

Student Learning Outcomes Committee
Department/Program Assessment Results Report

Department/Program: IDS / Information Systems

Degree: MSBA – Information Systems

Date Submitted: 04/01/2010

I. Working from your assessment report of last year, please discuss some changes made or strategies implemented in response to last year's results.

As of the time of last year's report, the MSBA-Information Systems assessment schedule (i.e., the time-table for specific SLO assessment) had not been finalized yet. The information systems (IS) faculty have since met and finalized this time-table (see Appendix A). While the possibility always exists for minor modifications (due, perhaps, to some unforeseen circumstance), we have now identified specific semesters during which specific SLOs will be assessed. Last year's assessment results were very encouraging; they showed that the vast majority of students had achieved the learning objectives that were assessed. These results, as well as the University SLO Committee's response to our report, were shared with the IS faculty. The importance of employing "closing the loop" activities in an effort to improve student learning and performance was re-emphasized to the faculty. Unfortunately, we were unable to implement some of the recommendations made by the University SLO Committee in response to last year's report due to some logistical constraints. Most notable of these was the suggestion to develop a pool of multiple-choice and short-answer items from which questions may be randomly drawn for assessment purposes (the "item pool strategy"). The information systems program assessment is based on the calendar, rather than the academic, year; therefore we were already well into data collection for this report when we received the suggestion mid-year, and it was impractical to make any modifications. Compounding this problem further was our mandatory furlough situation last year, which rendered faculty meetings a bit of a challenge. However, we will endeavor to begin implementing this suggestion in subsequent semesters.

II. Drawing upon the goals and objectives contained in the department/program student learning assessment plan, what was the focus of the department's student learning assessment for the past academic year?

- A. This section should list the student learning goals and objectives that were the focus for the report year (selected from your complete set of goals and objectives).

Our focus for the 2009 calendar year was on Goals 1, 2, and 3 (see Appendix A). Within these goals, the following SLOs were assessed: SLO 1.4, 2.4, and 3.1, respectively.

- B. It would also be helpful to note here the student learning goals and objectives that you intend to assess during the next year.

For the 2010 calendar year, we intend to assess the following learning objectives: SLOs 2.2, 2.3, 3.2, and 4.2.

III. What information was collected, how much, and by whom?

- A. This section should briefly describe the methodology used to examine the targeted goals and objectives. Please attach relevant scoring rubrics, surveys, or other materials used to examine student learning to the back of the report, as Appendices.

SLO 1.4 was assessed by Dr. Murray Jennex using three exercises for the assessment while Dr. Theo Addo conducted the SLO 2.4 and 3.1 assessments, using examination questions for the purpose. The rubrics employed for these assessments can be found in Appendices B, C, and D.

IV. What conclusions were drawn on the basis of the information collected?

- A. This section should briefly describe the results (in summary form) in regard to how well students have met the targeted goals and objectives. For example, what percentage of students met the objectives? Is this a satisfactory level of performance? What areas need improvement?

The results obtained from all the SLO assessments indicate that the vast majority of students have met the targeted goals and objectives. Overall, about 97 percent of the students obtained satisfactory or better scores. This is a very satisfactory level of performance and indicates that the students are learning the relevant material quite effectively. The specific SLO results are presented in a bit more detail below. *Note:* The scores are reported on the following scale: 4-Very Good; 3-Good; 2-Satisfactory; 1-Unsatisfactory. The specific meaning of these scores can be found in the respective rubrics shown in Appendices B, C, and D.

A breakdown of the student scores for SLO 1.4 is shown below for each of the three assessment exercises. Virtually all students obtained satisfactory or better scores. The overall average score in each instance approximates a rating of "Good."

SLO 1.4 - Model and document information system requirements

Exercise 1 - Use Case model with requirements

Score	No. of Students (N=31)	% of Students	Cumulative %
4 - Very Good	11	35%	35%
3 - Good	14	45%	80%
2 - Satisfactory	6	20%	100%
1 - Unsatisfactory	0	0%	-

Mean Score: 3.19 out of 4

Exercise 2 - DFD model with requirements

Score	No. of Students (N=31)	% of Students	Cumulative %
4 - Very Good	11	35%	35%
3 - Good	17	55%	90%
2 - Satisfactory	3	10%	100%
1 - Unsatisfactory	0	0%	-

Mean Score: 3.26 out of 4

Exercise 3 – ERD model with requirements and business rules

Score	No. of Students (N=31)	% of Students	Cumulative %
4 – Very Good	7	23%	23%
3 – Good	21	68%	91%
2 – Satisfactory	1	3%	94%
1 – Unsatisfactory	2*	6%	100%

Mean Score: 3.13 out of 4

* The two unsatisfactory scores were remediated to satisfactory

Actions to be taken based on results (“closing the loop”):

Those students who obtain failing scores on any of the exercises are remediated through a discussion of what they did wrong and the completion of an additional remedial exercise. Points of difficulty for students are noted and will be incorporated in explanations provided in subsequent semesters.

