

ASSESSMENT REPORT FOR

Master of Science in Information Systems (MS-IS)
Instructional Degree Program

Spring 2004
Assessment Period Covered

July 1, 2004
Date Submitted

Expanded Statement of Institutional Purpose Linkage:

Institutional Mission Reference:

Texas A&M International University, a Member of The Texas A&M University System, is committed to the preparation of students for leadership roles in their chosen profession and in increasingly complex, culturally diverse state, national, and global society ... Through instruction, faculty and student research, and public service, Texas A&M International University is a strategic point of delivery for well-defined programs and services that improve the quality of life for citizens of the border region, the State of Texas, and national and international communities.

College/University Goal(s) Supported:

The primary objectives of the College of Business Administration are directed toward the parameters of education for the administration of business organizations. To this end, curriculum development is a continuous activity in response to social, economic and technological developments reflected in the evolving knowledge in the behavioral and quantitative sciences.

Intended Educational (Student) Outcomes:

- 1.** Students completing the Master of Science in Information Systems will have a basic understanding of system concepts.
- 2.** Graduates will demonstrate competency in communication skills.

3. Students completing the masters program will demonstrate their knowledge of theories, models and tools relevant to the field of Information Systems through the development of a fully functional software product designed to meet a specific client's needs. [Note: this outcome is new for Fall 2003 and is the direct result of faculty consideration of outcomes' assessment from Spring 2003.]

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Intended Educational (Student) Outcome:

1 Students completing the Master of Science in Information Systems will have a basic understanding of system concepts.

First Means of Assessment for Outcome Identified Above:

1 a. Means of Program Assessment & Criteria for Success:

An objective test developed by members of the department will be given to all the students attending a required graduate course measuring the student's knowledge of the following:

- a. General system concepts
- b. Network concepts
- c. Systems management concepts
- d. Database concepts
- e. Computer programming

Success is deemed to be a 70% attainment in each area (average of all student scores for the topic) with no area being below 50% attainment.

1 a. Summary of Assessment Data Collected:

The test was administered as part of the CIS 5390 "Capstone" course; prior to the administration of the test, the students were given three twenty-minute review sessions as part of the three lectures preceding the administration of the test. Nineteen (19) students submitted responses to the test. The following results were achieved (Fall 2003

results are presented in parenthesis () following Spring 2004, e.g. Systems concepts 72.25% (58.04%) +++); the arithmetic symbols (i.e. "+" and "-") indicate change in results in 5% increments and portions thereof. Results from the pilot test conducted in Spring 2003 are the last item in each record and are presented in brackets "[]".

a. General Systems Concepts	72.25%	(58.04%)	+++
	[67.41%]		
b. Network Concepts	34.21%	(33.08%)	
	[45.19%]		
c. Systems Management	77.73%	(56.21%)	++++
	[59.54%]		
d. Database Concepts	75.79%	(66.15%)	++
	[61.73%]		
e. Programming Concepts	84.69%	(74.83%)	++
	[76.77%]		

Overall the average score on the test was 69.158%, compared to 60.92% in Fall 2003. This represents a 13.5% improvement in overall performance, but the result is still slightly below the acceptable standard. All knowledge areas, except Networking, showed improvement, while networking remained consistently well below standard. However, the small sample size (19) suggests that caution should be used in implementation of program changes based solely upon test results.

1 a. Use of Results to Improve Instructional Program:

The results will be reviewed by the Department at the first Departmental meeting in Fall 2004, as specified by unanimous vote of the faculty. Several changes in faculty composition will impact the quality and structure of the program in the future. These changes include, but are not limited to: the recruiting of two new Assistant professors, as well as a change in the department chairmanship, and the additional offerings required to support the new doctoral program. While the performance in all areas except networking improved, and the overall score improved, two factors were identified as being major concerns: [1] international students, especially from certain parts of Asia, do not fully comprehend the American definition of plagiarism, and consequently are often discovered submitting work that is not their own. When discovered, grades suffer, but prior to discovery, learning has not occurred. [2] Most international students do not understand the necessity to read the assigned texts prior to class, nor do they do optional exercises from textbooks, because they simply do not own the required texts. An informal survey of two Spring 2004

classes suggest that over 90% of international students in the MS-IS program neither own the required textbook or understand the necessity to take lecture notes, but would rather rely upon copies of lecture slides and/or transparencies.

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Intended Educational (Student) Outcome:

2 Graduates will demonstrate competency in communication skills

First Means of Assessment for Outcome Identified Above:

2 a. Means of Program Assessment & Criteria for Success:

In a reasonable effort to allow the students to demonstrate their communications skills, the products from the MIS 5390 Project Management course will be presented in a public forum, and the Departmental faculty as well as College and University Administrators will be asked to evaluate the apparent functionality of the products. The participants were asked to evaluate each product on the following characteristics: Apparent Quality and the Presentation of the product. It was determined that no evaluation should be below 3.5.

