:** *Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm.* |
| **Traits** |   |
| Trait 1: | The student learns to think strategically beyond the IT function alone |
| Trait 2: | The student understands how to develops an IT strategy that aligns with the business strategy |
| Trait 3: | The student demonstrates creative and innovative thinking |
| Trait 4: | The student articulates the way in which technology enables business strategy i.e., drives business improvement and leads to a competitive advantage |
|  |  |
|  Trait 5: | The student demonstrates how they would forge a partnership with the business |

# 3. RUBRICS

The following was used up to the Fall of 2013.

|  |
| --- |
| **Objective 1:** *Students recognize the role of the CIO as a corporate executive and a contributor to the strategic direction of the firm.* |
|   | **Trait** | **Poor** | **Good** | **Excellent** | **Score** |
|   | **Value** | **0** | **5** | **10** |  |
| Trait 1: | The student learns to think strategically beyond the IT function alone | Focus remains on IT alone | Alignment between business and IT is articulated | Innovative ideas are brought forth |   |
| Trait 2: | The student develops an IT strategy that aligns with the business strategy | The strategy is poor, incremental change | The strategy clearly shows a relationship between IT and business | The strategy goes beyond commonplace thinking and demonstrates insight into the future of the firm |   |
| Trait 3: | The student demonstrates creative and innovative thinking | Thinking is incremental | Some elements of the analysis process show radical change | The recommended strategies present a clear opportunity for competitive advantage |   |
| Trait 4: | The student articulates the way in which technology enables business strategy | Relationship between IT and business strategy is not clear | Clear link between IT an business strategy is shown | The alignment of IT & business through strategy will provide competitive advantage. |   |
| **Criterion: Does not meet expectations: 0 – 15; Meets: 15-20 ; Exceeds: 20-30**  |

|  |
| --- |
| **Objective 2:** *Students complete a strategic analysis process that results in specific recommendations for strategic direction* |
|   | **Trait** | **Poor** | **Good** | **Excellent** | **Score** |
|   | **Value** | **0** | **5** | **10** |  |
| Trait 1: | All elements of the process are correctly carried out | Elements are missing or incorrect | All elements are present | Elements are present and innovative |   |
| Trait 2: | Viable alternative strategies are generated | Strategies are weak or not viable | There is at least one viable strategy aligning IT and business | The alternatives go beyond commonplace thinking and demonstrate future insight |   |
| Trait 3: | Viable recommendations are presented and supported by the elements of the process | Recommendations do not come from alternatives presented | Recommendations incorporate innovative thinking and insight | The recommendations align IT and business and present a clear opportunity for competitive advantage |   |
| Trait 4: | The analysis contains innovative thinking, "stretching" what the firm has done in the past | Thinking is commonplace or weakly incremental | Thinking is innovative, strong incremental, some radical | Entire analysis demonstrates creative thinking and application of the elements resulting in valuable recommendations |   |
| Trait 5: | The overall process presents a strong, convincing argument for top management action | Weak or poor argument presented with no connections between the elements. | Elements work together to support an effective case for change | The elements of the process work together to support an effective case, that demonstrates insight into how IT can enable business strategy |   |

The following was used from Fall 2013 up to Spring 2016:

|  |
| --- |
| **Objective 1:** *Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm.* |
|   | **Trait** | **Poor (0-4)** | **Good (5-8)** | **Excellent (9-10)** | **Score** |
|   | **Value** | **0** | **5** | **10** |  |
| Trait 1: | The student learns to think strategically beyond the IT function alone | Focus remains on IT alone | Alignment between business and IT is articulated | Innovative ideas are brought forth |   |
| Trait 2: | The student understands how to develop an IT strategy that aligns with the business strategy | The understanding of alignment is poor, incremental change | The understanding clearly shows a relationship between IT and business | The understanding goes beyond commonplace thinking and demonstrates insight into the future of the firm |   |
| Trait 3: | The student demonstrates creative and innovative thinking | Thinking is incremental | Some elements of the analysis process show radical change | The recommended strategies present a clear opportunity for competitive advantage |   |
| Trait 4: | The student articulates the way in which technology enables business strategy, in particular demonstrates how IT drives business improvement the leads to a competitive advantage | Relationship between IT and business strategy is not clear | Clear link between IT an business strategy is shown | The alignment of IT & business through strategy will provide competitive advantage. |   |
| Trait 5: | The student demonstrates how they would forge a partnership with the business | Doesn’t show a real understanding of how to build a partnership | Shows good elements of how to build a partnership | Demonstrates how they would build a true partnership with the business |  |
| **Criterion: Does not meet expectations: 0 – 20; Meets: 20 -40 ; Exceeds: 40 - 50**  |

The following is currently being used - from Spring 2016. The rubric was made more stringent to push the objectives to a new level:

|  |
| --- |
| **Objective 1:** *Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm.* |
|   | **Trait** | **Poor (0-6)** | **Good (7 - 9)** | **Excellent (10)** | **Score** |
|   | **Value** | **0** | **7** | **10** |  |
| Trait 1: | The student learns to think strategically beyond the IT function alone | Focus remains on IT alone | Alignment between business and IT is articulated | Innovative ideas are brought forth |   |
| Trait 2: | The student understands how to develop an IT strategy that aligns with the business strategy | The understanding of alignment is poor, incremental change | The understanding clearly shows a relationship between IT and business | The understanding goes beyond commonplace thinking and demonstrates insight into the future of the firm |   |
| Trait 3: | The student demonstrates creative and innovative thinking | Thinking is incremental | Some elements of the analysis process show radical change | The recommended strategies present a clear opportunity for competitive advantage |   |
| Trait 4: | The student articulates the way in which technology enables business strategy, in particular demonstrates how IT drives business improvement the leads to a competitive advantage | Relationship between IT and business strategy is not clear | Clear link between IT an business strategy is shown | The alignment of IT & business through strategy will provide competitive advantage. |   |
| Trait 5: | The student demonstrates how they would forge a partnership with the business | Doesn’t show a real understanding of how to build a partnership | Shows good elements of how to build a partnership | Demonstrates how they would build a true partnership with the business |  |
| **Criterion: Does not meet expectations: 0 – 34; Meets: 35-49 ; Exceeds: 50**  |

# 4. ASSESSMENT PROCESS

|  |  |  |
| --- | --- | --- |
| **Where and when measured?** | **How measured?** | **Criterion** |
| Course-embedded analysis assignment in required course *MIS 760 IT Strategy: Strategic issues in IT management.* Assessed in either the fall or spring semester each year. | Sampling: Sample of MIS 760 students from all sections of course. Individual written project. | 90% of students get a grade of meets or exceeds expectation on the assessment assignment as measured by the rubric for this learning goal. |

# 5. RESULTS OF LEARNING GOAL ASSESSMENT - INTRODUCTION

The results of the initial learning goal assessments carried out to date are included below.

**Explanation**

Each learning goal has a number of learning objectives and performance on each objective is measured using a rubric that in turn contains a number of desired “traits”. Students are scored on each trait.

The grading sheets for each student are used to develop a Summary Results Sheet for each learning goal objective. A selection of these Summaries is included below.

The first table in the Summary Results Sheet for a learning objective and trait gives the counts of students falling in each of the three categories:

- Does not meet expectations
- Meets expectations
- Exceeds expectations

The right-hand column in the table is used to record the average score of the students on each trait. This table provides an indication of the relative performance of students on each trait.

The second table on each sheet provides the counts of students who fall in each of the above three categories for the overall learning objective.

The person doing the assessment provides explanatory comments and recommendations on the bottom of the Results Summary Sheet. The recommendations improve content or pedagogy changes for the next time the course is given.

# 6. RESULTS OF ASSESSMENT: SPRING 2008

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: May 10, 2007 ASSESSOR: Christine Bullen**

**NO. OF STUDENTS TESTED: 30 COURSE:MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **To think strategically beyond the IT function** | **0** | **13** | **9** | **7.0** |
| **Becomes engaged in developing business strategy for the overall firm** | **3** | **10** | **9** | **6.7** |
| **Demonstrate creative and innovative thinking**  | **6** | **8** | **8** | **5.7** |
| **Articulates the way in which technology enables business strategy**  | **2** | **9** | **11** | **7.3** |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **6.67** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Stu1dents by Category***(Based on Average score across all traits)* | **3** | **12** | **7** |
| **Students meeting or exceeding expectations:** | **86%** |

**COMMENTS:** Learning objective #2 is more challenging for the students than #1 indicating the difficulties in teaching students to think strategically.

