Major Field Achievement Test In Business - Guidelines For Improved Outcome Scores - Part I

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ABSTRACT

Outcomes measurements have always been an important part of proving to outside constituencies how you “measure up” to other schools with your business programs. A common nationally-normed exam that is used is the Major Field Achievement Test in Business from Educational Testing Services. Our paper discusses some guidelines that we are “pilot testing” to see if we can improve not only our lowest score, marketing majors in the finance area, but all of our overall outcome scores in the eight (8) segmented areas covered in the exam. If we are going to use the MFAT, let us try to make sure that the “input” from our students is the best we can get so that our “output” scores are truly meaningful.

INTRODUCTION

All universities find it necessary to “prove” how good they and their programs are to all kinds of “customers.” It could be parents of potential students, the students themselves, the Academic wing of the university’s administration, or the state-wide Coordinating Board for Higher Education. They all want proof of how your university and its’ programs “stack up” against the competition. Northwest Missouri State University (Northwest) is no different when it comes to outcome measurements and testing to see how students perform at all levels, whether it is for general studies or specific programs. In fact, Northwest has developed what is known as “The Culture of Quality.” It revolves around the Seven-Step Planning Process, whereby each unit sets forth specific Key Quality Indicators, validates them, sets out specific targets and goals, defines where these are met and deployed, lists the type of instrument to determine the outcome, such as surveys or tests, monitors said outcomes to look for trends, and then allows for benchmarking better practices at other universities to move forward.

This process has been quite successful inasmuch as Northwest has received the State of Missouri’s Quality Award in Education three times (each time it became eligible) and has received three site visits from the Malcolm Baldrige Quality Award examiners. One such measurement tool in the business school is the Major Field Achievement Test in Business (MFAT) from the Educational Testing Service (ETS). It provides for questions in eight categories: Accounting, Management, Marketing, Finance, Legal and Social Environment, International Business, Economics and Quantitative Business Analysis. Scores can be broken down so that each student can get a total score, which can then be compared to the ETS national data to determine that student’s overall percentile as a reported score for all categories. The scores can further be broken down into majors and how those students in that major performed on all parts of the exam. In other words, we can see how our finance majors performed as a group in all eight categories, how marketing majors performed in finance, and so on to possibly identify where potential problems may exist. Following are the score averages and standard deviations for all eight categories based upon the 513 participating institutions; the overall performance of the students taking the MFAT exam in the Spring Semester 2006; the Marketing majors performance in all eight categories (including finance, the subject area of our research); the Finance majors performance in all eight categories, for comparison purposes; and the overall results, with a weighted average for all majors on the MFAT in all categories from Fall 2000 to Spring 2006. In analyzing this data over a period of semesters, we began to see trends emerging. As we had hoped, finance majors did very well on the finance questions, accounting students on the accounting questions, and on down the line. However, it also became clear that marketing majors consistently scored very poorly on the finance questions. The obvious question was - **WHY?**

(1)

Major Field Test in Business¹
Institutional Assessment Indicator Mean Score Distributions
Seniors Only --- 2003-2005 Data

Mean Percent Correct	Assessment Indicators ²								Mean Percent Correct					
	% at or below													
	AI 1	AI 2	AI 3	AI 4	AI 5	AI 6	AI 7	AI 8						
69 - 100	95	95	95	95	95	95	95	95	69 - 100					
68													68	
67									90	90				67
66														66
65									85	85			95	65
64									80	80				64
63									75	75				63
62									70	70				62
61									65	65				61
60									60	80				60
59									50	55			90	59
58									45	50			85	58
57									40	45			80	57
56									35	40		90	75	56
55									25	35				55
54	90			30		85	70	90	54					
53			20	25		80	65		53					
52	85	90	15	20		75	55	85	52					
51	80	85				70	50	80	51					
50			10	15		65	40	75	50					
49						60	35	70	49					
48	70	80	5	10	90	55	30	65	48					
47	60	70				50	25	60	47					
46	55	65				45	20	55	46					
45	45	60				40	15	45	45					
44	40	55				35	10	40	44					
43	35	50	1	1	85	25		35	43					
42	25	40			80	20		30	42					
41	20	30			75	15	5	25	41					
40		25			70	10		20	40					
39	15	20			65			15	39					
38					60	5			38					
37	10	15			50			10	37					
36					45				36					
35	5	10			35				5	35				
34		5			30					34				
33			25					33						
32			20			1		32						
31			15		1			31						
30	1							30						
29		1			10			29						
28								28						
27					5			27						
0 - 26					1				0 - 26					
Number of Institutions	513	513	513	513	513	513	513	513						
Mean	44.4	42.7	57.1	56.4	36.1	46.8	49.8	44.4						
Median	45.0	42.0	58.0	57.0	36.0	47.0	50.0	45.0						
Standard Deviation	6.3	6.5	7.2	7.5	6.2	6.0	6.2	6.4						

