On-Campus Versus Off-Campus: A Comparative Analysis Of MBA Learning Outcomes For A Classroom-Based Program

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ABSTRACT

Both direct and indirect measures of learning outcomes provide data that can be used to improve learning. The research reports a study of an indirect measure of learning outcomes in an MBA program. The measure was a Post-Then format using a five point Likert scale. Thirteen courses were analyzed generating 107,440 responses over a 5-year period. Two research questions were addressed: Are MBA students learning as demonstrated by an improvement in learning outcomes? and, Is there a difference in learning outcomes for on-campus versus off-campus students? Results are presented and future research directions are offered.

INTRODUCTION

Distance education is not a new concept. As put forth by Plato long ago, learning occurs in the mind, independent of time and place (Tesone, Alexakis, & Platt, 2003). Although the term "distance education" has come to primarily mean on-line delivery systems, on-ground education offered off-campus preceded the web-based medium by several years. It continues to grow (Mujtaba & Preziosi, 2006). The comparative efficacy of programs offered in remote facilities has been questioned ever since universities first began offering courses somewhere other than their main campuses. Business schools in the United States were one of the first to broadly offer courses at university satellite campuses. The phenomenal growth in MBA programs in the last 15 years has furthered the efforts of higher learning institutions to reach out to students that do not and cannot live in proximity to the central campus. At the same time, students, employers, and governments that disburse money to pay for MBA programs have sought verification that the expenditures were sensible investments (Preziosi, Barnes, & Balloun, 1999). Concerns within the academy about the effectiveness of off-site programs have been met with calls for increased measurement of student learning outcomes (Kretovics & McCambridge, 2002). The various forms of distance education have become an accepted and expected alternative delivery system for MBA programs that have proliferated throughout the country (Cook, 2000). Nonetheless, the question remains in many business educators' minds: Is the level of learning equivalent in off-campus and on-campus MBA programs? The following study presents a comparative analysis of on-campus versus off-campus learning outcomes at Nova Southeastern University's H. Wayne Huizenga School of Business and Entrepreneurship in the Master of Business Administration program. The aim of the research was to evaluate the learning outcomes of students graduating from the weekend MBA program on the main campus versus those in off-campus locations.

LITERATURE REVIEW

Accurately assessing the learning outcomes of a particular classroom of students has always been a challenge for educators; however, it is an essential role (Mujtaba & Preziosi, 2006). With the increase of non-traditional educational modalities, such as off-campus and online classes, pressure has mounted for academic

institutions to document learning outcomes (Kretovics & McCambridge, 2002). A major shortcoming of the many institutions that have some sort of outcomes evaluation program in place is that their curricular assessment efforts do not take a holistic approach to planning (Slegna & Bantham, 2002). A traditional view of outcomes assessment in MBA programs has included the extent to which graduates: (a) secure a job, (b) find positions at respected company, and (c) garner an acceptable salary (Preziosi, Barnes, & Balloun, 1999). If graduate placement rates were high, then it was assumed that the MBA program was successful, especially if the companies hiring the students were well renowned and the salaries were above average. While employer reputation and employee salary level continue to be an acceptable approach for many traditional MBA programs, there is a growing need for other outcome measures. The other metrics are especially important in programs with non-traditional and alternative delivery systems whose students are usually already gainfully employed (Preziosi, Barnes, & Balloun).

On-Campus Versus Off-Campus Learning

The literature provides consistent indications of the relative effectiveness of off-campus programs. Spooner and his associates (1999) found that a comparison of outcome measures revealed no difference in the overall course means between on- and off-campus deliveries. Outcome measures for on-campus students versus off-campus students for two courses were examined, but no differences were found in the overall ratings. Kretovics and McCambridge (2002) affirmed the high quality of learning that could occur through off-site executive MBA education. Other researchers have gone further, suggesting quality off-campus instruction is not only comparable to what is provided on campus but can sometimes be even better by providing a level of creativity and energy that surpasses ongoing campus-based programs (McFall & Freddolino, 2000). In another study, the outcomes for a single course were very similar when comparing on-campus and off-campus (both classroom based) outcomes assessments (Mutjaba & Preziosi, 2006). Regardless of the learning outcomes development process, research suggests that there is a compelling need for business school administrators and faculty to compare on-campus and off-campus exit competences in MBA programs.