**REMEDIAL ACTIONS:** Next term we will introduce creative problem solving techniques to help the student practice thinking strategically**.**

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 2: Students complete a strategic analysis process that results in specific recommendations for strategic direction**

**ASSESSMENT DATE: May 10, 2007 ASSESSOR: Christine Bullen**

**NO. OF STUDENTS TESTED: 30 COURSE: MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| All elements of the process are correctly carried out | 7 | 7 | 8 | 5.2 |
| Viable alternative strategies are generated | 0 | 8 | 14 | 7.5 |
| Viable recommendations are presented and supported by the elements of the process | 0 | 11 | 11 | 7.4 |
| Analysis contains innovative thinking, “stretching” what the firm has done in the past | 5 | 12 | 5 | 5 |
| Overall process presents a strong, convincing argument for top management action | 3 | 8 | 11 | 6.4 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **6.3** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **6** | **9** | **7** |
| **Students meeting or exceeding expectations:** | **73%** |

**COMMENTS:** Learning objective #2 is more challenging for the students than #1 indicating the difficulties in teaching students to think strategically.

**REMEDIAL ACTIONS:** Next term we will introduce creative problem solving techniques to help the student practice thinking strategically**.**

**7. SPECIFIC STEPS TAKEN IN FALL 2008**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and a contributor to the strategic direction of the firm**

**SPECIFIC STEPS TAKEN IN FALL 2008**

The role of the CIO as a corporate executive was discussed in more depth. This discussion, together with the evolving marketplace where CIOs are beginning to take a stronger role in corporate management and in the highest level of strategic planning, has helped the students’ view of the CIO to change. The students are more comfortable recognizing that the CIO is not simply the person who manages information technology, but is in fact a corporate executive.

**LEARNING OBJECTIVE # 2: Students complete a strategic analysis process that results in specific recommendations for strategic direction**

**SPECIFIC STEPS TAKEN IN FALL 2008**

Each term begins with an exercise for the students in creative problem solving. One that has worked well is to show the students a wooden clothes pin and ask them to list 10 things that can be done with the clothes pin other than hanging clothes to dry. When the students share their lists, there are two positive results: 1) each student can see the broad range of ideas that are presented by the class demonstrating the value of group interaction in creative thinking; and 2) each student can see their own creativity and how it differs from others. The clothes pin is a particularly good item as it transcends cultural differences – everyone recognizes the clothes pin no matter what country they are from.

The clothes pin exercise is then a reference point for the entire term as proof that they can think creatively and thus be creative in determining strategy.

# 8. RESULTS OF ASSESSMENT: SPRING 2009

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: Jan 09 term ASSESSOR: Christine Bullen**

**NO. OF STUDENTS TESTED: 22 COURSE: MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **To think strategically beyond the IT function** | **0** | **4** | **18** | **8.7** |
| **Becomes engaged in developing business strategy for the overall firm** | **0** | **4** | **18** | **8.6** |
| **Demonstrate creative and innovative thinking**  | **0** | **4** | **18** | **8.0** |
| **Articulates the way in which technology enables business strategy**  | **0** | **4** | **18** | **7.9** |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **8.3** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **6** | **16** |
| **Students meeting or exceeding expectations:** | **100%** |

**COMMENTS**: The Spring 2009 results indicate an increase in scores and in students exceeding expectations over the Spring 2008 assessment. These results may indicate 1) that students in the graduate program generally have a better sense of the strategic nature of the CIO as general knowledge of this has increased in the world, 2) the actions taken in the course to improve understanding of the role of the CIO as a corporate executive have had an impact.

**REMEDIAL ACTIONS:** Continue to bring material into the course that illustrates the strategic nature of the CIO through current articles and cases that support this concept.

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 2: Students complete a strategic analysis process that results in specific recommendations for strategic direction**

**ASSESSMENT DATE: May 10, 2007 ASSESSOR: Christine Bullen**

**NO. OF STUDENTS TESTED: 22 COURSE: MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| All elements of the process are correctly carried out | 0 | 3 | 19 | 8.9 |
| Viable alternative strategies are generated | 0 | 3 | 19 | 9.0 |
| Viable recommendations are presented and supported by the elements of the process | 0 | 3 | 19 | 8.8 |
| Analysis contains innovative thinking, “stretching” what the firm has done in the past | 0 | 5 | 17 | 7.9 |
| Overall process presents a strong, convincing argument for top management action | 1 | 4 | 17 | 8.0 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **8.5** |

|  |  |  |  |
| --- | --- | --- | --- |
| 1 | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **1** | **4** | **17** |
| **Students meeting or exceeding expectations:** | **95%** |

**COMMENTS:** The Spring 2009 results indicate an increase in scores and in students exceeding expectations over the Spring 2008 assessment. These results may indicate 1) that students in the graduate program generally have a better sense of how to create strategic plans and relate them to IT, 2) the actions taken in the course to improve creative thinking have had an impact.

**REMEDIAL ACTIONS:** Continue to bring creative and innovative thinking techniques into the course and use these exercises to stimulate student thinking.

#  9. SPECIFIC STEPS TAKEN IN FALL 2009

Continuing to use the clothespin exercise and getting good response. Also added additional current reading from newspapers and other periodicals to related strategic nature of IT to the corporate competitive position.

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# 10. OVERVIEW: LEARNING GOAL # 3

**After First Round Review Fall 2008**

The students responded very well to the clothespin exercise. Many were very enthusiastic and came up with more than the required 10 ideas. The variety of ideas was broad, so while there were always some overlaps, for any one class, there were many independent ideas. As a result everyone easily saw the creative thinking that had taken place in the group and how they were a part of this thinking.

The exercise served well as a reference point when students “complained” that they could not be creative or come up with innovative ideas. It was also used in conjunction with specific case studies to illustrate the most creative ideas in the case and how far those are from the traditional way of thinking.

The next round of assessments will be necessary to see if there is an effect on the scoring of the learning goal traits. However, there has been a definite effect on communication of what it means to be carrying out innovative thinking. This observation comes from the class interaction and questions which are quite different now compared to prior to the use of the exercise. Prior questions were vaguer and indicated a lack of experience with creative thinking. Students had trouble formulating questions to improve their understanding of creative thinking. After the exercise, the questions were more directed leading to answers that were more helpful.

**After First Round Review Fall 2009**

Similar to fall 2008, we are continuing to use the innovative thinking exercise with the clothes pin. Several other exercises were introduced, but did not work as well because they were too time consuming. The original exercise seems the best, although more experimentation will be done.

# 11. RESULTS OF ASSESSMENT: SPRING 2010

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: April 06, 2012 ASSESSOR: Christine Bullen**

**NO. OF STUDENTS TESTED: 18 (30%) COURSE:MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **To think strategically beyond the IT function** | **1** | **5** | **12** | **7.7** |
| **Becomes engaged in developing business strategy for the overall firm** | **1** | **5** | **12** | **7.6** |
| **Demonstrate creative and innovative thinking**  | **3** | **4** | **11** | **7.2** |
| **Articulates the way in which technology enables business strategy**  | **1** | **6** | **11** | **7.4** |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **7.5** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **1** | **7** | **10** |
| **Students meeting or exceeding expectations:** | **94%** |

**COMMENTS:** The Spring 2010 results were carried out on a smaller population due to enrollment decreases. While in 2009, there were no students who did not meet expectations, in 2010 there was one. However the overall results are very similar in that almost all the students met or exceeded expectations in 2010. It is hard to generalize from this comparison as the overall number in the sample is low.

**REMEDIAL ACTIONS:** Continue to bring material into the course that illustrates the strategic nature of the CIO through current articles and cases that support this concept.

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 2: Students complete a strategic analysis process that results in specific recommendations for strategic direction**

**ASSESSMENT DATE: June 11, 2010 ASSESSOR: Christine Bullen**

**NO. OF STUDENTS TESTED: 18 (30%) COURSE: MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| All elements of the process are correctly carried out | 2 | 8 | 8 | 6.2 |
| Viable alternative strategies are generated | 1 | 4 | 13 | 8.2 |
| Viable recommendations are presented and supported by the elements of the process | 1 | 4 | 13 | 7.8 |
| Analysis contains innovative thinking, “stretching” what the firm has done in the past | 1 | 7 | 10 | 7.2 |
| Overall process presents a strong, convincing argument for top management action | 1 | 5 | 12 | 7.3 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **7.3** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **4** | **6** | **8** |
| **Students meeting or exceeding expectations:** | **78%** |

**COMMENTS:** Learning objective #2 continues to be more challenging for the students than #1 indicating the difficulties in teaching students to think strategically and apply this new way of thinking to create strategic objectives for the organization. Students whose primary experience has been non-managerial and/or within the IT function alone struggle with taking the broader view of the organization as a whole and with letting themselves become the strategist for the business.

