



## **A University's Quest to Motivate and Prepare Students for the Major Field Test (MFT) in Business**

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### **ABSTRACT**

This article reviews a historical account of an undergraduate business school's effort to incorporate, review and improve student performance on the Major Field Test in Business. This effort was designed to support business knowledge and skill attainment – and to support programmatic assessment and accreditation efforts. The process includes interviews, review of literature, and expert opinions to increase students' overall performance.

Keywords: Accreditation, "Business Students", "Major Field Test"

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### **INTRODUCTION: IMPLEMENTING THE MAJOR FIELD TEST IN BUSINESS**

This article includes a School of Business located in a four-year Historically Black College and University – in a South Georgia community. The University has been a catalyst for change since its founding in 1903. The School of Business was developed in 1954 and continues to serve the business education needs of its population. With more than 6,000 students enrolled, the progressive institution offers certificates, associates, bachelors, master's and specialist degrees. The university is currently represented by three colleges – The College of Arts and Humanities, The College of Business, Education, Professional Studies (formerly, The College of Professional Studies) and The Darton College of Health Professions. The study body consists of 4,614 (72%) females and 1,757 (28%) males. Most of the students are enrolled in a wide array of undergraduate programs. Enrollment in the graduate and specialist programs continues to grow (Fact Book, 2018-2019).

Approximately 512 students –including graduate and undergraduate students were enrolled in the university's School of Business in 2018 (Fact Book, 2018-2019). The School of Business is currently accredited by the Southern Association of Colleges and Schools, and the Accreditation Council for Business Schools and Programs (ACBSP) – with re-affirmation expected in 2024. The current majors in the School of Business include accounting, management, management information systems, marketing, supply chain and logistics and technology management. The School of Business also includes a management concentration in healthcare administration.

The standards and criteria for ACBSP accreditation include leadership, strategic planning, student and stakeholder focus, measurement and analysis of student learning.

To support the accreditation efforts and to measure student learning, the School of Business utilizes a series of direct and indirect measures. The Educational Testing Services' Major Field Test in Business (MFT-Business) is the standardized direct measure of the students' business knowledge in the School of Business.

From 2013 - 2014, the Major Field Test in Business was administered to seniors from 489 colleges in the United States (Education Testing Service, 2015). Martell, 2007, reported that 46% of business programs surveyed reported using the MFT-Business at their institution. The test has gained popularity because of its use to measure student learning outcomes – while gathering comparative data on business specific subjects from students in the United States and around the world (Educational Testing Service, 2015). Outcomes from the test can be used for curriculum changes and to determine whether the needs of students and stakeholders are being met. The test is also useful to provide information to facilitate the development of appropriate goals and educational programs, and to enhance accountability in education. The business test has five key objectives:

1. Measure the students' knowledge of the multidisciplinary subject matter representative of undergraduate business education.
2. Provide information to students regarding their level of achievement.
3. Provide information on student achievement to faculty to enable institutions to assess their performance relative to a specific mission and objectives.
4. Provide information to facilitate development of appropriate goals and educational programs.
5. Strengthen the accountability of undergraduate business education (Educational Testing Service, 2015).

The Major Field Test in Business was first administered nationally in 1990. Current subject areas for the Major Field Test in Business include accounting (15%), economics (13%), finance (13%), information systems (10%), legal and social environment (10%), management (15%), marketing (13%), quantitative business analysis (11%) and international issues (which overlap and draw from other content areas). The test range of score is 120 to 200 – with approximately 120 test questions. Cohort data is available by institution. National comparison data is also available to participating colleges and universities. (Educational Testing Service, 2021).

During the 1996 – 1997 term, the School of Business incorporated the MFT (Major Field Test) in business to measure business skills and knowledge attained by students nearing graduation. The test was implemented upon the recommendation of the Southern Association of Colleges and Schools (SACS) – one of the university’s accrediting bodies. The test was also used to support ACBSP accreditation requirement – relative to learning goal assessment. The MFT in Business replaced the GRE (Graduate Record Examination) which did not specifically measure business skills. Also, the GRE was used as a graduate entrance test in various other disciplines.

