A study examined the effectiveness of an experiential learning exercise in a speech communication classroom setting. Participants were 62 students in communication classrooms in a large southwestern university. The exercise, entitled "The Ace, Incorporated Hanging Tray Company Exercise" was done as a group communication exercise preceding a regularly assigned group project and involved the manufacture of a simple product using paper as the base material. Students completed two surveys and answered three questions following the exercise. As a result of the exercise, students learned the extent to which group decisions are effective in reaching goals. Students also learned about the major strengths and weaknesses which are involved and how communication in groups can facilitate and, if dysfunctional, impede group decision making. The survey questions are included. (RS)
Using Experiential Learning to Teach Group Communication Interaction

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Commission on Experiential Learning in Communication Program: Experiential Learning in the Communication Classroom

Running head: GROUP INTERACTION
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I hear and I forget.
I see and I remember.
I do and I understand.

Confucius

INTRODUCTION

Living and working in groups is an inherent part of belonging to our world. It is also an inherent part of our workplace situations. Exercises and simulations which will aid student understanding of group communication is an important part of learning. It is these enactments of real-life situations which lead to enhanced understanding. Kelly (1955) described the inductive nature of trial and error learning, noting how "learning" and "experience" are intertwined:

The person who merely stands agog at each emerging event may experience a series of interesting surprises, but if he makes no attempt to discover the recurrent themes, his experience does not amount to much. It is when man begins to see the orderliness in a sequence of events that he begins to experience them... From the standpoint of the psychology of personal constructs, it is the learning which constitutes experience.

An exercise which focuses on the process and the importance of group decision making is explained in this paper. As a result of the exercise, students learned the extent to which group decisions are effective in reaching goals. They also learned about the major strengths and weaknesses which are involved and how communication in groups can facilitate and, if dysfunctional, impede group decision making.

Experiential exercises in a speech communication classroom setting provide an inductive basis for learning decision making and problem solving in groups. When individual learning events are presented within the structured experience, a powerful experiential learning process results (Foxen, 1990).

The Ace Incorporated Hanging Tray Department exercise provides students with the opportunity to learn how
communication contributes to the work process and how it impacts manufacturing outcomes. The exercise is a modified version of two similar exercises (Pasmore & Sherwood, 1981 & Weisbord, 1991) and is titled as The Ace, Incorporated Hanging Tray Company Exercise. Similar exercises are used for redesigning the manufacturing process and to improve quality and productivity. The focus of this exercise, however, is for the discovery of how to improve group communication skills. The exercise involves the manufacture of a simple product using paper as the base material with the employment of simple office tools.

Experiential learning exercises are more successful in changing understanding and behavior when they resemble real life situations. Training by reading and lecture is not readily applicable because visualization of an actual situation is difficult. Group activities which actually produce something closely emulate an actual job, but in a low risk setting. New knowledge, which can be applied on the job, occurs when the individuals: (1) engage in the activity; (2) critically evaluate the activity; (3) abstract some useful insight; (4) generalize the experience; (5) apply the generalization in later work (Pfeiffer and Jones, 1983).

METHOD

Participants

The participants were 62 students in communication classrooms in a large southwestern university in 1993-94. The exercise was done as a group communication exercise preceding a regularly assigned group project. Its purpose was to show the importance of communication in group communication by way of an experiential simulation exercise. The students would learn group communication interaction by participating in this exercise.

Experiential Process

The experiential learning exercise takes 25 minutes for the production, with a 5 minute break (total: 20 minutes actual production time), leaving 25 minutes for debriefing, discussion and evaluation in a 50 minute class period. Students are asked to complete two surveys: The Work-Group Effectiveness Inventory and The Learning Group Process Scale, both by F. Burns and R.L. Gragg (Pfeiffer & Jones, 1983). They are also asked to complete one page, answers to three questions following the exercise:
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1. Describe what took place in terms of group communication.