**REMEDIAL ACTIONS:** The continued use of creative thinking exercises coupled with current information from articles and web sites is important for helping to lift the students out of the operational world in which they have experience and into the strategic planning realm.

# 11. RESULTS OF ASSESSMENT: Fall 2011

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: April 06, 2012 ASSESSOR: Christine Bullen**

**NO. OF STUDENTS TESTED: 36 COURSE: MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **To think strategically beyond the IT function** | **1** | **6** | **29** | **8.2** |
| **Becomes engaged in developing business strategy for the overall firm** | **1** | **11** | **24** | **7.8** |
| **Demonstrate creative and innovative thinking**  | **6** | **13** | **17** | **6.4** |
| **Articulates the way in which technology enables business strategy**  | **3** | **8** | **25** | **7.7** |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **7.5** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **1** | **17** | **18** |
| **Students meeting or exceeding expectations:** | **97%** |

**COMMENTS**: Almost all the students met or exceeded expectations and therefore these results are consistent with past assessments. This assessment was conducted on a larger sample that the previous one and that helps in the generalization process.

One of the issues that emerged in this analysis was a difference in perspective between the two instructors whose classes were represented here. Learning Object #1 states: ”**Students recognize the role of the CIO as a corporate executive and a contributor to the strategic direction of the firm.”** One of the primary goals of this class is to guide the students to think outside the traditional Information Technology Department and focus on strategy for the firm as a whole. Many of our students currently work within the IT Department and therefore getting them to visualize how they can affect corporate strategy can be difficult. However, this is a key element of the class and must be stressed by the instructor. It became clear in this assessment that one of the instructors was less successful in achieving this objective. As a result the students learned the various techniques and carried them out properly, but applied them to IT strategy rather than to corporate strategy. In scoring the student work, this was taken into consideration since it was not their fault, but rather the instructor’s in not guiding them properly.

One of the techniques employed (by the more successful instructor) to help focus the students on corporate strategy was to use a case study of Second Life, a 3-D virtual world, where many organizations and educational entities have established a presence to market their products and services, and in some cases, conduct meetings, classes etc. virtually. The students were asked to apply techniques learned in the class to envision how their own organizations could use Second Life. This exercise was very successful in getting the students out of their comfort zone of the IT Department and into creative thinking about corporate strategy that is enabled by technology.

**REMEDIAL ACTIONS:** This class is being redesigned by a new instructor and therefore it will be changed in many ways. However, it will remain critical to bring in case studies and techniques to guide the students toward creativity and applying the technology they know to develop IT strategy that aligns with the corporate strategy and improve an organization’s competitive position.

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 2: Students complete a strategic analysis process that results in specific recommendations for strategic direction**

**ASSESSMENT DATE: April 06, 2012 ASSESSOR: Christine Bullen**

**NO. OF STUDENTS TESTED: 36 COURSE: MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| All elements of the process are correctly carried out | 0 | 5 | 31 | 8.9 |
| Viable alternative strategies are generated | 1 | 5 | 30 | 8.6 |
| Viable recommendations are presented and supported by the elements of the process | 0 | 21 | 15 | 6.5 |
| Analysis contains innovative thinking, “stretching” what the firm has done in the past | 7 | 15 | 14 | 6.1 |
| Overall process presents a strong, convincing argument for top management action | 4 | 20 | 12 | 6 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **7.2** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **2** | **22** | **12** |
| **Students meeting or exceeding expectations:** | **94%** |

**COMMENTS:** Learning Objective #2 is related to Objective #1 in that students cannot carry out a strategic analysis process leading to recommendations for corporate strategic direction unless they have moved beyond their focus of the IT Department and have begun to focus on how technology can bring about new strategic directions for the organization as a whole. However, what can be assessed in this Learning Objective is the application of the techniques the students have learned in the class. The results show that only 2 students did not meet expectations.

**REMEDIAL ACTIONS:** The continued use of creative thinking exercises and case studies that represent different ways of thinking about how organizations create strategy, coupled with current information from articles and web sites on the directions of successful, innovative organizations are all important for helping to lift the students out of the operational world in which they have experience and into the strategic planning realm.

# 12. RESULTS OF ASSESSMENT: Fall 2012

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: February 11, 2013 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 43 COURSE: MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **To think strategically beyond the IT function** | **2** | **8** | **33** | **8.3** |
| **Becomes engaged in developing an IT strategy that aligns with the business** | **1** | **8** | **34** | **8.4** |
| **Demonstrate creative and innovative thinking**  | **8** | **16** | **19** | **7.2** |
| **Articulates the way in which technology enables business strategy**  | **3** | **10** | **30** | **7.9** |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **7.9** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **1** | **16** | **26** |
| **Students meeting or exceeding expectations:** | **98%** |

**COMMENTS**: This is the first assessment after the redesign of the course. The new materials were well received and understood as is shown by the improvement in the rubric results. A larger sample was taken to receive as much feedback as possible. The new detailed cases as well as the mini cases used each week in class proved to drive home the key take aways form the course materials. Thinking strategically beyond the IT function was achieved. Both the face to face and the online classes were very interactive which lead to a good learning environment for all students. The enhanced focus on alignment and partnership overlaid by current IT strategic issues lead to a new level of understanding. Although improvement was show more was expected on the understanding of alignment and partnership.

**REMEDIAL ACTIONS:** Continue to add current day materials will be important. One area of additional focus should be the execution of the IT strategy as it helps the business in the competitive environment. The range of student varies greatly from those with no experience to folks that have 20+ years in business. The students are still mostly technical professionals. Additional materials should be added to being the less experience students up a level in their understanding of strategy and the role of senior IT managers.

Because the results of understanding alignment and partnership were not as good as expected a new assignment will be developed with a more focus set of objectives/traits which will lead to a new rubric.

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 2: Students complete a strategic analysis process that results in specific recommendations for strategic direction**

**ASSESSMENT DATE: February 11, 2013 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 43 COURSE: MIS760**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| All elements of the process are correctly carried out | 0 | 7 | 36 | 9.0 |
| Viable alternative strategies are generated | 3 | 13 | 27 | 8.0 |
| Viable recommendations are presented and supported by the elements of the process | 3 | 26 | 14 | 6.4 |
| Analysis contains innovative thinking, “stretching” what the firm has done in the past | 3 | 13 | 27 | 8.0 |
| Overall process presents a strong, convincing argument for top management action | 2 | 15 | 27 | 7.8 |
|  |  |  |  |  |
| **Average Grade (Maximum 10)** | **7.8** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **3** | **15** | **25** |
| **Students meeting or exceeding expectations:** | **93%** |

**COMMENTS:** With the redesign of the course and the emphasis of current real world issues, thereby placing many of the students in familiar territory it was expected that they would be able to relate better to innovative thinking and formulating a strategy that they can sell to top management that is necessary in the technical organizations of today. This was proven by the improved scores. Although the strategic alignment tool that was used in the past is still used in is emphasized less for the assessed project, which showed in the low score in item five above.

**REMEDIAL ACTIONS:**. We will continue to challenge the students and emphasize the importance of strategy and strategic alignment to help/drive their companies to a competitive advantage. As well as look for enhanced ways to demonstrate how to achieve partnership with the business.

Because the results of understanding alignment and partnership were not as good as expected a new assignment will be developed with a more focus set of objectives/traits which will let to a new rubric.