Assessment Indicators are reported as *percent correct*.
% at or below based on percent below the lower limit of the score interval.

¹ Assessment Indicators for this test cannot be compared to testing years prior to 2003 due to changes in the Business test that were introduced in 2003.

² Assessment Indicator 1: Accounting
Assessment Indicator 2: Economics
Assessment Indicator 3: Management
Assessment Indicator 4: Quantitative Business Analysis

Assessment Indicator 5: Finance
Assessment Indicator 6: Marketing
Assessment Indicator 7: Legal and Social Environment
Assessment Indicator 8: International Issues

ETS MAJOR FIELD TESTS

DEPARTMENTAL SUMMARY
ASSESSMENT INDICATORS

TEST: BUSINESS

INSTITUTION: NORTHWEST MISSOURI STATE UNIVERSITY

GROUP: 04

PAGE 1 OF 1

REPORT DATE: MARCH 2006

	MEAN PERCENT CORRECT	SEX	00	20	40	60	80	100
			+-----+-----+-----+-----+					
ASSESSMENT INDICATOR 1	54.7	4.2				+---X---		(94%)
ASSESSMENT INDICATOR 2	51.7	4.4				+---X---		(89%)
ASSESSMENT INDICATOR 3	64.8	4.3				+---X---		(89%)
ASSESSMENT INDICATOR 4	66.6	4.0				+---X---		(91%)
ASSESSMENT INDICATOR 5	66.0	5.9				+---X---		(95%)
ASSESSMENT INDICATOR 6	51.8	3.0				+---X---		(74%)
ASSESSMENT INDICATOR 7	58.9	3.7				+---X---		(94%)
ASSESSMENT INDICATOR 8	63.3	5.6				+---X---		(95%)

STUDENTS RESPONDING TO < 50% OF THE ITEMS IN ONE OR BOTH SECTIONS: 0

STUDENTS IN FREQUENCY DISTRIBUTIONS: 12

STUDENTS TESTED: 12

ASSESSMENT INDICATORS

1: ACCOUNTING

2: ECONOMICS

3: MANAGEMENT

4: QUANTITATIVE BUSINESS ANALYSIS

5: FINANCE

6: MARKETING

7: LEGAL AND SOCIAL ENVIRONMENT

8: INTERNATIONAL ISSUES

Finance

Overall 95%

ETS MAJOR FIELD TESTS

DEPARTMENTAL SUMMARY
ASSESSMENT INDICATORS

TEST: BUSINESS

INSTITUTION: NORTHWEST MISSOURI STATE UNIVERSITY

PAGE 1 OF 1

REPORT DATE: MARCH 2006

GROUP: 02

	MEAN PERCENT CORRECT	SE*	00	20	40	60	80	100
			+	-----	+	-----	+	-----
ASSESSMENT INDICATOR 1	46.6	2.5				+-X-+	(58%)	
ASSESSMENT INDICATOR 2	43.0	3.1				+-X-+	(50%)	
ASSESSMENT INDICATOR 3	60.5	2.8				+-X-+	(62%)	
ASSESSMENT INDICATOR 4	61.4	2.2				+-X-+	(65%)	
ASSESSMENT INDICATOR 5	35.9	3.0				+-X-+	(44%)	
ASSESSMENT INDICATOR 6	59.0	3.3				+-X-+	(95%)	
ASSESSMENT INDICATOR 7	57.1	3.8				+-X-+	(85%)	
ASSESSMENT INDICATOR 8	41.4	3.5				+-X-+	(27%)	