2 a. Summary of Assessment Data Collected:

Fourteen (14) people evaluated the projects in addition to the client. They were four MIS faculty, five members of the University staff, and five guests who were local business people. [Note: in the following summary of data, the staff and guest evaluations are combined as "Guest Evaluation"].

	<i>Invincible</i>	<i>Midnight Skipper</i>	<i>Waves</i>	<i>Triumphs</i>
Faculty Evaluation				
Quality of product	3.75	3.70	4.20	4.50
Presentation	3.45	3.20	4.25	4.75
Guest Evaluation				
Quality of product	4.10	3.90	4.20	5.00
Presentation	3.80	4.00	4.05	4.70
Overall				
Quality of product	3.88	3.44	3.87	4.60
Presentation	3.66	3.35	3.92	4.60

__2__a. Use of Results to Improve Instructional Program:

The results were overall acceptable. One group received overall mean evaluations below the 3.5 standard (e.g, 3.44 for quality and 3.35 for presentation); however the class as a whole exceeded the standard. During the first Fall 2004 faculty meeting the department will determine if this approach will be continued or if another outcome will be specified and studied. In part, the re-evaluation of this outcome and its assessment will be driven by the changes in the department's faculty composition.

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Intended Educational (Student) Outcome:

3 Students completing the masters program will demonstrate their knowledge of theories, models and tools relevant to the field of Information Systems through the development of a fully functional software product designed to meet a specific client's needs. This product is one of the outputs of the CIS 5390 "Capstone" course, and it's development provides the students the opportunity to experience "service learning" or the completion of learning objectives while providing a benefit to a community member or entity.

First Means of Assessment for Outcome Identified Above:

3 a. **Means of Program Assessment & Criteria for Success:**

The client will be asked to accept the product as being in compliance with the client's new system specifications, and the client will be asked to adopt the product for in their organization. However, to provide us with a higher degree of granularity in our assessment, it has been decided that the clients would be asked to provide answers on a 5-point scale of acceptance, with the following items: 5 = Excellent, 4 = Very Good, 3 = Good, 2 = Average, 1 = Poor. The participants were asked to evaluate each product on the following characteristics: Function, Suitability, Quality, Presentation, and Overall (please see attached evaluation form for definitions). It was determined that no evaluation should be below 3.5, except the Overall characteristic which was used to comparatively rank all of the products.

For the Spring 2004 semester, the CIS 5390 the University Registrar requested help with the development of an automated Commencement Control system that would provide, among other items, correctly

ordered seating charts, check-out forms, mailing labels for degrees, and processional order rosters. The class was divided into four teams; each team selected a name; data will be reported on each team and summarized. The teams were: Waves, Triumphs, Invincible, and Midnight Skippers.

The completed projects were presented in open forum to the client (the University Registrar and selected members of the Registrar's staff), MIS/DS faculty, University Administrators and Staff, and invited guests. Everyone who attended the presentation was given an opportunity to review the software, question the student participants, and review system documentation. The presentation were evaluated by the students in the class (whose evaluations were not included in this assessment), four (4) MIS/DS faculty, and five (5) members of the Staff and Administration, and five (5) guests, as well as the client.

__3__a. Summary of Assessment Data Collected:

Client's evaluation of product:

Waves – Acceptable as is, not perfect, but useable; this product has been institutionalized and was used in conjunction with May 2004 Commencement.

Triumphs – Acceptable, but required minor modifications

Invincible – Acceptable, but requires major modifications

Midnight Skippers – Not useable as submitted at deadline.

Fourteen (14) people evaluated the projects in addition to the client. They were four MIS faculty, five members of the University staff, and five guests who were local business people. [Note: in the following summary of data, the staff and guest evaluations are combined as "Guest Evaluation"].

	<i>Invincible</i>	<i>Midnight Skippers</i>	<i>Waves</i>	<i>Triumphs</i>
Faculty Evaluation				
Functionality	3.63	3.38	4.10	4.50
Suitability of Purpose	4.00	3.80	4.50	4.50
Quality of product	3.75	3.70	4.20	4.50
Presentation	3.45	3.20	4.25	4.75
Guest Evaluation				
Functionality	4.10	4.10	4.40	5.00
Suitability of Purpose	3.80	3.70	4.20	4.90
Quality of product	4.10	3.90	4.20	5.00
Presentation	3.80	4.00	4.05	4.70
Overall				
Functionality	3.96	3.52	4.07	4.69

Suitability of Purpose	3.70	3.40	4.00	4.60
Quality of product	3.88	3.44	3.87	4.60
Presentation	3.66	3.35	3.92	4.60

__3__ a. Use of Results to Improve Instructional Program:

The overall result of the projects' evaluations was acceptable. A similar evaluation technique may be used in the future; however, during the first Fall 2004 faculty meeting the department will determine if this approach will be continued or if another outcome will be specified and studied. In part, the re-evaluation of this outcome and its assessment will be driven by the changes in the department's faculty composition.

