ABSTRACT

Teaching methods and content of two Business School behavioral science courses are described. The evolution of the first course, Small Group Dynamics, from 100% lecture to 100% experiential learning is described. The effects on student acceptance and ability to apply the concepts are discussed. Finally, Total Quality Management (TQM) principles were applied to the Laboratory to Achieve Organizational Excellence.

History and Evolution

Initially, the presentation included the traditional stand-up professor with listening and note-taking students. Midterm and final exams were required and depending on class size, a paper might have been assigned.

Students were assigned a book of readings like Cartwright and Zander's *Small Group Dynamics* (1968), and additional articles from various journals. Basically, the assigned readings were research papers on topics involving group dynamics or on variables related to group dynamics.

The course topics included Definition of Groups; Group Membership, Similarity and Dissimilarity; Reference Groups; Group Cohesiveness; Conformity; Group Structure; Leadership and Productivity; Group Decision Making and the Risk Shift; and Goal Attainment. The lectures and readings usually detailed how one variable correlated with or affected another and then described the experiment or field study that demonstrated that relationship. For instance, a study could deduce that group members would be less subject to conformity pressure than would be non-members for whom the group constituted a reference group. The theory that led to the hypothesis and the experimental test would be discussed in class.

Among the topics discussed during the ten-week quarter were studies on development of group attitudes; the relation of individual attitudes to group norms; what cohesiveness was and how it related to group norms; the correlates of cohesiveness, and all the experiments that demonstrated those relationships. In addition, much time was devoted to various theories of leadership and to all of the studies purporting to demonstrate the validity of each of the theories. Naturally, the papers relevant to any of these variables which were published by the professor teaching the course, were discussed in great detail.

By the time the eleventh week of the quarter arrived the students were more or less well equipped to respond to a variety of multiple choice, fill in the blank, and true and false questions. Presumably they were equipped to apply group dynamics' concepts in their managerial activities. This model became well established and continued more or less unchanged, except for the replacement of old research reports with newer ones as they appeared in the literature.

During this period of stability the professor began a consulting relationship with The Presidents Forum. This was a group of about forty presidents who paid a yearly fee to the Forum in return for which they could attend a one-day-per-month presentation on various business or related topics. They also participated monthly, in six to eight person, relatively permanent, problem solving groups. Each president was host approximately twice per year when the agenda centered on his company and its opportunities, strategies, or problems. Many of the same companies enrolled their vice presidents in similar problem-solving groups managed by The Presidents Forum.

The professor functioned as a moderator or facilitator of the vice presidential problem-solving groups. The topics varied from general organization strategy to specific marketing, production or financial problems. This was a for-profit activity and the owner of the organization frequently assessed the client members' perceptions of the meetings—how much they benefited, how effective was the moderator, suggestions for improvements, etc. These ratings and responses were discussed by the professor and the owner of the Forum and continuous thought was given to how meetings could be improved. The motive for this self-examination was to insure that executives would give positive feedback to their presidents, so that member dues and fees would be forthcoming each year. From these discussions, from trial and error and more discussions, there evolved methods of moderating successful meetings; meetings that would result in client satisfaction and renewal of memberships. The Presidents Forum was in fact a successful business and member renewal rates were high. It seemed clear that concepts and techniques for holding very successful decision-making group meetings had evolved and that highly cohesive groups were developed.

Occasionally a substitute moderator was necessary and the techniques of how to properly run one of these meetings had to be transmitted by the professor. While the effectiveness of these techniques could be understood in terms of the group dynamics' variables taught in Business 393, it was clear that the "how-to" being transmitted to the substitute moderator was different from the material the professor taught in the classroom.

During the same time frame, students in the class would bring up for discussion various situations they were encountering or had encountered in their work organizations. More and more frequently, the professor would structure the ensuing discussions in light of the concepts and principles derived from his consulting experience rather than from the framework provided by the variables described in the research papers. Post-class discussions centered on the consulting activity, group composition, tasks, outcomes, moderator role, etc. Eventually and inevitably the question arose—"Why don’t you teach us that stuff in class?" Why not, indeed? And thus the journey toward experiential learning began.