STUDENTS RESPONDING TO < 50% OF THE ITEMS IN ONE OR BOTH SECTIONS: 0

STUDENTS IN FREQUENCY DISTRIBUTIONS: 22

STUDENTS TESTED: 22

ASSESSMENT INDICATORS

- 1: ACCOUNTING
- 2: ECONOMICS
- 3: MANAGEMENT
- 4: QUANTITATIVE BUSINESS ANALYSIS
- 5: FINANCE
- 6: MARKETING
- 7: LEGAL AND SOCIAL ENVIRONMENT
- 8: INTERNATIONAL ISSUES

Marketing
Overall 69%

ETS MAJOR FIELD TESTS

DEPARTMENTAL SUMMARY
ASSESSMENT INDICATORS

TEST: BUSINESS

INSTITUTION: NORTHWEST MISSOURI STATE UNIVERSITY

PAGE 1 OF 1

REPORT DATE: MARCH 2006

	MEAN							
	PERCENT	00	20	40	60	80	100	
	CORRECT	SEX	+	+	+	+	+	+
ASSESSMENT								
INDICATOR 1	50.8	1.4			+X+	(80%)		
ASSESSMENT								
INDICATOR 2	45.5	1.5			+X+	(62.5%)		
ASSESSMENT								
INDICATOR 3	62.1	1.4			+X+	(70%)		
ASSESSMENT								
INDICATOR 4	62.3	1.3			+X+	(70%)		
ASSESSMENT								
INDICATOR 5	39.9	1.9			+X+	(65%)		
ASSESSMENT								
INDICATOR 6	54.5	1.4			+X+	(85%)		
ASSESSMENT								
INDICATOR 7	56.6	1.5			+X+	(85%)		
ASSESSMENT								
INDICATOR 8	46.7	1.8			+X+	(60%)		

STUDENTS RESPONDING TO < 50% OF THE ITEMS IN ONE OR BOTH SECTIONS: 0

STUDENTS IN FREQUENCY DISTRIBUTIONS: 108

STUDENTS TESTED: 108

ASSESSMENT INDICATORS

1: ACCOUNTING

2: ECONOMICS

3: MANAGEMENT

4: QUANTITATIVE BUSINESS ANALYSIS

5: FINANCE

6: MARKETING

7: LEGAL AND SOCIAL ENVIRONMENT

8: INTERNATIONAL ISSUES

Overall
All Students

(2)

