

Simulations, Games and Experiential Learning Techniques:, Volume 1, 1974

A STUDENT'S VIEW OF LEADERSHIP TRAINING WITH A TWO- LEVEL HIERARCHY, TWO COURSE SIMULATION

Bernard Keys and Chris Jones,
Oklahoma Christian College

INTRODUCTION

For several years a noticeable weakness in business games has been the absence of strong organizational and leadership functions. Organization often tends to be that of a democratic committee management, while leadership, if present, tends to that of an emerging informal leader¹ (p. 183). Neither is very realistic measured by corporate activities.

Course Organization

At Oklahoma Christian College the Behavioral Business Concepts course (a freshman introductory course) and the Business Policy Seminar have been designed to alleviate the weaknesses mentioned above. Three graduating seniors are assigned teams of approximately seven or eight freshmen students and required to play 8 decisions of The Executive Simulation². Seniors are given the test scores of freshmen on The Executive Simulation along with GPAs to assist them in selecting leaders. They assign salaries to team members which are convertible to grade points in the course and which become administrative expenses on their income statement. A grading system is given in Appendix A. The classes meet together in the order shown below:

(BBC - Behavioral Business Concepts)

(SPS – Senior Policy Seminar)

M
BBC

T
SPS

W
BBC
SPS

T
SPS

F
BBC

On Mondays the class professor lectures to the BBC class on one of the following subjects, each of which has a parallel assignment to one text chapter or a hand-out. (See Appendix A.)

A quiz is given each Friday to the BBC class on that week's assignment. Each student can retake each exam one time. This procedure is a modification of the Keller system of self-paced instruction. All freshmen are required to write a 4 - 7 page term paper on their business game activities, including the four basic functions of management: planning, organizing, leading and controlling. Within the planning section reports on marketing, production and financial strategies are requested. Evaluations of their teammates and senior advisors are also required.

SPS students are assigned several classic texts in management. No examinations are required. They meet with the same class professor who teaches BBC. On Tuesday and Thursday the class discusses experiences which

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they have had in motivating BBC students to organize, appoint leaders, establish goals and develop strategy. Seniors are encouraged to take a personal interest in freshmen, to help them develop a positive self-image and to give them the confidence and the incentive to complete their college education. In the most recent cycle of the courses, Thomas Harris' book, I'm OK, You're OK³ was required reading for seniors.

SPS has only one written assignment which is graded: a term paper including many of the same topics as mentioned for freshmen. However students are encouraged to use all of the tools which they have learned in four years and to conceptualize their experiences.

The Simulation Activities

The Executive Simulation is a fourteen variable total management game with approximately equal emphasis in marketing, production and finance. In addition the game includes 4 unique planning sheets which allow a person completely uninitiated in the business field to make reasonably rational decisions within a hypothetical year of operation. In order to indicate the richness and depth of behavior generated by the two course simulation I have invited a student to present excerpts from his senior paper and to respond to questions along with me at the conclusion of this panel.

A STUDENT'S OBSERVATIONS

Chris Jones

Introduction

I saw as the purpose of this class a challenge to pull all of the concepts which I had learned in management together into a workable unit and to apply them on a realistic basis, (as suggested by Given). I saw my role as that of a manager-teacher. If one wants to do a good job of managing people, he must be able to help them grow in competence and understanding. He must be able to teach them.

In preparing myself to become a manager I ran across several new concepts but none struck me so boldly as the following excerpt from Maslow's book Eupsychian Management: "The trouble with most youngsters who have been after me is that it seems they have in the back of their heads some notion of self-actualization as a kind of lightning stroke which will hit them on the head suddenly without their doing anything about it." (4, p. 7).

When I view the freshmen on my team, I can see myself as if looking in a mirror. When I was a freshman and played the game I felt very lost. So, the question I asked myself when facing my freshmen was, "What happened to cause my interest in the business game to increase to the point of self-motivation and self-actualization?" My own self-actualizing I remembered came from taking on roles of leadership and responsibility during my college career. Knowing this was of some benefit, because I could see the possibility of creating interest by placing the team members in points of

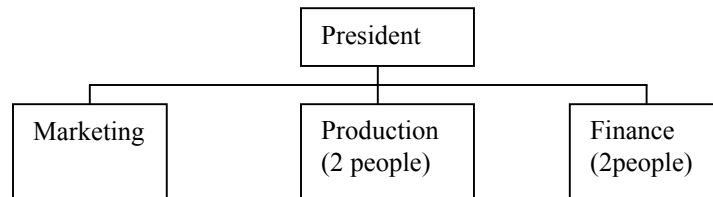
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direct responsibility and causing them to seek out solutions while facing possible failure or financial loss if they were incorrect.