Initial Experiential Learning Exercises

Without a great deal of thought the decision was made to do in class what has proved successful outside: form the students into decision-making groups of six to eight people and solve real problems. To that end, during the first class meeting all students were asked to submit two paragraphs describing two problem-solving situations or opportunities they currently faced in their work. (Those students who were enrolled in an evening M.B.A. program so most held full-time jobs.) The situations could involve production, marketing, financial, or engineering problems. They should not be confined to human relations or group dynamics problems. Any business problem would do. Class members were assigned readings about phases in group problem solving (Bales, R. F. and Strodtbeck, F. L., 1981;
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Carter, L. F., 1954) and valence (Hoffman, R. and Maier, N. R., 1964) in group problem solving. The professor selected two problems from among those submitted, telephoned the students to get additional details about the situations, and ascertained exactly what kind of problem-solving outcome the student desired.

The class period began by selecting a problem-solving group of six to eight students. The remainder of the class functioned as observers. At least, two members were given forms that enabled them to count valence, two observed Bales' phases and two detailed another moderator or group leader behavior. The professor functioned as the moderator. The problem-solving session lasted one and one-half hours, then the class discussed what happened.

First was discussed whether the person with the problem was satisfied with the solution, whether it was different from what the student had previously thinking about, was it better and if so, why. That is, why was the group able to come up with a better solution (if it had) than the person with the problem? The Bales' observers reported their findings and interpretations and then the entire class looked at the phases of problem solving: discussed the uneven transitions between orientation, evaluation, and control; whether the phases could be managed, and if so, how. Also discussed were the relation between movement through the phases and the length of time to come to a decision; whether group meetings were really a waste of time or rather movement through necessary phases.

Next, the valence observers reported their findings. The relation between valence associated with the various alternatives and the selected alternative was discussed. Finally, the moderator's behavior was discussed including his role in setting the agenda, establishing rapport (how and why), soliciting participation from less forward group members, his role in distributing rewards for participation vs. getting other group members to do so, etc. Usually the discussions considered how the moderator handled problems like the “obnoxious know-it-all,” “the obstinate one who disagrees with everyone,” etc.

The following week the student roles were exchanged, the observers became problem solvers and vice versa, using a new problem. As before, discussion followed the problem-solving session.

The groups were then reconstituted and two additional problems from among those submitted by the students were used and the process was repeated in two subsequent weeks. The remainder of the course reverted to lectures and readings, but during discussions the variables under consideration were related to the problem-solving sessions where possible.

Feedback from the students in those early years indicated several things:

a) They much preferred experiential to other forms of teaching.

b) They perceived they learned more from the experiential sessions.

c) They were able to immediately use the things they learned in the experiential sessions unlike the material from the lectures.

d) They preferred more experiential class sessions and fewer lectures.

e) Many wanted to gain experience as group moderators or leaders.

The next few times the course was offered the major change was to permit class members to function as group moderators. The moderators and people with the problem contacted each other before the day of class and the moderator was instructed to determine the agenda for the upcoming problem-solving session.

and to make certain he understood what his “client” felt was the major issues. Discussions subsequent to the problem-solving session proceeded as before, but with students as moderators an increased amount of time was spent on how the moderator could function more effectively, especially from the point of view of maintaining long-term group and moderator effectiveness.

During this period, in addition to the problem-solving experiences, a variety of different exercises were attempted, some in class some off site. The off-site situations usually were project teams which functioned as observers rather than interveners in some ongoing situations like condominium board meetings, group meetings in social case work agencies or other on-going work group meetings. The in-class sessions were constructed situations like constrained communication games where problems required solution but communication was limited to adjacent positions in a network; problem solving of different classes of problems, e.g., ill structured vs. well structured; and various role-playing situations. As the in-class exercises were refined over the years—some discarded, some modified—they were judged more useful than the off site purely observational experiences. These refined situations finally replaced all the lecture sessions. All class sessions included some experiential exercises with subsequent discussion of participants feelings, hypotheses, intuitions, and new insights.

Recently classes consisted of:

a) Real problem solving with students as problem solvers, group moderators, and observers. Each problem is solved twice. Two moderators and problem people each begin with a group of solvers and observers. When the problems are solved the moderators and problem people swap solvers and observers and repeat the process. Hence, each problem is solved twice each time by different people. Thereafter it is possible to compare solutions, compare the processes to solution, the interaction of moderators with different groups, etc. Observational exercises and discussions constitute roughly 50% of the class sessions. The remaining sessions are utilize constructed situations, b through f.

b) Group problem solving with each member instructed to be an advocate for a competing alternative. The discussion centers on how conflict was resolved.

c) Role-play--two and four person--with and without instruction in transactional analysis and the use of language in conflict and problem solving! Although the role-playing situation is an artificial one the student can experience different outcomes as a function of the variations in language usage.

d) Role-play of a situation where one player has a hidden agenda. The discussion centers on how to recognize a hidden agenda and then how to deal with it.

e) Problem solving with varying communication constraints where information is distributed among the group members and all information is necessary to solve the problem. The discussion centers on efficiency of the problem solving as a function of different communication networks, and how people felt as they occupied different positions in the network.

f) Survival games to demonstrate synergy. Discussion of the development of synergy, where the group decision is superior to the sum or mean of individual decisions and how it differs from the distributed information situation enlightens this exercise. The role of experts and their effects on possible synergy also is explored. There usually are one or two “experts” in every class. (An expert can “skew” synergy in either direction depending on his “quality” and effectiveness in group functioning.)