Another driving force for the development of a systematic approach to outcomes assessment is accreditation bodies (Preziosi, Barnes, & Balloun, 1999). Regional accrediting agencies have been including standards in the area of learning outcomes for a number of years. The Association to Advance Collegiate Schools of Business has shown a great deal of interest in the area, as exemplified by their conducting outcomes assessment seminars in recent years.

There are other forces at work causing business schools to devote resources to the measurement of learning outcomes. One of them is the need for more data that can enhance decision-making. Program improvement, faculty development, and budget allocations are just three areas where data about learning outcomes are being used. Programs and faculty that are seeking ways to improve because all these forces act upon the system to create needed change, accept the performance-based nature of the learning outcomes assessment movement. After all, many disciplines have been emphasizing performance-based approaches for use in the business world. MBA programs are now more aligned with performance-based thinking when they commit to a system for measuring (and managing) learning outcomes. The trend towards metrics has been especially true of learning in the affective and cognitive domains (Preziosi, Barnes, & Balloun, 1999).

Approaches For Assessing Student Perceptions Of Learning Outcomes

Self-report surveys are frequently used to assess student perceptions of a variety of educational dimensions including learning outcomes. For instance, they are used at Crowder College in Missouri as described by Hiigendorf (1998) who stated that self-report surveys were used there to collect data on a number of issues including "knowledge required." Astin (1987) suggested that students be asked to give their opinion of their learning experience. In a paper entitled *Effective Collaboration for the Twenty-first Century: The Commission and Its Stakeholders*, the North Central Association of Colleges and Schools recommends that self-reporting be developed to encourage discussion and improvement of curriculum (Commission on Institutions of Higher Education, 1998). Self-reporting was also used in a study of communication and critical thinking skills at the University of Missouri-Columbia (Li, Long, & Simpson, 1998). Seniors were asked to report their perceived gain in communication and

critical thinking skills using a Likert-type scale on a senior survey. The use of student-generated data concerning their learning outcomes also appears to be an acceptable approach. One study used the nominal group technique to create an inventory that was used to ask students to self-report their learning outcomes (Drew, 1998). Finally, self-report surveys are being used at institutions accredited by the Association to Advance Collegiate Schools of Business specifically to assess learning outcomes. Both the University of Colorado at Boulder and Duquesne University in Pittsburgh use self-report surveys for evaluating exit competencies (Palmer, 1999; Presutti, 1999).

Grades are often used as another measure of program effectiveness. However, there are indications that friendships, communication, and adversarial networks affect MBA student grades (Baldwin, Bedell, & Johnson). In a weekend MBA program, the quality of classmates may also affect grades and learning. Many executive MBA programs require students to have a certain number of years in a managerial position as a prerequisite. However, Kohn (2002) refuted the assumption that grades are an accurate assessment of student learning. He asserted that a review of the relevant research leads to the conclusion that grades are a real threat to excellence in the classroom. The contention draws its premise from a line of investigation that indicates testing is a poor indicator of student learning, even if most college grades are derived from test results (Antioch University Seattle, 2007).

RESEARCH METHODOLOGY

The study of learning outcomes was conducted at the H. Wayne Huizenga School of Business and Entrepreneurship (Huizenga School) at Nova Southeastern University using a Post-Then form of outcome measurement to determine if students report the same level of success whether they are on campus or in other off-campus locations. Online students were not included in the study. The study focused on two simple research questions:

1. Are our MBA students learning from their courses as demonstrated by an improvement in their learning outcomes?
2. Is there a difference in learning outcomes for on-campus students versus off-campus students in our MBA program?

Background Of The Huizenga School Learning Outcomes Assessment Process

When beginning the learning outcomes assessment process at the Huizenga School in 1997, the school was in the process of conducting a quality self-assessment for three different accrediting bodies. At that time, it was decided to use information that already existed in course syllabi for the MBA program. The approach was taken because all syllabi already included exit competencies, which were behaviorally anchored statements about what students were expected to have learned at the end of each course. They were, in actuality, learning outcomes and they served as the basis for measurement in the outcomes assessment process.

