

A Design for Theory Input in a Training Laboratory¹

Results of Testing Some Innovations in Conceptual Learning

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Over the years, the problem of how to introduce relevant and usable theoretical material into a laboratory training program has been a major issue in lab design, especially those designs with primary emphasis on experiential data. Questions around this issue have included: How do we get across theoretical concepts in a way that they are understood; How much should we actually worry about this—How much does an understanding of theoretical viewpoints add to an understanding and use of a laboratory training experience; How much

does theoretical material lead to retention and later generalization of real-life situations; and so on. Previous attempts have been made to integrate more fully the conceptual and experiential aspects of management training.² This article reports still another attempt as well as a different approach.

Solutions to this problem have run all the way from regularly-scheduled theory sessions or lectures on such topics as group membership, personal styles, leadership, to no "theory" at all, and whatever inputs of a theoretical

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nature do occur happen out of the group experience itself and are put into it by the trainer on the spot or by other group members. In this brief report, we would like to describe one solution to this issue which was used at the January 1967 Management Work Conference, one of several laboratory training programs conducted for management by the NTL Institute for Applied Behavioral Science.³ We will describe the process, interpret it through our view of the results, and present some generalizations and suggestions as to how theory input might be handled in future laboratory training sessions.

Basic Assumptions

In planning the handling of theory at this particular laboratory, the staff made several basic assumptions about how the process should occur. One assumption was that the delegates probably arrive with a large number of "theories" of their own about the world and a variety of perceived "givens" about the nature of man and human behavior. Thus, one of our goals concerning the theory process was to help the participants articulate *their* theories about human behavior so that we would have some way of comparing their theories with ones which are based on research data and developing philosophies in behavioral science.

On the basis of research in learning, a second assumption was that people who are actively involved in learning tend to perceive and work with a greater proportion of ideas and events than those who are passive receptors or targets. Thus, we made a determined effort to create a process where persons could actively participate in the development of a new understanding of theory.

A third assumption concerned the

manner in which one actually gains involvement in the learning process. The notion was that if the conditions of involvement could be created through the use of a *free choice* with respect to focusing on a theory area, the likelihood of commitment to theoretical learning would be increased.

A final assumption was that persons who are studying a theoretical area and also working toward a goal of providing a learning experience for others at some specified time in the future are more likely to invest a greater amount of energy in their own learning process.

The Design

With these goals and assumptions in mind, then, we designed the following elements of the laboratory as a way of providing the delegates with concepts and theories about the processes which they were experiencing in the laboratory and back in their organizations. On Monday of the first week, the delegates were presented with six brief descriptions of theory areas: change, communication, group decision making, the individual and the group, leadership, and general topics. The participants were asked to rank order the six in terms of their own interest in each theory area, and the theory groups were to be formed on the basis of interest expressed by the participants. Based on the participants' rankings of the six areas, four groups were formed: change, communication, the individual and the group, and leadership. With the exception of the change group, the participants divided themselves into the theory area fairly equally. Since 23 out of 54 participants chose the change subject, they were divided into three separate groups (also on the basis of personal choice as expressed at the first meeting of the change group):

1. Change when you are internal to the system;
2. Change when you are external to the system; and
3. Change with respect to superior-subordinate relationships.

There were four scheduled times when these theory groups met simultaneously during the first week. They had two tasks: (1) to discuss the conceptual area of interest to them, exploring both their notions about it and developing new ideas based on their experiences at the lab and inputs from staff members (there was at least one staff member with each theory group), and (2) to develop a scheme for a learning session on Friday morning which would help the other participants in the lab to learn about the particular theory groups' area of interest. Each group was to have approximately 30 minutes to provide this learning experience for the remainder of the total group.

During the Friday period, the four theory groups handled their portions of the program differently: the *change* group broke into three seminars and each presented its own concepts as developed to 1/3 of the rest of the total group; the *individual-group* theory group did exercises to demonstrate non-verbally some of the issues they were concerned with; the *communication* group also did some exercises around one-way and two-way communication; and the *leadership* group presented a lecture to the total lab population combining a number of theories of leadership plus a theory of their own which they developed from these and the lab setting.