That format remained fairly stable for a few years. Students consistently rated the exercises of solving real problems more highly than the artificial, role-playing ones. The role-playing exercises did not elicit as much meaningful involvement as did the solution of real problems faced by some class members. However, no better alternative was found until the last year and a half developed a more involving format. Groups

1 Valence in problem solving is a method of assigning positive and negative values to different solution alternatives, i.e., purports to predict the solution prior to its adoption once the positive weights for an alternative reach a particular level. Bales' phases describe the typical stages in the group problem-solving process, roughly orientation first, then evaluation, and finally control. Bales and Strodtebeck also define various behavioral acts which can be classified into the three broad categories, or if necessary, into many subcategories.

2 Transactional analysis includes how the use of language implies a parent, child, or adult role in the interaction process. The implicit adoption of these roles affects the communication and conflict resolution process.
What Have We Learned?

The one obvious thing that was learned is that students are (reportedly) much better able to apply concepts from small group dynamics in their every-day functioning. However, one cannot attribute this benefit solely to changing from a lecture/discussion format to a more experiential one. Not only was the method of presentation changed, but so was the content of the material presented. Further, the discussion and reflection on the experiences leads to better understanding of the concepts and together with experiencing the situation to more efficient application of the concepts.

The different content includes ideas not prominent in the research literature, for example: a) the importance of an agenda; b) how to “discipline” a recalcitrant group member; c) the importance of rapport other than for rapport’s sake; d) how to manage a group outcome as a leader; e) how to influence a group outcome as a member, non-leader; 1) how to manipulate a group outcome; g) how to recognize a hidden agenda; h) how to identify the hidden agenda (maybe); i) barriers to conflict resolution and how to overcome them; j) barriers to communication and information transmission and how to overcome them; etc.

The professor also has learned some things. Teaching via experiential situations is not cut and dried. Students learn different things from similar situations and the professor must be prepared to evaluate and incorporate the unexpected into the discussions. If what he/she wants to teach is not extracted from the situation by the participants, the experience has to be changed. Simply saying, “This is what you should have gotten out of this situation.” is totally inadequate.

Letting students design in-class experiences is risky. Sometimes they do not work! C’est la vie. Sometimes the principles do not work when applied by the students in their work organizations. The professor must learn to tolerate these situations. (What happened?” “Why did it not work as intended?” “Was it the situation or what?” “How could it have been set up so it would have worked?)

Finally, it is clear that everyone including the professor, had a lot more fun, and that everyone learned a lot more than in a traditional class.

WHAT HAVE WE LEARNED?

The Laboratory to Achieve Organization Excellence is a course whose premise is that the best way to learn how to initiate change in an ongoing organization is by doing, experiencing, and reflecting on those experiences. This is a new course, currently being offered for the second time. For this course students register for two quarters, or twenty-two weeks, and they are not permitted to drop the course after making the initial two-quarter commitment. The aim of the course is to effect change in a functioning organization, change that represents movement toward the Total Quality Management (TQM). It may be an initial step in an organization that had no TQM program, or it may be an additional or new step where a TQM program already has been started. TQM essentially is the training and empowerment of employees to work toward customer satisfaction and reduction of internal waste of resources.

The students are formed into teams, depending on the number of students and client organizations. The team can number four to ten or twelve students depending on the size of the effort. The team works with members of management, usually top
management of a small organization or of the division of a large organization. Faculty members ascertain the company’s perception of the situation and its perceptions of the opportunities for improvement. The student team will also examine documents, perhaps interview some people, and generally examine all the organization’s systems to come up with a proposal detailing the team’s perception of the opportunities for improvement.

The team develops this proposal through a series of team meetings, sometimes with but usually without faculty participation. The faculty function as coaches, primarily asking questions rather than giving advice. The faculty in this course consisted of a statistician and a psychologist.

