

**Indiana University Kokomo
School of Business
M.B.A. Program
Assessment Report
Academic Year 2011-2012**

I. BRIEF SUMMARY OF ASSESSMENT PLAN

Highlights of the Assessment Plan

Assessment and assurance of student learning is a priority for the School of Business. The School established a set of program goals and learning outcomes for its M.B.A. program and regularly collects assessment data to measure student achievement of these outcomes. In 2011-2012, we focused on the assessment of quantitative skills in a core M.B.A. course. We also assessed area-specific knowledge in Economics. The faculty developed assessment forms and used benchmarks to evaluate individual student performance and establish whether the student achievement in an outcome is Exemplary, Satisfactory, or Needs Improvement.

As an external assessment mechanism, the School also used the ETS Major Field Test for Business to measure the knowledge and skills of all graduates in Spring 2012. The results of this national standardized ETS test allow for comparison of our graduates to national norms. Overall, the School's graduates performed strongly on this national test. There were 17 graduates taking the test and the mean performance for the cohort was at the 91st percentile compared to all institutions participating in the ETS testing. The area scores for Accounting, Economics, Finance, and Information Systems were all at the 90th percentile level or better. The comparison sample for this test includes 80,806 students at 585 institutions worldwide.

The following are assessment highlights:

- Mission, Program Goals and Learning Outcomes are established and reviewed
- Course-embedded assessment data is collected every school year
- External standardized testing with the ETS Major Field Test for M.B.A.
- Assessment Committee oversees all assessment activities
- Assessment results reviewed by all faculty in regular faculty meetings
- Other activities include periodic surveys of graduates with the next survey planned for Fall 2012

Goals and Outcomes Assessed in 2011-2012

In the academic year 2011-2012, the School assessed student performance on the following goals and outcomes. Assessment data were collected by course-embedded methods for outcomes 1.1-1.3 (Quantitative and Problem-solving skills), as well as outcomes 6.3-6.4 (Economics knowledge and skills). Other outcomes were assessed with the ETS standardized test. Appendix A presents the curriculum map of all goals and outcomes and identifies the courses in which each outcome is assessed.

A graduate of the Master in Business Administration program should be able to:

Goal 1. Critically and analytically reason and solve problems.

Outcome 1.1 – Provide identification and formulation of problem

- Outcome 1.2 – Develop problem solution techniques
- Outcome 1.3 – Interpret and implement solution results

Goal 2. Communicate effectively.

- Outcome 2.1 – Write clearly and effectively for a business audience.
- Outcome 2.2 – Present clearly and persuasively to a business audience.
- Outcome 2.3 – Work in and lead teams.

Goal 3. Anticipate and analyze trends in the business environment.

- Outcome 3.1 – Recognize the effects of change in the economic and political environment.
- Outcome 3.2 – Recognize the effects of change in culture and demographics.

Goal 4. Approach organizational decisions in ethical, legal and socially responsible manner.

- Outcome 4.1 - Describe the concept of ethics and its applications.
- Outcome 4.2 - Describe the impact of the legal and regulatory environment on business.
- Outcome 4.3 - Describe the social responsibility of business.

Goal 5. Operate in dynamic and complex domestic and global organizational environments.

- Outcome 5.1 – Describe organizational synergies resulting from partnerships and alliances including mergers and acquisitions.
- Outcome 5.2 – Describe gains to trade and barriers to trade.
- Outcome 5.3 – Describe the international monetary system and the role of exchange rates.
- Outcome 5.4 – Describe the opportunities and threats that accompany globalization.

Goal 6. Demonstrate knowledge in the functional areas of business.

- Outcome 6.1 – Use financial statements to guide decision making.
- Outcome 6.2 – Apply cost behavior to solve business problems.
- Outcome 6.3 – Perform analysis of supply and demand and evaluate market outcomes.
- Outcome 6.4 – Evaluate the effects of fiscal and monetary policies.
- Outcome 6.5 – Describe the importance of quality and technology to gain a competitive advantage.
- Outcome 6.6 - Apply quantitative models and technology to support managerial decision making.
- Outcome 6.7 – Utilize valuation models in order to estimate the price of financial assets.
- Outcome 6.8 – Describe capital budgeting theory and the theory of capital structure.
- Outcome 6.9 – Develop a marketing mix to appeal to target markets.
- Outcome 6.10 – Describe marketing management and strategic market planning processes.
- Outcome 6.11 – Describe high performance Human Resources practices.
- Outcome 6.12 – Discuss current trends in organizational behavior and leadership concepts.