# 13. RESULTS OF ASSESSMENT: Fall 2013

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: November 18, 2013 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 29 COURSE: MIS760A(campus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **6** | **23** | **8.7** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **0** | **10** | **19** | **8.3** |
| **The student demonstrates creative and innovative thinking**  | **2** | **23** | **4** | **7.14** |
| **The student articulates the way in which technology enables business strategy**  | **6** | **21** | **2** | **6.4** |
| **The student demonstrates how they would forge a partnership with the business** | **4** | **19** | **6** | **7.2** |
| **Average Grade (Maximum 10)** | **7.58** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **19** | **10** |
| **Students meeting or exceeding expectations:** | **100%** |

**ASSESSMENT DATE: November 18, 2013 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 20 COURSE: MIS760WS(online)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **5** | **15** | **9** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **1** | **7** | **12** | **8.1** |
| **The student demonstrates creative and innovative thinking** | **1** | **13** | **6** | **7.15** |
| **The student articulates the way in which technology enables business strategy** | **0** | **18** | **2** | **7.05** |
| **The student demonstrates how they would forge a partnership with the business** | **7** | **9** | **4** | **6.0** |
| **Average Grade (Maximum 10)** | **7.43** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **12** | **8** |
| **Students meeting or exceeding expectations:** | **100%** |

**ASSESSMENT DATE: November 18, 2013 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 49 COURSE: MIS760combine**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **11** | **38** | **8.9** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **1** | **17** | **31** | **8.24** |
| **The student demonstrates creative and innovative thinking** | **3** | **36** | **10** | **7.1** |
| **The student articulates the way in which technology enables business strategy** | **6** | **39** | **4** | **6.7** |
| **The student demonstrates how they would forge a partnership with the business** | **11** | **28** | **10** | **6.7** |
| **Average Grade (Maximum 10)** | **7.52** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **31** | **18** |
| **Students meeting or exceeding expectations:** | **100%** |

**COMMENTS**: This is the first assessment after the redesign of the rubric. The course stayed true to its roots of business and IT strategy; alignment and the importance of the CIO. However, this semester more emphasis was placed on thinking beyond the IT function and more like business people; alignment of strategies; how the IT strategy can enable the business and how a true partnership can be forged. The first three traits of the matrix were well meet however the results of the influence on the business and developing a true partnership showed there need improvement.

**REMEDIAL ACTIONS:** The results of the traits of how technology enables the business and the new trait of forging a true partnership of IT with the business were not where we had hope, nor where we want them to be. To address these two areas we will first put more emphasis and materials to discuss forging a partnership. In addition we will add an entire module dedicated to how a successful IT strategy can enable the business. In particular readings, lectures and discussions will be added to the course that will address how a successful implemented IT strategy can lead to business improvement and a competitive advantage.

# 14. RESULTS OF ASSESSMENT: Spring 2014

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: April 24, 2014 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 23 COURSE: MIS760A, WS**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **1** | **22** | **9.6** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **3** | **4** | **16** | **8.4** |
| **The student demonstrates creative and innovative thinking** | **2** | **14** | **7** | **7.8** |
| **The student articulates the way in which technology enables business strategy** | **5** | **10** | **8** | **5.9** |
| **The student demonstrates how they would forge a partnership with the business** | **4** | **11** | **8** | **7.4** |
| **Average Grade (Maximum 10)** | **7.8** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **14** | **9** |
| **Students meeting or exceeding expectations:** | **100%** |

**COMMENTS**: This semester more emphasis was placed on thinking beyond the IT function and more like business people; alignment of strategies; how the IT strategy can enable the business and how a true partnership can be forged. There was improvement in 4 of the traits, showing that the changes made this semester had a positive effect. However the fourth trait of technology enabling the business strategy fell back a little. This was particularly disappointing since an entire module was added to address the relationship of the IT strategy to driving competitive advantage. Actions are defined below on how this will be handled.

**REMEDIAL ACTIONS:** We will continue to use the changes made last semester, since most of the results were positive. To address the area of how IT enables the business changes will be made to the definition of the assignment. As currently defined there is emphasis on alignment and partnership. The enabling of the business is picked up in the rubric which the students see however even the wording there was about enabling the business and not what was directly discussed in class with the new materials. The rubric will be updated to clearly spell out the business improvement and competitive advantage that is the real trait desired. Additionally more emphasis will be place on the competitive advantage module and this material will be covered enough in advance for the students to fully understand it (last semester the material was covered days before the assignment was due).

# 15. RESULTS OF ASSESSMENT: Fall 2014

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: November 11, 2014 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 30 COURSE: MIS760A(campus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **6** | **24** | **9.2** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **0** | **6** | **24** | **9.3** |
| **The student demonstrates creative and innovative thinking**  | **0** | **6** | **24** | **8** |
| **The student articulates the way in which technology enables business strategy**  | **14** | **9** | **7** | **6.2** |
| **The student demonstrates how they would forge a partnership with the business** | **11** | **7** | **12** | **7.1** |
| **Average Grade (Maximum 10)** | **7.96** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **15** | **15** |
| **Students meeting or exceeding expectations:** | **100%** |

**ASSESSMENT DATE: November 11, 2014 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 18 COURSE: MIS760WS(online)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **2** | **16** | **9.6** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **1** | **3** | **14** | **9** |
| **The student demonstrates creative and innovative thinking** | **0** | **11** | **7** | **8.5** |
| **The student articulates the way in which technology enables business strategy** | **11** | **3** | **4** | **5.4** |
| **The student demonstrates how they would forge a partnership with the business** | **8** | **3** | **7** | **6.3** |
| **Average Grade (Maximum 10)** | **7.76** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **12** | **6** |
| **Students meeting or exceeding expectations:** | **100%** |

**ASSESSMENT DATE: November 11, 2014 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 48 COURSE: MIS760combine**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **8** | **40** | **9.4** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **1** | **9** | **38** | **9.2** |
| **The student demonstrates creative and innovative thinking** | **0** | **17** | **31** | **8.2** |
| **The student articulates the way in which technology enables business strategy** | **25** | **12** | **11** | **5.9** |
| **The student demonstrates how they would forge a partnership with the business** | **19** | **10** | **19** | **6.8** |
| **Average Grade (Maximum 10)** | **7.9** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **27** | **21** |
| **Students meeting or exceeding expectations:** | **100%** |

**COMMENTS**: The overall results were good, with the aggregate scores from the previous semester improved. Especially the first 3 traits: thinking beyond IT, alignment and innovative thinking all showing improvement. The last two traits showed disappointing result with both traits: enabling the business leading to a competitive advantage and true partnership of IT and the business showing a decline in overall scores despite the actions taken this semester. In analyzing the data it is not clear if the students didn’t know the topics because many did not address one or both traits either at all or only in a cursory way.

In comparing the on campus class to the web campus class the results where, the on campus class did slightly better in trait 2 and almost a full point better in traits 4 and 5. The web campus class did better in trait 1 and 3. The scores for the first 3 traits overall were good, so the focus needs to be on traits 4 and 5. The analysis of the data shows the same results as the combine scores and that is that many students did not address the last two traits.

**REMEDIAL ACTIONS:** Since many of the students did not address traits 4 and 5 either at all or not in a substantial way one step that will be taken next semester is a clarification of the assignment clearly spelling out the requirements. Also we will revisit the materials that address these two areas and add to/delete/enhance both topics to address them as clearing as possible.

# 16. RESULTS OF ASSESSMENT: Spring 2016

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: May 1, 2016 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 54 COURSE: MIS760A and B(campus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **21** | **33** | **9.39** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **0** | **7** | **47** | **9.74** |
| **The student demonstrates creative and innovative thinking**  | **5** | **32** | **17** | **8.41** |
| **The student articulates the way in which technology enables business strategy**  | **19** | **23** | **12** | **6.39** |
| **The student demonstrates how they would forge a partnership with the business** | **17** | **21** | **16** | **7.04** |
| **Average Grade (Maximum 10)** | **8.19** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **32** | **22** |
| **Students meeting or exceeding expectations:** | **100%** |

**Comments:** While the first 3 traits continue to make forward progress and second two – how technology enables the business and how IT needs to forge a partnership although still need focus and improvement.

**REMEDIAL ACTIONS:** In analyzing the raw data there are many few low scores in the last two traits I believe in part because the assignment was not understood. We will take steps to clarify the assignment when it is given. Because these two traits are extremely important we will do more research to find compelling information in these areas and present in a more interact way.