The exit competencies/learning outcomes provided the foundation for a series of self-report survey questions. The indirect measure uses self-report surveys for assessing learning outcomes and was consistent with the approach used by other institutions as discussed above. A commonly accepted five-point Likert scale (1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5 =Strongly Agree) was included (Ghiselli, Campbell, & Zedeck, 1981) in the Learning Outcomes Survey.

A second measure of student learning was administered at the end of the last course students take in the MBA program. The final course is a 1-week intensive, on-campus course for all MBA students that is titled, "Values Integration Workshop." The capstone course requires a written assignment and a final examination. The two learning activities test students on all learning outcomes for the MBA program.

A third method for assuring the achievement of learning outcomes for MBA students has more recently begun at the Huizenga School. The approach utilizes a portfolio of course materials, which is prepared for each required MBA course over a 3-year cycle. Based on a published schedule, instructors are notified when their particular course is to be evaluated. Then, they are asked to create a course evaluation portfolio which includes (a) the course syllabus with learning outcomes, (b) copies of student assignments with grades and instructor comments,

(c) a copy of final course grades, and (d) a short written explanation by the instructor discussing how the learning outcomes were achieved. The portfolio is examined by a small group of faculty to (a) confirm if the syllabus reflects current needs and outcomes, (b) consider the quality of student assignments and instructor grading, and (c) evaluate the effectiveness of the instructor's approach for achieving the learning objectives. A formal assessment document is created to provide feedback to the instructor and an action plan is developed for any changes that need to be made. The tripartite method for examining learning outcomes has been in place for more than 1 year, therefore not all courses have yet been evaluated.

Hence, the Huizenga School is using an indirect measure (self-reporting), which is a more objective approach (capstone course learning activities) for assessing learning outcomes for on-campus and off-campus MBA students, and a newly implemented method for examining how the outcomes are being met and changes that might need to be made (portfolio evaluation). The outcomes approach will ultimately allow for a wider variety of analyses. Currently in the Huizenga School learning outcomes assessment process, the more objective method has not yet been tracked in a way that allows comparison to the self-report surveys and the portfolio evaluations have been completed for only a few required courses. Thus, the research study has focused only on the Post-Then self-reporting.

Outcomes Assessment

The learning outcomes survey consists of 81 questions based on the exit competencies/learning outcomes drawn from each of the required courses in the MBA program. Because the MBA curriculum consists of 13 required courses (see Table 3), there is an average of 6 questions for each of the courses, and the outcomes can then be tracked for each required course in the curriculum. The survey is administered at the end of the MBA program (see Appendix A).

Table 1: Required MBA Courses

GMP 5012	21st Century Management Practices
GMP 5014	Information Technology Application in Management
GMP 5015	Legal, Ethical & Social Value of Business
GMP 5017	Delivering Superior Customer Value
GMP 5020	Managing Organization Behavior
GMP 5030	Managing Human Resources
GMP 5040	Quantitative Thinking
GMP 5050	Economic Thinking
GMP 5060	Accounting for Decision Makers
GMP 5070	Managerial Marketing
GMP 5080	Applying Managerial Finance
GMP 5090	Entrepreneurial and Strategic Thinking
GMP 5095	Operations and Systems Management

When MBA students complete the Learning Outcomes survey, they take it twice using a "Post-Then" self-report methodology (which is sometimes described as a "then/post test"). First, using the five-point scale described above, students are asked to report how much they felt that they had learned *at the end* of their 18 months of coursework for their Post scores. During the second completion of the survey, students are asked how much they felt that they knew *at the beginning* of the program for the Then scores. Auspiciously, The "Post-Then" type of self-reporting eliminates the sliding scale phenomenon for the total MBA experience (Preziosi & Legg, 1983), although it still has the limitations associated with respondents' perceptions (Emory & Cooper, 1991).

According to Mezoff (1981), Post-Then assessment is also a useful measure of choice because of its low cost, convenience, and improvement in the accuracy of program evaluation. Rohs and Langone (1997) compared Pre-Post and Post-Then self-reports and found them to be less conservative and more accurate than the traditional Pretest-Posttest. Therefore, the Post-Then self-report approach was initially chosen at the Huizenga School to expedite the process of assessing learning outcomes and to provide an immediate snapshot of competencies before

and after the MBA program. Another important consideration was to use criterion-reference tests, because they focus on the specific tasks and learning outcomes that are stressed in the Huizenga School's MBA curriculum (Ornstein & Hunkins, 1993).