Effects of the Design

As is usually the case, it is difficult to be completely sure of the specific effects of this theory input design. However, we do feel that there were

certain outcomes which might be relevant for future design and which seemed to be fairly noticeable to the staff. For one, setting up situations which enabled the participants to talk about their own assumption and theories about various aspects of human behavior seemed to be fairly useful for getting hidden assumptions out into the open where discussion and reflection could take place. As far as how capable the groups were of then moving on to new conceptual ideas and formulating new dimensions and being able to understand process through new theories, this appeared to vary from group to group. Some had much more difficulty with this part of the process than others. Some groups seemed more comfortable at the conceptual level while others seemed to hunger for much more concrete considerations of particular areas, e.g., skill exercises of non-verbal experiments (the communication group seemed to be particularly interested in moving away from the conceptual and toward the experimental level).

As a whole, we would estimate that the groups probably did not function too effectively in creating learning experiences for the rest of the laboratory population. They probably learned more in preparing for the presentation than the "learners" did from the presentations themselves. One possible reason why the presentations were not as effective as they might have been was the competition that tended to develop among the groups. Each group wanted to have the best presentation on Friday. This competition may have interfered, to some extent, with the learning process.

During the preparation and exploration periods, the staff attempted to keep competition down by simply repeating or reflecting to the group the times when the staff members felt

that the groups were behaving in a competitive manner, and indicating that the staff felt that this was inappropriate for the learning goals at hand. It was also necessary to be supportive to the groups and to relieve anxiety about the presentation period by suggesting that the early phases of the group not be used for presentation preparation per se, but just for exploration and learning about an area. This was handled in some groups by stressing that if they would concentrate initially on exploration and conceptualization of a theoretical area then there would be more learning payoff and a presentation would flow from this exploration. It was suggested to them that the payoff would probably be less if they began by aiming right at the presentation from the beginning.

Serendipitous Finding

One striking feature of the way the first week's process unfolded was that a pattern appeared to emerge in how individuals chose their particular theory groups. This pattern represented a serendipitous finding. There seemed to be a fairly clear self-selection process going on, one which could be identified by looking at the characteristics of individuals who chose particular groups. For instance, three or four participants from one T group who chose the communication theory seminar were seen by the trainer as the most noncommunicative persons in their own T group. Again, in the "changing my subordinates" group, many of the people seemed to be fairly soft spoken, and it appeared that they were more likely to be comfortable and assertive with subordinates than with people at their own level or other people over whom they did not have power. They seemed less interested in looking at relations with these

kinds of people than with their subordinates with whom they had a fairly clear feel as to what they could and could not do (even though this feel was often erroneous).

Probably the most striking self-selection feature was in the leadership theory seminar, where it was clear that many of the people involved were quite concerned about their own influence and ability to be leaders at the laboratory (and probably in their own organizations as well). Out of a total nominated list of 20 (from the overall delegate body of 54) who were nominated for leadership positions during the organization exercise, 8 of the 11 persons from the leadership theory group were in the nominated list of twenty. This was a representation of 72 per cent of the leadership group, as contrasted with approximately 27 per cent from the rest of the lab population.

Conclusions

In thinking about what might be learned from this experience, there seem to be four basic elements to this particular design: (1) providing smaller seminar groups for theory activity as contrasted with total lab sessions; (2) having the participants prepare to teach someone else as a way of providing greater incentive and tests of understanding; (3) helping them articulate their own theories as a means of contrasting their assumptions with those of the lab program; and (4) allowing self-selection or individual choice of theory areas as a way of using greater interest and involvement in particular conceptual notions.