# 17. RESULTS OF ASSESSMENT: Fall 2016

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: December 5, 2016 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 63 COURSE: MIS760A and B(campus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions 0 - 6** | **Meet Expectat-ions 7-9** | **Exceed Expectat-ions 10** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **9** | **54** | **9.75** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **4** | **7** | **52** | **9.44** |
| **The student demonstrates creative and innovative thinking**  | **3** | **15** | **45** | **9.40** |
| **The student articulates the way in which technology enables business strategy**  | **22** | **24** | **17** | **7.40** |
| **The student demonstrates how they would forge a partnership with the business** | **22** | **22** | **19** | **7.29** |
| **Average Grade (Maximum 10)** | **8.65** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **52** | **11** |
| **Students meeting or exceeding expectations:** | **100%** |

**NO. OF STUDENTS TESTED: 14 COURSE: MIS760WS (Webcampus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **1** | **13** | **9.86** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **1** | **4** | **9** | **8.57** |
| **The student demonstrates creative and innovative thinking**  | **0** | **6** | **8** | **9.14** |
| **The student articulates the way in which technology enables business strategy**  | **5** | **4** | **5** | **7.07** |
| **The student demonstrates how they would forge a partnership with the business** | **5** | **3** | **6** | **7.50** |
| **Average Grade (Maximum 10)** | **8.43** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **12** | **2** |
| **Students meeting or exceeding expectations:** | **100%** |

**NO. OF STUDENTS TESTED: 77 Combined all COURSEs: MIS760(A,B,WS)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **0** | **10** | **67** | **9.80** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **5** | **11** | **61** | **9.01** |
| **The student demonstrates creative and innovative thinking**  | **3** | **21** | **53** | **9.27** |
| **The student articulates the way in which technology enables business strategy**  | **27** | **28** | **22** | **7.23** |
| **The student demonstrates how they would forge a partnership with the business** | **27** | **25** | **25** | **7.39** |
| **Average Grade (Maximum 10)** | **8.54** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **0** | **64** | **13** |
| **Students meeting or exceeding expectations:** | **100%** |

**Comments:** Overall the results were excellent with 4 of the 5 traits improving. The one trait that fell back was the one on alignment. We were also able to compare on campus and web campus sections. The web section did better on the first trait of going beyond IT in their thinking, possible because most were working professionals. However the other 4 traits the web campus sections were behind the on campus sections. The most significant finding was in the area of alignment.

**REMEDIAL ACTIONS:** This semester the results showed great improvement however one key area fell back and that is in aligning an IT strategy with the business. We will need to assess the course material, especially the tools and measurements that are used to help with alignment. We will update the presentation material accordingly as well as hold lengthy discussions on alignment. Also possible adding reading material on the subject. In the comparison of on campus and web campus course all but one trait was less for the web campus class. We will need to research this as traits 3, 4 and 5 were close in scores so improvements made in the course should affect both modes of delivery. However the one are of concern is the area of alignment, where the web campus class scored significantly below the on campus class. The improvements made to the course referenced above should impact both delivery modes, however we will add emphasis in one of our blackboard online session to explicitly address alignment. Additionally, even though there was improvement in IT driving competitive advantage and forging a partnership with the business more improvement is needed. We will add more discussions, articles, in class exercises and update the presentation material to continue to improvement in these areas.

# 18. RESULTS OF ASSESSMENT: Fall 2017

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: November 16, 2017 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 75 COURSE: MIS760A and B(campus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions 0 - 6** | **Meet Expectat-ions 7-9** | **Exceed Expectat-ions 10** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **2** | **8** | **65** | **9.64** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **6** | **13** | **56** | **9.15** |
| **The student demonstrates creative and innovative thinking**  | **16** | **38** | **21** | **7.96** |
| **The student articulates the way in which technology enables business strategy**  | **33** | **22** | **20** | **6.8** |
| **The student demonstrates how they would forge a partnership with the business** | **39** | **16** | **20** | **5.55** |
| **Average Grade (Maximum 10)** | **7.8** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **18** | **51** | **6** |
| **Students meeting or exceeding expectations:****Target is 90%** | **69%** |

**Comments:** Overall the results were disappointing with all traits assessed at less than the year before. Especially traits 3, 4 and 5 losing significant ground. Of these the most disappointing is the trait on forging a partnership between IT and the business. In analyzing the data 18 of the students did not address the trait at all. While it is true we are grading more stringently to drive overall improvement the results are not what we had hoped for. The students this semester had much less experience than those in the past. Although traits 1 and 2 slipped a little the results are still excellent. We need to concentrate on traits 3, 4 and 5 for improvement.

**REMEDIAL ACTIONS:** Since so many students did not address partnership we will need to address how the assignment is defined and explained. We also need to add more reading materials and clarify the presentation material. In addition understanding how IT drives business improvement and competitive advantage is a critical part of the course. We will research how best to present this material, adding cases that will address the topic as well as additional reading materials.

# 19. RESULTS OF ASSESSMENT: Fall 2018

**LEARNING GOAL #3: Students will be able to formulate and articulate plans to align business and IT**

**LEARNING OBJECTIVE # 1: Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm**

**ASSESSMENT DATE: November 22, 2018 ASSESSOR: Michael Parfett**

**NO. OF STUDENTS TESTED: 74 COURSE: MIS760A and B(campus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions 0 - 6** | **Meet Expectat-ions 7-9** | **Exceed Expectat-ions 10** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **1** | **5** | **68** | **9.78** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **10** | **7** | **57** | **8.86** |
| **The student demonstrates creative and innovative thinking**  | **8** | **16** | **50** | **8.96** |
| **The student articulates the way in which technology enables business strategy**  | **30** | **12** | **32** | **7.09** |
| **The student demonstrates how they would forge a partnership with the business** | **29** | **18** | **27** | **6.61** |
| **Average Grade (Maximum 10)** | **8.26** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **10** | **39** | **25** |
| **Students meeting or exceeding expectations:****Target is 90%** | **74 = 86%** |

**NO. OF STUDENTS TESTED: 25 COURSE: MIS760WS (Webcampus)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **1** | **1** | **23** | **9.8** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **2** | **2** | **21** | **9.48** |
| **The student demonstrates creative and innovative thinking**  | **2** | **5** | **18** | **9.28** |
| **The student articulates the way in which technology enables business strategy**  | **7** | **7** | **11** | **9.2** |
| **The student demonstrates how they would forge a partnership with the business** | **14** | **3** | **8** | **5.0** |
| **Average Grade (Maximum 10)** | **8.55** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **3** | **14** | **8** |
| **Students meeting or exceeding expectations:****Target is 90%** | **22 = 88%** |

**NO. OF STUDENTS TESTED: 99 Combined all COURSEs: MIS760(A,B,WS)**

|  |  |  |
| --- | --- | --- |
|  | **Number of Students** |  |
| **Learning Goal Traits** | **Not Meet Expectat-ions** | **Meet Expectat-ions** | **Exceed Expectat-ions** | **Avg. Grade on Trait** |
| **The student learns to think strategically beyond the IT function alone** | **2** | **6** | **91** | **9.79** |
| **The student understands how to develop an IT strategy that aligns with the business strategy** | **12** | **9** | **78** | **9.02** |
| **The student demonstrates creative and innovative thinking**  | **10** | **21** | **68** | **9.12** |
| **The student articulates the way in which technology enables business strategy**  | **37** | **19** | **43** | **7.22** |
| **The student demonstrates how they would forge a partnership with the business** | **43** | **21** | **35** | **6.2** |
| **Average Grade (Maximum 10)** | **8.27** |

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Not meet Expectations** | **Meets Expectations** | **Exceeds Expectations** |
| **Total Students by Category***(Based on Average score across all traits)* | **13** | **53** | **33** |
| **Students meeting or exceeding expectations:** | **86 = 87%** |

**Comments:** In comparing the on campus sections to the last assessments there were improvements in 4 of the 5 traits. Trait 3 – innovative thinking showed a substantial gain. Only the second trait – understanding how to align an IT and business strategy showed a slight decrease.

When comparing the web campus class to the last time the web campus class was assessed the results were positive gains for all traits but one. Trait 5 – forging a partnership showed a substantial decrease. In looking at the raw data it shows 10 of the 25 students didn’t address that trait at all.

When comparing the campus sections to the web sections the web sections do better on all traits except the last one – forging partnerships. The last trait is missing leading because of the number of students not addressing the trait in the web section. The probable reason the web sections do better than on campus in most traits is the experience level of the students.

When comparing all students in all sections to the last assessment the results are very good, with gains in the first 4 traits. The last trait decreases but as previously stated the results are misleading. Without the 10 students who didn’t address that trait the results would have been 8.33, which is an increase.

**REMEDIAL ACTIONS:** The results were positive in all comparisons – on campus to on campus; web campus to web campus; web campus to on campus and the total of all sections from assessment to assessment. Even though we are encouraged by the gains we still need to do better on traits 4 and 5 – partnership and competitive advantage.

To address these 2 traits we will add more recent reading materials; use the latest version of the test book and try to find cases that address these 2 traits directly.