The learning outcomes survey is administered using an online instrument at the end of each capstone course. Students enter their campus location, and then respond to the 81 learning outcomes questions by clicking their choice on the Likert-type scale. Students remain anonymous in this process, and no other demographic data is collected. Using the online instrument, data is immediately stored in a database by term, and is used to produce Learning Outcomes reports that indicate any changes or differences in learning for each required course in the curriculum.

Hypotheses

To answer the two research questions, two hypotheses were created to examine the learning outcomes data from a 5-year period from 2001 through 2005 from on-campus and off-campus locations.

H1n: There is no significant gain in learning outcomes as reported by Huizenga School MBA students using a Post-Then self-assessment.

H1: There is a significant gain in learning outcomes as reported by Huizenga School MBA students using a Post-Then self-assessment.

H2n: There is no significant difference in learning outcomes means between on-campus and off-campus Huizenga School MBA students using a Post-Then self-assessment.

H2: There is a significant difference in learning outcomes between on-campus and off-campus Huizenga School MBA students using a Post-Then self-assessment.

Sample

The sample for the learning outcomes assessment comparison included 107,440 responses from 32,469 on-campus student responses (classes attended at the Fort Lauderdale campus) and 74,971 off-campus student responses (classes attended outside of the Fort Lauderdale campus) in the 13 required MBA business courses from July 2001 through July 2005.

DATA ANALYSIS

To test Hypothesis 1 a Wilcoxon Z test was used to compare the Post/Then scores for the responses for both on-campus and off-campus students as shown in Table 4. The results show that for each of the 13 required courses, the null hypothesis is rejected indicating a significant difference between Then scores (at the beginning) and Post scores (at the end) at the .05 level. In other words, students reported an increase in learning for all the required MBA courses.

Table 2: Overall Learning Gain

Course	Sample Size	Mean Then	Mean Post	Wilcoxon Z	Probability	Decision
GMP5012	5440	2.60	4.38	-58.201	<0.001	Reject null
GMP5014	5440	2.79	4.33	-55.996	<0.001	Reject null
GMP5015	9520	2.81	4.40	-76.204	<0.001	Reject null
GMP5017	10880	2.81	4.48	-82.293	<0.001	Reject null
GMP5020	6800	2.53	4.22	-65.334	<0.001	Reject null
GMP5030	10880	2.43	4.08	-81.769	<0.001	Reject null
GMP5040	12240	2.12	3.88	-86.115	<0.001	Reject null
GMP5050	5440	2.36	4.00	-57.668	<0.001	Reject null
GMP5060	10880	2.37	4.01	-81.035	<0.001	Reject null
GMP5070	9520	2.73	4.40	-76.357	<0.001	Reject null
GMP5080	9520	2.33	4.03	-76.225	<0.001	Reject null
GMP5090	5440	2.31	4.25	-59.110	<0.001	Reject null
GMP5095	5440	2.40	4.26	58.828	<0.001	Reject null

To test Hypothesis 2, learning outcomes for each course were compared for any differences between on-campus and off-campus students using a Mann-Whitney z-test at the .05 significance level as shown in Table 3. The results of these tests for the 13 required MBA courses show that for 8 of the courses the null hypothesis is accepted while for the other 5 courses the null hypothesis is rejected. The data indicate that there is no difference between on-campus and off-campus learning outcomes for 8 of the required MBA courses, but for the other 5 courses there are differences in learning for on-campus versus off-campus students.

Table 3: Learning Outcomes Comparison for On-campus versus Off-campus

Course	Sample Size On Campus	Sample Size Off Campus	Mean Improvement	Mann-Whitney Z	Probability	Decision
GMP5012	1644	3796	1.78	-1.463	0.143	Do not reject null
GMP5014	1644	3796	1.54	-2.036	0.042	Reject null
GMP5015	2877	6643	1.59	-0.218	0.827	Do not reject null
GMP5017	3288	7592	1.67	-2.029	0.042	Reject null
GMP5020	2055	4745	1.70	-0.831	0.406	Do not reject null
GMP5030	3288	7592	1.65	-0.822	0.411	Do not reject null
GMP5040	3699	8541	1.76	-1.160	0.246	Do not reject null
GMP5050	1644	3796	1.64	-3.027	0.002	Reject null
GMP5060	3288	7592	1.63	-1.168	0.243	Do not reject null
GMP5070	2877	6643	1.67	-0.267	0.789	Do not reject null
GMP5080	2877	6643	1.70	-2.274	0.023	Reject null
GMP5090	1644	3796	1.94	-0.666	0.506	Do not reject null
GMP5095	1644	3796	1.85	-1.976	0.048	Reject null