First, the smaller groups seemed quite useful. People had more "air time," and often the groups created the same dynamics within themselves that they were trying to learn about, since they were on-going groups them-

selves. They therefore could use the here-and-now data to learn about the very areas about which they were concerned. For example, in one of the change groups, several group members used a relatively ineffective strategy of change (and, hence, based their attempt on an implied "theory" of change) to try to "convince" another member of the change group of their particular point. They were able to use this event as a learning experience. Events in the theory seminars also fed back into the T groups to some extent, especially around role shifts in the theory groups versus the T groups.

Second, the preparation for teaching someone else about an area seemed to be a relatively effective way to help them work meaningfully on theory and concepts. This placed a strong emphasis on *understanding* a given area. Thus, when they tried to repeat something with a thought toward what they would do with it later on, they often discovered that they really didn't understand a concept or a process in a way that they had assumed they did. On the other hand, our guess is that this process would have been more effective with a more intellectual group, and this is probably a better process with groups that are better able to handle concepts in a relatively fluid way. We found in this case the staff needed to do more of the inputs themselves as a part of the theory building process with groups not used to conceptual material.

Third, the notion of helping them to articulate their theories of behavior before trying to present them with particularly new or confronting ones, seemed to be quite useful. In several cases, they developed models which represented their thinking at the moment, and it was illuminating for them to contrast these models with ones which developed out of what they

were learning in the groups and in the rest of the laboratory. We would guess that the process of articulation that went on during this period also helped later in the laboratory by giving them some practice at trying to understand just exactly what they did believe about particular processes or themselves. It also looked as if they continued to try to conceptualize certain processes during the rest of the program (although this obviously also varied with individual inclination).

Finally, as we indicated above, the self-selection process was a very interesting part of this experience. The data about how people were different who selected different groups suggests that self-selection probably goes on in total lab theory sessions *anyway*. Those who are concerned about a particular area tune in, those who are not tune out—it's just that in the usual, total theory session it is not particularly visible to us which ones are tuned in and which ones are tuned out. From this particular theory design, we would suggest that we might as well recognize this fact of self-selection, and we should create choices so that we can use the time better and so that as many people as possible can be docile to a given discussion of concepts.

Theory Session Scheduling

One further extension in this direction would be possible: We might not schedule specific theory session times at all, but rather just have a list of topics which is developed during the planning session and post it on a board somewhere in the area of the laboratory. We could then hold theory group sessions when enough people to create a critical mass indicated that they were interested in a particular topic by signing their name next to an area. Then these sessions could be held and scheduled through individual negotia-

tion. Topics would probably shift over time, build, and die out as they were explored to satisfaction. This would obviously provide some problems in terms of lack of structure and need to be responsive to growing interests, but it would also be much more closely related to concerns and events at the laboratory and flow much more from the generation of data in the ongoing experience itself.

The training laboratory has often been characterized as an experiential

or emotional learning situation only. For management training both conceptual and experiential learning are needed. Laboratory trainers have been quite creative in providing experiential learning, but we need more innovation in conceptual training. And, hopefully, innovation in this latter area will develop by more effectively blending or integrating the conceptual with the experiential. This article has represented one such attempt.

References

1. A version of this paper was published in *Human Relations Training News*, a publication of the NTL Institute for Applied Behavioral Science. Permission for this similar publication here has been granted by the Editor of *Human Relations Training News*.
2. Burke, W. W. and Hornstein, H. A. "Conceptual vs. Experiential Management Training: An Attempt to Integrate Instrumented and T Group Training," *Training and Development Journal*, Dec. 1967, 21, No. 12, 12-17.
3. The authors would like to express our appreciation to the January 1967 Management Work Conference staff for their insights and ideas for implementing a critical phase of a laboratory: Richard Arima, David Bradford, Donald Klein, Don Orton, Saul Siegel, Waldron Smith.

GEL Becomes 100% Educational

Mr. Philip Taber, President of General Electronic Laboratories, Inc. (GEL) announced that the Military Division has been purchased by Parisi Associates, Inc. "This will now permit our company to concentrate all of our manpower and other resources in the burgeoning educational and training markets," stated Mr. Taber.

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