From 2012 – 2014, the School of Business identified the following learning goals and objectives for its programs:

#### School Learning Goals:

- Goal 1: Effective Communicators
- Objective 1: Oral Communication. Prepare and deliver professional and effective quality presentations, incorporating appropriate technologies, on business topics.
- Objective 2: Written Communication. Prepare professional quality business documents and/or memos summarizing their analysis of a business issue.
- Goal 2: Ethical and Analytical Business Problem Solvers
- Objective 1: Systematically apply decision-making models to identify business problems, generate and evaluate solutions, and propose a feasible solution.
- Objective 2: Understand the nature and applications of ethical behavior in healthcare organizations.
- Goal 3: Technology Competent
- Objective 1: Demonstrate proficiency with word processing, spreadsheet, database, data communication, internet, financial calculations and presentation software.
- Goal 4: Business Professionals
- Objective 1: Exhibit appropriate professional behaviors in an actual work environment, including: appropriate dress, punctuality, and demeanor.
- Objective 2: Prepare students for professional jobs with a quality resume’, application letter and interview skills.
- Objective 3: Demonstrate effective team behaviors.
- Goal 5: Globally and Environmentally Aware
- Objective 1: Our students will understand global business frameworks, models, core concepts and best practices in a global environment.
- Objective 2: Our students will analyze global potential through country analyses, including: political, cultural, economic, legal, and strategic approaches.
- Objective 3: Our students will practice environmental conservation and awareness.

The MFT-Business test is administered by the university’s Testing Center. The test is administered twice annually (fall, spring). The School of Business encourages registration and completion of the test at least one semester prior to graduation to assure timely posting and processing of scores. Also, this timeframe allows students to complete relevant business courses and attain business knowledge and skills for success on the MFT-Business.

On average thirty to forty students register for the examination (based on average enrollment in the related capstone course sections) in recent semesters. As a means of monitoring compliance and progress, a copy of the students’ scores is sent to the School of Business from the University’s Testing Center.

To encourage students to do well on the test, the School of Business began exploring strategies and policies to enhance this effort. In the spring of 2002, a policy was developed by the School of Business to increase the student scores on the MFT in Business. Student results demonstrated that scores ‘not inspected were scores not respected.’ Students were discouraged from simply “taking the test.” Components of the initial policy for the School of Business were as follows:

- All School of Business students with 90 hours or more will be required to register for and take the MFT in Business during the semester prior to taking MGMT 4199, Business Policy. Students are responsible for preparing for the MFT in Business. Faculty can support the students by offering an overview of the areas covered on the exam.

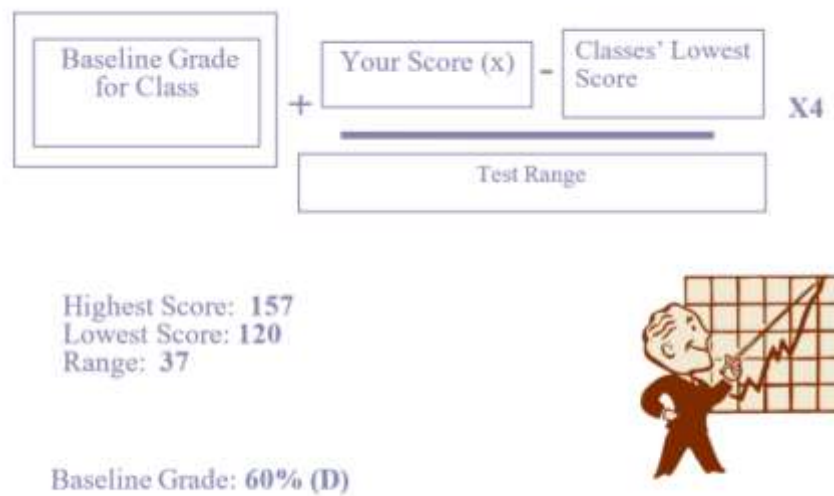
- MFT in Business scores for each School of Business student will be incorporated into the Business Policy course, MGMT 4199 final grade at a weight of 10%. A MFT in Business score at the School of Business 95<sup>th</sup> percentile or more would constitute 100%; 90<sup>th</sup> – 94<sup>th</sup> percentile, 92%; 80<sup>th</sup> – 89<sup>th</sup> percentile, 85%; 70<sup>th</sup> – 79<sup>th</sup> percentile, 75%; 60<sup>th</sup> – 69<sup>th</sup> percentile, 65%, etc.

