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ABSTRACT

A nationwide survey of a random sample of 210 two-year colleges was conducted in 1979 to test the hypothesis that administrative adherence to sound marketing practices will lead to higher enrollments. Survey participants were asked to respond to 15 items adapted from Philip Kotler's Marketing Audit, a recognized scale of marketing effectiveness designed to measure the adequacy of an organization's customer philosophy, marketing organization, marketing information, strategic operations, and operational efficiency. Data from this analysis, in correlation with enrollment figures from Fall 1977 to Fall 1978, were treated with a stepwise regression analysis using effectiveness scores as predictor variables for enrollment change. Major findings, based on a 53% response rate, revealed that while the majority of colleges were effective in recognizing the value of the customer and in integrating the concepts of marketing throughout their institutions, they were less effective in performing strategic marketing operations. Correlations between the predictor variables and changes in enrollment yielded no significant relationship. The survey report details methodology and presents summary conclusions and recommendations. Data tables and the questionnaire are appended. (JP)

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MARKETING EFFECTIVENESS IN COMMUNITY AND JUNIOR COLLEGES

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ABSTRACT

The purposes of this study were to determine the perceived effectiveness of marketing techniques in two-year colleges, and to detect any relationships that exist between marketing effectiveness and enrollment increases or decreases. The survey instrument used in this study was patterned after Philip Kotler's Marketing Audit. The instrument consisted of 15 items grouped in the areas of operational efficiency, strategic operation, adequate marketing information, integrated marketing organization, and customer philosophy. Scores in the five categories and the individual items were used as predictor variables in stepwise regression analyses using enrollment change in respondent's colleges as the criterion variable. The results indicated that marketing techniques were not statistically significantly related to enrollment growth or decline in two-year colleges. The lack of viable marketing planning was found to be a severe shortcoming to achieving marketing effectiveness. The results also indicated that cost effective measures were not utilized by the majority of colleges, marketing resources were inadequate and the current marketing strategy was unclear. It was recommended that practitioners should consider using the marketing instrument as a device for measuring their organization's health in the marketing arena.

MARKETING EFFECTIVENESS IN COMMUNITY AND JUNIOR COLLEGES

Introduction

Across the country enrollment in community and junior colleges declined in the Fall of 1978 for the first time in twenty years. This reversal has prompted many professionals to turn to the marketing field for relief. Marketing is making an impression on higher education through the increasing number of books, conference papers, and journal articles on the subject. Also, the number of workshops being offered on the topic of marketing in higher education is escalating, and many colleges have already installed marketing strategies in an effort to stop the enrollment slide.

The increasing dependence of community and junior colleges on concepts from the marketing discipline is based on an assumption that marketing efforts can be transferred to higher education. In addition, practitioners assume that marketing activities will correct many of the enrollment shortfalls prevalent today -- that problems concerning declining enrollment, faculty dismissal, budget reduction and under utilization of physical plant can be solved by applying marketing
(1)
concepts to higher education. These assumptions, however, have not been supported by empirical data. The lack of data concerning successful applications of marketing techniques in higher education is the justification for this study. There are many unanswered questions concerning marketing effectiveness in higher education, and little is

known about the relationships that exist between marketing activities and changes in student enrollments. Some of these questions are:

(a) What degree of effectiveness do community college practitioners feel their institutions achieve in marketing? (b) What are the perceived strengths and weaknesses in the application of marketing concepts? and (c) What relationships exist between marketing effectiveness and enrollment changes?

It is recognized that enrollment change is only one indicator of a college's performance, however, the increase in the application of marketing strategies in higher education has come about because of the perception that good marketing will lead to higher enrollments. It is this perception that is being tested here; whether that perception is correct, in its simplest form where effective marketing is related to increases in enrollment, is the target of this study.

