

# Developments in Business Simulation & Experiential Learning, Volume 11, 1984

## COMPARISONS OF PRACTITIONERS' AND PROFESSORS' PERCEPTIONS OF BUSINESS POLICY CONTENT AND LEARNING METHODS

Irvin Summers, Southwest Missouri State University  
Charles Boyd, Southwest Missouri State University

### ABSTRACT

The results of national samples of executives and professors are reported. Business Policy course content and learning methods perceptions of the two groups are analyzed and compared.

### INTRODUCTION

At recent ABSEL meetings those in attendance have asked for the development of an improved research base and for replicable research to be presented. This paper reports additional analysis of findings presented at the 1982 and 1983 meeting, presents additional findings related to that research, and extends the statistical analysis to which the data has been subjected. The research design, technique, and content is extensively described to facilitate replication.

Some who teach Business Policy are concerned with building a theory or model of the discipline. What should be taught in the classroom? Leontiades (1979) has called for "a deliberate, empirical-based development of the underlying theory for the policy course." Theory, in his view, should continually be tested against practice so that new concepts can build and modify existing knowledge. Mintzberg (1977) also believes that the policy professor should teach the best descriptive theory available in order to provide students with models of the reality they will face. He seems to believe that inductive field research best lends itself to the further development of policy theory.

The validity of cross-sectional studies of strategy content has been questioned (Schendel and Hofer, 1979): the need for contingent statements arising from industry differences has been pointed out (Charan, 1979).

Business Policy professors use a variety of methods to transfer knowledge to their students. Several reports have indicated the positive aspects of using simulation games as learning methods. Raia (1966) found games to be efficient for acquiring content knowledge. Robana (1980) reported numerous learning results; Shim (1978) reported positive student learning responses.

Summers and Boyd (1982, 1983) have reported practitioners' and professors' ratings of Business Policy learning methods that strongly favor the case method. Other investigators have recently focused attention on simulation games and experiential learning techniques in industry. Examples are the Thompson and Pitts (1980) panel at the 1980 ABSEL meeting and the Hunter and Price (1980) article in *Industry Week*.

It seems reasonable to assert that the best opportunity to facilitate the application of Business Simulation and experiential Learning techniques is to identify the areas of course content perceived as

most important by both practitioners and professors. Secondly, a comparison between practitioners' and professors' ratings of learning methods is reported.

### METHOD

The present study investigated opinions regarding Business Policy course content and learning methods. It was inductive; no preconceived hypotheses were formulated for testing. Two samples were drawn from two populations--practicing executives and Business Policy professors.

A sample of 40 companies was drawn from the Fortune 500, Fortune 50's and Moody's Manuals representing the following seven industry classifications-- industrial, commercial banking, life insurance, diversified financial, retailing, transportation, and utilities. Usable responses were received from 75 of the 280 firms in the sample, a 27 percent response rate. Table 1 reports the number of firms that responded by industry classification and the percentage of the responses represented by each classification. (Tables available upon request.) The asset size of the firms with assets of approximately 25 percent of the Fortune firms. (The sample represents medium-to-large firms in each industry classification.) It was requested that the person most responsible for the organization's strategic planning respond. Figure 1 presents the reported organizational level of the respondents; 85 percent were within the top three levels of their organization. Sixty-four of these respondents had completed a Business Policy course: 19 at the undergraduate level, 42 at the master's level, and 3 at the doctoral level.

FIGURE 1  
HIERARCHICAL LEVEL OF EXECUTIVE  
RESPONDENTS

Level	Number of Executives
<u>1</u>	10
<u>2</u>	25
<u>3</u>	29
<u>4</u>	3
<u>5</u>	2
<u>6</u>	2
not reported	

The second sample was composed of 200 drawn randomly from the membership of the Academy of Management's Business Policy and

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Planning Division. Fifty-seven usable instruments were returned, a 28.5 percent response rate. The respondents' academic ranks were: 20 Professors, 18 Associate Professors, 10 Assistant Professors, and 9 "various other" titles or ranks. The respondent's length of nonacademic management experience was: 10 had more than 20 years, 26 had 6-20 years, and 19 less than 5 years experience.

Almost one-half of the respondents had at least ten years of nonacademic management experience and almost 70 percent hold the rank of Associate Professor or Professor. It seems reasonable to accept that the responses were from individuals that possess an experienced basis for their judgments.

Respondents from both samples were asked to answer the questions on the instrument according to the following rating scale:

Best	1	2	3	4	5	Worst
Most Important						Least Important
Most Favored						Least Favored

The first questions was:

What should be the content of a Business Policy Course?

A list of 17 course content factors was provided, and the respondents rated them based on their inclusion in either an undergraduate or a graduate Business Policy course. The result was 34 (17 x 2) separate ratings. The choice of the 17 course content factors was based on various published models of the strategic management process, the functional and disciplinary fields of study which a Business Policy course is typically assumed to integrate for a student, and the considerations deemed important for executive decision making.