MFAT RESULTS - Booth College of Business & Professional & Studies

	WGHT AVG	Fall 00	Spr. 01	Sum. 01	Fall 01	Spr. 02	Sum. 02	Fall 02	Spr. 03	Sum. 03	Fall 03	Spr. 04	Sum. 04	Fall 04	Spr. 05	Sum. 05	Fall 05	Spr. 06	Sum. 06
Institution Score	73%	67	83	53.5	70	86	79	72	78	71	57	70	79	62	80	67	65	78	60
Overall Assessment		n=74	n=96	n=19	n=58	n=106	n=22	n=97	n=112	n=22	n=84	n=121	n=15	n=79	n=95	n=15	n=75	n=108	n=21
Accounting	68%	57	78	38	67	75	40	55	71	76	61	69	95	76	75	67	59	82	45
Economics	70%	62	89	43	64	77	94	91	79	67.5	56	63	89	60	74	70	55	63	25
Management	72%	73	83	72	70	85	92	93	62	59.5	52	63	43	43	90	72	66	71	90
Quan. Bus. Analysis	79%	89	87	83	89	90	99	77	87	77	59	75	74	62	82	65	78	72	60
Finance	58%	41	56	16	40	70	84	70	55	62	46	62	88	53	65	44	45	69	45
Marketing	73%	56	56	80	49	83	86	60	91	74	40	84	63	63	90	69	88	88	90
Legal & Social Env.	77%	59	92	55	89	87	99	99	73	69	64	72	75	62	89	51	59	88	40
International Issues	74%	73	83	58	55	78	78	77	89	77	68	67	75	76	88	80	65	59	75
Mgmt / IB		n=31	n=39	n=10	n=17	n=38	n=10	n=50	n=43	n=9	n=36	n=61		n=32	n=48	n=6	n=40	n=53	
All	64%	67	69	25.5	44	62	59	55	79	81.5	57	72		50	82	70	47	69	
Accounting	55%	62	54	17	28	53	14	33	65	85	54	68		60	71	26	29	71	
Economics	61%	74	81	13.5	48	61	92	79	76	73	52	55		49	63	67	34	56	
Management	79%	85	90	43	62	77	93	95	82	91	72	79		52	95	95	66	74	
Quan. Bus. Analysis	71%	85	67	43	92.5	66	97.5	97	89	83	42	79		52	75	63	48	63	
Finance	38%	28	37	8	4.5	28	58	24.5	51	60	23	61		33	68	53	24	30	
Marketing	69%	64	45	53	38	72	77	59	83	89	43	78		37	88	90	84	88	
Legal & Social Env.	74%	33.5	87	15	87	64	99	98	78	94	65	89		56	88	53	48	79	
International Issues	60%	85.5	75	48	27	54	79	49	89	85	64	64		51	65	83	34	42	
Marketing		n=19	n=19	n=9	n=8	n=19	n=10	n=10	n=25	n=7	n=21	n=18		n=15	n=24	n=4	n=18	n=22	
All	60%	69	80	88	26	62	59	39	68	33	50	55		40	65		54	69	
Accounting	43%	20	79	74	9.5	32	14	24	37	24	57	23		41	43		64	58	
Economics	57%	46	76	83	30	48	92	70	65	41	55	71		49	58		21	50	
Management	62%	74.5	81	90	34	88	93	39	62	23	44	51		36	76		43	63	
Quan. Bus. Analysis	70%	94.5	83	97	42	70	97.5	94	68.5	76	34	63		34	68		82	67	
Finance	31%	47	45	26	37	13	58	36	17	36	34	28		39	15		11	44	
Marketing	84%	73	83	97	39	98	77	82	95.5	56	44	88		95	95		95	95	
Legal & Social Env.	68%	77	89	89	11	86	99	87	72	13	68	49		18	89		37	86	
International Issues	61%	49.5	64	72	23	69.5	79	84	72	38	75	56		62	69		59	27	