In addition we need to address why so many students in the web section did not address partnership. We will rewrite the directions for the assignment; and add examples of what is expected.

# 18. Outcomes from Previous Assessments:

Fall 2018:

The outcomes from this assessment were very good. After analysis all traits improved depending on the comparison data used. Overall we are very pleased with the results. We especially like the fact that our web campus section results are on par with the on campus sections, in fact they are better on most traits. However there is still work to be do for continuous improvement as addressed in the remedial action section, especially on traits 4 and 5.

Fall 2017:

There was a loss of improvement in many of the traits since the last assessment. There was improvement over the last several assessments on alignment, which is encouraging. We need to address the area of partnership, which did not score well. As well as continue to enhance how we address competitive advantage. We will aggressively look to improve using the information stated above.

Fall 2016:

There was great improvement in 4 of the 5 traits after implementing the improvements identified from the Spring 2016 assessment. We will continue to improve using the information stated above. We need to address the area of alignment, which fell back. As well as continue to enhance how we address partnership and competitive advantage.

Spring 2016:

The overall results showed improvement in the first 4 traits, while the last one was essentially flat. The focus continues to be needed on traits 4 and 5. The overall average continues to raise which indicates most of the material is well received and understood.

Fall 2014:

The overall results were good, with the aggregate scores from the previous semester improved. Especially the first 3 traits: thinking beyond IT, alignment and innovative thinking all showing improvement. The last two traits showed disappointing result with both traits: enabling the business leading to a competitive advantage and true partnership of IT and the business showing a decline in overall scores despite the actions taken this semester. In analyzing the data it is not clear if the students didn’t know the topics because many did not address one or both traits either at all or only in a cursory way.

In comparing the on campus class to the web campus class the results where, the on campus class did slightly better in trait 2 and almost a full point better in traits 4 and 5. The web campus class did better in trait 1 and 3. The scores for the first 3 traits overall were good, so the focus needs to be on traits 4 and 5. The analysis of the data shows the same results as the combine scores and that is that many students did not address the last two traits.

Spring2014:

This semester more emphasis was placed on thinking beyond the IT function and more like business people; alignment of strategies; how the IT strategy can enable the business and how a true partnership can be forged. There were new readings added throughout the course and updated presentation materials that put more focus on the above. There was a new module developed that addressed how IT can improve business performance and how this drives competitive advantage. These changes lead to improvement in 4 of the traits, showing that the changes made this semester had a positive effect. However the fourth trait of technology enabling the business strategy fell back a little. This was particularly disappointing since an entire module was added to address the relationship of the IT strategy to driving competitive advantage. Actions are defined above on what changes will be made to address this area for improvement.

Fall 2013:

This is the first assessment after the new rubric was developed to put more emphasis on the relationship of the IT strategy to the business. Overall we were pleased with the results, especially with the traits that addressed thinking beyond IT; business and IT alignment and creative thinking. The areas of how IT enables the business, in particular how a successful implemented IT strategy can improve the business and drive competitive advantage; and how a true partnership can be forged between IT and the business were not where we had hoped. The emphasis in these two areas are both new to the course so these metrics help point out where we need to focus. As discussed in the remedial action section specific actions will be taken for next semester.

Additional in this semester we measured the on campus and online section separately and then combined them. The results, trait by trait were uneven but in aggregate they demonstrated the same two areas that need to be improved – IT business impact and partnership. The online students did slightly better in 3 of the traits and the on campus better in the other two. The online students were by in large working part time students, while more of the on campus students where full time students will little experience. However, the one significant take way was more time needed to be spent on the partnership material in the online class.

Fall 2012:

This is the first assessment after the redesign of the course. The new materials were well received and understood as is shown by the improvement in the rubric results. A larger sample was taken to receive as much feedback as possible. The new detailed cases as well as the mini cases used each week in class proved to drive home the key take away form the course materials. Thinking strategically beyond the IT function was achieved. Both the face to face and the online classes were very interactive which lead to a good learning environment for all students. The enhanced focus on alignment and partnership overlaid by current IT strategic issues lead to a new level of understanding. Although improvement was show more was expected on the understanding of alignment and partnership.

Fall 2011:

The materials that were added as a result of the spring 2010 assessment were well received and added to the understanding of the strategic nature of the CIO.

Almost all the students met or exceeded expectations. This assessment was conducted on a larger sample then the previous one and that helps in the generalization process. One of the issues that emerged in this analysis was a difference in perspective between the two instructors whose classes were represented here. One of the primary goals of this class is to guide the students to think outside the traditional Information Technology department and focus on strategy for the firm as a whole. It became clear in this assessment that one of the instructors was less successful in achieving this objective.

Spring 2010:

The Spring 2010 results, were carried out on a smaller population due to enrollment decreases. The overall results were similar to the previous assessment, expect one student did not meet expectations. It is hard to generalize from this comparison as the overall number in the sample was low.

However, Particularly challenging for the students is thinking strategically and applying this new way of thinking to create strategic objectives for the organization. Students whose primary experience has been non-managerial and/or within the IT function alone struggle with taking the broader view of the organization as a whole.

Spring 2009:

The Spring 2009 results indicate an increase in scores and in students exceeding expectations over the Spring 2008 assessment. These results indicate: that students in the graduate program generally have a better sense of strategic nature of the CIO; actions taken in the course to improve understanding of the role of the CIO as a corporate executive have had an impact.

The role of the CIO as a corporate executive was discussed in more depth. This discussion, together with the evolving marketplace where CIOs are beginning to take a stronger role in corporate management and in the highest level of strategic planning, has helped the students’ view of the CIO to change. The students are more comfortablerecognizing that the CIO is not simply the person who manages information technology, but is in fact a corporate executive.

We are continued to use the innovative thinking exercise with the clothes pin. Several other exercises were introduced, but did not work as well because they were too time consuming. The original exercise seems the best, although more experimentation will be done.

The following table shows the average scores on each goal objective for the last 7 years.

|  |  |  |
| --- | --- | --- |
|  | Objective 1Recognize the role of the CIO and IT org | Objective 2Recommend strategic direction |
| SPRING 2008 | 6.67 | 6.3 |
| SPRING 2009 | 8.3 | 8.5 |
| SPRING 2010  | 7.5 | 7.3 |
| Fall 2011 | 7.5 | 7.2 |
| Fall 2012 | 7.9 | 7.8 |
|  | Objective 1Recognize the role of the CIO and IT org |  |
| Fall 2013  | 7.52 |  |
| Spring 2014 | 7.8 |  |
| Fall 2014 | 7.9 |  |
| Spring 2016 | 8.2 |  |
| Fall 2016 | 8.54 |  |
| Fall 2017 | 7.82 |  |
| Fall 2018 | 8.27 |  |

#

# 19. Close Loop Process – Continuous Improvement Record

**Assurance of Learning**

**Assessment/Outcome Analysis**

**Close Loop Process - Continuous Improvement Record**

**Program:** Master of Science in Information Systems

**Goal 3:** Students will be able to formulate and articulate plans to align business and IT

**Goal Owner:** Michael Parfett

**Where Measured:** Course-embedded analysis assignment in required course *MIS 760 IT Strategy : Strategic issues in IT management.* Assessed in either the fall or spring semester each year.

**How Measured:** Sampling: Sample of MIS 760 students from all sections of course:

Individual written project.