To enhance students’ performance on the exam, faculty –led review sessions were also proposed as a part of the initial policy. Two weeks prior to the exam date, examinees in the School of Business were to attend and participate in 75-minute content subject preparatory sessions (taught by faculty members teaching in the applicable discipline area). The sessions were planned for a six-day schedule. Online review sessions were also discussed to ensure maximum compliance and flexibility. Faculty–led review sessions solely for MFT in Business review were not implemented.

From 2012 – 2014, campus-wide student Study Tables (faculty-led tutoring) were initiated. The Study Tables included major course subjects including accounting and economics. Business students were encouraged to participate in the Study Tables. Studies were conducted on the outcome and benefit of the Study Tables. On average, course grade improvements were noted in Study Table subject areas. Specific increases in the MFT- Business were not noted during the time period. From 2006 – 2013, the range of business students that scored near or above the national mean score of 150 was not optimal. Major score rankings (from highest to lowest) were as follows: Technology Management, Supply Chain and Logistics Management, Accounting, Marketing / Business Information Systems and Management (including the Healthcare Concentration). Some research has been inconclusive about the role of the student’s major in test outcomes (Black and Duhon, 2003). While other research has shown significant positive results for finance and accounting majors (Black and Duhon, 2003). Bielinska-Kwapisz, Brown, and Semenik, 2012, suggested that major selection and high MFT-Business performance may be controlled and related to grade point average.

During the time of the exam, the MFT score constitutes 10% of the student’s final course grade – based on an adjusted range of scores of peers in each class. The student scores can range from 120 – 200 points. A formula and sample for computing a student’s final grade using the MFT Score appears in Figure 1.

Figure 1 – Formula for the Calculation of the MFT Score



Sample: X = Student’s Score of 145

Business Policy MFT Grade = 60 + 145 – 120 = 85 / 37 = 2.29 x 4 = 9.189

Baseline Grade		Student’s Score (X)		Lowest Class Score		Range Of Scores					Percentage Points Earned (of 10 Maximum) (Y)
60	+	145	-	120	=	85 / 37	=	2.29	x	4	= 9.189

Note: The 9.189 points will be added to other course percentage points to determine the student’s final course grade.

To support optimal performance on the test, the School of Business discussed the adoption of comprehensive, standardized, departmental final exams for accounting, economics, and other MFT-Business related courses. These exams were to be developed by discipline area faculty in line with MFT coverage and type of questions. Major components of the policy were included in discussions between all faculty advisors and their advisees. Students were to

acknowledge understanding of the policies by their signature on a copy of the policy memorandum. Selected components of the standardized final were implemented –such the standard percentage weight of 30% in all major courses – with faculty discretion relative to specific content.

All undergraduate majors in the School of Business are required to take the MFT-Business: Accounting, Healthcare Management, Business Information Systems, Management, Marketing, Supply Chain and Logistics and Technology Management. The School of Business aims to review learning outcomes, revise curriculum, support accreditation and enhance students' overall knowledge and skills in business. Measures to increase student performance to support learning outcomes remains an active goal for the School of Business.

## THEORETICAL FRAMEWORK / REVIEW OF LITERATURE

Various theories have examined student motivation and testing behavior. Internal and external motivators have been focal points. A review of motivators is especially useful with low stakes exams that may not be taken seriously by students (Breslawski, 2011). Such a review is especially useful when low scores impact the values of test results that may be useful for continuous quality improvement.

In a study of 140 students post – examination, it was determined that students were motivated to the MFT – Business – yet not intrinsically. The study results underscored the need for external motivators (Breslawski, 2011). Additional research has also shown that male gender / question type (Buckless, Lipe, Ravenscroft, 1991); high grade point average (Allen and Bycio, 1997), learning aptitude (Bycio and Allen, 2007; DeMong et al., 1994) and adequate preparation by major (Contreras, Badua, Chen and Adrian, 2011) are all factors that may play a role in test results.

