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Improving Student Effort on a Learning Outcome Assessment: Benchmarks, Options, and Results

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Appalachian Research in Business Symposium (ARBS) 2017 PROCEEDINGS 4th Annual Conference Volume II

March 30-31, 2017



**Appalachian State University
Boone, NC**



**Edited by:
G. David Shows and Pia A. Albinsson
Appalachian State University
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2017 Appalachian Research in Business Symposium

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It is our pleasure to present the *Proceedings of the 4th Annual Appalachian Research in Business Symposium* from the 2017 conference held March 30-31 hosted by the Walker College of Business at Appalachian State University. The Appalachian Research in Business Symposium provides a venue for presenting new research, discovering contemporary ideas, and building connections among scholars at Appalachian State University, Eastern Kentucky University, East Tennessee State University, and Western Carolina University.

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IMPROVING STUDENT EFFORT ON A LEARNING OUTCOME ASSESSMENT: BENCHMARKS, OPTIONS, AND RESULTS

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Introduction

Mission-driven accreditation standards were established by AACSB in 2003 and updated in 2013, and these standards required accredited business and accounting programs to establish and assess student learning outcomes. This approach was a major change for AACSB accreditation, so beginning in 2003 universities were given a few years to design and implement their Assurance of Learning (AoL) programs. The result has been an array of measures to assess student learning outcomes. All too often, however, the AoL programs were stand-alone efforts to comply with the standards for assessment and were not linked to meaningful continuous improvement processes.

Assessing basic business content knowledge gained by students continues to constitute an important element for AACSB accreditation. The challenge for universities is how best to measure content knowledge. While there are a variety of alternative approaches, many universities use the Educational Testing Service's Major Field Test of Business (MFTB) as a component of their AoL programs. Between September 2013 and June 2015, 563 domestic institutions administered the MFTB to a total of 68,594 students (Educational Testing Service, 2015). The MFTB is a nationally-normed assessment instrument that enables business schools to compare their students' content knowledge with that of students at other universities.

Despite widespread use of the MFTB, concerns are sometimes expressed regarding the validity of the MFTB data. At issue is the extent to which students taking the test are sufficiently engaged and serious about doing their best, because if not, the test results cannot provide a reasonable estimate of students' true knowledge and have little or no value as an assessment tool.

Question: Is it possible to increase student motivation on a learning outcome assessment test and get results that are closer to each student's true score?

Literature Overview

Black and Duhon (2003) describe 17 possible uses of standardized test scores such as the MFTB, beginning with the most obvious and important category of use – program assessment. The authors suggest that the most meaningful, single statistical result from the MFTB is the percentile level associated with the institution's overall mean score on the test. These percentiles enable the faculty and administration to compare their students' achievement with those of either the entire database of schools participating in the exam or a select group of benchmark schools.

Mirchandani, Lynch, and Hamilton (2001) compared total score on the MFTB with GPA and found that while correlated, each measure provided useful information for outcome assessment. The authors contend that standardized tests such as the MFTB have greater external validity than GPA in assessing student learning.

Bush, Duncan, Sexton, and West (2008) describe their institution's use of the MFTB over a 15-year period, including valuable information that was gleaned from the test and was used to make positive changes within their programs. They also pointed out that the way the test is administered and the degree to which students are motivated to do well on the test are major factors in obtaining accurate results.

The Major Field Test in Business is not without its critics. Green, Stone, and Zegeye (2014) claim that the MFTB provides no direct evidence of student learning and does not allow for any meaningful comparisons with other institutions, referring to the test as "a pretend solution."

Obviously, there are different points of view about the usefulness of standardized tests such as the MFTB. However, many schools still use these types of tests, and unless students can be encouraged to put forth their best effort, the scores will have little or no value.

Methodology

This paper reports the experience of one AACSB-accredited business school regarding its attempts to secure meaningful assessment of student knowledge. The use of an in-house knowledge test developed by members of the school's faculty was questioned by an AACSB visiting team as being inadequate due to lack of national norming. The school's response was to switch from the in-house test to the Major Field Test in Business (MFTB). Beginning in the summer of 2013, the MFTB was administered to every graduating business student in the capstone business strategy class. In order to provide some incentive for students to give effort on the test, students' MFTB score counted five percent (5%) of their total grade in the class.

After administering the exam for more than a year, the school's faculty expressed concerns that many students were still not giving their best effort on the test. The faculty decided to employ benchmarking and check with other business schools to see if they shared these concerns, and if so, what steps they had taken to address the issues. The results of the canvas of other business schools led to changes in the administration of the MFTB and changes in the student scores. The

results of the canvas of schools, the changes implemented, and pre-change/post-change scores on the exam are discussed in this paper.

Results and Implications

Canvas of benchmark business schools. Twenty-nine business schools were contacted and asked to participate. Twenty-six universities responded (including the canvassing school). The list of participating schools is shown in Table 1.