2. What did you learn about group communication?

3. How could group communication have been improved?

To begin the exercise, the instructor sets up the room with different work stations, keeping the students in the hall. The stations include areas for: a supervisor, cutters, staplers, quality control inspectors, a maintenance technician, a supplier, a clerk/record keeper, a supervisor/foreman, and consultants. Cards with the station names are placed on the table work areas. Supplies which are needed for the work stations and explanation sheets are placed at the appropriate stations. There are available jobs for a supervisor, several cutters and staplers, a quality control inspector, a maintenance technician, a supplier, a clerk, and several consultants. The numbers vary according to the number of students available. Some students can be observers. Supplies consist of scissors, staplers, staples, rulers, 200 sheets of paper and a sample Ace Hanging Tray. In addition to the supplies and the job description sheets, there is a general description of activities, supply forms (2 kinds), clerk forms, and quality control forms.

Students are greeted at the door of the classroom by the instructor with, "The hiring hall is now open!" A supervisor is immediately selected and is told to send in the prospective employees, and they will be assigned jobs. As the students enter, they are given their job titles and told to report to their work stations. For example, in a class of 24, there might be: 1 supervisor, 8 cutters, 8 staplers, 1 quality control inspector, 1 maintenance technical, 1 supplier person, 1 clerk (record keeper), and 3 consultants. A general instruction sheet and job specific instruction sheets are available to be read. Instruction sheets can be developed by the students following the exercise, to be used in future activities.

From this point on, the instructor's only words (and answers) are: "You have been given all of the information that you need to know." This response, of course, causes students to experience frustration. The rest of the activity is left to the students (workers) to perform the task of creating quality hanging trays.

The Ace Hanging Tray's straightforward goal is described in the general description of activities: to keep the organization well-supplied with hanging trays which are manufactured for the purpose of transporting material from one side of a factory to another. The demand for these trays is steady, and they must meet an exacting quality. The
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production is essentially a two-step process, with work flowing from the cutters to the stapler operators. All personnel report directly to the supervisor. It is important in this exercise that the instructions are followed exactly. It is a union shop.

The exercise typically proceeds as follows: Once all students are at work stations, instructions are (hopefully or maybe) read, and the production begins. The goals of being quality conscious and productive are presented, and the students have 20 minutes to product as many quality paper baskets as possible. Usually, there is a flurry of activity which soon turns into frustration and chaos for most students. There is a definite feeling of being out of control with no answers as to how to fix the situation.

All of the jobs have frustrations connected with them. Some of the cutters and the staplers take to task, and individually attempt to produce. Most of the problems and the blame for everything is placed on the supervisor. At first the supervisor position is the coveted one; by the end of the exercise, the position seems to be the worst one.

There is a five minute break, which no one ever seems to want, so it takes almost five minutes to clear everyone out. About half way through the exercise, poorly produced hanging trays begin to appear; all of which are rejected by the quality control inspector. The supervisor never maintains control, and the consultants wander aimlessly taking notes and making suggestions to deaf ears. Results of the hanging tray production is usually a few poorly constructed baskets, all of which are usually rejected.

When this class is used with its redesign phase, and is repeated at the end of the semester, the results are amazing. In a sociotechnical design course, in a large southwestern university, students participate in this exercise twice, once at the beginning of the semester and again at the end of the semester. There is a redesign, planning phase in between exercises, and the results are amazing. In this situation, the exercise is used by industrial engineering students to demonstrate productivity and quality in industrial manufacturing.

In 1993, in this industrial engineering classroom, during the first production run of this exercise no quality baskets resulted. The class broke into groups and had a semester long planning and redesign phase. In the second production run of this exercise, the students produced 3,182 baskets or 128.28 per person! This was amazing and unbelievable to watch. In observing this project, there was no denying that communication played the major role, and
consequently, this exercise was modified for the speech communication classroom.

RESULTS

Essay Answer Responses

These sentences are taken from different student response papers, although they are reported in paragraph format.