A breakdown of the student scores for SLO 2.4 is shown below. Ninety-seven percent of the students received a score of “Satisfactory” or better, with 63 percent obtaining the highest score of 4 (“Very Good”). The mean score was 3.5 out of 4, representing the midway point between “Good” and “Very Good.”

SLO 2.4 – Analyze global impacts on infrastructure and architecture

Score	No. of Students (N=30)	% of Students	Cumulative %
4 – Very Good	19	63%	63%
3 – Good	8	27%	90%
2 – Satisfactory	2	7%	97%
1 – Unsatisfactory	1	3%	100%

Mean Score: 3.5 out of 4

A breakdown of the student scores for SLO 3.1 is shown below. Again, 97 percent of students obtained satisfactory or better scores, with 27 percent receiving the highest score of 4 (“Very Good”). The mean score was 2.7 out of 4. As with SLO 2.4 above, only one student received an unsatisfactory score.

SLO 3.1 – Describe frameworks for strategic alignment of IT and corporate goals

Score	No. of Students (N=30)	% of Students	Cumulative %
4 – Very Good	8	27%	27%
3 – Good	7	23%	50%
2 – Satisfactory	14	47%	97%
1 – Unsatisfactory	1	3%	100%

Mean Score: 2.7 out of 4

Actions to be taken based on results (“closing the loop”):

To further improve student performance with respect to SLO 2.4, attempts will be made to provide even more examples in class of global information technology (IT) infrastructure options, and supplement this with students’ independent research on the topic. For SLO 3.1, further attempts will be made to relate theoretical models to real-world situations and examples. (These steps are currently being taken, but will be intensified in the future.)

V. How will the information be used to inform decision-making, planning, and improvement?

- A. This section should describe the strategies that will be implemented for program improvement as a result of the conclusions drawn from the assessment activities.

The overall assessment results presented in this report are very encouraging. However, more can and will continue to be done in the endless effort to improve student learning. The “Actions to be taken” segments in the preceding section represent some actions that will be undertaken in that effort. The information systems faculty will meet to discuss these actions, in conjunction with indirect measures obtained from the alumni survey conducted by Dr. Bruce Reinig and Dr. Theo Addo in spring 2008 to further inform appropriate decision making.

Report completed by: Theo Addo

Date: 04/01/2010

Appendix A

Goals, SLOs, and Assessment Schedule for MSBA-IS Program

MSBA in Information Systems – Assessment

Vision Statement

To produce students who can lead organizations in the evaluation, adoption, and implementation of information systems and technologies for the strategic benefit of organizations.

Graduate IS Assessment Schedule

Goals and SLOs	Point(s) of Assessment	Assessment Method	Planned Assessment Date	Assessment Completed (Y/N)
Goal 1: Analyze organizational data, information, and knowledge requirements for the design and implementation of information systems				
SLO 1.1 – Design a database from the analysis of information requirements	IDS 686	Project	Fall 2008	Y
SLO 1.2 – Build and process a relational database using a common DBMS software package.	IDS 686	Project	Fall 2008	Y
SLO 1.3 – Explain the functions of database administration.	IDS 686	Exam question	Fall 2008	Y
SLO 1.4 – Model and document information system requirements.	IDS 695	Exercises	Fall 2009	Y
Goal 2: Understand implications of enterprise information technology infrastructure and architecture in a global environment.				
SLO 2.1 – Identify and explain general information systems components.	IDS 680 / IDS 697	Exam/assignment	Spring 2011	
SLO 2.2 – Describe standard information technology architectures and key protocols.	IDS 680 /IDS 687 /IDS 790	Exam/assignment	Spring 2010	
SLO 2.3 – Explain technology standards for local area networks and wide area networks.	IDS 687 /IDS 790	Exam/assignment	Spring 2010	
SLO 2.4 – Analyze global impacts on infrastructure and architecture.	IDS 688 /IDS 790	Exam/assignment	Summer 2009	Y

Goal 3: Align information strategy with organizational strategy.				
SLO 3.1 - Describe frameworks for strategic alignment of IT and corporate goals.	IDS 688	Exam question	Summer 2009	Y
SLO 3.2 - Explain how IT investments support an organization's competitive strategy.	IDS 688 /IDS 790	Exam/assignment	Fall 2010	
SLO 3.3 - Explain IT procurement strategy.	IDS 688 /IDS 695 /IDS 697	Exam/assignment	Fall 2011	
Goal 4: Understand information technology threats and challenges and trends in the global environment.				
SLO 4.1 - Discuss security issues of networking infrastructure.	IDS 687 /IDS 790	Exam/assignment	Spring 2011	
SLO 4.2 - Analyze information assurance needs.	IDS 695 /IDS 697	Exam/assignment	Fall 2010	
SLO 4.3 - Analyze emerging information technology trends and how they can affect the organization.	IDS 688 /IDS 697 /IDS 790	Exam/assignment	Spring 2012	
SLO 4.4 - Explain IT auditing.	IDS 697	Exam question	Spring 2008	Y