Appalachian State University	Radford University
Arkansas Tech University	Southeast Missouri State University
College of Charleston	Southern Illinois – Edwardsville
Eastern Kentucky University	Southern Indiana
Florida Gulf Coast University	Stephen F- Austin State University
Illinois State University	Tennessee Tech University
Indiana State University	University of Arkansas - Little Rock
Jacksonville State University	University of Central Missouri
Lamar University	University of North Florida
McNeese State University	University of South Alabama
Missouri State University	UT – Chattanooga
Murray State University	University of Tennessee at Martin
Northwestern State University	University of West Florida

Table 1. List of Business Schools Included in the Canvas

Canvas questions included:

1. Does your school use the MFTB? If so, are students required to take the exam?
2. Is the MFTB given in association with the capstone business course?
3. Does the exam score count for a portion of students' grades? If so, how much?
4. Does your school have a minimum score students must achieve on the exam? If so, what happens if a student fails to achieve that minimum?
5. Is there any type of reward given to students who excel on the exam?

Results of the canvas. Results of the canvas of benchmark schools is presented in Table 2. Twenty-five out of the 26 business schools use the MFTB, and most require their students to take the exam. The manner in which the exam score affects students' grades in the course with which they are associated varies from 10 percent of the course grade based on exam score down to a one-point bonus added to one's course grade for merely taking the exam. Three schools indicate that they require students to achieve a minimum score, but none uses procedures that keep failing students from graduating. Only four schools report any formal recognition or reward for student who excel on the exam.

Change in the administration of the MFTB. Based on the results of the canvas, the business faculty made the decision to change the point within the semester when the MFTB is administered. One of schools canvassed suggested that students give greater effort on the exam if it is given earlier in the semester, before students are burned out. It was further speculated that if

the exam is given at the end of the semester, when the majority of each student's course grade has been determined, some students might conclude the portion of their grade determined by their MFTB exam score is not sufficient to significantly impact the letter grade the student will receive in the course. On the other hand, if the exam is given earlier in the semester, students may be more eager to earn all possible points to enhance their overall course grade. As a result of this information, beginning in the spring of 2015 the MFTB exam administration was moved from the last week of the semester to the second week.

Administration of MFTB	N	%
The MFTB is administered	25	96%
Students required to take the exam	23	
The exam is optional	2	
Administered in connection to the capstone course	22	85%
Exam score counts as a portion of the students' grade	19	73%
10 percent of grade	7	
5 percent of grade	3	
Bonus added to grade	5	
Varies by instructor	3	
Uncertain	1	
Minimum exam score students are required to achieve	3	12%
Score of 75 percent correct	1	
Score of 70 percent correct	1	
Score at the 10 th percentile (e.g., 68 percent correct)	1	
Formal recognition for high scores	2	8%
Gift/scholarship for high scores	2	8%

Table 2. Summary of MFTB Administration Practices

Comparison of MFTB results before and after the change. Test scores for the five semesters before the change in administration (summer 2013 to Fall 2014, N=248) were compared with the five semesters after the change (spring 2015 to summer 2016, N=281). Results are presented in Table 3.

MFTB total scores. Overall MFTB student scores improved after the change from the 51st percentile to the 68th percentile. Increases were also seen for each of the nine subject-area scores.

Student time spent taking the test. Students spent 15 minutes longer on the exam after the change in administration, and the percentage of students submitting their exams in under an hour decreased from 22.6 percent to 8.6 percent. Both of these results suggest that many students took the exam more seriously and gave more time and effort after the change in administration.

	Pre-Change		Post-Change	
	Mean	Percentile	Mean	Percentile
Overall MTFB Score	151.2	51 st	154.0	68 th
Accounting	42.9	58 th	43.2	60 th
Economics	40.4	50 th	41.4	57 th
Management	58.3	69 th	59.1	74 th
Quantitative Business Analysis	36.3	44 th	38.7	64 th
Finance	43.7	58 th	43.9	59 th
Marketing	55.0	41 st	58.8	68 th
Legal & Social Environment	56.3	24 th	64.0	76 th
Information Systems	53.2	46 th	55.4	78 th
International Issues	42.5	63 rd	44.0	72 nd
Mean time spent on exam	1:18		1:33	
Percentage of student times < 1hr.	22.6%		8.6%	

Table 3. Scores and Time Spent on the Exam

Conclusions

Given the importance of the MFTB for both AoL and continuous improvement, it is vitally important that students give enough effort to render their scores meaningful. Based on both the findings of this study and the lessons learned from the canvas of benchmark schools, it appears that a combination of early administration and a portion of a course grade linked to students' exam performance is associated with stronger overall exam results.

References

- Black, H. T., & Duhon, D. L. (2003). Evaluating and improving student achievement in business programs: The effective use of standardized assessment tests. *Journal of Education for Business*, 79(2), 90-98.
- Bush, H. F., Duncan, F. H., Sexton, E. A., & West, C. T. (2011). Using the Major Field Test-Business as an assessment tool and impetus for program improvement: Fifteen years of experience at Virginia Military Institute. *Journal of College Teaching & Learning (TLC)*, 5(2).
- Educational Testing Service (2015). 2015 Major field test for business comparative data guide. Retrieved from https://www.ets.org/s/mft/pdf/acdg_business.pdf.
- Green, J. J., Stone, C. C., & Zegeye, A. (2014). The Major Field Test in Business: A Solution to the Problem of Assurance of Learning Assessment? *Journal of Education for Business*, 89(1), 20-26.

Mirchandani, D., Lynch, R., & Hamilton, D. (2001). Using the ETS major field test in business: Implications for assessment. *Journal of Education for Business*, 77(1), 51-56.