(2)

Krachenberg has reviewed marketing approaches in higher education and concludes that all colleges are involved in some marketing activity. He explains that persuasive efforts frequently include both advertising and personal selling. Although educators have not applied all of the marketing tools, it is said that colleges and universities engage in pricing, advertising, selling and product design. In general, some marketing concepts have been adopted while others have not, and many marketing dimensions remain unexplored.

(3)

The rush to implement marketing ideas in higher education is similar to other attempts by educators to apply business related

techniques, such as PPBS, MIS, Delphi, and Zero-base budgeting. Marketing is defined in this study as the planning, development, implementation and evaluation of programs to bring about voluntary exchanges with target publics for the purpose of achieving institutional objectives. Many educators have applied the concepts of marketing with little or no positive investigative data to justify their widespread use in higher education. More information is needed to prevent the misuse of marketing strategies in situations where they may be inappropriate.

The purposes of this study are to determine the perceived effectiveness of marketing techniques in two-year institutions, and to detect any relationships that exist between marketing effectiveness and enrollment increases or decreases. To accomplish this an existing scale of marketing effectiveness was identified, adapted and administered to a systematic random sample of two-year institution personnel nationwide. The scale was adapted from Philip Kotler's Marketing Audit and relabeled by the authors, the Marketing Index For Higher Education (MIHE). Data from the responses to the MIHE were treated with a stepwise regression analysis using effectiveness scores as predictor variables and enrollment change as the criterion variable.

Procedures

The registrar of each college in the sample received a copy of the MIHE, a letter explaining the study, and an addressed-stamped envelop.

The first follow-up to nonrespondents was mailed one month after the initial mailing of the survey form. A second follow-up was mailed three weeks after the first follow-up. The name, title, and institution of the individual completing the instrument were requested. The 125 useable responses (53%) were considered adequate for the purposes of this study. A bias study was conducted involving college size, enrollment change and the role of respondents, and no significant biases were detected.

The MIHE instrument consisted of fifteen items as illustrated in Figure 1. Respondents were asked to rate their institution's efforts on each of the fifteen items. Scores for each item could be either 0, 1, or 2, depending on the response made by each person. A zero rating was the lowest while two was the highest. The range of possible scores on all fifteen items for any one institution was from zero to thirty. Figure 2 contains a rating scale based on categories within the range and the relative effectiveness of marketing efforts in a given institution. The fifteen items were then grouped into five categories for further analysis following Kotler's original design. (6)

Each group score was arrived at by adding the scores of the three items forming the respective groups. Figure 3 illustrates the five groups and presents a brief description of each. A maximum score of six was possible in each category. Scores in the five categories were used as predictor variables in a stepwise regression analysis using enrollment change, from Fall of 1977 to Fall of 1978, in the respondent's colleges as criterion variables. (5)

A stepwise regression analysis was also performed using the scores on all 15 of the MIHE items as predictor variables and enrollment change as the criterion variable.

Results

Means and standard deviations for the five categories are listed in Table 1. A summary of the stepwise regression analysis listing the predictor variables in the order in which they were entered in the regression equation is displayed in Table 2. The fifth variable (integrated marketing organization) did not contribute enough variance to be entered in the equation. No statistically significant correlations were found between the predictor variables (marketing effectiveness) and the criterion variable (enrollment change).

Since the five categorical predictor variables showed no statistically significant relationships to enrollment changes, an analysis of the fifteen individual items forming the five categories was conducted. Stepwise regression analysis was used to determine if any relationships existed between the scores on the fifteen items of the MME scale and enrollment changes. The means and standard deviations for the fifteen predictor variables are shown in Table 3 and the stepwise regression summary appears in Table 4 where the variables are listed in the order of entry. No statistically significant relationships were found between the fifteen predictor variables and the criterion variable of enrollment change.

Even though no statistically significant relationships were found, several observations can be made concerning the perception of college personnel about their effectiveness in applying marketing techniques. Generally, colleges are perceived as achieving high effectiveness in acknowledging the value of their customers needs and wants and integrating the concepts of marketing throughout their institutions. These colleges,

however, perform less well in strategic operations, such as planning and cost effectiveness functions. Colleges are also somewhat weak in developing the overall communication links involving marketing.