This concept needed refinement if it was to be useful. A student might be put into a point of responsibility which is too great for him as an individual. Maslow points out that failure at this point will result in regression rather than growth.

Organization

Our team started out with two men and eight women. However by a little bartering we were able to trade around and acquire four men and four women. We, as a team of managers, set down in a meeting designed to set goals for ourselves and to pick out what we hoped would be the most effective organizational structure. Because it is well known that a leader will emerge in an informal group we decided to leave the decision of the president up to the team itself by a vote at the end of their second meeting. The structure was to be as follows:



Our goal was to expose each team member as much as possible to all aspects of the business game and build a broad foundation upon which a major could be built. By using a highly centralized organization we hoped to get work done through a strong leader and allow the team members to become accustomed to working with each other. We rotated the members at the end of one year of game play to a new area within the three functional areas of the game.

Leading

As a manager I would place myself at the 7-7 point of Blake's Managerial Grid⁵ (p. 6). That is, I feel that work and people are inseparable. They are mixed to the point that any attempt to separate them will result in poor motivation and a poor manager. As a 7-7 manager I feel that efficiency is still important and that it comes through understanding my employees while commanding their respect. I began to notice from the very start that my participation on the Emory intercollegiate business game team was having a decided effect on my team's impression of me. I was looked at as being a 'superior boss' according to the definition given by Maslow. This was somewhat true of all seniors. The freshmen seems to say, "Why should we work so hard at coming up with answers when you obviously know the answer?" In order to cope with this problem we would answer their questions with questions.

It was my job to persuade the team to relax at our first meeting and to condition them early to the possibility of mistakes and failure. We gained team appreciation early by scheduling -outside meetings and promising that they would be over at a certain time. We felt that a good leader must realize that his employees have many tasks to perform and that they

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can not be effective if they spend all their time in rambling meetings.

Surfacing Problems

Several problems developed during our administration. Early in the game we became aware that our team was not as well informed as they should have been about the game worksheets. We had felt that the sheets were reasonably self-explanatory and had not spent much time on explaining their purpose. However we found that the freshmen did not know what to do with the information which they developed on the forms. In order to solve this problem we set up times to meet individually with each department and explain in detail the use of the final figures from each of the planning sheets. By doing this we were able to spend more time in the decision meetings discussing the various variables rather than trying to explain the procedures of playing the game.

A second problem that developed was that of an overly zealous president who was so out spoken that she stunted the growth of her fellow team members. She seemed to develop the feeling that one of the freshman men was out to get her. He took over the job of president the second year succeeding her as was originally planned. His form of leadership was exceptionally good in causing others to talk. Before expressing his feelings about a particular variable he would solicit the responses of other team members. The woman, on the other hand, would give her opinion first and look at any other suggestions as a threat to her views.

A third problem was that of non-participating team members. I do not think that a decentralized form of control would have been effective for these people either. This was more of a human-relations problem. We tried several different leadership techniques but were never too effective.

Communication

At any time I passed a team member outside of meetings I took the time to talk about their personal goals in the business department and tried to tie them into our team goals of a broad understanding of a business firm. I feel that this outside contact was a strong reinforcing agent and helped create more goodwill between the managers and the team. It was very interesting to watch communication increase in times of profitability as opposed to times of low profits or losses. In times when the profit picture was not good I pointed out other high points, such as excellent inventory control, sound market share, higher sales per salesman, and other important points of an internal nature.

We attempted to use Maslow's authentic communication in our organization, i.e., to be honest and frank. When the team set up outside meeting times and failed to show up, I was very concerned and pointedly asked why an individual was unable to attend. Having built up a certain amount of respect this open communication was well accepted.

The communication between managers was for the most part satisfactory. However I had a difficult time being patient around one senior and I was unable to draw him into a discussion. He was not very interested in the course and the team had very little to do with him. Advisors met regularly outside of class to discuss the individual team members and to modify

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our management techniques. I tried in the meetings to pass on information I had found in Maslow's Eupsychian Management while Craig returned with thoughts from I'm OK, You're OK. Craig managed on a person-to-person basis, in that he took each team member out for a coke and was able to pass on some very factual and valuable information that I had not noticed or learned. We often found ourselves at unscheduled times discussing ways to pull in the slower team members.

Control

We explained the reason for goals but we left it up to the freshmen to set their own standards and goals. They wasted no time in setting goals which turned out to be not only sound but flexible. After two quarters of game play their flexible goals became a little more rigid as trends set in, but their ability to reach those goals also increased with practice and experience.