Fall 2000-Summer2006
9/18/2006

MFAT Analysis.xls

	WGHT AVG	Fall 00	Spr. 01	Sum. 01	Fall 01	Spr. 02	Sum. 02	Fall 02	Spr. 03	Sum. 03	Fall 03	Spr. 04	Sum. 04	Fall 04	Spr. 05	Sum. 05	Fall 05	Spr. 06	Sum. 06
Accounting		n=4	n=12	n=0	n=12	n=10	n=9	n=11	n=8	n=3	n=7	n=14		n=6	n=4	n=2	n=6	n=7	
All	91%		96		95.5	99	83	96	92		73.5	95		83			95	75	
Accounting	96%		99		97	99	84	99	99		92	95		95			95	95	
Economics	85%		95		87	92	93	99	83		65.5	92		80			95	22	
Management	84%		97		91	99	81.5	98	66.5		55	92		84			80	41	
Quan. Bus. Analysis	94%		96		95	99	99	99	95		83	95		95			95	67	
Finance	83%		78		70	96	91	93	64		85	92		78			95	68	
Marketing	81%		95		93	93	92	86	79		29	95		95			71	35	
Legal & Social Env.	87%		99		99	98	76	99	81		22	81		95			95	91	
International Issues	82%		99		68	99	47	97	90.8		85	95		95			95	13	
Finance		n=8	n=9	n=0	n=10	n=12	n=9	n=14	n=9	n=2	n=8	n=9		n=11	n=11	n=0	n=3	n=12	
All	91%	88	99		91	99	83	99	94		95	73		73	95			95	
Accounting	93%	78	94		98	97	84	98	97		95	79		95	95			94	
Economics	87%	82	99		83	59	93	99	99		90	69		85	95			89	
Management	66%	58	47		64	94	81.5	99	35		37	24		55	75			89	
Quan. Bus. Analysis	93%	83	97		94	98	99	99	93		95	70		93	95			91	
Finance	96%	95.5	99		97	99	91	99	94		95	95		95	95			95	
Marketing	61%	50	99		43	53	92	55.5	53		64	28		46	78			74	
Legal & Social Env.	93%	98.5	97		91	95	76	99	91		95	92		94	95			94	
International Issues	88%	87	99		89	81	47	99	99		92	75		95	95			95	
CMS/OIS/Bus. Ed.		n=12	n=17	n=0	n=11	n=27	n=0	n=12	n=27	n=1	n=12	n=19		n=14	n=8	n=3	n=7	n=14	
All	64%	42	63		64.5	88		48	71		24	39		56	80		94	95	
Accounting	58%	45	56		59.5	75		33.5	66		19	24		70	73		71	95	
Economics	66%	26	29		67	89		86	73		27	49		78	85		95	89	
Management	50%	60	49.5		80	73		22	42		10	33		24	60		93	72	
Quan. Bus. Analysis	83%	70	95		90	92		99	86		57.5	60		63	95		95	92	
Finance	47%	13	8.5		15	73		30	69		36	33		39	33		95	90	
Marketing	62%	24.5	21		30	82		39	94		10	76		54	83		85	95	
Legal & Social Env.	70%	33	93		88	89.5		93	61		34	38		73	73		59	91	
International Issues	69%	65	64.5		78	90		35	72		28	36		92	88		95	91	

Fall 2000-Summer2006
9/18/2006

MFAT Analysis.xls

CURRENT PRACTICES

We felt the best place to start in answering that question was to evaluate what we were currently doing to prepare our students for the MFAT exam, and do we have appropriate “incentives” in place to help assure that they are applying themselves to do the best of their true abilities?

First, the MFAT exam was made a part of our “capstone” course, Organizational Policy and Decision Making. It was a senior level course designed to be taken in a student’s last semester. We purposely set forth certain prerequisites such as accounting, economics, principles of management, principles of marketing, fundamentals of finance, operations management, international business and management information systems. This way they would have at least been exposed to all of the topics tested on the MFAT exam.

We then checked with the teachers of the Organizational Policy course to see how they were enforcing the prerequisites. What we found was that they were using an “honesty pledge” of self-reporting wherein they stated that all prerequisites had been completed. However, in checking with the Registrar’s Office, what was actually found, just for the economics and finance classes, was that fourteen of the ninety-five students were currently enrolled in economics and finance at the same time, and that other students who were not actually set to graduate, had signed up to take the course early. Unfortunately, we had no way under our current system of telling if these students had even taken the prerequisites to be eligible to take the course. Consequently, it was clear that we had a problem with students not being exposed to any of the economics, finance or perhaps even other basic course concepts.

In addition, we had suggested that the MFAT test be made a part of the student’s grade in Organizational Policy. This request was made after an informal survey of graduating seniors were asked if they actually “performed to the best of their abilities” on the test. The survey was random, but what we found was, not too surprisingly, that the “better students,” per their GPA’s to that point, tended to want to excel on the exam, whereas the “average and lesser students,” again based solely upon their GPA’s, took the attitude of “what difference does it really make?” despite our efforts of giving them “pep talks” about the importance for them, their departments and the University as a whole. Thus, a sliding scale was implemented that, based upon their composite score on the MFAT, they would receive a maximum of three percent (3%) added to their percentage in the class based upon a one percent (1%) increase for the fiftieth percentile to sixtieth, two percent (2%) for the sixtieth percentile to seventieth percentile and three percent (3%) for above the seventieth percentile. On the flip side of the equation, a student’s grade would be reduced by one percent (1%) for the fortieth to fiftieth percentile, two percent (2%) for the thirtieth to fortieth percentile and the maximum of three percent (3%) for below the thirtieth percentile.