Second Means of Assessment for Outcome Identified Above:

__3__ b. Means of Program Assessment & Criteria for Success:

No second means was used

SUPPORT DOCUMENTATION

Enter any document referenced above in this summary table. There are two examples listed below. If no documents are cited, please remove the two examples from the table.

SOURCE	LOCATION/Special Instructions
<i>Informing Science</i> (Special issue on Organizational Learning), V.3, No.3.	Kock, N., Auspitz, C. and King, B. (2000), Using the Web to Enable Industry-University Collaboration: An Action Research Study of a Course Partnership, <i>Informing Science</i> (Special issue on Organizational Learning), V.3, No.3, pp. 157-167.
<i>Communications of the ACM</i> , V.46, No.9.	Kock, N., Auspitz, C. and King, B. (2003), Web-supported Course Partnerships: Bringing Industry and Academia Together, <i>Communications of the ACM</i> , V.46, No.9, pp. 179-183.

MIS 5390 – Project Evaluations – Spring 2004

Presentations:

Project presentations were evaluated by three different groups: peer-evaluation (i.e., other MIS 5390 students), MIS/DS faculty, and TAMIU Administrators, Staff and other visitors. The evaluations contributed by each of these groups was considered, then weighted based upon project development experience, then combined to determine an overall presentation evaluation. In each case (i.e., functionality, suitability, quality, and presentation), the following 5 point scale was used:

- 5 = Excellent
- 4 = Very Good
- 3 = Good
- 2 = Average
- 1 = Poor

Invincible

Peer Evaluation

Functionality	4.14
Suitability of Purpose	3.20
Quality of product	3.80
Presentation	3.73

Faculty Evaluation

Functionality	3.63
Suitability of Purpose	4.00
Quality of product	3.75
Presentation	3.45

Guest Evaluation

Functionality	4.10
Suitability of Purpose	3.80
Quality of product	4.10
Presentation	3.80

Overall

Functionality	3.96
Suitability of Purpose	3.70
Quality of product	3.88
Presentation	3.66

Midnight Skippers

Peer Evaluation

Functionality	3.07
Suitability of Purpose	2.90
Quality of product	2.71
Presentation	2.86

Faculty Evaluation

Functionality	3.38
Suitability of Purpose	3.80
Quality of product	3.70
Presentation	3.20

Guest Evaluation

Functionality	4.10
Suitability of Purpose	3.70
Quality of product	3.90
Presentation	4.00

Overall

Functionality	3.52
Suitability of Purpose	3.40
Quality of product	3.44
Presentation	3.35

Waves

Peer Evaluation

Functionality	3.71
Suitability of Purpose	3.30
Quality of product	3.21
Presentation	3.46

Faculty Evaluation

Functionality	4.10
Suitability of Purpose	4.50
Quality of product	4.20
Presentation	4.25

Guest Evaluation

Functionality	4.40
Suitability of Purpose	4.20
Quality of product	4.20
Presentation	4.05

Overall

Functionality	4.07
Suitability of Purpose	4.00
Quality of product	3.87
Presentation	3.92

Triumphs

Peer Evaluation

Functionality	4.57
Suitability of Purpose	4.30
Quality of product	4.29
Presentation	4.36

Faculty Evaluation

Functionality	4.50
Suitability of Purpose	4.50
Quality of product	4.50
Presentation	4.75

Guest Evaluation

Functionality	5.00
Suitability of Purpose	4.90
Quality of product	5.00
Presentation	4.70

Overall

Functionality	4.69
Suitability of Purpose	4.60
Quality of product	4.60
Presentation	4.60

OVERALL PRESENTATION EVALUATION (and comments):

1st - **Triumphs** (A)

- Nice search of database
- Promotional brochure is a nice touch
- Nice use of multi-media
- Single student report is a nice touch

2nd - **Waves** (A-)

- Nice report format
- Nice use of web and multi-media (should check for spelling)
- Nice offer of choices of dates (etc.)
- Should there be a pop-up for student editing.

3rd - **Invincible** (B+)

- Did anyone beside the Manager (?) work on this project ("my project," "my software," "MY system").
- Why was the entire team in the front of the room when only one person presented?
- Can not add college? Or program? What about the new Ph.D.

- Too much time spent on reports, too little on why this is “the right solution”
 - Speak – pause; speak – pause; etc., etc. the presentation must have wasted at least 5 or 6 minutes of available time saying nothing
 - On-line help was apparently missing
- 4th - ***Midnight Skippers*** (B+)
- Security is a nice touch
 - Why only one tie? Isn't this a professional presentation?
 - Too hard to see
 - Row length not adjustable
 - Too quick, not enough detail; how do we know this the solution
 - Typos in Ceremony

CLIENT'S REPORT ON ACCEPTABILITY

WAVES

Acceptable – not perfect, but will be used as is: A

TRIUMPHS

Acceptable with minor modifications: A-

INVINCIBLE

Acceptable with major modifications: B+

MIDNIGHT SKIPPERS

Not useable as submitted: B