I tried to use Newman and Summers thoughts on 'More coaching, less ordering' (6). I let the control mechanism--standards, measurements, and reports--point out the need to the individual to realign his thinking. I tried to coach them back in the right direction by asking questions which when answered would point toward the right direction. I often reminded freshmen of their original goals. I tried to control to a certain extent by orally approving of a comment or telling freshmen outside of class that they were doing a good job. This was effective and caused some normally silent team members to occasionally speak out. The females were especially responsive to this form of control

The salary did not seem to motivate students, although we set the salaries ourselves. Perhaps it was because over three years of game play the salary arrangement had little total effect on a grade.

During the second year of game play we were able to control much more effectively through the team president. By discussing areas of weakness before team meetings the freshman president was able to point them out without us saying anything to the whole team and the team responded more favorably.

Control was difficult and more direct during the first year. No one knew enough to follow the president's lead on the various variables.

SUMMARY

In reflecting on the simulation experience I have been able to see my weak points and areas in which I was unsuccessful as a manager, but I can also see some good points. In relation to our goals of having freshmen acquire understanding of the business world and vocabulary I think we were very successful. I am amazed at the freshmen's depth of understanding of the game. By the final quarters of game play they were able to see the relationship between all the marketing variables and how each one affected the other. They were able to weigh each variable in relation to the economic index and trends and come up with sound decisions. Their final game standing was a close tie for first. They are far superior as team members to myself in the same class four years ago.

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Our greatest disappointment was the fact that several on our team would just not participate in the meetings or even in class. I feel certain that for some the entire thought of college was so overwhelming that they could not even begin to think about one class. I feel sure that by the close of the game we had been able to wipe out the 'superior boss' image. They realized our goal and therefore knew that we were unwilling to take on the decision making process.

EVALUATION

Since this course is still in the pilot project stage very little statistical evaluation is being done. My principle thesis in evaluating business games has been for some time that games are not responsible for teaching or disseminating knowledge. Rather it is their responsibility to generate behavioral and decision-making activity so that information from texts and lectures can be launched in a 'property-rich' environment (7, p. 5). If this thesis is accepted subjective descriptions and anecdotes from participants become better forms of feedback than any type of correlation analysis. In other words, our purpose at this point is to make sure that most or all of the behavior in the managerial domain can or does take place, which in turn insures that experiential learning could take place. However we could not resist the temptation to do a few mental gymnastics with our students while such an opportunity was presenting itself.

In order to get some idea of the human relations understanding of our freshmen and seniors we gave a pre and post test using Kirkpatrick's Supervisory Inventory on Human Relations.⁸ The results are exhibited in Table I.

TABLE I

Pre and Post Test Scores on Kirkpatrick's
Supervisory Inventory on Human Relations

	Pre-Test Mean	Post-Test Mean	Net-Change Mean
Freshman BBC	61.01	63.40	+2.39
Senior SPS	67.32	68.95	+1.63

Since we offered only one section of this course and had no control group, this test was of limited value. It did indicate a considerable difference between human relations knowledge of freshmen and seniors, and some

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positive gain for both during the semester. All of these differences could probably be attributable to many other things. Since our seniors are scoring above the national average of practicing supervisors on this test we probably need to utilize a test that includes more differentiation in future controlled studies. Therefore significance tests were not conducted.

A more useful evaluation was a test known as Marvin's Management Matrix (MMO)(9, pg. 98-102). This is a test which measures a person's perception of his own managerial style in three action patterns: (A) working through others, (B) producing worthwhile results and (C) generating usable ideas. SPS students were given the MMO at the beginning of the semester and at the end of the semester to determine whether or not their leadership styles changed during the semester's experience. It is given in modified form to freshmen who evaluate the leadership action patterns of all seniors. While it will not be possible to examine patterns of all seniors on the MMO one example will be cited to show the level of behavioral information which can be structured and measured using the two-level hierarchy business game. Three sets of scores from the action patterns of advisors on one team are given in Table II. (See Table II below.)

TABLE II

Comparison of Marvin's Management Matrix Scores on Three Action Patterns for three Seniors by themselves and freshmen subordinates.

	Self-Evaluation Score			Freshman Rating (Most frequent N=8)		
	Action Patterns			Action Patterns		
	A	B	C	A	B	C
Advisor X	7	5	7	(1)	5	7
	7	7	5	(3)	(5)	(1)
	5	5	7	5	(3)	(5)
	7	7	7	7	(1)	(5)
	7	7	7	(1)	7	(3)
Totals	33	31	33	(17)	(21)	(21)
Advisor Y	7	7	3	7	(5)	7
	3	5	3	(7)	5	(1)
	5	5	5	(7)	(1)	(7)
	7	1	5	7	(7)	(7)
	7	5	3	7	(7)	3
Totals	29	23	19	(35)	(25)	(25)
Advisor Z	7	5	7	(3)	(3)	(1)
	5	3	5	(1)	(1)	(1)
	7	1	5	(5)	1	(1)
	1	1	1	1	(3)	(3)
	3	7	3	(2)	(1)	(3)
Totals	23	17	21	(12)	(9)	(9)

Note for Table II:

- (1) Action pattern A – working through others
- Action pattern B – producing worthwhile results

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- Action pattern C – generating ideas
- (2) Parenthesis denote action pattern scores that differ between senior advisors self-evaluation and freshmen subordinates evaluation.
 - (3) Higher scores indicate superior performance. 7 is a maximum score on a question, 35 in an action patten.