Specifically, items 1, 2, 3, 5, 8, and 12 had the strongest positive response reported. The respondents perceived that administration recognizes the importance of designing the institution to serve the needs and wants of chosen markets, develops different offerings and marketing plans for different segments of the markets, and takes a whole marketing system view in planning its programs. In addition, the individuals responsible for the marketing function were perceived to have worked well with other college personnel in research, program development, purchasing and finance. The new program development process was perceived as well organized. Finally, administration was perceived as knowing the sales potential and profitability of different market segments and were doing contingency thinking and planning.

Lowest mean scores were on items 9, 10, 11, and 14, indicating that little effort is expended in measuring cost-effectiveness of different marketing expenditures and there is little formal marketing planning. Current marketing strategies are unclear and there are inadequate resources used in marketing. Only 16% of the respondents agreed that their marketing strategy was clear, innovative, data based and well reasoned, and, furthermore, 43% and 41% respectively reported that the strategy was unclear, or clear but represented a continuation of traditional strategy.

Items 4, 7, 13, and 15 addressed quality and flow of communication within the institution. Respondents perceive their institution as

being somewhat weak on these items. This may point to an overall weakness in the communication structure of these institutions.

Limitations Of The Study

The absence of statistically significant relationships between marketing effectiveness and enrollment changes in this study may have resulted from certain limitations regarding the design. These are:

1. Data supporting the benefits from marketing strategies may not have been easy to retrieve and, therefore, not readily available to the respondents at the time they completed the instruments.

2. The complexity of the forces acting on college enrollments, or other outcome measures, makes it extremely difficult to isolate key measures that could serve as valid and reliable predictors of growth or decline in enrollments. Proposition 13 in California and the tax-payer revolt nationwide had occurred while this study was in progress.

3. Increasing enrollments may not be the best possible outcomes for many colleges depending on the goals set and their financial structure. Meeth states that there is no reliable pattern of growth for increased efficiency and that it is possible for a college to become smaller and be more economically managed.⁽⁷⁾

Many other dimensions presumed to drive college enrollments were not isolated in this design. These items include tuition increases, program additions or deletions, availability of student financial aid, area competition, and overall area population trends. Perhaps, future research will take these matters into account in attempts to identify other measures of marketing effectiveness.⁽⁸⁾

Conclusions

The following conclusions are warranted to the extent that the Marketing Index For Higher Education reflects the actual marketing practices in two-year colleges. The effectiveness of the applications of marketing techniques is not related to enrollment growth or decline in two-year colleges. It appears that the lack of viable marketing planning may be a severe shortcoming to achieving effectiveness. In addition, cost effectiveness measures are not utilized by the majority of colleges. Marketing resources are inadequate for the job to be done and the current marketing strategy is unclear in the majority of community and junior colleges. Although these shortcomings were found, college personnel know their markets well, adapt programs to meet the needs of their constituencies, and foster internal cooperation among the different college personnel involved in the marketing function.

Recommendations For Future Research

The following recommendations are made to facilitate additional research concerning marketing effectiveness in higher education.

1. Any future studies involving the MIHE instrument should include multiple responses from different administrators at each level of the institution to stabilize predictor scores.
2. A study utilizing a stratified sample of urban and rural, small and large colleges may detect relationships that were not found in this study.
3. The potential for growth indicated by the surrounding community population trends may be a factor in determining the upper limit of marketing effectiveness for a college. Studies involving this population context could be valuable in assisting the colleges in organizing

subsequent marketing systems.

4. Additional criterion measures, such as number of graduates, overall college financial performance, community satisfaction, innovative program implementation, etc., may be useful in establishing significant predictors of marketing effectiveness.