The Expectancy Value Model, which includes cognitive competence, difficulty, task value and affect also illuminates factors that may influence the results of standardized examinations. Task – value and motivation can be directly linked. The other factors may be more readily linked to innate qualities of performance and may be predicted by academic ability, disposition and cognitive ability (Tempelaar, Schim van der Loeff, Gijsselaers, and Nijhuis, 2011).

## METHODOLOGY

To gain further insight into ways to increase student scores on the MFT-Business, suggestions were sought from business faculty and other campus - based faculty members. Five School of Business faculty members returned a flyer placed in their mailboxes requesting suggestions to improve students' MFT scores. One faculty e-mail response was also received.

A review of literature was subsequently conducted to incorporate strategies used in other institutions and via research reports. Lastly, a telephone session / webinar was held with an Educational Testing Service representative / expert on effective MFT strategies to promote student success.

## SUGGESTED BEST PRACTICES

Summary results of the motivation and preparation strategies by sources are displayed in Tables 1 - 3:

**Table 1 – Suggested Best Motivation and Preparation Strategies for the MFT-Business**

Motivation and Preparation Strategies <i>*Positive Outcome/ Usage by School of Business</i>	Source	Comments
*Conduct faculty pre-sessions to promote “curriculum coherence.”	Ewell and Lisensky, 1988	Objectives, design and delivery should match curricular intent.
*Inform students of the importance of the MFT-Business, personally and for the School of Business	School of Business / Campus Faculty	Explain how the MFT-Business relates to specific majors and supports learning outcomes and accreditation activities. This was a strong point – yet this process needs to be continued without lapses.
Offer preparation workshops at flexible hours. Consider online review modality.	School of Business/ Campus Faculty	
Review various types of teaching and learning modalities to support test – taking (traditional and online)	School of Business / Campus Faculty	Determine ideal methods. Online delivery has not been supported as the most effective technique to increase student scores.

*Consider non-traditional, accelerated formats for some courses.	Herzer, 2001	The School of Business incorporates hybrid, A-Term and B-Term Courses.
Consider constructivist teaching – discussion / knowledge integration vs. traditional – memorization.	Scott and Conrad, 1991	
*Set an institutional goal – e.g., to increase percentile rankings.	Meredith College, 2005	The School of Business developed a strategic plan to increase student scores at modest incremental levels.
*Promote learning outside the classroom via clubs, etc. *Incorporate cooperative learning – active engagement vs. traditional learning. *Increase work experience to increase MFT-B score.	Glenn, 2011 Miller and Groccia, 1997 Cox, Chen, Totten, 2011	Higher scores were demonstrated on the Watson-Glaser Critical Thinking Test due to active engagement and cooperative learning.
Consider factors such as instructors’ skills, the length of the (intensive) course, the students’ intellectual development and age, the students’ responsibilities, course subject, time of year and other student factors.	Scott, 1994	
Consider making preparatory workshop(s) mandatory as a graduation requirement.	School of Business / Campus Faculty	

Table 2 – Suggested Best Motivation and Preparation Strategies for the MFT-Business

Motivation and Preparation Strategies <i>*Positive Outcome/ Usage by School of Business</i>	Source	Comments
*Establish study teams and groups. *Incorporate instructor led collaborative study groups.	Strang, 2013	Instructor led collaborative study groups yielded positive outcomes for MFT-B Testing the literature.
Post a web page with information on planned workshops and review information.	School of Business/ Campus Faculty	
*Use previous test results to make curricular changes and enhancements	Rackley, 2011	Test results are reviewed annually.
*Make sure all objectives and specific outcomes match appropriate courses.  Align business curriculum with the MFT-Business either in course content, course selection or both. Upper-level courses in an area (ex. Management) may not enhance MFT-Business scores or may be misaligned.	Academic Assessment at BYU, 2005  Word, Rook, and Lancaster, 2011	e.g. -Objective: Comprehend issues related to money value -Course: FINC 3121 Managerial Finance/FINC 3162 Corporate Finance -Outcome: Understand risk and return relationships, domestic securities markets, time value of money, security valuation.
*Make sure that all faculty and students are aware of all of the subjects and structure of the Major Field Test - Business (multiple choice questions)	Educational Testing Service, 2015	Subjects include accounting, economics, quantitative business analysis, management, finance, marketing, social and legal issues, information systems, international issues. Sample questions are available at <a href="http://www.ets.org">www.ets.org</a>
Seek corporate gifts, such as an “IPAD” for student high scorers.	Rackley, 2011	
Provide monetary awards, publicly recognize high scorers.	Dobbs, and Nonis, 2002	
Give classroom bonus points for test preparatory workshop attendance or other for test outcomes.	Bielinska-Kwapisz, Brown, Semenik, 2012	Extra credit points can be used to incent the student’s best

