Indiana University Kokomo
School of Business
M.B.A. Program
Assessment Report
Academic Year 2012-2013

I. BRIEF SUMMARY OF ASSESSMENT PLAN

Highlights of the Assessment Plan

Assessment and assurance of student learning are a priority for the School of Business. In 2012-13, the School performed a complete revision of its program goals and learning outcomes and continues to collect assessment data each academic year to measure student achievement of these outcomes. 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 Excellent, Satisfactory, or Needs Improvement.

As an external assessment mechanism, the School also used the ETS Major Field Test for M.B.A. to measure the knowledge and skills of all graduates in Spring 2013. The results of this national standardized ETS test allow for comparison of our graduates to national norms. Overall, the School's graduates performed very strongly on this national test. There were 19 graduates taking the test and the mean performance for the cohort was at the 80^{th} percentile compared to all institutions participating in the ETS testing. The comparison sample for the ETS test includes 24,766 students at 260 institutions worldwide.

The following are assessment highlights:

- Mission, Program Goals and Learning Outcomes were reviewed in 2013
- Course-embedded assessment data is collected every academic year
- External standardized testing is performed 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

Goals and Outcomes Assessed in 2012-13

In the academic year 2012-13, the School used course-embedded methods to assess student performance on 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 standardized test. In 2012-13, 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 BUKO-E542 and BUKO-F542 courses. In BUKO-E542, the assessment data were collected from an analytical homework assignment, case studies, as well as an exam. The collection of assessment data was independent from the course grades. Appendix B presents the form used in this assessment as well as a summary of the results. In BUKO-F542, the assessment of quantitative skills was done with a quiz developed by the Assessment Committee. Appendix B also presents the quiz form and a comparison of the results from graduate students to those of undergraduate students.

National Standardized Test

All graduates also took the standardized Educational Testing Service (ETS) exam for M.B.A. This test focuses on the integrative skills specific to M.B.A. graduates. The ETS test was administered in the capstone course. The test was listed as a requirement for completion of the course and was administered in the Spring 2013 semester. The scores were analyzed by the Assessment Committee. The ETS test provides an opportunity to compare student performance to an international sample of M.B.A. program graduates that included 24,766 students at 260 institutions in 2013.

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, our 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.

III. DESCRIPTION OF ASSESSMENT RESULTS

The summary of the assessment results for 2012-13 is presented in appendices B and C. The course-embedded 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 BUKO-E542. For outcome 1.1 – “Provide identification and formulation of problem” – the mean performance was at 89.1%. For outcome 1.2 – “Develop problem solution techniques” the mean performance was at 95.2%. For outcome 1.3 – “Interpret and implement solution results” the mean performance was at 91.2%. The data were collected in course projects, including case study analysis, regression analysis, and profit maximization problems.

Knowledge and skills in Economics were also assessed in BUKO-E542. Mean performance for Outcome 6.3 “Apply demand and supply theory and the concept of elasticity to managerial decisions” was at 83.5%. For outcome 6.4 “Analyze pricing strategies used by firms in different market structures” the mean performance was at 92.5%.

As a separate assessment activity, the problem-solving and quantitative skills covered by outcomes 1.1-1.3 were assessed in BUKO-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 62% for freshmen, at 79% for seniors, and at 94% for graduate students. M.B.A. students demonstrated a high level of achievement on individual questions linked to specific mathematical and statistical concepts. One area 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 2013 cohort of graduates. The results of the ETS test are presented in Appendix C. In particular, there were 19 graduates taking the test in Spring 2013, and the mean performance score for the cohort was at the 80th percentile. This means that our M.B.A. graduates scored in the top 20 percent of the extensive ETS sample. This is an excellent level of performance, as the national sample includes many competitive programs, with a total sample of 24,766 students at 260 institutions. The ETS test results are further linked to the program outcomes assessed. For instance, in Spring 2013 the ETS test assessment indicator for outcomes in Managerial Accounting was at the 91st percentile. We expect our students to perform at better than the national average in each area of the test. This benchmark was reached as the area assessment indicators for the 2013 cohort were between the 57th and the 91st percentiles.

IV. USING ASSESSMENT FOR PROGRAM IMPROVEMENT

The School’s faculty and the Assessment Committee focus on the continuous improvement of the program and the assessment process itself. In 2012-13, a major revision of the M.B.A. program assessment plan was undertaken. All faculty members teaching in the M.B.A. program reviewed the program goals and learning outcomes in their areas, as well as the courses where the assessment data are collected. As the result, a new assessment plan was prepared with a more focused list of program goals and learning outcomes and a streamlined assessment curriculum map. The details are available in the 2013-2015 assessment plan document.

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 discuss the proposed changes with the Assessment Committee of the School. A similar process is successfully used in the assessment of the undergraduate Business program.

In 2012-13, the assessment results from the course-embedded assessment and the ETS testing indicate that the performance of students meets the expectations of the faculty. The School will continue to collect and review the assessment results to ensure the attainment of learning outcomes.

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. Recently, the assessment results have been discussed 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 reports 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. ASSESSMENT 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 2012**

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		
		Excellent	Satisfactory	Needs Improvement
Provide identification and formulation of problem	89.1%		X	
Develop problem solution techniques	95.2%	X		
Interpret and implement solution results	91.2%	X		
Apply demand and supply theory and the concept of elasticity to managerial decisions.	83.5%		X	
Analyze pricing strategies used by firms in different market structures.	92.5%	X		

Comments: (attach additional material if necessary)

All assessment was done in the Fall 2012 E542 course with a sample size of 26 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 Fall 2012 and Spring 2013 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 in class for F542 students and W100 students.

	W100-Fall (Freshman)	W100-Spring (Freshman)	J401 (Seniors)	F542 (MBA students)
# of students	20	22	29	18
mean	6.5	5.8	7.9	9.4
median	7	6	8	10
mode	6 and 7	5 and 6	9	10
Question #1 (% correct)	25	9	34	74
Question #2 (% correct)	50	55	82	100
Question #3 (% correct)	80	73	86	100
Question #4 (% correct)	60	64	82	100
Question #5 (% correct)	45	45	86	100
Question #6 (% correct)	65	45	51	84
Question #7 (% correct)	90	86	89	95
Question #8 (% correct)	35	32	44	84
Question #9 (% correct)	100	86	82	100
Question #10 (% correct)	95	91	96	100

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 <u>variable</u> 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 24,766 students from 260 institutions.

Percentile scores	Spring 2006	Spring 2007	Spring 2008	Spring 2009	Spring 2010	Spring 2011	Spring 2013
Number	15	24	13	19	27	11	19
Overall IUK Percentile	**75**	**85**	**95**	**85**	**95**	**90**	**80**
Marketing	70	85	95	80	95	80	57
Management	80	80	95	80	95	85	77
Finance	70	80	90	85	85	95	74
Managerial Accounting	65	75	95	90	95	90	91
Strategic Integration	60	85	95	80	90	90	65

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.

Percentile scores	Spring 2012
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