1. Describe what took place in terms of group communication.

   It could be described as chaos. When I asked anyone anything, they got distracted. No one was interested in communicating; they were only interested in their own task. It was too competitive for communication, and I was one of the most competitive. There was a complete breakdown - chaos. Everyone was so busy asking questions, that no one listened. They were in such a rush to complete their job, they didn't want to work together. The supervisor didn't step up and put his foot down, or listen to his consultants. There was only confusion because there was no orientation. I hated being the supervisor!!! No one listened to me! I had no power over anybody or anything! I was laughed at and talked about, and I was ignored! It was a total and complete frustration! I could not control anyone! People were miscommunicating about sizes and specifications, even though the instructions were written down they were going their own way. We should have had an assemble line for doing the stapling, but everyone was determined to take charge of their own baskets. There was a lot of talking and suggesting, but no listening. I suggested an assembly line, the consultants did, too, but we were ignored. Some people hated the supervisor and wouldn't listen to him. They wondered why they were not chosen to be in charge and were miffed. No one was interested in quality, only in quantity. Everyone thought they were in charge in the work groups, no one thought of designating a leader. It was all the supervisors fault; he never coordinated the project. Our only communication was with those who sat next to us. We each had a lot to say, and all of us tried to say it. The problem was that it was so diverse. I attempted to commandeer my department, but the attempt was rebuffed so I sabotaged the effort through humor. It got me fired! There was a major breakdown in communication because there was no authority. The room was too loud, and we had terrible communication because of that. No one even thought of quality. I was really frustrated about the lack of communication, and I still am.
2. What did you learn about group communication?

There definitely needs to be a group leader for communications, otherwise everyone's thoughts and ideas just float around with no basis for making judgments. Group communication has to be just that -- group communication, not just everyone talking or yelling on their own. There has to be a receiver who is focused on what others have to say. People have to respect what others say. There is no communication when the groups are not organized. A group needs a leader who will make decisions and stick to them. We needed to have a meeting before the exercise to state our purpose, describe the task, etc. Everyone needs a way to express their ideas. There needs to be an understanding of the task before it is performed. We needed to know the expectations of the project. We needed to cooperate and do our parts. Noise had to be under control. Organization helps the process flow smoothly. Chaos causes tension, and tears down the communication process and virtually destroys it. Group communication is an integral part of getting things done well. There can be a lot of quantity resulting from poor communication, but little quality. Every single member of a group has to be a good listener. They have to be polite, understanding and show common courtesy. If we listen to others we can learn more about ourselves. Communication must be two-way to be successful. I like to talk a lot and when the room is full of speakers, it is not productive; you must speak and LISTEN. Without group communication, groups will not work effectively or efficiently, the productivity will be low and the quality poor. We must put group needs a head of individual needs to accomplish productivity goals. Everyone needs to know what is going on in the total process in order to get things done.

3. How could group communication have been improved?

The noise level needed to be reduced. Everyone was yelling to be heard. Where was the supervisor? I didn't know who was who, and I didn't think to find out. I felt rushed and disorganized and without group cooperation. We needed a leader in each part of the production process to make decisions and tell us what to do. The supervisor needed to listen to his consultants and make firm, quick decisions. People needed to shut their big mouths and to listen. We disparately needed a company/employee meeting, prior to the production of the product. We needed goals, information about the expected quality and the needs and wants of each department within the organization. We needed to have employees who would be willing to cooperate and to take instructions. We needed to read the instructions. They were their and were very clear, but I skimmed them because I
wanted to get on with the production of the product. There were some good ideas suggested, but not taken. We needed to know the whole operation and where we fit into the final product. We all had individual goals and not group goals. When we finished early and were waiting for supplies, we should have discussed our plans of action. All stations needed to set group goals, not individual goals. Everyone needed to take turns talking. We desperately needed more planning time. Everyone was so outspoken and set in his or her ways, and you need to see all sides of an issue. It is very necessary to have a leader to keep you on track and on the subject at hand. Guidelines needed to be enforced. It is essential to take all projects seriously. There was too much humor added. As college students, we are such take charge individuals that we do not follow well. We need to find roles which we are comfortable with so we can grease the appropriate wheel of communication. When the supervisor spoke, we should have listened, because he was visiting the different stations and knew more what was going on as a whole. We must work on listening skills; this exercise was a frightening example of what reality might be like.