Goal 7. Integrate theory and application from various functional areas in an interdisciplinary approach.

- Outcome 7.1 – Perform an internal analysis of an organization, using tools and concepts from various related disciplines.

- Outcome 7.2 – Describe how functional areas interact to derive cross-functional synergies.
Outcome 7.3 – Integrate economic thinking and accounting data to make financial decisions.

II. ASSESSMENT METHODS

Course-embedded Assessment

The School used a combination of course-embedded assessment tools and an external nationally standardized test. In 2011-2012, we performed assessment of quantitative skills in a core M.B.A. course as well as assessment of knowledge and skills in Economics.

The assessment data were collected in the E542 and F542 courses. In E542, the assessment data were collected from analytical homework assignment, as well as an exam. The collection of assessment data was separate from the course grades. Appendix B presents the rubric used in this assessment as well as a summary of the results. In F542, the assessment of quantitative skills was done with a quiz developed by the Assessment Committee. Appendix B presents the quiz form and a summary of the assessment results prepared by Dr. S. Cox.

National Standardized Test

All graduates also took the standardized Educational Testing Service (ETS) exam for Business. This test is designed to measure knowledge in the functional areas of Business. The ETS test was administered in the capstone course. This exam was listed as a requirement for completion of the course. The test was administered in the Spring 2012 semester. This test was different from the ETS Major Field Test for M.B.A. used in previous years. While the M.B.A. test focuses on the integrative skills specific to M.B.A. graduates, the Business tests looks at all of the areas of Business. The scores on this exam were analyzed by the Assessment Committee. The ETS test provides an opportunity to compare student performance to an international sample of Business program graduates that included 80,806 students at 585 institutions in 2012.

We expect our students to perform better than at the national average level. This is a high expectation, as the comparison sample for the ETS Major Field test includes the results of test-takers from highly selective national and international programs. In ETS test assessment, the first program-level benchmark for Excellence is to have 75 percent of the graduates exceed the national average scores individually. The benchmark for Satisfactory performance is to have 60 percent of students exceed the national average score.

A second program-level benchmark for Satisfactory performance is to have program-level mean scores for each of the business-area assessment indicators above the national average. The benchmark for Excellence is to have program-level mean scores for each of the area assessment indicators above the 75th percentile of all institutions participating in the M.B.A. ETS testing.

III. DESCRIPTION OF ASSESSMENT RESULTS

The summary of the assessment results for 2011-2012 is presented in appendices B and C. The course-level assessment results are presented in appendix B, while ETS test results are summarized in Appendix C.

Assessment of the learning outcomes linked to goal 1 “Critically and analytically reason and solve problems” was performed in E542. For outcome 1.1 – “Provide identification and formulation of problem” – the mean performance was at 89.0%. For outcome 1.2 – “Develop problem solution

techniques” the mean performance was at 97.2%. For outcome 1.3 – “Interpret and implement solution results” the mean performance was at 90.1%. The data were collected in course projects, including case study analysis, regression analysis, and profit maximization problems.

Knowledge and skills in Economics was also assessed in E542. Mean performance for Outcome 6.3 “Apply demand and supply theory and the concept of elasticity to managerial decisions” was at 83.0%. For outcome 6.4 “Analyze pricing strategies used by firms in different market structures” the mean performance was at 97.7%.

As a separate assessment activity, the problem-solving and quantitative skills covered by outcomes 1.1-1.3 were also assessed in F542 with a comprehensive quantitative quiz. Appendix B presents the questions and the form used for the quiz, as well as a summary of the results. This quiz was used to assess the quantitative skills at multiple points of the School's curriculum, including freshmen (W100), seniors (J401), and M.B.A. students (F542). M.B.A. students were shown to have significantly higher quantitative skills. The mean score on this quiz was at 66% for freshmen, at 71% for seniors, and at 85% for graduate students. Students demonstrated a high level of achievement on individual questions linked to specific mathematical and statistical concepts. One areas on this test that needs improvement is in application of complex mathematical models and formulas such as the EOQ method calculations or cost functions.