Understanding that this policy did have an effect on the seriousness of the “average” student to take it “more seriously,” it still seemed to be a “small price to pay” for “blowing off the exam” as a number of students indicated they had done because the MFAT test just “didn’t matter that much” in their overall grade compared to the “energy and effort” of doing their best.

SUGGESTIONS FOR IMPROVEMENT

Thus, after our evaluation of the situation we felt we could make some viable suggestions for improvement. The first step, of course, was to convince the faculty members teaching the Organizational Policy course to “buy-in” to our suggestions on how the MFAT test would become more meaningful and, in turn, a more accurate and valid measure of what our business programs were accomplishing in this one form of outcomes on a nationally-normed exam.

Our strategy was to include the teachers of the course, the Department Chair of the Marketing and Management Department, teachers in the finance and economics areas, and ourselves as the facilitators to see if we could manage to get everyone on the “same page” with regard to recognizing the issues of the marketing students (in particular) consistently performing poorly in the finance portion of the MFAT exam. We had discussed the inclusion of the Dean in this group as well, but decided it would be better to keep him informed of the issues and progress and to keep it a “ground-up” endeavor.

We received tremendous cooperation. Based upon our aforementioned “Culture of Quality” environment, this concept of convincing a group of faculty to address a “recognized issue or concern” was not unique. After the plans were made to identify the persons to be included, we asked them to be involved, they all accepted the request and our first meeting was convened.

At that meeting, all of the issues we have set forth were openly discussed, including the specifics of the subject of our research and the thrust of why we were meeting - the poor performance of marketing majors, in particular in the area of finance, and other germane topics, such as how to increase all of the scores in all of the eight MFAT exam topic areas.

Due to our study of these areas, it resulted in making a number of suggestions for continuous quality improvement to the group. They included: a new way of assuring prerequisites had been completed; informing all faculty to take a proactive role in advising their academic advisees of the importance of their MFAT exam scores to themselves, the Department, the Business School, University and outside constituencies; to assist students with a review process of the eight critical areas being examined by the MFAT exam; and to increase the relevancy to students of the importance of “doing their best” on the exam by increasing the amount of impact the test would have on their final grade determination.

After considerable discussion and input from members of the team accumulated, recommendations were made to the Dean for quality outcome improvement in all of the majors, in all of the eight MFAT testing categories, including, of course, the basis of our research which dealt with marketing majors in finance. Our suggestions were proposed for implementation in the following ways.

Assurance Of Prerequisites

The University purchased a new software package that allows for preventing students from taking a course unless it shows that all prerequisites have been completed. It puts a “block” on any student who tries to register for a course without the prerequisites, since nearly all of our registration is done “on-line.”

Academic Advisors And The MFAT

Once again, in our “Culture of Quality” the Dean discussed the importance of giving a “positive pep talk” to each of our academic advisees who were scheduled to take the MFAT exam about how a good score could be used on their resume, how it could affect their grade and the importance of the reporting information at all levels. It was felt that since most faculty had a special “bond” with their advisees, this could be more effective through personal contact than the previous group “pep talk.”

Review Of Tested Subject Areas

It was decided that the instructors of the Organizational Policy class would do a locally-generated “pre-test” over the eight subject matter areas of the MFAT exam. Thus, faculty members of accounting, economics, management, marketing, finance, legal environment and international business were each asked to submit ten (10) questions that would “highlight” the perceived “most important issues” of their disciplines for developing a “comprehensive exam” to test how well students recalled the material, since they had not been directly exposed to some courses, such as economics and accounting for three or four years and their retention of the materials in the upper division business courses in the tested areas to determine their basic understanding of these advanced concepts.

