

Assessment with ETS Exams

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Abstract. In this paper, we present our findings resulting from our experience with piloting the Educational Testing Service (ETS) Major Field Test to a sample of undergraduate and graduate students at a large public university. We find that piloting a standardized test that will be administered on a large scale has many merits, along with some potential problems. We summarize the measures our team took to decrease these problems and provide suggestions for other schools considering such pilot programs.

Keywords: Standardized tests, ETS, Pilot Test.

1. Introduction

Educational Testing Service (ETS) Major Field Tests (MFT) assesses students' mastery of the knowledge, principles, and concepts in a program they study. The Bachelor's Degree in Business test consists of 120 multiple-choice questions and the MBA test consists of 124 multiple-choice questions with half of the questions are based on short cases. The tests provide a convenient method to compare each student's performance to the performance of other students in a program. ETS also provides statistics on other institutions that use the test and hence the student performance in a program can be compared to the performance of students in other programs. However, to the extent that ACT or SAT scores are indicative of performance in these tests, schools with open admission policies may not be able to compare their performance with schools with higher admission standards. These schools, though, can track their performance over the years or compare their scores with schools that have similar admission processes.

In this study, we discuss the pros and cons of piloting the ETS Major Field Test before the actual administration based on our experience in a large regional business school in the Midwest. Pilot studies are useful since they allow for the methodology to be tested before the actual application to identify the potential flows. Pilot studies also build research skills of the parties taking part in the study. These studies also help with the decision whether the full scale research project should go forward (Haralambos, 2008).

We have administered the pilot test in three sections of our BBA capstone course and one section of MBA capstone course. A total of 107 undergraduate students and 27 MBA students took the test. We discuss the measures we took to motivate our students to take the exam, the issues we encountered in the logistics of the exams, and our recommendations for other programs planning to pilot this test.

2. Literature Review

2.1. Studies on the ETS Major Field Test

In their article, Mirchandani et al. (2001) study the ETS Major Field Test and the GPA of students as two alternative methods of measuring student learning outcomes. The authors argue that the test provides a cost-effective method of evaluation of student performance. ETS test reports provide scores of other institutions allowing schools to compare their performance to the performance of other schools. The test provides immediate assessment of student learning, eliminating the need to go through faculty committees. A

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disadvantage of the test is that the students who are generally better at taking standardized tests do well on this test, regardless of the level of their knowledge or skills on the program content. Mirchandani et al. (2001) find that GPA provides internal validity within the institution while the ETS test provides external validity.

Parmenter (2007) also recognizes the benefits of the test such as quick implementation and benchmark scores of other schools. He argues that the comparative data can be useful for administrators who need empirical evidence for funding decisions. Also, since the test questions are updated regularly by experts, they can be used as a benchmark for curriculum. However, the tests have the disadvantages of student apathy, additional fees required for detailed reports, delays between learning and testing, and not providing adequate faculty input. Parmenter (2007) suggests involving faculty to develop an exam that students would be required to take before enrolling in capstone courses.

Ward et al. (2010) study the relationship between the National Survey of Student Engagement (NSSE) items and the ETS Major Field Test and find that this test is a better measure of engagement as described in NSSE compared to GPA. The authors conclude that Major Field Test is a “valid external measurement of student engagement”.

2.2. Studies on Test Pilots

Haralambos (2008) argues that pilot studies have many advantages. For example, pilot studies allow researchers to develop methods to obtain the cooperation of the individuals they are studying. Pilot studies also enable researchers to develop the skills they need during the actual application. These studies allow the users to test whether the questions that are used make sense to the user. Pilot studies may also provide information necessary to decide whether the research should be fully undertaken.

Hulley et al. (2007) argues that pilot studies are “designed to evaluate the feasibility, efficiency and cost of study methods, the reproducibility and accuracy of measurements, and likely recruitment rates, outcome rates and effect sizes”. They show that pilot studies assist decisions about recruitment approaches, interventions, and measurements. Pilot studies can be used to provide data on the feasibility of measurements, the reactions of the subjects, the quality of the test material, and the methods to improve the actual study. Hulley et al. (2007) state pilot studies are useful “dress rehearsals” since seemingly well-designed research that looks good on paper can have many logistical and substantive flaws.

Kezar (2000) indicates that pilot studies “can help develop an experiential understanding that reshapes the final study in profound and important ways.” She argues that pilot studies are underutilized due to time and financial constraints. Within the hermeneutic circle framework, in order to develop an understanding of an issue, individuals need to have practical sense of the topic area.