The second question was:

In your present position, what business policy concepts are important?

This question was asked only of the practitioner sample. The executives were presented the same 17 factors to rate, so that the investigators could later compare differences between the reported importance of what should be taught in the Business Policy course (course content factors) with the reported importance of these factors (concepts) in practice.

The third question was:

Considering the student's future application of Business Policy concepts to their career in a company, what learning method do you believe is best?

- Lecture/discussion
- Computer simulation game
- Case analysis
- Other experiential exercises

The purpose of this question was to compare the differences between the perceived importance of Business Policy learning methods as rated by professors and by practicing executives.

## ANALYSIS

The investigators were interested in two types of measurements: (1) the absolute value of the mean ratings by respondents in each sample (indicating perceived factor importance), and (2) the differences between the mean ratings of each sample (indicating disparity between perceptions of what should be taught and what is practiced). The perceived importance of each factor was measured by ranking the mean ratings for each factor. The means were rounded to the first decimal; smaller differences are not of practical importance in this crude, but indicative, type of measurement. The difference between means was measured by t-tests of independence, with statistical significance set at alpha = .05. In every case where statistical significance was attained, a strength of association test was calculated using:

This correlation coefficient reveals the proportion of the variance

$$r^2 = \frac{t^2}{N - 2 + t^2}$$

between the mean ratings of the two groups that is accounted for by the respondents' membership (Roscoe; 1975). It is a measure of the practical (rather than statistical) significance of the difference between the ratings of the two groups.

The investigators also employed an alternative analysis technique--the Bonferroni  $t$ , a multiple comparison method--which should decrease the likelihood of obtaining spuriously significant findings (Myers, 1979). The results of this test are not reported below because the findings were in agreement with the first t-test, except "Production and Operations Management" was rated significantly higher as undergraduate course content by practitioners; it was not, however, rated high by either sample.

## FINDINGS AND DISCUSSION

By inspection of Table 2 the reader can compare the professors' and practitioners' rankings of the course content factors at both the graduate and undergraduate level.

If one considers one-third of the range as being a remarkable difference in ranking, then only five of the items are ranked remarkably different by the practitioners as compared to the professors. If one extends the remarkable difference judgment to one-half the range, only one item is ranked remarkably different by professors and practitioners. In a nutshell, it seems reasonable for those developing and assessing simulation and experiential learning techniques that are targeted for use in Business Policy courses to concentrate on those content factors ranked among the top four. In any case, some of the other factors will likely be by-products of the simulation or experiential learning, e.g., group activities.

The 1959 report of the Carnegie Commission on the Study of Business in Higher Education stressed the need for a capstone course that would integrate students' knowledge from business courses. This report was the genesis of the business policy course. The rankings in Table 2

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indicate that the professors still consider this integrative function to be quite important, but that executives consider it to be much less important. It seems to the writers that integration is one of the strengths of computer-based business simulations.

The investigators were concerned with the factor rankings and with identifying significant differences between the ratings of factors for graduates and undergraduates both within each sample and between the two samples. These comparisons were made by means of t-tests of independence. Table 3 and 4 report all for which the calculated t value attained statistical significance at the .05 or higher level.

Table 3 presents within-sample comparisons. The mean differences between all five factors attained statistical significance in the executive sample. It appears from the strength of association tests ( $r^2$ ), however, that only "Development of Top Management View" carries much practical significance. High statistical significance (.0001), relatively high strength of association (.11), and the rankings in Table 2 all combine to indicate to the investigators that the executives' perception of helping students to develop a top management viewpoint is very important in the graduate course. This appears to be the most important finding reported in Table 3, because cases, exercises, and simulation all can provide the graduate student with an opportunity to function-- albeit somewhat vicariously--as a top-level manager.

Table 4 reports mean differences in the between- sample ratings. The statistically significant t values are again attenuated by relatively low  $r^2$  values, except for two factors--"Quantitative Decision Making" and "Motivation, Leadership, Other Behavioral Concepts". At both undergraduate and graduate course levels, both the high t and  $r^2$  values appear to indicate that the executives place higher value on quantitative decision making than do the professors. Note, however, that the absolute value of the executives' mean ratings for this factor are rather modest--2.6 undergraduate and 2.7 graduate. Both samples ranked "Motivation, Leadership, Other Behavioral Concepts" about equally low in Table 2. The mean ratings by both samples reported in Table 4 are also quite modest; however, the between-sample differences in these ratings at both course levels are statistically significant and have a reasonably high strength of association. The professors assign significantly less importance to behavioral concepts as course content than do the executives. In any case, the group activity common to simulations and experiential exercises is experience in group behavior. Further, the writers believe many instructors bring quantitative applications to the students' simulation management experience.

In your present position, what business policy concepts are important?

