RELATING TEACHING METHOD EFFECTIVENESS TO INSTRUCTIONAL EMPHASIS AREAS: A STUDY OF MBA ALUMNI

Stuart Van Auken, Lutgert College of Business, Florida Gulf Coast University, 10501 FGCU Blvd. South, Fort Myers, FL 33965-6565; (239) 590-7382

Earl Chrysler, College of Business, Black Hills State University, 1200 University Ave., Spearfish, SD 57799-9074; (605) 642-6269

Ludmilla Gricenko Wells, Lutgert College of Business, Florida Gulf Coast University, 10501 FGCU Blvd. South, Fort Myers, FL 33965-6565; (239) 590-7363

ABSTRACT

The matching of teaching methods to student performance is viewed as facilitating learning. However, questions remain as to what is most effective for various alternative instructional areas within business. This study thus reports on an approach that relates the perceived teaching method effectiveness of alternative pedagogies to key instructional emphasis areas. The results revealed some surprise and may serve as a guide for faculty within a program as to pedagogical deployment. The implications of the design are developed and presented.

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Much has been made about learning styles and the importance of using teaching methods that support them (Davis, Misra, and Van Auken, 2000; Galvin 2006; Goodwin 1996; Karns 1993; Matthews 1994; Nulty and Barrett 1996; Stewart and Felicetti 1992). Typically, the nature of skill and knowledge presentations among faculty drive or influence the selection of teaching methods. To illustrate, the teaching of skills may involve pedagogies in the form of group assignments and in-class exercises, among others. Additionally, integrative course material may be taught through cases and simulations. Rather than taking an instructors' bias *per se* as to what an instructor thinks is appropriate, assessments of teaching methods as to student preference may be conducted and correlated with the students' perceived instructor emphasis on skill and knowledge variables. Couplings between the two that evidence statistically significant relationships would thus suggest the teaching methods that are considered by students as being most viable for a given area of skill or knowledge presentation. Thus, faculty can consider a student point-of-view with respect to teaching methodology. If a faculty member has skills or abilities that are congruent with the revealed teaching methodology, then the faculty member could consider the pedagogy for implementation.

STUDY FOCUS

This study thus proposes to assess among MBA alumni two primary areas. One will encompass the emphasis given to each of eleven MBA instructional areas, while the other will evaluate the effectiveness of each of eight teaching methods. It is these data sets that are to be correlated in an effort to reveal key associations. To expedite the comparison, factor analysis will be used to reduce the data into more meaningful chunks and to simplify the construction of the correlation matrix.

METHODOLOGY

The Sample

The MBA alumni utilized in this study came from a private New England based university that is accredited by AACSB-International. The study involved surveying 312 of them and of this number, 82 responded for a 26.3% response rate.

Instructional Areas

The study employs as instructional variables the skill and knowledge areas used by Van Auken, Chrysler, and Wells (2005) in their study of MBA program ROI. These variables are presented in Figure 1.

As can be seen, they have been *a priori* classified as to skills and knowledge to reflect AACSB-International emphases and the inherent conflicts between them as to emphasis (Alsop 2004; Middleton 2004).These variables were assessed as to MBA instructional emphasis using a one- to seven-point scale, with the value of one denoting a Very Low Emphasis and the value of seven evidencing a Very High Emphasis.

Teaching Methods

The teaching methods utilized in this study initially came from the work of Davis, Misra, and Van Auken (2000) who utilized them as predictors of attitude toward the marketing major. They encompass the following: cases, lectures, computer simulations, class discussions, group projects, in-class exercises, individual projects and written assignments. The effectiveness of each of these teaching methods was assessed on a seven-point semantic differential scale that ranged from Poor (1) to Excellent (7). If an alumnus did not experience a particular method, the alumnus was instructed to check a box indicating a lack of exposure to the approach.

DATA REDUCTION

Instructional Areas

To reduce the eleven instructional areas into constructs, a principal components factor analysis with varimax rotation was employed. The results revealed the presence of three factors that explained 73.3% of the variance in the data. These three factors and the variables with sizable loadings are presented in Table 1.

As can be noted, a single skill factor has been revealed along with two knowledge-based factors (capabilities and understandings). Additionally, quantitative skills represented a departure from expectations as they were classified under knowledge-based understandings. Apparently, they add breadth to understanding and serve as a useful complement as to how a business works.

Teaching Methods

The eight teaching methods were likewise subjected to a principal components factor analysis with varimax rotation. This application revealed the presence of three factors that explained 64.8% of the variance in the data. The three factor patterns are presented in Table 2.

The first factor loads heavily on group projects and in-class exercises. The second factor denotes an emphasis on cases and computer simulations, while the third factor weights more on individual involvement.