	Bycio and Allen, 2007	performance on the MFT-Business and increase scores.
*Allow 10 to 20% of grade in a capstone course to be based on MFT –Business results.	Bycio and Allen, 2007 Terry, Milles, Rosa, and Sollosy, 2009	Ten percent grade incentive is strong enough to motivate students and twenty percent increases percentile ranking by five points.
Conduct a MFT-Business Intercollegiate Competition – and reward winner.	School of Business / Campus Faculty	
Recruit a diverse student body for academic programs.	Contreras, Badua, Chen, and Adrian, 2011	Males scored highest on tests. Multiple choice tests were more favorable for male students in the literature.
Revisit test taking skills in all majors. Standardize practices and rigor across majors, to increase retentive, analytical and quantitative skills regardless of major.	Contreras, Badua, Chen, and Adrian, 2011	Reports show that some majors are more accustomed to test taking, information retention and computation.

Table 3 – Suggested Best Motivation and Preparation Strategies for the MFT-Business

Review factors such as levels of student self-efficacy and topic coverage, preparation (question and problem type) by major.	Contreras, Badua, Chen, and Adrian, 2011	
*Require an information system and an international business course for all business majors.	Word, Rook, Lancaster, 2011	International issues relate to all subjects on the MFT-Business.
Discuss the need to change elective requirements to improve student performance on the MFT-B in general and in specific test areas.	Word, Rook, Lancaster, 2011	
Use a competency-based graduation model to allow for early graduation - whether in 2 or 6 years.	Glenn, 2011	
Boost business specific analytics.	Barboza and Peske, 2012	
Balance group work and individual work for the development of essential business skills.	Glenn, 2012	
*Allow for retake of deficient business courses (less than grade of C).	Black and Duhon, 2003	
Develop integrated team-taught courses.	Glenn, 2011	Team-taught courses are a characteristic of a highly ranked colleges.
*Include liberal arts education for business students to gain contextual knowledge and reasoning skills.	Glenn, 2011	
Work to increase test scores with student and faculty mentors,	Black and Duhon, 2003	

## DISCUSSION

While progress on the MFT-Business will continue to be monitored annually, some strategies to improve student scores, as reflective outcome measures of knowledge gained, have been incorporated / explored by the School of Business. The student scores are being monitored within the institution and compared with the regional / national averages. School type is also being used as a variable for consideration. Of particular interest is the role of innate characteristics such as academic ability and gender (male scores increase due to multiple choice question type). Lumsden and Scott, 1987, reported that male students scored higher on multiple choice questions, while female students scored higher on essay questions. The Educational Testing Service reported that men scored 3.41 points higher than female students (Black and Duhon, 2003). The MFT-Business is constructed with multiple choice questions. The population of students in the College of Professional Studies / School of Business was primarily female – 68.6% -1244 of 1814 students in 2018 – 2019 (Fact Book, 2018 -2019). Test construction and test taking skills may also be useful to the student population. Recruitment measures to

diversity the academic programs may also be useful. Various literature reviews showed transfer students as high-test scorers. The School of Business has numerous articulation agreements to support student transfers to the School of Business for advanced degree completion.

High grade point averages, SAT/ACT scores, perceived test value, and major type were also factors associated with success on the MFT – Business. Since major affiliation may be largely based on aptitude / student specific qualities, changes in advisement and recruitment and retention processes may be warranted (Contreras, Badua, Chen, and Adrian, 2011). Bycio and Allen, 2007, reported better MFT-Business scores among accounting and finance majors. The students' majors also mirrored their grade point averages.