Considering the combination of t and  $r^2$  values, the only finding of apparent practical significance appears to be that concerning the factor "Development of Top Management Point of View." The executives' mean rating for this factor in response to the second question corresponds perfectly to their rating of the factor as content for a graduate course; they rate it significantly lower as content for the undergraduate course. This is highly consistent with their ranking of this factor in Table 2 and their rating of it in Table 3.

Table 5 reports executives' mean ratings of course content factors. Their ratings are compared with the professors' ratings of the preferred course content factors at the undergraduate and graduate

level. While five statistically significant findings are reported in the table, only three of them appear to be of practical significance.

First, "Financial Statement Analysis" was rated significantly higher by the executives than by the professors as undergraduate course content; mean ratings for both groups were rather modest.

Second, "Motivation, Leadership, Other Behavioral Concepts" was rated fairly low by the executives, and it was rated very low by professors as content for both the undergraduate and graduate course. Both the t and  $r^2$  values indicate that the executives consider behavioral concepts more useful in their work than the importance the professors assign to this factor as course content.

Third, Table 5 reveals a higher rating for "Quantitative Decision Making" by practitioners than by professors. The t values are significant at both the undergraduate and graduate levels, although the  $r^2$  is somewhat weak for the graduate course comparison. Although the mean values and the rankings are modest, the implication from Table 5 appears to be that the professors perceive "Quantitative Decision Making" of lesser importance in a Business Policy course than do the practitioners.

Concerning the student's future application of Business Policy Concepts to their career in a company, what learning method do you believe is best?

Table 6 presents a simple ranking of the four learning methods based on the overall mean ratings from each sample. The somewhat lower response rate for "Other Experiential Exercises" may indicate unfamiliarity or lack of experience with such learning methods; the slightly reduced response rate for "Computer Simulation Game" in the executive sample may indicate the same phenomenon. Table 7 reports t values for between-sample comparisons of the ratings for all four learning methods, and the strength of association ( $r^2$ ) where statistical significance was attained by t-tests. Executives rated "Lecture/Discussion" higher than did the professors and the strength of association is quite small. Both the t value and the  $r^2$  are stronger for "Other Experiential Exercises," with the significantly higher rating being awarded by the executive sample. The very similar mean ratings and small t values for "Cases" and "Computer Simulation Game" indicate close agreement from the two samples regarding the ranking of these two learning methods.

### DISCUSSION

Several findings from this study appear to provide considerations for professors of Business Policy and for the preparation of experiential and simulation material. First, both rankings and ratings between the two samples indicate strong differences of opinion regarding the factor "Financial Statement Analysis." The executives considered this to be important course content material at the undergraduate level and important in their jobs; the professors indicated it to be of less importance, especially at the undergraduate level. If one purpose of the policy course is to train students to approach strategic problems as planning executives do, then these findings indicate that financial statement analysis should be an integral part of the undergraduate course. This can be accomplished by means of simulation games and/or cases of sufficient rigor.

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Respondents from both samples agree that it is more important for the top management view to be inculcated in students in a graduate policy course. This may be a reflection of respondents' belief that those attaining a graduate degree are more likely to become top managers. It may also reflect that many managers enter MBA programs after already attaining higher levels of management experience.

The executives regarded "Quantitative Decision Making" to be of at least moderate importance in the undergraduate course; the professors regarded it to be of little importance. One reason for the professors' opinions on this subject may be that quantitative decision making techniques are addressed in the core business school courses.

Generally speaking, executives gave a moderate rating to "Motivation, Leadership, Other Behavioral Concepts"; the professors gave this factor low ratings. There was a highly significant difference, however, between the professors' rating of this factor as course content and the executives' rating of it as useful in their jobs. These executives, while responsible for planning, may have little responsibility for implementation of strategies. Since implementation is the point at which behavioral concepts would appear to become most operative and imperative, this may account for the modest ratings of this factor by these executives. Similarly, the low ratings for behavioral factors by the professors may indicate lack of emphasis on strategy implementation in case analyses and other important phases of the policy course. Lack of emphasis in these phases has been much discussed in recent business policy literature (Schendel and Hofer, 1979; Greene, 1978).

Future useful research might concentrate on the formulation and testing of specific hypotheses regarding the role of the four most significant factors found in this study: financial statement analysis, top management viewpoint, quantitative decision making, and motivation, leadership, and other behavioral concepts. Such research may provide more specific insights regarding how classroom approaches to these topics can better prepare students for applying them in organizations.

There was clear agreement between the two samples that case analysis and lecture/discussion were the best and second-best business policy learning methods, respectively. The executives rated other experiential exercises significantly higher than did the professors, and gave their lowest rating to computer simulation games. It is possible that the executives gave higher ratings to the learning methods to which they were exposed as students, and that the professors were rating highest those methods which they felt most comfortable using in the classroom. Future research on business policy learning methods perhaps should investigate more thoroughly the specific strengths and weaknesses of each of these four learning methods.

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