The students are strongly encouraged to maintain a Lablog™ wherein is explored their individual feelings, intuitions, and deductions relative to their functioning and effectiveness in the group meetings and in their interactions with company personnel at whatever level. The Lablog is more than a journal. It encourages students to treat their observations and feelings in a relatively scientific manner so that they can hypothesize future effects of their own and others’ behavior. In other words, the Lablog is the reflective part of the experiential learning process.

The course can be described by elaborating some of the experiences of one of the teams working with a $40MM manufacturing firm. The team’s initial contact with the company was with the president who came to campus and spoke to them of his view of the company mission and growth goals as well as some of his current problems. He introduced his vice president of manufacturing who was to be the major liaison between the group and the company. The next meeting was held at the company. Vice presidents of manufacturing, marketing, and finance, as well as the president presented more detailed views of conditions, opportunities, and problems. Financial and other details of the company operations were made available.

The students returned to campus, discussed the situation among themselves, and contacted the company as they felt necessary for information. They also met with the faculty-coaches weekly to review progress and discuss the projects they were considering. In those meetings they agreed on criteria for selecting projects from among the alternatives being considered. The criteria included a) doability within the time frame, b) biggest hang for the buck, c) leaving behind capability for improvement in the company after their projects were completed.

In a meeting with the president and vice president, the student team described TQM and its underlying premises of customer satisfaction and employee empowerment as well as their proposed projects which included team building, customer and employee surveys, fabrication simulation, and charting and creating a visual factory. The specific projects were described in greater detail and the faculty were asked for priorities so that one or two might be selected. The officers, especially the president, were enthusiastic and immediately endorsed all four as desirable. The student team was riding high. They decided to take on all four projects.

Their next presentation was to the levels of management reporting to the vice presidents. The same presentation was given and was expected to result in specific suggestions for proposed team members as well as any other concrete suggestions the group (about 15) might have. The managers responded with silence until some of the more forward ones stated, “You guys are full of shit. Just like all the other consultants that come through here every month or so. Yah, your program sounds good. But as soon as you leave the ball is dropped and nothing happens. ‘All you guys do is create more work for us and waste time in meetings like this.’”

The students were no longer riding high. Their learning experience had begun in earnest. They returned to campus, not to lick their wounds, but to discuss how to get “buy-in”, effect cultural change. They also discussed whether the real problem was with the upper management quartet or the 15 who reported to them.

The faculty provided no answers. The course is designed to provide students a (reasonably safe) opportunity to take risks, make errors, fail, etc., although success is preferred by all. The faculty/coaches listened to their various plans and only asked questions while the group was settling on some alternatives.

Their basic strategy was to form a Continuous Improvement and Communication (CIC) team from among the 15 lower-level managers. The focus of this team would be to devise and establish a framework that would guarantee continuation of the programs and progress after the proposed projects were completed. Further, the CIC team was to structure the communication program, including the president’s role, in introducing the program to the rest of the factory and office. Approval of this plan was sought from upper management and when given it was introduced to the 15 managers.

Endorsement, but not enthusiasm, was obtained and the rest of the projects were launched under the guidance of this committee. The students taught problem-solving techniques to this and other teams; they shopped for and let contracts to two outside vendors, a market research firm and a software company; they acted as facilitators in subsequent team meetings and problem definition and problem-solving sessions. A variety of communication errors--between the team and vendors, the vendors and company management and the company--had to be overcome before all four projects could be brought to successful conclusions. The work of the cell assembly team in solving a parts identification and misassembly problem saved enough money to pay for all the time, costs including management time. At the time of the team’s final presentation the company was about to appoint a TQM director to continue the work begun by the Laboratory class.

How well did the students integrate their experiences and Lablogs to achieve new learning? One of the groups met and developed a fishbone diagram to define what constitutes team quality. They also developed a measuring instrument to measure quality and each team member, based on his own Lablog, applied it to himself and to each of his peers. An example of the fishbone definition is in Appendix A and the measuring instrument in Appendix A.

They met as a group and in a two-hour session discussed their ratings of each other and how and why one’s self rating departed from the mean of his peers ratings, if it did. This was all done without faculty present although the ratings were made public and a tape of the meeting was presented to the faculty at the end of the course.

The students rated the course exceedingly high on how much was learned, how relevant it was, and how many more hours it consumed relative to more traditional classes.

Feedback also was given the faculty/coaches on their behavior by the students. The expectation is that this year’s coaches will be more effective. Continuous improvement is the goal and the watchword. Is that not what a university is for? If not, is that not what it should be for?