In Table II above it is obvious (from the parenthesis) that there was a marked difference between the way seniors evaluated their own leadership patterns and the way the majority of their freshmen subordinates viewed their style. This difference held true for all seniors. In most cases the error was in the direction of seniors overrating themselves on an action pattern; however, as advisor Y's scores indicate this was not always the case.

The following generalizations can be made from the MMO, presuming that students took it seriously and that scores were not randomly checked. First, all senior students appeared to have a poor perception of their leadership styles, since they had little opportunity to test or develop them. All students tended to score higher on action pattern A - "working through others" than they did on B - "producing worthwhile results" or C - "generating usable ideas." This could be a consistent bias of immature leaders, a bias engendered by the course professor, or by the test itself.

In most cases students tended to view themselves as having superior leadership action patterns compared with ratings given them by their subordinates. Perhaps this was due to a tendency to score the correct choice rather than the choice that actually applied to a person. To this extent the MNO highlights the importance of experiential learning as opposed to cognitive learning.

Seniors in the class expressed appreciation at being given the freshman responses to their leadership patterns and indicated that this was a significant part of the learning experience. This tends to substantiate the premise which we began with that most learning in business games takes place not from participation alone, but from the quality of behavior generated in games and the way in which feedback and supplementary information is fed into the game environment.⁹

APPENDIX A

BA 1213
Behavioral Business Concepts
(Introduction to Business)

Tests: The American Business Enterprise, Poe
The Executive Simulation, Leftwich and Keys

I. Objectives: This course will introduce you to the human problems of business enterprise. In addition, you will participate in a hypothetical business simulation laboratory which will allow you to grasp the

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problems and feelings of business operation and to participate in marketing, financial and production decisions.

II. Subjects to be covered and assignments:

Week	1	Monday (Lectures) Introduction Review handout in acct. Review or read chapter on Finance	Wednesday (Participation)	Friday (Testing) Specialty tests over each student's selected functional area
Week	2	Chapter 5 Management	Organize teams	Test #1 Hand out game
Week	3	The Executive Simu- lation	Team Objectives Trial Decision	Test #2
Week	4	Chapter 12 Market- ing Mix	Decision #1	Test #3
Week	5	Chapter 13 Produc- tion	Decision #2.	Test #4
Week	6	Chapter 8 Person- nel	Decision #3	Test #5
Week	7	Chapter 9 Labor Relations	Decision #4	Test #6
Week	8	Administrator reviews team activities each day.		
Week	9	Chapter 11 Market- ing Concept	Decision #5	Test #7
Week	10	Chapter 19 Business and Society	Decision #6	Test #8
Week	11	Chapter 7 Human Relations	Decision #7	Test. #9
Week	12	The Executive Simulation, Review	Decision #8	Test #10
Week	13	Prepare presentations, make up exams. Reports should reflect team activities especially in regard to Management, Personnel, the Role of Profits, and Human Relations. (This could change to any emphasis.)		
Week	14	Present presentations before judges. Reports due Wednesday. No Final Exam or Mid-term.		

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Testing and Grading				
Each exam passed with mastery - 100	100	pts.	possible =	1000
Term report (3-5 pages)	200	pts.	possible =	200
Salary	100	pts.	possible -	100
Team Score	100	pts.	Possible =	<u>100</u>
				1400

A = 1260

B = 1120

C = 980

D= 840

Salary range: \$ 7000 - 10,000 per year

Salary convertible to points on 5 points per \$1000 (Ex. for 8 qtrs. of play \$20,000 salary equals 100 points.)

Salary will be allocated by Board of Directors (Senior Policy Students)

Note:

Salaries paid will be tallied and the difference subtracted from profits at end of each quarter of game play, if greater than shown on Administration expense. The difference will be added to profits if less than shown in Administration expenses. This charge will be made to miscellaneous.

Team Score:

First place team total profits	100pts. ea.
Second place team total profits	90pts. ea.
Third place team total profits	85pts. ea.
All others	80pts. ea.

The general format of the course will be lecture on Monday, group session (business game) Wednesday, tutorial and/or exam Fridays. (If you do not master an exam the first week it is given, you may retake the exam one time on Wednesday of the following week by getting permission from your Board Chairman to be "in training". However, when "in training" you lose your salary for the week.

There will be no mid-term or final exam.

You will be required to write a short report on your business game activities.

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