**Closing the Loop: Actions taken on specific objectives**

|  |  |
| --- | --- |
| **Objective 1** | Students recognize the role of the CIO as a corporate executive and the IT organization as a contributor to the strategic direction of the firm |
| **When** **Assessed** | Fall 2018 |
| **Remedial****Action**  | The results were positive in all comparisons – on campus to on campus; web campus to web campus; web campus to on campus and the total of all sections from assessment to assessment. Even though we are encouraged by the gains we still need to do better on traits 4 and 5 – partnership and competitive advantage. To address these 2 traits we will add more recent reading materials; use the latest version of the test book and try to find cases that address these 2 traits directly.In addition we need to address why so many students in the web section did not address partnership. We will rewrite the directions for the assignment; and add examples of what is expected. |
| **Outcome from previous assessment** | We are encouraged that actions take since the last assessment have led to improvements in all traits, especial traits 4 and 5; as well as the on campus, and web campus performing in similar positive ways. We will continue to improve the content of the course and especially focus on traits 4 and 5. |
| **When** **Assessed** | Fall 2017 |
| **Remedial****Action** | Since so many students did not address partnership we will need to address how the assignment is defined and explained. We also need to add more reading materials and clarify the presentation material. In addition understanding how IT drives business improvement and competitive advantage is a critical part of the course. We will research how best to present this material, adding cases that will address the topic as well as additional reading materials. |
| **Outcome****From****Previous****Assessment** | The outcomes from this assessment were very good. After analysis all traits improved depending on the comparison data used. Overall we are very pleased with the results. We especially like the fact that our web campus section results are on par with the on campus sections, in fact they are better on most traits. However there is still work to be do for continuous improvement as addressed in the remedial action section, especially on traits 4 and 5.  |
| **When** **Assessed** | Fall 2016 |
| **Remedial****Action** | This semester the results showed great improvement however one key area fell back and that is in aligning an IT strategy with the business. We will need to assess the course material, especially the tools and measurements that are used to help with alignment. We will update the presentation material accordingly as well as hold lengthy discussions on alignment. Also possible adding reading material on the subject. In the comparison of on campus and web campus course all but one trait was less for the web campus class. We will need to research this as traits 3, 4 and 5 were close in scores so improvements made in the course should affect both modes of delivery. However the one are of concern is the areaof alignment, where the web campus class scored significantly below the on campus class. The improvements made to the course referenced above should impact both delivery modes, however we will add emphasis in one of our blackboard online session to explicitly address alignment. Additionally, even though there was improvement in IT driving competitive advantage and forging a partnership with the business more improvement is needed. We will add more discussions, articles, in class exercises and update the presentation material to continue to improvement in these areas. |
| **Outcome****From****Previous****Assessment** | There was great improvement in 4 of the 5 traits after implementing the improvements identified from the Spring 2016 assessment. We will continue to improve using the information stated above. |
| **When Assessed** | *Spring 2016* |
| **Remedial Action** | In analyzing the raw data there are many few low scores in the last two traits I believe in part because the assignment was not understood. We will take steps to clarify the assignment when it is given. Because these two traits are extremely important we will do more research to find compelling information in these areas and present in a more interact way. |
| **Outcome from previous assessment** | While steps were taken to clarify the assignment not enough improvement was shown. This needs to be addressed again. The new materials were well received but more is needed as noted in the remedial action section. |
| **When****Assessed** | *Fall 2014* |
| **Remedial****Action** | Since many of the students did not address traits 4 and 5 either at all or not in a substantial way one step that will be taken next semester is a clarification of the assignment clearly spelling out the requirements. Also we will revisit the materials that address these two areas and add to/delete/enhance both topics to address them as clearing as possible. |
| **Outcome****From previous assignment** | The overall results were good, with the aggregate scores from the previous semester improved. Especially the first 3 traits: thinking beyond IT, alignment and innovative thinking all showing improvement. The last two traits showed disappointing result with both traits: enabling the business leading to a competitive advantage and true partnership of IT and the business showing a decline in overall scores despite the actions taken this semester. In analyzing the data it is not clear if the students didn’t know the topics because many did not address one or both traits either at all or only in a cursory way.In comparing the on campus class to the web campus class the results where, the on campus class did slightly better in trait 2 and almost a full point better in traits 4 and 5. The web campus class did better in trait 1 and 3. The scores for the first 3 traits overall were good, so the focus needs to be on traits 4 and 5. The analysis of the data shows the same results as the combine scores and that is that many students did not address the last two traits. |
| **When****Assessed** | *Spring 2014* |
| **Remedial****Action** | We will continue to use the changes made last semester, since most of the results were positive. To address the area of how IT enables the business changes will be made to the definition of the assignment. As currently defined there is emphasis on alignment and partnership. The enabling of the business is picked up in the rubric which the students see however even the wording there was about enabling the business and not what was directly discussed in class with the new materials. The rubric will be updated to clearly spell out the business improvement and competitive advantage that is the real trait desired. Additionally more emphasis will be place on the competitive advantage module and this material will be covered enough in advance for the students to fully understand it (last semester the material was covered days before the assignment was due). |
| **Outcome from previous assessment** | This semester more emphasis was placed on thinking beyond the IT function and more like business people; alignment of strategies; how the IT strategy can enable the business and how a true partnership can be forged. There were new reads added throughout the course and updated presentation materials that put more focus on the above. There was a new module developed that addressed how IT can improve business performance and how this drives competitive advantage. These changes lead to improvement in 4 of the traits, showing that the changes made this semester had a positive effect. However the fourth trait of technology enabling the business strategy fell back a little. This was particularly disappointing since an entire module was added to address the relationship of the IT strategy to driving competitive advantage. Actions are defined above on how what changes will be made to address this area for improvement. |
| **When****Assessed** | *Fall 2013* |
| **Remedial****Action** | The results of the traits of how technology enables the business and the new trait of forging a true partnership of IT with the business were not where we had hope, nor where we want them to be. To address these two areas we will first put more emphasis and materials to discuss forging a partnership. In addition we will add an entire module dedicated to how a successful IT strategy can enable the business. In particular readings, lectures and discussions will be added to the course that will address how a successful implemented IT strategy can lead to business improvement and a competitive advantage.  |
| **Outcome form previous** **assessment** | This is the first assessment after the new rubric was developed to put more emphasis on the relationship of the IT strategy to the business. Overall we were pleased with the results, especially with the traits that addressed thinking beyond IT; business and IT alignment and creative thinking. The areas of how IT enables the business, in particular how a successful implemented IT strategy can improve the business and drive competitive advantage; and how a true partnership can be forged between IT and the business were not where we had hoped. The emphasis in these two areas are both new to the course so these metrics help point out where we need to focus. As discussed in the remedial action section specific actions will be taken for next semester.Additional in this semester we measured the on campus and online section separately and then combined them. The results, trait by trait were uneven but in aggregate they demonstrated the same two areas that need to be improved – IT business impact and partnership. The online students did slightly better in 3 of the traits and the on campus better in the other two. The online students were by in large working part time students, while more of the on campus students where full time students will little experience. However, the one significant take way was more time needed to be spent on the partnership material in the online class. |
| **Whesn Assessed:** | *Fall 2012* |
| **Remedial Action** | *Continue to add current day materials will be important. One area of additional focus should be the execution of the IT strategy as it helps the business in the competitive environment. The range of student varies greatly from those with no experience to folks that have 20+ years in business. The students are still mostly technical professionals. Additional materials should be added to being the less experience students up a level in their understanding of strategy and the role of senior IT managers.**Because the results of understanding alignment and partnership were not as good as expected a new assignment will be developed with a more focus set of objectives/traits which will lead to a new rubric.* |
| **Outcome****from previous****assessment** | This is the first assessment after the redesign of the course. The new materials were well received and understood as is shown by the improvement in the rubric results. A larger sample was taken to receive as much feedback as possible. The new detailed cases as well as the mini cases used each week in class proved to drive home the key take aways form the course materials. Thinking strategically beyond the IT function was achieved. Both the face to face and the online classes were very interactive which lead to a good learning environment for all students. The enhanced focus on alignment and partnership overlaid by current IT strategic issues lead to a new level of understanding. Although improvement was show more was expected on the understanding of alignment and partnership. |
| **When****Assessed** | *Fall 2011* |
| **Remedial Action** | *This class is being redesigned by a new instructor and therefore it will be changed in many ways. However, it will remain critical to bring in case studies and techniques to guide the students toward creativity and applying the technology they know to develop an IT strategy that aligns with the corporate strategy and improve an organization’s competitive position. In addition, focus on thinking strategically beyond the IT function will be enhanced.* |
| **Outcome from previous assessment:** | *The materials that were added as a result of the Spring 2010 assessment were well received and added to the understanding of the strategic nature of the CIO.**Almost all the students met or exceeded expectations. This assessment was conducted on a larger sample then the previous one and that helps in the generalization process. One of the issues that emerged in this analysis was a difference in perspective between the two instructors whose classes were represented here. One of the primary goals of this class is to guide the students to think outside the traditional Information Technology department and focus on strategy for the firm as a whole. It became clear in this assessment that one of the instructors was less successful in achieving this objective.* |
| **When Assessed:** | *Spring 2010* |
| **Remedial Action** | *Continue to bring material into the course that illustrates the strategic nature of the CIO and the relationship of the CIO to the corporation as a whole through current articles and cases that support this concept.* |
| **Outcome from previous assessment:** | *The Spring 2010 results, were carried out on a smaller population due to enrollment decreases. The overall results were similar to the previous assessment, expect one student did not meet expectations. It is hard to generalize from this comparison as the overall number in the sample was low.**However, Particularly challenging for the students is thinking strategically and applying this new way of thinking to create strategic objectives for the organization. Students whose primary experience has been non-managerial and/or within the IT function alone struggle with taking the broader view of the organization as a whole.* |
| **When Assessed:** | *Spring 2009* |
| **Remedial Action** | *Continue to bring material into the course that illustrates the strategic nature of the CIO through current articles and cases that support this concept. Also add additional current reading from newspapers and other periodicals to related strategic nature of IT to the corporate competitive position.* |
| **Outcome from previous assessment:** | *The Spring 2009 results indicate an increase in scores and in students exceeding expectations over the Spring 2008 assessment. These results indicate: that students in the graduate program generally have a better sense of strategic nature of the CIO; actions taken in the course to improve understanding of the role of the CIO as a corporate executive have had an impact.**The role of the CIO as a corporate executive was discussed in more depth. This discussion, together with the evolving marketplace where CIOs are beginning to take a stronger role in corporate management and in the highest level of strategic planning, has helped the students’ view of the CIO to change. The students are more comfortable recognizing that the CIO is not simply the person who manages information technology, but is in fact a corporate executive.**We are continued to use the innovative thinking exercise with the clothes pin. Several other exercises were introduced, but did not work as well because they were too time consuming. The original exercise seems the best, although more experimentation will be done.* |
| **When Assessed:** | *Spring 2008* |
| **Remedial Action** | *Next term we will introduce creative problem solving techniques to help the student practice thinking strategically. Additionally, more focus on the CIO’s role as a corporate executive will be added.* |