The faculty in each of the disciplines also prepared, as requested, a set of review materials that the students could access either by hard copy or through e-companion, to review both before and/or after their “pre-test” which would help indicate, via their test scores in each area, their strengths, weaknesses and overall content knowledge. These pre-scores and review materials could then be used by the student to perform additional study before the actual administration of the MFAT exam

Prior to the actual administration of the MFAT exam, again a locally generated post-test exam would be used to see if a student's scores improved, particularly in their areas of deficiencies and if additional review on the behalf of the student would be recommended. If so, the faculty member, with the assistance of a graduate assistant, would work with the group of students to review materials and answer relevant questions in the particular subject area.

Increased Accountability For Student Performance

Another recommendation to the faculty members teaching the Organizational Policy and Decision Making class was that they consider the scores on the MFAT exam as a plus or minus ten percent (10%) of their grade based upon their previously used "sliding scale," but as modified with the increased emphasis on a superior performance and overall student accountability. Honestly, this is the area where we met the most resistance from the faculty (even though we had reduced our true recommendations/feelings that it should be twenty percent (20%) of their grade to really reinforce the importance of the exam based upon their abilities as graduating seniors in our "capstone" course) who taught the Organizational Policy and Decision Making course. They understood and accepted the importance of the exam, its outcomes, and the reporting being done, but believed that one such measure in a "capstone" course, with all the other measures already built into such a course by nature of being a capstone course, was just too much. Consequently, as a team we were able to reach a compromise that is still significant but is now set out as follows: fiftieth to sixtieth percentile is three (3%) percent, sixtieth to seventieth percentile is four percent (4%), seventieth to eightieth percentile is 5 percent (5%), eightieth to ninetieth percentile is six percent (6%) and over the ninetieth percentile is the maximum of seven percent (7%). The converse with regards to reducing a student's grade from all other measures based upon their MFAT test performance is: fortieth to fiftieth percentile is a three percent (3%) reduction; thirtieth to fortieth percentile, a four percent (4%) reduction; twentieth to thirtieth percentile, a five percent (5%) reduction; tenth to twentieth percentile a six percent (6%) reduction, and less than the tenth percentile, a seven percent (7%) reduction.

CONCLUSION

We are genuinely excited about how our colleagues, in all of the represented disciplines, were willing to come together and work for the "common goal" of helping to make sure our students at Northwest "measure up" to the challenge of performing at their very best on a nationally-normed outcomes measurements exam like the Major Field Achievement Test in Business.

We have now put into place our suggestions for continuous quality improvement, not only for our initial study of improving the scores of marketing majors in finance, but all of our scores in all of our majors in all of the categories. Now, the "true test" will come. These policies discussed in this research paper will go into effect this Fall 2006. Will they work? Will they be effective motivation for the students to "do their best?" Is our "review concept" something the students will actually utilize? Have we made a difference in our research efforts to make a difference in the outcomes of not only improving marketing majors scores in finance, but our student scores overall?

Only the outcomes can answer these questions. That is why we have entitled our paper as the Major Field Achievement Test in Business - Guidelines for Improved Outcome Scores? - Part I, because we hope we can answer these questions with improved outcome scores and potentially a guideline for all participating schools in the MFAT in business test to improve their scores thus raising "the bar" and collaterally, if not directly, promoting the concepts and ideals of Continuous Quality Improvement! (Please stay tuned for Part II - Major Field Achievement Test in Business - Guidelines for Improved Outcome Scores - [It Worked?] Part II)

ENDNOTES

¹ "Institutional Assessment Indicator Mean Score Distributions and Northwest Missouri State University's Departmental Summary Assessment Indicators in Finance, Marketing and Overall, Educational Testing Service - Major Field Achievement Test in Business", Princeton, NJ.

² "Comparative MFAT Results for Booth College of Business and Professional Studies, Northwest Missouri State University", prepared by Dean Tom Billesbach.