CORRELATIONS

In an effort to reveal the presence of associations between teaching method efficacy and instructional area emphases, a Pearson product-moment correlation analysis was run. The results appear in Table 3.

As can be noted, only three statistically significant correlations were revealed. Of these, group projects and in-class exercises were associated with skill development ($P = .005$), and individual involvements were correlated with knowledge-based capabilities ($P = .006$). Finally, individual involvements were correlated with knowledge-based understandings ($P = .020$). Basically, group projects are viewed as best for skill development, while the development of knowledge (capabilities and understandings) is best pursued through the individual, at least in this particular setting. A near-miss association involved cases and computer simulations being somewhat statistically associated with knowledge-based capabilities ($P = .061$).

IMPLICATIONS

The revelation of a lack of association suggests that instructors may have great flexibility in teaching method selection for particular areas, although directionality may be inferred. In this academic setting, individual assignments seem to be preferred for pure knowledge acquisition, thus perhaps revealing a displeasure with group projects for this purpose. In turn, group projects and in-class exercises are seen as more viable for skill development. Basically, leanings have been revealed that may help to confirm or disconfirm one's expectations.

What is unique to this study is that it shows the viewpoints of alumni in only one program. Perhaps, other programs may reveal more extant relationships. As more and more outcome data are collected, the revelation of patterns and relationships will be facilitated. As it is, this study evidences a design that may be mimicked in other outcome assessments. The study is also compatible with the theories advocating a match between student preference and learning or teaching approaches (Glazer, Steckel, and Winer 1987; Gregore 1979; Gregore and Butler 1984; Okebukola 1986) and new models investigating these relationships are worthy of exploration.

CONCLUSIONS

This study has demonstrated an approach for relating perceived teaching method effectiveness to instructional emphasis areas. For a given program, it can provide suggestive insights as to what is working from a student or alumni perspective. As a

result, it may serve as a guide for teaching method deploy-ment. The approach is not meant to replace instructor choice, but to facilitate an understanding of the efficacy of alternative teaching methods. As outcome metrics are increasingly developed, assessments of relationships should be endemic to the process. This study thus revealed one such approach. Hopefully, this design or related designs will become more of a part of assessment and a body of evidence can be generated.

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FIGURE 1
INSTRUCTIONAL AREAS

Classification	
Skill	***Knowledge***
Technical preparation (ability to use software such as spreadsheets, statistical packages, database packages, etc.)	Ability to identify an organizational problem
Ability to work effectively as a time	Ability to analyze the relationships between organizational variables
Oral communication skills	Ability to develop workable solutions to organizational problems
Written communication skills	Ability to communicate effectively using the language of business
Quantitative skills (ability to work with numerical data)	Understanding concepts of the functional areas of business (i.e. marketing, finance, etc.)
	Understanding how the functional areas of business relate to each other

TABLE 1
RESULTS OF A VARIMAX ROTATED FACTOR ANALYSIS APPLIED TO ELEVEN SKILL AND KNOWLEDGE VARIABLES

Variables	*Skills*	*Knowledge-Based Capabilities*	*Knowledge-Based Understandings*
Technical preparation	.58	.09	.29
Ability to work effectively on a team	.74	.44	.09
Oral communication skills	.87	.20	.16
Written communication skills	.68	.30	.24
Ability to identify an organizational problem	.36	.81	.20
Ability to analyze the relationship between organizational variables	.15	.83	.28
Ability to develop workable solutions to organizational problems	.30	.83	.23
Quantitative skills	.47	.33	.61
Ability to communicate effectively using the language of business	.53	.17	.58
Understanding concepts of the functional areas of business	.15	.36	.80
Understanding how the functional areas of business relate to each other	.20	.15	.90

TABLE 2
RESULTS OF A VARIMAX ROTATED FACTOR ANALYSIS
APPLIED TO EIGHT TEACHING METHODS

Variables	*Group Projects and In-Class Exercises*	*Cases & Computer Simulations*	*Individual Involvements*
Case Studies	.30	.69	-.03
Lectures	.45	.46	.21
Computer Simulation	-.14	.79	.06
In-Class Discussions	.66	.35	.26
Group projects	.87	-.11	.03
In-Class Exercises	.81	.14	.17
Individual projects	.02	-.04	.91
In-Class Presentations	.30	.16	.68

TABLE 3
CORRELATIONS BETWEEN INSTRUCTIONALAREA EMPHASES
AND TEACHING METHOD EFFECTIVENESS

Variables	Group Projects and In-Class Exercises	Cases and Computer Simulations	Individual Involvements
Skills	.31[1]	.03	.08
Knowledge-Based Capabilities	.18	.21	.31[2]
Knowledge-Based Understandings	.05	.18	.26[3]

[1]p = .005
[2]p = .006
[3]p = .020