3. Our ETS Pilot Experience

We piloted the ETS Major Field Test for Bachelor’s of Business programs in the BUS 4750 course at Western Michigan University Haworth College of Business. This is the capstone course in our Bachelor’s of Business Administration (BBA) program. In the three randomly selected sections of this course 107 students took the test, for a 91% participation rate. The Major Field Test MBA program was administered in one section of BUS 6990, the capstone course in our MBA program. 27 students took this test and the participation rate is 96%.

In our experience, piloting the test proved to have several advantages. First, there are many logistical requirements of administering the test that are worth experiencing before the test is applied at a large scale. These requirements are particularly important for large schools like ours. For example, Major Field Test Administration Manual (2007) states specific seating rules for the examinees. The students “must be separated on each side by a minimum of five feet (left and right), measured from center of answer sheet to center of answer sheet”. If the test is administered using an inclined seating arrangement, there needs to be a five foot separation between students at both the rear and front. There are also requirements on how left-handed students should be seated, how students will be directed to their seats and how the test administrators should keep a chart of the test takers. The detailed rules of Major Field Test related to closing the testing room, announcements that should be read before and after the test, distributing and accounting of test

materials, collecting test materials, and dismissal procedures should also be followed. Schools should also establish make-up policies and days for students who cannot take the exam on the scheduled date. The needs of the disabled students also need to be considered.

Second, the pilot enables institutions administering the test to develop an understanding of the extensive time commitments of planning and administering the test as well as the reports that need to be filed with ETS. For example, on the Supervisor's Report Form that needs to be sent to ETS, the supervisor needs to record the serial numbers of the test books received, used test books returned, and unused tests books returned separately. On the Supervisor's Test Administration Report Form, the supervisor should report the group and individual irregularities, alternative testing accommodations, and the possible test question errors.

Third, the pilot reveals that students need motivation to take and do well on these long tests. The undergraduate version of the test is two hours while the MBA version is three hours. In our pilot tests, we had members of the college Assurance of Learning Council give short speeches on the importance of the ETS Major Field Test in the classes the test was administered. Also, some of the faculty members administering the test added bonus points to the grades of students who took the exam. Although these measures resulted in a high participation rate, we believe the scores of the students should become a part of their program grade in order to ensure that they are motivated to do well in this long test. For example, the scores of test may constitute a percentage of the grade of the capstone course of the program. Alternatively, attaining a certain score from the test can be a graduation requirement. One issue that schools need to be careful about in incorporating test scores in program grades is that the actual scores may not be readily available due to the score equalization process for new tests. Consistent with the information on the ETS Major Field Test web site, preliminary scores of our students were available online within 10 days after ETS received the exams. However, these scores only showed the range of possible scores the students would earn after the score equalization process is finished. The precise score reporting took several months in our case.

Fourth, the cost of the test is another issue schools should consider when piloting the tests. Our cost for each BBA paper-and-pencil test was \$26 (for orders of 100 or more tests) while each MBA test cost \$31 (for 99 or less tests ordered). We also ordered one-year subscription for the Premium Report Package for a cost of \$700. This package includes all of the reports ETS provides. Other report options include the Item Information Report that shows the question-by-question analysis of the average student performance compared to the reference group, Design Your Own Analysis Service that provides individual demographic information, Custom Comparative Data Report that provides comparisons with schools the user has selected, and Subgroup Reports that provide data on smaller cohorts the user has identified. The basic reports are included in the test purchase. This report shows the individual scores of students, frequency distribution of reports, and the average scores for each subject area, and a demographic summary of all students.

Despite its costs, we recommend piloting the ETS MFT before the actual application due to the issues that may arise as we have described above. The pilot results also provide valuable data that can be used as a basis for further analysis with the actual application of the test.

4. Conclusions

In this study, we analyze our experience with piloting of the ETS Major Field Test at a large public university. We administered the undergraduate and graduate versions of the test for business programs in our capstone BBA course and MBA course, respectively. 107 students participated in the BBA test while 27 students took MBA test. We find that piloting this test before the actual application has several advantages. First, the pilot allows the administering institution to become have experience with the logistical issues of the test. Second, piloting enables institutions to experience the reporting and time commitment requirements of the test. Third, pilots allow the institutions manage student motivation issues when taking the test. Fourth, the schools can determine the true cost of the test and resulting reports with the pilot.

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