The performance on the standardized ETS test taken by the graduates demonstrates Excellent performance of the 2011-2012 graduates. The results of the ETS test are presented in Appendix C. In particular, there were 17 graduates taking the test in Spring 2012, and the mean performance for the cohort was at the 91st percentile compared to all institutions participating in the ETS testing. This is an excellent level of performance, as the national sample includes many competitive programs, with a total sample of 80,806 students at 585 institutions. IU Kokomo School of Business graduates ranked in the top 10-percent in this national sample. The ETS test results are further linked to the program outcomes assessed. For instance, in Spring 2012 the ETS test assessment indicators for outcomes in Accounting, Economics, Finance, and Information Systems were all at the 90th percentile level or better.

The ETS test allows us to get external validation of student performance. We expect our students to perform individually at better than the national average level. We also expect the program to have overall mean scores that are above the national average. The overall program score for this ETS test cohort was at the 91st percentile compared to the overall ETS sample. Furthermore, our benchmark for Excellence is for the program is to have 75 percent of the graduates exceed the national average scores individually. This benchmark is satisfied as 82% of the graduates demonstrated individual performance that was better than the national mean level. Thus, the performance of M.B.A. graduates on the ETS test is Excellent.

IV. USING ASSESSMENT FOR PROGRAM IMPROVEMENT

Program improvement in response to the assessment results is an important part of our overall assessment plan. If the benchmark is not reached for a particular outcome, the faculty teaching the course will consider changes to the course, and submit an outline of the proposed changes to the Assessment Committee of the School. A similar process is successfully used in the assessment of the undergraduate Business program.

In 2011-2012, the assessment results from the course-embedded assessment indicate that the performance of students on the problem-solving and quantitative outcomes meets the expectations of the faculty. The ETS test results indicated that student performance was high in all areas except for Legal and Social Environment. The School's faculty worked to review and revise the M.B.A.

curriculum to enhance coverage of these areas. In particular the required graduate core course J542 «Regulatory Environment of Business» was replaced with L512 «Law and Ethics in Business». The School will continue to collect and review the assessment results to ensure improvement in the attainment of learning outcomes in this area.

V. DISSEMINATION OF RESULTS

The School disseminates assessment results to stakeholders in several ways. A summary of assessment activities is presented to the School's faculty and staff at School of Business meetings. In the past, the assessment results have been reported in the meetings of the School's advisory board that include stakeholders from the community. In addition, a copy of this report is submitted to the IU Kokomo Office of Academic Affairs. These copies are publicly available to the stakeholders of the School, including web access through the university's web site.

The School also maintains an assessment web site with complete information on the School's assessment activities. The information on this web site includes assessment highlights for the undergraduate Business program and the M.B.A. program, the list of learning outcomes for the undergraduate and M.B.A. programs, and the results of ETS testing of graduates. The current address of the School's assessment web page is:

<http://www.iuk.edu/academics/majors/business/resources/assessment.shtml>

Highlights of the assessment activities were also provided to the campus Center for Teaching, Learning, and Assessment (CTLA) for dissemination to stakeholders. This information is now available at the CTLA web site:

