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DESIGNING AND DEVELOPING A "REAL" ORGANIZATION IN THE CLASSROOM

RALPH H. KILMANN
University of Pittsburgh

It often has been advocated that combining or integrating theory with practice results in the most effective learning of some knowledge area (4). In fact, some educators have insisted that conceptual material will not have a major impact on the student unless he has developed the need for such concepts by being emotionally involved with experiences that are directly related to these concepts (12).

In the teaching of management and organizational behavior, it is expected that integrating behavioral science material with *actual organizational experiences* will enhance the internalization of management skills. Recent research, for example, found that applying the concepts of participative management to the actual classroom situation (i.e., encouraging students to provide information and decision making efforts for determining classroom procedures) resulted in higher ratings on what the students learned about organizational behavior than were the ratings of students who did not receive this experience (8).

This paper further explores the experiential-educational philosophy by presenting a behavioral science curriculum program that was developed to involve students in a *real* organization, in which they have to solve *real* management and organizational problems and have to account for the performance of the organization to a *real* board of directors. They also systematically use this challenging experience as the foundation for learning behavioral science concepts and management skills.

Description of the Program

Recently, some 40 MBA (Masters in Business Administration) students at the University of Pittsburgh made application for membership in the Student Consulting Project (SCP), a student organization to provide advisory assistance to small businessmen in Pittsburgh's economically depressed black neighborhoods. These students were then enrolled in one section of a three credit required course: Behavioral Science for Business. The several major activities that occurred in the course which were designed to accomplish the integration of concepts with experience are described below. In addition to these major activities, however, each class

session involved the application of one or more behavioral science concepts to some issue or concern related to the development of an effective SCP organization. Also, for grading purposes at the middle and at the end of the semester, the students wrote papers in order to critically examine their experiences in relation to the topics covered in class and in the required outside readings (14).

The Organization Design Workshop—The first part of the course was intended to facilitate a design of the SCP organization which would maximize the commitment/motivation of the participants as well as assure the optimal use of expertise present in the organization (1). Consequently, a two day workshop of various interpersonal, group, and intergroup exercises was provided for the members of SCP in order to generate the information needed to design such an effective organization (10). Basically, two types of experiences or information were generated. First, participants were given a concentrated exposure to each other in homogeneous, support producing groups so that they could quickly get acquainted with several others, and get to know their areas of expertise, interests, and interpersonal style (11). Second, participants were given the opportunity to explore their commitment to SCP and to define a set of specific *task activities* which were compatible with their areas of expertise and compatible with the general mission of SCP, the latter being indicated by SCP's program director (7).

Designing the Subunits of the Organization via "MAPS"—The information and experiences that were generated in the workshop were developed into a MAPS questionnaire (9). The first section of the questionnaire listed the specific task activities, and each participant was asked to indicate on a seven-point Likert scale the extent to which he would like to be actively involved in pursuing each of the SCP tasks. The second section of the questionnaire listed the forty participants of SCP in alphabetical order, and each participant was asked to indicate on a seven-point Likert scale how much he would like to interact with each member of the organization in relation to the organizational tasks.

With the responses to the MAPS questionnaire, a computer program (similar to factor analysis) designs or "maps" the forty participants into various organizational subunits, with each subunit being responsible for a subset of the organization's identified task activities. Participants are actually placed in the same subunit if they have shared perceptions as to the nature of the task to be done and if they are able to work well with each other in the pursuit of such tasks. This approach to organization design has been applied to a number of educational and industrial organizations to facilitate a design based on member needs and preferences and to form an adaptive organization (7, 17, 18).

Three weeks after the participants responded to the MAPS questionnaire, the instructor presented an organization design of five subunits for SCP and the corresponding task activities for each subunit. Five subunits were chosen since this particular division proved most desirable based on several statistical properties of the analysis (7). It is of note that the MAPS

design was quite similar to the temporary design of SCP that had emerged during the interim. (The temporary design was needed in order to perform some organizational tasks while awaiting the permanent design.)

Each SCP subunit then prepared a brief statement defining the unique thrust of its tasks—i.e., the expertise and resources present in the subunit, the goals the subunit was attempting to accomplish and how they were supportive of overall organizational goals. Each subunit presented its statement to the other subunits so that each could comprehend and appreciate the relation of its activities to those of the other subunits (3). There was then discussion as to the extent each subunit had to coordinate its activities with the others in order for the entire SCP organization to accomplish its goals (13).

Development of a Leadership Hierarchy—Two proposals were entertained as to the leadership structure of SCP. One subunit had specified that its goals involved coordinating the activities of the other subunits. This subunit proposed that it would become the leadership of the organization. This proposal was not acepted by the other subunits since they did not want a computer program (i.e., MAPS) to dictate who would be their organization leaders. Consequently, the other four subunits proposed that members of the "leadership" subunit disband and join the other subunits according to their individual interests. While this occurred for several individuals, some members chose not to disband and decided to form a subunit directed to "organizational development" which was unrelated to any formal leadership role. Then each of the five subunits elected a chairperson to serve on a coordinating executive board led by a student coordinator who was elected by the entire organization. This became the leadership structure of SCP, closely resembling the concept of the "linking-pin" function (16). The student coordinator as well as the five chairpersons all came from the original "leadership" subunit (selected by the MAPS program) that was forced to partially disband. This suggests some definite validity for the design process via the MAPS method.