5. The level of competition in the local area of a college may affect marketing strategies implemented by any given college. Kotler states that little or no competition by local organizations could be a factor in low marketing activity. ⁽⁶⁾ A study investigating competition and marketing effectiveness could be useful in motivating personnel to improve their efforts.

6. Studies concerning the ability of college personnel to adapt to changing community needs would appear useful since communication of marketing information was less than adequate. The structure of communication links from the top down the line could be examined for rapid and valid reaction to community input.

Recommendations For Practitioners

College personnel engage in marketing activities to achieve results. They expect to meet the needs of their constituencies while maintaining a financially healthy organization that promotes a high quality learning environment. The opportunities available for tuning that environment depend on a detailed knowledge of personnel effectiveness in relation to college goals. The Marketing Index For Higher Education is one measure of organizational health that could be a valuable tool for assisting administrators in adapting their organizations to the needs of their communities.

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Figure 1

MARKETING INDEX for HIGHER EDUCATION *

		CAT.3 cont.	
CATEGORY 1	<p>1. Does administration recognize the importance of designing the institution to serve the needs and wants of chosen markets?</p> <p>0 <input type="checkbox"/> Administration primarily thinks in terms of selling current and new programs to whoever will buy them</p> <p>1 <input type="checkbox"/> Administration thinks in terms of serving a wide range of markets and needs with equal effectiveness</p> <p>2 <input type="checkbox"/> Administration thinks in terms of serving the needs and wants of well-defined markets chosen for their long-run growth and income potential for the institution</p> <hr/> <p>2. Does administration develop different offerings and marketing plans for different segments of the markets?</p> <p>0 <input type="checkbox"/> No</p> <p>1 <input type="checkbox"/> Somewhat</p> <p>2 <input type="checkbox"/> To a good extent</p> <hr/> <p>3. Does administration take a whole marketing system view (suppliers, delivery systems, competitors, customers, environment) in planning its programs?</p> <p>0 <input type="checkbox"/> No Administration concentrates on selling and servicing its immediate students</p> <p>1 <input type="checkbox"/> Somewhat Administration takes a long view of its delivery systems although the bulk of its effort goes to selling the immediate students</p> <p>2 <input type="checkbox"/> Yes Administration takes a whole marketing systems view recognizing the threats and opportunities created for the institution by changes in any part of the system</p> <hr/> <p>4. Is there high-level marketing integration and control of the major marketing functions?</p> <p>0 <input type="checkbox"/> No Recruiting and other marketing functions are not integrated at the top and there is some unproductive conflict</p> <p>1 <input type="checkbox"/> Somewhat There is formal integration and control of the major marketing functions but less than satisfactory coordination and cooperation.</p> <p>2 <input type="checkbox"/> Yes The major marketing functions are effectively integrated</p> <hr/> <p>5. Do those individuals responsible for the marketing function work well with other college personnel in research, program development, purchasing, and finance?