<http://iuk.edu/academics/ctla/assessment/results/index.shtml>

APPENDIX A. CURRICULUM MAP

Objectives/Outcomes		(Spring) D542	(Fall) E542	(Spring) F542	(Fall) J542	(Spring) J560	(Fall) M560	(Spring) M570	(Fall) Z542
CRITICAL/ANALYTICAL REASONING									
Identification and formulation of problem	1.1		X	X					
Develop problem solution techniques	1.2		X	X					
Interpret solution results	1.3		X	X					
COMM AND ORG MGMT SKILLS									
Write clearly and effectively	2.1		X	X					
Present clearly and persuasively	2.2		X	X					
Work in and lead teams	2.3				X	X			
ANALYZE TRENDS IN BUS ENVIRONMENT									
Economic and political change	3.1					X			
Change in culture and demographics	3.2					X			
ETHICAL, LEGAL, SOCIAL RESPONSIBILITY									
Concept of ethics	4.1				X				
Legal and regulatory environment	4.2				X				
Social responsibility of business	4.3				X				
DYNAMICS OF DOMESTIC AND GLOBAL ORGANIZATIONAL ENVIRONMENT									
Synergies resulting from partnerships	5.1					X			
Gains to trade, barriers to trade	5.2		X						
Globalization and competitive advantage	5.3					X			
ORGANIZATIONAL AND FUNCTION-RELATED STRATEGIES									
Financial statements in decision making	6.1	X							
Cost behavior	6.2	X							
Supply and demand	6.3		X						
Pricing in market structures	6.4		X						
Quality, technology	6.5							X	
OM concepts and techniques	6.6							X	
Valuation models	6.7			X					
Capital budgeting theory	6.8			X					
Segment product-markets / marketing mix	6.9						X		
Marketing management / strategic market planning	6.10						X		
High performance Human Resources practices	6.11								X
Organizational behavior	6.12								X
INTEGRATIVE / INTERDISCIPLINARY									
Internal analysis of an organization	7.1					X			
Interaction of functional areas	7.2					X			
Economic reasoning and accounting data in decisions	7.3	X							

Appendix A.

Curriculum Map for M.B.A. program. The grid indicates courses used for collection of assessment data for each learning outcome.

APPENDIX B. COURSE-EMBEDDED ASSESSMENT RESULTS

IU Kokomo School of Business Assessment Data Form

Course: E542

Semester: Fall 2011

Faculty: CHULKOV

Please include your evaluation of the aggregate student performance measured for the assessment outcomes in the course. If you use a numerical measure in your assessment (for example, the percentage of correct answers on a test) include it under "Score". Also include your evaluation by placing a checkmark in the appropriate area.

Goal	Score	Evaluation		
		Exemplary	Satisfactory	Needs Improvement
Provide identification and formulation of problem	89.0%		X	
Develop problem solution techniques	97.2%	X		
Interpret and implement solution results	90.1%	X		
Apply demand and supply theory and the concept of elasticity to managerial decisions.	83.0%		X	
Analyze pricing strategies used by firms in different market structures.	97.7%	X		

Comments: (attach additional material if necessary)

All assessment was done in the Fall 2011 E542 course with a sample size of 18 students.

Outcome 1 was assessed with a case study problem

Outcome 2 was assessed with a regression analysis problem homework

Outcome 3 was assessed with a case study analysis assignment

Outcome 4 was assessed with an exam

Outcome 5 was assessed with an case study analysis assignment

Results from Spring 2012 School of Business Math Skills Assessment Test

This 10-question test is provided at the end of this document. It was administered online for J401 and F542 students and in class for W100 students.

	W100 (Freshman)	J401 (Seniors)	F542 (MBA students)
# of students	18	19	20
mean	6.6	7.1	8.5
median	7	8	9
mode	8	8	10
Question #1 (% correct)	44	36	55
Question #2 (% correct)	56	73	100
Question #3 (% correct)	83	84	100
Question #4 (% correct)	72	84	100
Question #5 (% correct)	61	84	95
Question #6 (% correct)	39	52	65
Question #7 (% correct)	78	89	80
Question #8 (% correct)	28	26	70
Question #9 (% correct)	94	89	95
Question #10 (% correct)	100	89	85

School of Business Math Assessment Quiz (20 minutes, calculator allowed)

Name _____ Year _____ (Fr, So, Jr, Sr, MBA)

1. At a previous market price of \$8/unit, 50 units were sold. When the price was cut to \$6/unit, 75 units were sold. What is the price elasticity of demand if the formula is the % change in unit sales divided by the % change in price? (Ignore adjustments for arc elasticity, just use the formula above.)
 - a. -4.0
 - b. -2.0
 - c. -0.5
 - d. -0.25
 - e. -0.1

2. The current marginal propensity to consume (mpc) is $\frac{9}{10}$. What is the spending multiplier if the formula is $1/(1 - mpc)$?
 - a. 0.1
 - b. 0.9
 - c. 1.0
 - d. 9.0
 - e. 10.0