# APPENDIX A: Assessment Exercise

# This assessment exercise was used prior to Spring 2012. Still used fully in the course on another assignment but not No index entries found. for AoL.

The final project requires the completion of a strategic analysis process for the organization where the student is employed. For full-time students other alternatives are provided. To complete this final project successfully, students need to master a number of planning techniques including: As-Is/To-Be, Strategic Alignment Maturity Assessment, Stakeholder Analysis, Ansoff Product/Service Matrix, Porter 5-Force and 6 Force Models, Super SWOT (a Stevens variation on SWOT), the application of additional academic and industry analysis methods, the formulation of feasible alternatives, choosing the strongest recommendation, and enumerating the “next steps.”

The following is a graphic representation of the strategic analysis process:



# APPENDIX B: Assessment Exercise MIS760 – IT Strategy Final Paper

# This assessment was used for Fall 2012.

Assignment: Develop a IT Strategy for the entire IT organization or part of the IT organization for your company or a firm of your choice. If you prefer you can develop a strategy to build and introduce a new or enhanced service, which is a continuation of the work you started in the first paper e.g., a strategy for cloud computing, mobility solutions, virtualization, BI and analytics etc. A key element is to demonstrate alignment of your IT strategy with the business units and with the corporate strategy. In addition, cover how your organization will become a trusted partner with the business. Remember one of the main themes of the course is that alignment is a necessary but not sufficient in today’s marketplace. The CIO and his/her organization need to participate in the development of the corporate strategy and this needs to be reflected when the IT strategy is developed. The paper should be a comprehensive document (25 to 50 pages) that could be issued to the CEO/President of the Division. Also prepare a 20 minute power point presentation to present to senior management; covering all the critical elements of your strategy.

 A possible outline of the document follows:

**IT Strategy Plan**

Cover Sheet

Table of contents

Section 1: Executive Summary

Section 2: Introduction

* 1. Company background
	2. Purpose

 2.3 Assumptions

* 1. Industry
	2. Size, growth rate, outlook
	3. Customers

Section 3: Corporate strategy

* 1. Mission
	2. Vision
	3. Objectives
	4. Value statement
	5. Strategy

Section 4: Business/Service unit Strategy

4.1 Mission

4.2 Vision

4.3 Objectives

4.4 Value statement

4.5 Strategy

Section 5: IT strategy

* 1. Mission
	2. Vision
	3. Objectives
	4. Value statement
	5. Definition of the IT strategy
	6. Define the 4 P’s of the IT strategy (perspective, positions, plans, patterns)
	7. Alignment with Corporate and Business/service unit
		1. What tools/processes/methods/metrics will you use to ensure alignment?
		2. Demonstrate how you will implement what you defined in 5.7.1
	8. Business problem or opportunity being address
	9. Demonstrate how it delivers value to the business (how, when, who, where, what)
	10. Show how the 5 principles for delivering value are used
	11. Show how it supports the forming of a strong IT business relationship (competence, creditability, interpersonal interaction, trust leading to value)
	12. Data
		1. Demonstrate the use of Information Management (IM)
		2. Demonstrate the use of Master Data Management
	13. Address compliance impacts and needs
	14. Suppliers and alliances
		1. Address the need and how to evaluate
	15. IT Governance
		1. Define the process and structure you will use
		2. Define the components
		3. Demonstrate how you will manage risk with your strategy
			1. Develop a risk management strategy (RM)
	16. Communication plans
		1. Define a communication plan to be used with the business

Section 6: Professional assessment

* 1. Internal analysis (Strengths and Weakness)

 Use Super Swot matrix and provide a detail description

* 1. External analysis/Competitive analysis (Opportunities and Threats)

 Use Ansoff Matrix for opportunities

 Use Porter’s five forces for threats

* 1. AS-IS analysis
	2. TO-BE analysis
	3. Market analysis and demand
	4. Target market
	5. Application Portfolio analysis (positioning maps)
	6. Use the appropriate strategy tools e.g., BCG; core competences; critical success factors; value chain analysis, scenario planning etc.

Section 7: IT Service Design

* 1. Stages of the service design
	2. Productivity and Innovation
	3. Service processes
	4. Service visualization through blueprinting

Section 8: Technology road map

 8.1 Develop a technology roadmap including the new strategy

Section 9: Business Model

 9.1 Develop an IT business model

 9.2 Demonstrate how it is aligned with the corporate/BU business model

Section 10: Functional strategies

* 1. Marketing strategy (for an external strategy)

10.1.1 8 p’s of service marketing

10.1.2 Positioning the service in the competitive global market

10.1.3 Value proposition

10.1.4 Marketing segmentation

10.1.5 Data requirements/analysis

10.1.6 How you will educate your customers

10.1.7 Customer satisfaction and loyalty

10.1.8 Strategic partnerships

10.1.9 Communication strategy

10.2 Financial

10.2.1 Profit and Loss analysis – P/L (3 years)

* + - 1. Revenue projections
			2. Expense forecasts

10.2.1.3 P/L

* + 1. IT budget
			1. Functional budget

10.2.2.2 Capital budget

* + 1. Cash flow analysis – 1 year
		2. Pricing analysis (external strategy)
		3. Service valuation

10.3 Delivery/Operations

 10.3.1 Customer service strategy

 10.3.2 Distributing services through physical and electronic channels

 10.3.3 Delivery options

 10.4 Technology

 10.5 Sales

 10.6 Human Resources

 10.6.1 Hiring

 10.6.2 Training

 10.6.3 Retaining

 10.6.4 Staffing plan (in house, in source, outsource, partnership)

 10.6.4.1 Identify staffing and sourcing criteria

 10.6.5 Outsourcing

 10.6.5.1 Strategy and steps to select a vendor

 10.6.5.2 Strategy to mitigate risk

 10.6.5.3 Define jobs/functions to be outsourced

 10.6.5.4 Identify success metrics

Section 11: Implementation Strategy

 11.1 Rollout plan

Section 12: Measurement and Metrics

 12.1 Traditional measures (ROI, ROE, shareholder equity, market share, product profitability …)

 12.2 New metrics – (customer satisfaction, customer profitability, customer lifetime value …)

 12.3 Balance scorecard

 12.4 Value measurements

 12.5 Demonstrate how IT metrics are linked directly to the business

 12.6 Create a dash board

Section 13: Issues

 13.1 Government regulations and policies (Political and legal environment)

 13.2 Technology environment

 13.3 Macroeconomic environment

 13.4 Social environment

 13.5 Demographic environment

 13.6 Complementors

 13.4 Other

Section 14: Conclusions

 14.1 Recommendations

Appendices

# Appendix C:

# Currently used

A multiple page assignment that addresses the students’ understanding of IT and business alignment of strategies as well as how to build a true partnership with the business, which drives business improvement and leads to a competitive advantage.