</p> <p>0 <input type="checkbox"/> No There are complaints that marketing is unreasonable in the demands and costs it places on other departments</p> <p>1 <input type="checkbox"/> Somewhat The relations are amicable although each department pretty much acts to serve its own power interests</p> <p>2 <input type="checkbox"/> Yes The departments cooperate effectively and resolve issues in the best interest of the institution as a whole</p> <hr/> <p>6. How well organized is the new program development process?</p> <p>0 <input type="checkbox"/> The system is ill-defined and poorly handled</p> <p>1 <input type="checkbox"/> The system formally exists but lacks sophistication</p> <p>2 <input type="checkbox"/> The system is well-structured and professionally staffed</p> <hr/> <p>7. When were the latest marketing research studies of students, tuition, delivery systems, and competitors conducted?</p> <p>0 <input type="checkbox"/> Several years ago (5 years or more)</p> <p>1 <input type="checkbox"/> A few years ago (1 to 4 years)</p> <p>2 <input type="checkbox"/> Recently (within the past year)</p> <hr/> <p>8. How well does Administration know the sales potential and profitability of different market segments, students, territories, programs and delivery systems?</p> <p>0 <input type="checkbox"/> Not at all</p> <p>1 <input type="checkbox"/> Somewhat</p> <p>2 <input type="checkbox"/> Very well</p>	<p>9. What effort is expended to measure the cost-effectiveness of different marketing expenditures?</p> <p>0 <input type="checkbox"/> Little or no effort.</p> <p>1 <input type="checkbox"/> Some effort</p> <p>2 <input type="checkbox"/> Substantial effort</p> <hr/> <p>10. What is the extent of formal marketing planning?</p> <p>0 <input type="checkbox"/> Administration does little or no formal marketing planning.</p> <p>1 <input type="checkbox"/> Administration develops an annual marketing plan</p> <p>2 <input type="checkbox"/> Administration develops a detailed annual marketing plan and a careful long-range plan that is updated annually</p> <hr/> <p>11. What is the quality of the current marketing strategy?</p> <p>0 <input type="checkbox"/> The current strategy is not clear.</p> <p>1 <input type="checkbox"/> The current strategy is clear and represents a continuation of traditional strategy.</p> <p>2 <input type="checkbox"/> The current strategy is clear, innovative, data-based, and well-reasoned.</p> <hr/> <p>12. What is the extent of contingency thinking and planning?</p> <p>0 <input type="checkbox"/> Administration does little or no contingency thinking.</p> <p>1 <input type="checkbox"/> Administration does some contingency thinking although little sound contingency planning.</p> <p>2 <input type="checkbox"/> Administration formally identifies the most important contingencies and develops contingency plans</p> <hr/> <p>13. How well is the marketing thinking at the top communicated and implemented down the line?</p> <p>0 <input type="checkbox"/> Poorly</p> <p>1 <input type="checkbox"/> Fairly</p> <p>2 <input type="checkbox"/> Successfully</p> <hr/> <p>14. Is administration doing an effective job with the marketing resources?</p> <p>0 <input type="checkbox"/> No The marketing resources are inadequate for the job to be done.</p> <p>1 <input type="checkbox"/> Somewhat The marketing resources are adequate but they are not employed optimally.</p> <p>2 <input type="checkbox"/> Yes The marketing resources are adequate and are deployed efficiently.</p> <hr/> <p>15. Does administration show a high capacity to react quickly and effectively to on-the-spot development?</p> <p>0 <input type="checkbox"/> No Sales and market information is not very current and the administration reaction time is slow.</p> <p>1 <input type="checkbox"/> Somewhat Administration receives fairly up-to-date sales and market information, reaction time varies</p> <p>2 <input type="checkbox"/> Yes Administration has installed systems yielding highly current information and fast reaction time.</p>	
CATEGORY 2	CATEGORY 4	CATEGORY 5	
CATEGORY 3			