Work-Group Effectiveness Inventory

The Work-Group Effectiveness Inventory by Burns and Gragg (Pfeiffer, & Jones, 1983) is a scaled inventory from Strongly Disagree (1) to Strongly Agree (5), with 20 items. Students were asked to circle responses. This scale was used to help students think about work group effectiveness and used as a part of the debriefing process and discussion.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I have been speaking frankly here about the things that have been uppermost in my mind.</td>
<td>3.74</td>
<td>.99</td>
</tr>
<tr>
<td>2.</td>
<td>The other members of this team have been speaking frankly about the things that have been uppermost in their minds.</td>
<td>3.48</td>
<td>1.17</td>
</tr>
<tr>
<td>3.</td>
<td>I have been careful to speak directly and to the point.</td>
<td>3.24</td>
<td>1.15</td>
</tr>
<tr>
<td>4.</td>
<td>The other members of this team have been speaking directly and to the point.</td>
<td>3.21</td>
<td>1.08</td>
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</tbody>
</table>
5. I have been listening carefully to the other members of this team, and I have been paying a special attention to those who have expressed strong agreement or disagreement.

6. The other members of this team have been listening carefully to me and to each other, and they have been paying special attention to strongly expressed views.

7. I have been asking for and receiving constructive feedback regarding my influence on the team.

8. I have been providing constructive feedback to those who have requested it—to help them keep track of their influence on me and the other team members.

9. Decisions regarding our team's operating procedures and organization have been flexible, and they have been changed rapidly whenever more useful structures or procedures have been discovered.

10. Everyone on the team has been helping the team keep track of its effectiveness.

11. Members of this team have been listening carefully to each other, and we have been paying special attention to strongly expressed values.

12. We have been speaking frankly to each other about the things that have been uppermost in our minds.

13. We have been speaking directly and to the point.

14. We have been helping our team keep track of its own effectiveness.
15. Our team's internal organization and procedures have been adjusted when necessary to keep pace with changing conditions or new requirements.

16. All members of this team understand the team's goals.

17. Each member of our team understands how he or she can contribute to the team's effectiveness in reaching its goals.

18. Each of us is aware of the potential contribution of each of the other team members.

19. We recognize each other's problems and help each other to make a maximum contribution.

20. As a team, we pay attention to our own decision-making and problem-solving processes.

Learning Group Process Scale

The Learning Group Process Scale by Burns and Gragg (Pfeiffer & Jones, 1983) is a scaled inventory from Strongly Disagree (1) to Strongly Agree (5), with 10 items. Students were asked to circle responses. This scale was used to help students think about learning group process and used as a part of the debriefing process and discussion.

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Members of this learning group know each other well enough to understand the potential contribution of each of the other members.</td>
<td>3.53</td>
<td>.96</td>
</tr>
<tr>
<td>2. We have been listening carefully to each other, and we have been paying special attention to strongly expressed views.</td>
<td>3.05</td>
<td>1.08</td>
</tr>
</tbody>
</table>
3. Each of us has been speaking frankly about the things that have been uppermost in our minds, and we have been speaking directly and to the point.

4. The learning goals of this group have been clearly specified and understood.

5. I understand what activities and procedures are planned for this learning group.

6. I expect these planned activities and procedures to contribute to the group’s effectiveness in reaching its learning goals.

7. I understand what contribution is expected of me for each of the planned activities and procedures.

8. I anticipated that the group’s planned activities and procedures will contribute to my achievement of my personal learning objectives.

9. So far, I am satisfied with this learning group, and I feel that my time in the group has been well spent.

10. Overall, I am committed to this learning group, and I look to our future activities with interest and enthusiasm.

DISCUSSION

The one step missing for most college students is the ability to apply what they have learned in the real world. An improved setting for this method of instruction would be in an existing work group that focuses on the group communication process. The experiential process would allow groups to experiment with new techniques and behaviors in a low risk setting. The new knowledge and behaviors could then be utilized by the group on the job as appropriate applications arose. Organizations are now more committed to using experiential learning (Foxen, 1990). Effective communication can help industry with its' quality and
productivity problems. This experiential process has limitless research possibilities for communication classrooms.

One must learn by doing the thing, for though you think you know it— you have no certainty, until you try.

Sophocles

The great difficulty of education is to get experience out of ideas.

George Santayana

REFERENCES