In a session with a representative from the Educational Testing Service (ETS), School of Business faculty members were encouraged to provide incentives for students to do well on the MFT. However, faculty were discouraged from awarding points regardless of a student's performance level. Instead, faculty were instructed to award credit to high achievers or recognize students during honors day or with a special ceremony – while deducting points (e.g., up to ten) from students scoring below the class mean /average score (Rackley, 2011). The point deductions could reduce a student's overall average and letter grade – if the test is not taken seriously.

Even so, the ETS representative indicated that the use of the MFT scores as a sole indicator for graduation was not supported (and was strongly discouraged) by the Educational Testing Service. Results could be used to make curricular changes or improve the student learning process. The ETS representative also stated that summary reports for each institution were available for review, analysis and comparison with national scores (Rackley, 2011). MFT-Business results should be supported with curriculum information, student quality data and perceived faculty performance differences (Word, Rook and Lancaster, 2011).

The individual and composite scores could be obtained to determine individual and subject area strengths and deficits. School faculty presumed that the incorporation of the MFT-Business test score into the students' final grade by the School of Business would encourage students to do more than simply "take the test". Upon review, faculty members realized that "giving points for simply taking the test" may have been a disincentive for the students to do their best on the MFT-Business. Lenient grading may allow weaker students to continue in the program and may not measure student knowledge well. In some cases, higher student grades may contribute to lower MFT-Business results (Word, Rook, Lancaster, 2011). However, Bycio and Allen, 2007 reported that many business programs provide students with extra credit to take the MFT-Business. Bielinska-Kwapisz, Brown and Semenik (2012) reported the use of extra credit to incentivize the students' best effort on the MFT-Business.

It was deemed essential that students be focused and attentive to the testing process in order to ensure a successful outcome. Further, course grade distributions may reveal differences in course rigor among faculty and disciplines. Such variations may influence student preparation and outcomes on the MFT-Business. The expectation that students would perform better in their major / concentration areas was not always supported (Word, Rook, Lancaster, 2011). In other research, instructor led collaborative study groups showed positive results (Strang, 2013). The results may be influenced by student quality, curriculum and faculty grading policies (Word, Rook, and Lancaster, 2011).

Also of note was the timeframe in which essential courses such as accounting, economics, and finance may have been taken. Perhaps, such fundamental courses were completed at the end of the students' second year or the beginning of the student's third year. Vital concepts may not have been retained and integrated into the learning process. Efforts to identify course and student deficits, structure proper foundations and integrate knowledge throughout the students' matriculation were heralded as essential.

The ETS representative felt that students should not "have to" study for the MFT – but should have developed skill sets and critical knowledge in the business field (Rackley, 2011). Therefore, the students should be able to apply the key components and skills set (such as problem solving) while taking the test. Review of major subject areas may also be an appropriate measure. Some business colleges have even included the flash card study system (for the content driven test). Some research on review and practice sessions has shown insignificance in benefiting test outcomes (Cox, Chen and Totten, 2011). Students and faculty from the School of Business participated in Study Tables in the areas of accounting and economics. Results of the Study Tables showed increases in course grades. The impact of the Study Tables on the MFT-Business has not been documented.

In 2011, the Business faculty were informed that the MFT in Business would be updated to a newer version. The primary changes were the inclusion of an international business component and subject weight variations. For the School of Business, historical documents such as scores from 2006 – 2013 remained available through the Educational Testing Service for individual, cohort, annual, institutional, and national comparisons and analysis. Other available results mentioned by the ETS representative were the Departmental Roster, Total Scores and Subscores for All Students, Departmental Summary (including total scores and subscores with frequency and percentage distributions), the Departmental Summary Assessment Indicators (with an average of correct test questions in each content area for the group), the Demographic Summary and the Individual Student Report - with Total and Subscores for each student tested in the School of Business (Educational Testing Service, 2011a; Rackley, 2011).

Perspectives of School of Business faculty, academicians, relevant literature and a testing expert added much insight into ways to improve scores and outcome on the MFT-Business. Ongoing feedback from students should also add additional knowledge and strategies to improve MFT-Business scores. When students do well, faculty can be encouraged that knowledge has been imparted and that business skills have been gained by students. Such measures are also becoming increasingly important for accreditation, strategic planning, institutional effectiveness, performance funding, continuous process improvement and for stakeholders (Educational Testing Service, 2011b).

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