Development of a Financial Reward Plan—Because of external financing which the SCP project received, $24,000 per year was available to pay students for SCP work (e.g., consulting service to minority businessmen). Consistent with the freedom allowed the membership in designing their own organization, the participants were given the authority to determine how this money was to be distributed among themselves, with the constraint that the necessary organization activity had to take place (15). The students appointed a member of the former leadership subunit to design a comprehensive reward plan, which was subsequently approved by the entire organization including the SCP Board of Directors. The plan defined explicitly what constituted SCP "work," the rate of payment, and the minimum number of hours work necessary to qualify for payment. The objective of the plan was to maximize the total hours that the entire organization devoted to SCP services while containing a number of safeguards to assure that the work was actually and effectively being performed. This was accomplished

through the development of several control mechanisms, for example, completion of reports outlining the services given to the client and the outcomes of the activity.

Team Building of the Organization's Subunits—During a three hour class session, the participants of SCP generated several behavioral science dimensions which pertain to the effectiveness of a team's behavior (5). The dimensions included: the amount of trust among participants, whether participants felt cooperative or competitive with one another, the amount of communication and information sharing that existed, the clarity of subunit goals, the commitment to the subunit's mission, etc. Then, on a seven-point Likert scale, each member was asked to indicate how he saw his subunit functioning *now*, and how he would like or *desire* his subunit to be functioning in the near future. For each subunit, difference scores were computed that highlighted the discrepancy between the "now" and the "desired" score for each dimension.

The next few class sessions enabled each subunit to discuss the reason for the difference score on the various behavioral dimensions and to consider what could be done to improve the effectiveness of their team effort (2). Specific action plans were developed by each subunit to operationalize their discussions. A similar process was then applied to analyze the interrelationships among the five subunits, especially in regard to the type of conflicts that had emerged and the modes being used to resolve the conflicts. Action plans also were developed to improve the effectiveness of the interunit relationships (6).

A Comparative Analysis

Of the 160 students enrolled in the MBA program, the forty that applied for SCP were placed in one section of the course, Behavioral Science for Business, as indicated earlier. The remaining students were randomly distributed into three sections of approximately 40 students each.

In the last week of class, all four sections were asked to respond to a questionnaire designed to assess students' personal involvement in the course and their perceptions as to how successfully they had learned the behavioral science material. Although the four instructors taught their classes differently, the same textbooks were used in each class and each instructor was expected to cover roughly the same basic behavioral science concepts. Consequently, student responses to the questionnaire can be used to compare the SCP class/organization with the more traditional course design of the other sections, which did not incorporate a real organization into the course material. It must be emphasized, however, that for several methodological reasons such a comparison is not a rigorous test of the impact of the SCP program; for example, students chose to be in the SCP organization and were not randomly assigned.

Table 1 shows the 20 items that appeared on the questionnaire and for each item a *t*-test comparison between the mean response of the SCP class versus the mean response of the three other sections combined. Not

only did all 20 items yield higher mean scores for the SCP class versus the others, but most mean differences were statistically significant at $p < .001$.

This comparison tentatively suggests that the SCP curriculum was able to provide the students with an intensive experience in organization design and development for their learning of management and behavioral science concepts. Again, while the data may be misleading due to methodological shortcomings, the comparative analysis is encouraging.

TABLE 1

Comparison of SCP Class with Three Other Sections Combined

Questionnaire Item	*Mean SCP (N = 39)*	*Mean Others (N = 108)*	*t*
1. I have gained a better understanding of myself from the classroom experience	4.86	3.42	4.85**
2. The course has already had a personal impact on my life	4.07	2.65	4.68**
3. I have achieved an in-depth understanding of organizational dynamics	4.83	3.37	.5.10**
4. I have achieved an in-depth understanding of interpersonal relations	4.69	3.66	3.88*
5. The course has shown me the relevance of behavioral science concepts to management	5.35	4.41	3.23*
6. I feel that the course will be relevant to my future career	5.10	4.08	3.42*
7. I feel that I will apply what I learned in the course to my next job	4.38	3.30	4.03**
8. I feel that I have internalized the course concepts	4.93	3.32	5.63**
9. My learning of the concepts was achieved by my personal involvement with the issues	5.41	3.54	6.75**
10. My goals and expectations were congruent with the classroom experience	4.00	3.16	3.05*
11. The problem of racism was exposed in my class	3.76	1.54	9.30**
12. The problem of sexism was exposed in my class	2.38	2.21	.46
13. The examples illustrating the concepts seemed personally relevant to me	4.93	3.22	6.65**
14. The experience of frustration or anxiety was an important condition for my learning	5.38	2.83	8.05**
15. My instructor was personally involved in my learning	5.97	3.06	9.11**
16. My instructor actively encouraged the application of course concepts	5.90	4.13	6.38**
17. My instructor's general behavior in class was consistent with the concepts	5.48	4.03	5.11**
18. "Real life" experiences were effectively integrated with course concepts	5.35	3.60	6.39**
19. In general, my instructor developed a useful and meaningful learning climate for me	5.66	3.67	6.59**
20. This course has been more worthwhile for me than my other courses	4.45	2.69	5.74**

Note: Items were scaled on a seven-point Likert scale from 1 = "not at all" to 7 = "extremely."

*$p < .01$

**$p < .001$

Further Development of the Program

The SCP organization voted unanimously to continue as a class for the second course sequence of behavioral science in the MBA program. The design of this second course will follow that of the first, with a greater effort made to measure different aspects of individual and organizational effectiveness.

Longer term plans include the continuation of this curriculum for incoming students with the possibility of utilizing other course material in an experiential manner. For example, accounting and economics courses might find it useful to rely on the SCP organization as an immediate and available source of "real world" experiences. Finally, the possibility exists of incorporating other types of community action programs into the curriculum to extend the benefits derived from the SCP type program.

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