*This survey is adapted from Philip Kotler's audit appearing in "From Sales Obsession to Marketing Effectiveness", in the November-December, 1977, issue of Harvard Business Review. Modifications in this survey were made with permission granted by Dr. Kotler.

NOTE: 1. See Table 3 for results of 125 two-year colleges on these 15 items.
2. See Figure 3 and Table 1 for the sub-category results.



Figure 2

TOTAL MIHE SCORE AND THE EXTENT OF MARKETING STRUCTURE

<u>Total MIHE Score</u>	<u>Extent of Marketing Effectiveness</u>	<u>Number of colleges in each category</u>
26 - 30	Superior	8
21 - 25	Very Good	18
16 - 20	Good	32
11 - 15	Fair	30
6 - 10	Poor	25
0 - 5	None	12

N = 125

Mean rating = 14.5

SD = 6.9

Range = 0-30

Figure 3

CATEGORIES OF MARKETING STRUCTURE

<u>Category</u>	<u>Description of Categories</u>	<u>Items*</u>
1	<u>Customer Philosophy</u> -Does the administration acknowledge the primacy of the marketplace and of students' needs and wants in shaping college college plans and operations?	1 - 3
2	<u>Integrated Marketing Organization</u> Is the organization staffed so that it will be able to carry out marketing analysis, planning, and implementation and control?	4 - 6
3	<u>Adequate Marketing Information</u> Does the administration receive the kind and quality of information needed to conduct effective marketing?	7 - 9
4	<u>Strategic Operation</u> -Does the administration generate innovative strategies and plans for long-run growth?	10 - 12
5	<u>Operational Efficiency</u> -Are marketing plans implemented in a cost-effective manner, and are the results monitored for rapid corrective action?	13 - 15

* These numbers refer to the individual items of the MIHE instrument listed in Figure 1.

Note: The five categories were adapted from Philip Kotler's audit appearing in "From Sales Obsession to Marketing Effectiveness", in the November-December, 1977, issue of Harvard Business Review. Modifications in this survey were made with permission granted by Dr. Kotler.

Table 1

MEANS AND STANDARD DEVIATIONS OF MARKETING EFFECTIVENESS CATEGORIES
FOR COMMUNITY AND JUNIOR COLLEGES

<u>Variable</u>	<u>Categories Of Predictor Variables</u>	<u>Mean</u>	<u>Standard Deviation</u>
1	Customer Philosophy	3.45	1.60
2	Integrated Marketing Organization	3.26	1.63
3	Adequate Marketing Information	2.77	1.65
4	Strategic Operation	2.41	1.70
5	Operational Efficiency	2.58	1.65

N=125

Table 2

STEPWISE REGRESSION SUMMARY OF CATEGORICAL PREDICTOR VARIABLES
WITH ENROLLMENT CHANGE AS THE CRITERION

<u>Variable</u>	<u>Predictor Variable</u>	<u>Simple R</u>	<u>Multiple R</u>	<u>Beta Weight</u>
5	Operational Efficiency	.10005	.10005	.19091
4	Strategic Operation	-.00014	.13910	-.16117
3	Adequate Marketing Information	.07124	.15072	.09680
1	Customer Philosophy	.02300	.15696	-.06014

Note: None of the correlations were statistically significant at the .05 level.

Table 3

MEANS AND STANDARD DEVIATIONS OF THE FIFTEEN MARKETING
STRUCTURE ITEMS FOR 125 COMMUNITY AND JUNIOR COLLEGES

<u>Items</u> *	<u>Mean</u>	<u>Standard Deviation</u>
1	1.10	.74
2	1.21	.63
3	1.14	.71
4	.98	.70
5	1.26	.67
6	1.02	.65
7.	.97	.81
8	1.06	.62
9	.75	.67
10	.62	.74
11	.73	.72
12	1.06	.64
13	.90	.72
14	.79	.64
15	.90	.63

N=125 \bar{x} = 14.47 SD = 6.9

* These items refer to the
Marketing Index in Figure 1

Table 4

STEPWISE REGRESSION SUMMARY TABLE OF ALL FIFTEEN PREDICTOR
VARIABLES WITH ENROLLMENT CHANGE USED AS THE CRITERION

<u>Predictor Variable No.</u>	<u>Simple R</u>	<u>Multiple R</u>	<u>Beta Weight</u>
15	.12869	.12869	.20130
12	-.10352	.20481	-.23776
8	.10633	.23128	.14938
2	-.02713	.25347	-.14141
6	.09722	.26876	.12539
11	-.00310	.28372	-.18792
10	.09248	.30783	.16306
9	-.01468	.31808	-.11814
7	.07759	.32334	.06719
14	.10245	.32756	.06805
4	.01634	.33192	-.06267
3	.04812	.33399	.04887
1	.02526	.33520	-.03197
5	.02806	.33588	-.03223
13	.07494	.33608	.01770

Note: None of the correlations were statistically significant at the .05 level.

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