REFERENCES


3- The author is a psychologist. William Golomski is a statistician and a member of The Board of Ovcrsccrs. The Malcom Baldrige Award.
Final Exercise

The class will be divided into three groups of eight members and one group of the remainder of the class.

Each group will meet to decide how to distribute grades in this course to the members of the group. For each group there are four A's, three B's, and one C.

Each of you is to try to convince the other you deserve an A. (Not that all you care about is a B or a C, or that you need an A because of your GPA.) Try to convince the others you deserve an A because of what and how much you have learned. Once the group has come to a consensus on how to distribute the grades, the exercise is completed. If you cannot come to a consensus within forty minutes, consider the exercise completed. Please rewind the tape and bring it with you to the "home" room.

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Final Evaluation: Self-Evaluation

Your Name: ____________________________

If 20 new ideas, insights, or understandings is a high-quality outcome for a ten-week quarter, my gain for this quarter has been: (check one)

1 - 4 ideas or insights —__________
5 - 9 " " " —__________
10 - 14 " " " —__________
15 - 19 " " " —__________
20 or more " " " —__________

My personal effectiveness in small-group activity, compared with my activity prior to this quarter, has increased by about: (circle one value)

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

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Final Evaluation: Final Exercise

I. Circle one number for each group except your own. The group outcome, in terms of overall effectiveness was:

Quick, Efficient Consensus, Resolved Conflict without Forcing Capitulation / Took a Little Long, almost a Consensus but Time Forced Some Capitulation, Problem-Solving Incomplete / No Real Consensus Achieved. No Problem Solving /

Group I

1 2 3 4 5 6 7 8 9 10

II. Circle one number for each group member.

Name of Member / Did not Promote Group Process, Was an Impediment / Definitely Helped, Provided Structure, Facilitated, etc /

1 2 3 4 5 6 7 8 9 10

III. Circle one number for each group member and include the grade assigned to each group member.

Grade Assigned by Group to Member / Name of Member / Clearly Didn't Have Command of Ideas Covered in the Course / Understood about as Much as any in the Group / Displayed Understanding of nearly all Concepts Covered in the Course, More than Others in the Group /

1 2 3 4 5 6 7 8 9 10

Final Evaluation: Class Contributions

Circle one number for each class member, excluding yourself.

Contributed to Understanding of Concept, Frequent Participant / Contributed to Understanding of Concept, Average Amount of Participation / Little or No Useful Contribution /

Almario, M. C.

1 2 3 4 5 6 7 8 9 10
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GSB Quality Team Evaluation Form

Business 595
Becker/Golombiski

This is an opportunity to provide objective feedback to each of the team members. The categories are those generated by the Team on Friday, 31 May 1991, and the scale is as follows:

1 Poor/Detraeted - Weakened project, diluted team effectiveness or learning experience.
2 Adequate - Met goals and requirements.
3 Outstanding - An individual's contribution moved the project ahead of target.

This form is due Tuesday, 4 June 1991 at Noon to every Team member's mailbox. We shall discuss the results as a group beginning at 2:00 p.m. Tuesday afternoon.

Team Member:

Leadership
Communication
Clear
1 2 3 4 5
Quick
1 2 3 4 5
Continuous
1 2 3 4 5
Complete
Goal Focus
Goal Integration (Actions/Goals)
1 2 3 4 5
Development of Team
Coaching
1 2 3 4 5
Education
1 2 3 4 5

Relationship Building
Client
1 2 3 4 5
Development of Ownership
1 2 3 4 5
Communication
1 2 3 4 5
Presentations
1 2 3 4 5
Team
Trust
1 2 3 4 5
Follow-Through
1 2 3 4 5
Communication
1 2 3 4 5
Dependability
1 2 3 4 5
Goal Congruence
1 2 3 4 5
Impact
Goal Follow-Through
1 2 3 4 5
Level of Participation
Effectiveness
1 2 3 4 5
Time
1 2 3 4 5
Effort
1 2 3 4 5
Reaching Closure
1 2 3 4 5
Project Impact (Client)
Realizing Project Potential
1 2 3 4 5
Selection/Prioritization
1 2 3 4 5
Initiative
New Ideas
Generating
1 2 3 4 5
Buy-In/Selling
1 2 3 4 5
Integrating
1 2 3 4 5
Original Data Collection and Analysis
1 2 3 4 5
Insights
1 2 3 4 5
Experimentation/Risk-Taking
1 2 3 4 5
Overall, how would you rate this Team member's effectiveness?
1 2 3 4 5