RESULTS

The study began with two research questions regarding self-reported learning outcomes for the 13 required MBA courses delivered in a classroom setting for the Huizenga School. The first question asked, "Are our MBA students learning from their courses as demonstrated by an improvement in their learning outcomes?" Results from testing Hypothesis 1 indicated that students do show an increase in learning. The result was expected and was reassuring that students consistently report a gain in learning.

The second question asked, "Is there a difference in learning outcomes for on-campus students versus off-campus students in our MBA program?" Results from testing Hypothesis 2 indicated that there are, in fact, differences between learning outcomes for 5 of the 13 required courses. The result was unexpected and somewhat troubling. It indicated that for these 5 courses, course delivery is not consistent among the various locations of the Huizenga School. This means that action needs to be taken to resolve these inconsistencies to assure an equivalent learning from location to location. One way that uniformity can be achieved is to track the courses in question, identify the location and term from the database, and then identify individual instructors who taught the courses in each of the locations. With this information, steps can be taken to determine the causes of the inequity in learning outcomes and whether it was specific to instructor, location, or facilities.

CONCLUSIONS AND IMPLICATIONS

The research focused on an analysis of learning outcomes for students in an MBA program. Self-report Post-Then learning outcomes scores for on-campus and off-campus students were compared. Mean scores for 107,440 responses made up the sample population. Demographic data was not collected and, therefore, not analyzed.

Statistical analysis rejected the first null hypothesis. The conclusion was that both on-campus and off-campus students reported that their learning had increased. The second null hypothesis was partially rejected. There were no differences in learning outcomes for 8 courses, but there were for 5 other courses.

There are several lessons to be learned from the research study. First, increasing emphasis is being given to learning outcomes assessment by accrediting bodies such as the Southern Association of Colleges and Schools and the Association to Advance Collegiate Schools of Business. Second, gathering learning outcomes data can use a variety of approaches including direct approaches (i.e., grades, exams, and course portfolios), indirect approaches (i.e., self-report surveys), or a combination of the two. Third, gathering learning outcomes data alone is only the first step in the outcomes assessment process; the results must be analyzed on a regular basis. Even more important, however, is the need to use the results of the outcomes assessment and analysis to drive changes in course delivery, faculty development, or facilities. Otherwise, gathering the data becomes merely a mechanical exercise rather than a means of closing the loop in the learning outcomes assessment process.

FUTURE EFFORTS

Future research options are multiple. First, for the Huizenga School further research could address why the second null hypothesis was rejected, identify appropriate remedies, and then reassess learning outcomes. A second research option would be to expand the sample to compare online course learning outcomes with classroom learning outcomes. A third research possibility may be to assess outcomes in the other degree programs. At the Huizenga School, for example, the learning outcomes database includes on-campus, off-campus, and online programs for MBA, MIBA, MS in Human Resource Management and MS in Accounting. Although the Huizenga School database does not currently include any demographic data (i.e., age, gender, employment status, etc), such data could be added and would allow additional, useful analyses while still providing anonymity to students.

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APPENDIX A

Sample of Huizenga School Learning Outcomes Survey Questions

Using the rating scale below, please help us determine how capable you are as an NSU MBA to continuously improve yourself and add value to your organizations:

Capability

Low High
1 2 3 4 5

1. By understanding the importance of law, ethics, personal morality, and corporate social responsibility.
2. By exhibiting legal, ethical, moral, and socially responsible behavior.
4. By exhibiting effective interpersonal communications.
6. By preparing effective written documents in English for business use.
7. By understanding the dynamic role of technology in regional, national, and global competition and its impact on managerial decision-making.
11. By performing industry/competitive analyses, and by assessing the potential role of external stakeholders (e.g., ecologists or legislators) in influencing the actions of an enterprise.
16. By applying customer value concepts in making managerial decisions.