3. If \$100 is left to grow at 5% interest per year, what is its value at the end of two years? This relationship is shown by $FV = PV(1+r)^n$, where r is the annual interest rate, n is the number of years, PV is the initial amount, and FV is the future amount. What is the future amount?
 - a. \$105.00
 - b. \$105.50
 - c. \$110.00
 - d. \$110.25
 - e. \$110.50

4. Based on $FV = PV(1+r)^n$ from above, what amount must be invested now to end up with \$1,000 in two years assuming a 10% annual interest rate?
 - a. \$826.45
 - b. \$843.69
 - c. \$879.12
 - d. \$900.00
 - e. \$981.00

5. If a 1 Gb flash drive holds about a billion bytes and the average size of an mp3 music file is about 4 Mb or about 4 million bytes, approximately how many songs can you store on the flash drive?
 - a. 40
 - b. 250
 - c. 400
 - d. 2,500
 - e. 4,000

6. Assume that your annual cash needs are \$1,000. Also assume that each time you go to the bank to withdraw cash it costs you \$4 (gas, time, fees, etc.). Assume that your annual holding cost for cash is 20% (due in part because you tend to spend cash excessively when you hold it). Using the EOQ model below, how much money should you withdraw each time you visit the ATM. The EOQ is your optimal amount to withdraw at the ATM.

$EOQ = \sqrt{\frac{2DS}{H}}$, where D is the annual demand quantity, S is cost per order (transaction), and H is the annual holding cost per unit.

- a. \$40
 - b. \$60
 - c. \$80
 - d. \$100
 - e. \$200
7. How would you describe the relationship between sales (y) over time (x) as depicted below? Use math terms to describe the function $y = f(x)$.

Sales (y) in million \$:	10	20	30	40	50	60	70
Year (x):	1	2	3	4	5	6	7

- a. $y = x$
 - b. $y = .1x$
 - c. $y = 10x$
 - d. $y = x + 10$
 - e. $y = x - 10$
8. Total cost (TC) for a firm is represented by the following: $TC = ax + b$, where a = the variable cost per unit, b = the fixed costs, and x = # of units. For a specific firm the total cost function is $6x + 10,000$. What will be this firm's total variable costs if 1,000 units are produced?
- a. 4,000
 - b. 6,000
 - c. 10,000
 - d. 14,000
 - e. 16,000

9. What is the mean of the following numbers? 12, 18, 20, 25, 35
- a. 15
 - b. 18
 - c. 20
 - d. 22
 - e. 25

10. What is the median of the following numbers? 12, 18, 20, 25, 35
- a. 15
 - b. 18
 - c. 20
 - d. 22
 - e. 25

APPENDIX C. ETS MAJOR FIELD TEST RESULTS

ASSESSMENT OF STUDENT LEARNING THROUGH ETS MAJOR FIELD TEST

The data represents results of IU Kokomo MBA students in Educational Testing Service's standardized MFT test for MBA. The test is taken by graduating students in the Spring semester. The numbers are percentile rank scores for all categories and for each category separately for a given semester. The percentile ranks are in relation to the national comparative data sample received from the ETS. This sample includes 24,785 students from 230 institutions.

	Spring 2006	Spring 2007	Spring 2008	Spring 2009	Spring 2010	Spring 2011
Percentile scores						
Number	15	24	13	19	27	11
Overall IUK Percentile	75	85	95	85	95	90
Marketing	70	85	95	80	95	80
Management	80	80	95	80	95	85
Finance	70	80	90	85	85	95
Managerial Accounting	65	75	95	90	95	90
Strategic Integration	60	85	95	80	90	90

In Spring 2012, the MBA students took the ETS Business Major Field Test in order to measure the knowledge in the areas of Business to complement the MBA MFT tests taken in other years. The results appear below and show percentile ranks for each area. The sample includes 80,806 students at 585 institutions.

	Spring 2012
Percentile scores	
Number of students tested	17
Overall IU Kokomo Percentile	91
Accounting	96
Economics	90
Mgmt	86
Quantitative Analysis	75
Finance	94
Marketing	75
Legal/Social Environ.	59
Information Systems	97
International Issues	70