Appendix B

Rubric used for assessing SLO 1.4

SLO 1.4	4 – Very Good	3 - Good	2 - Satisfactory	1 - Unsatisfactory
Use Case with narrative and requirements	No notational errors. Use case diagram identifies all major actors and use cases with associated depends, extends, and uses relationships and use cases. Narrative includes appropriate steps for the specified use case. Requirements are clearly written, singular items that can be readily verified complete	No notational errors. Use case diagram identifies all major actors and use cases and most associated depends, extends, and uses relationships and use cases. Narrative includes most of the appropriate steps for the specified use case. Requirements are clearly written but not always singular items that can be readily verified complete	Only minor notational errors. Use case diagram identifies most major actors and use cases with associated depends, extends, and uses relationships and use cases. Narrative includes many of the appropriate steps for the specified use case. Requirements are valid but not clearly written, singular items that can be readily verified complete	Many and serious notational errors. Use case diagram fails to identify many to most major actors and use cases with associated depends, extends, and uses relationships and use cases. Narrative fails to include many of the appropriate steps for the specified use case. Requirements are poorly written and may not be valid
DFD with requirements	All correct notation. DFD diagrams identify all entities, processes and data flows. Requirements are clearly written, singular items that can be readily verified complete	All correct notation. DFD diagrams identify all major entities, processes, and data flows. Requirements are clearly written but not always singular items that can be readily verified complete	Only minor notational errors. DFD diagrams identify most major entities, processes, and data flows. Requirements are valid but not clearly written, singular items that can be readily verified complete	Many and serious notational errors. DFD diagrams fail to identify many to most major entities, processes, and data flows. Requirements are poorly written and may not be valid
ERD with requirements and business rules	All correct notation. ERD diagram identifies all major entities and relationships with associated attributes and cardinalities. Business rules provide most all needed guidance on specifying cardinalities. Requirements are clearly written, singular items that can be readily verified complete	All correct notation. ERD diagram identifies all major entities and relationships and most associated attributes and cardinalities. Business rules provide clear but not all needed guidance on specifying cardinalities. Requirements are clearly written but not always singular items that can be readily verified complete	Only minor notational errors. ERD diagram identifies most major entities and relationships with associated attributes and cardinalities. Business rules provide some but not all needed guidance on specifying cardinalities. Requirements are valid but not clearly written, singular items that can be readily verified complete	Many and serious notational errors. ERD diagram fails to identify many to most major entities and relationships with associated attributes and cardinalities. Business rules fail to provide guidance on specifying cardinalities. Requirements are poorly written and may not be valid

Appendix C

Rubric used for assessing SLO 2.4

	4 - Very Good	3 - Good	2 - Satisfactory	1 - Unsatisfactory
Comprehension of global business environment	Can accurately identify and describe all the major characteristics of the global business environment, including requisite success factors	Can accurately identify and describe most characteristics of the global business environment and success factors	Can adequately describe some aspects of the global business environment and some success factors	Cannot identify or describe significant aspects of the global business environment; cannot identify many critical success factors
Comprehension of corporate information technology(IT) infrastructure options and analysis of how they can facilitate competitive success	Can accurately describe various IT infrastructure and technology options available to organizations; Can analyze the global business environment and identify appropriate technologies that can ensure competitive success	Can provide a good description of various corporate IT infrastructure and technology options; Can provide a good analysis of the global business environment and make good IT recommendations	IT descriptions and recommendations are adequate but incomplete for today's business environment	Inadequate analysis of the IT environment and options available to organizations

Appendix D

Rubric Used for Assessing SLO 3.1

	4 - Very Good	3 - Good	2 - Satisfactory	1 - Unsatisfactory
Comprehension of strategic fit from a business perspective	Can accurately describe the concept of strategic fit between business strategy and organizational infrastructure using a strategic alignment model	Can use a strategic alignment model to describe the concept of strategic fit from a business perspective but with minor errors and/or omissions	Can use a strategic alignment model to adequately describe the concept of strategic fit from a business perspective, but with notable errors or omissions	Cannot describe strategic fit from a business perspective using a theoretical model
Comprehension of strategic fit from an information technology (IT) perspective	Can accurately describe the concept of strategic fit between IT strategy and IT infrastructure using a strategic alignment model	Can use a strategic alignment model to describe the concept of strategic fit from an IT perspective but with minor errors and/or omissions	Can use a strategic alignment model to adequately describe the concept of strategic fit from an IT perspective, but with notable errors or omissions	Cannot describe strategic fit from an IT perspective using a theoretical model
Comprehension of strategic integration	Can use a strategic alignment model to accurately describe the concept of strategic integration between business strategy and IT strategy	Can use a strategic alignment model to describe the concept of strategic integration but with minor errors and/or omissions	Can use a strategic alignment model to describe the concept of strategic integration but with notable errors or omissions	Cannot describe strategic integration using a theoretical model