

RESEARCH IS NOT A FOUR-LETTER WORD!

*the increasing need
for research and
experimentation in
business and
industrial training*

Everyone who is responsible for a training function is concerned with the operating effectiveness of his program; but research techniques for determining such effectiveness have been almost entirely unused. The reason given most often is that there is a lack of qualified personnel in training departments to conduct the research required.

Research can be conducted effectively by the instructors in industrial and business environments. Unheard of? Maybe so! But, who is often responsible to update and improve the curriculum? The instructor. But, curriculum revision must be guided by evidence found in significant and relevant data, is your reply. O.K., but, who is asked to collect this data? Right again: The instructor.

Research is the technique by which these data can be collected, organized and analyzed. From this procedure comes a more intelligent decision as to what and how to improve or update existing curriculum.

PAST RESEARCH ACTIVITIES

All too often in business and industrial training programs, only one type of research (if it can be called research) has been stressed — *program planning*. Even here, there has been a tendency to conduct such surveys only once — when the training program is begun. It is regrettable that this activity, such as it is, is not repeated periodically.

Operations research and evaluation in training and education have been too often nonexistent except in theses for college degrees. Unfortunately, this research has been, in the main, confined to vocational education as it applies to public school systems and is too unrelated to the business and industrial community. In addition, it covers too little ground to add much to new knowledge.

INSTRUCTOR INVOLVEMENT IN RESEARCH

The instructor who is teaching a full schedule, and in addition has various non-instructional duties, may not be interested in research. He may insist he

is too busy with other things. Most instructors can find some justification for not engaging in research.

That is where we as their supervisors and members of management can play an important role. If we are asking that they be responsible for the best program possible, why not ask that the data necessary to evaluate their curriculum be collected and analyzed in an orderly fashion? (Is this any way to define research? You bet it is!)

Once instructors became involved, many of them will gain much satisfaction from participating in the research. They will focus their attention on the problems and issues. This exercise will establish various alternatives from which a solution is selected. In addition, and most important, the instructor will become more cognizant of problem areas in his specialized fields.

KEEPING ABREAST

The instructor has the responsibility of keeping abreast of the technological changes in his curriculum areas. Therefore, individual courses and training programs must be constantly evaluated, revised, and refined.

Even though he may not make the final decision on specific courses to be added or deleted from the curriculum, the instructor has the opportunity to obtain the facts that warrant change.

EXPERIMENTATION

An obvious way to decide upon alternatives is to try them and see what happens. Such experimentation is used in scientific inquiry, especially in view of the intangible factors.

RESEARCH AND ANALYSIS

The most generally used and certainly a most effective technique is research and analysis. Although the lessons of experience may be drawn upon in analyzing and although experimentation may be undertaken to test hypotheses, research and analysis have many advantages for weighing courses of action.

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FROM ADDISON-WESLEY TWO NEW FILMSTRIP SERIES

In the first place, the solution of the problem requires that it be broken into its component parts and the various tangible and intangible factors studied. In the second place, study and analysis are likely to be far cheaper than experimentation.

Research and analysis involve a search for the limiting variables and parameters and their placement in a logical causal relationship to each other as they affect the problem under consideration. In fact, a characteristic of the research and analysis technique is seeing a problem and its relationships in mathematical terms. If all the important factors bearing on the solution in terms of the research objectives are known, if they can be seen in their relationship to each other and can be quantified, and if the objective is definite and subject to measurement, evaluation of various courses of action can be stated mathematically and the answer developed by modern computers.

The "easy" access to the most advanced computers for problem solving is where business and industry has the advantage in conducting and solving research problems.

CONDUCTING RESEARCH IS NOT ENOUGH

Collecting data, evaluating it and selecting from alternative courses of action for your internal training is not enough. These knowledges and experiences must be shared. The best way is to publish your experience. Yes, there will be those individuals who will criticize aspects of *your* research, but you must have the intestinal fortitude to look them straight in the eye and say, "If you can do better, go right ahead." And if they can, they should. In this way, we will have a continuing refinement of training systems.

AMOUNT OF RESEARCH EFFORT

The principle of limiting factor may apply to the amount of effort expended. This is nowhere more applicable than in the case of research and

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analysis. Not every business or industrial training program can stand the cost or delay of careful analyses and weighing of alternative hypotheses. Therefore, the most avid researcher must tailor his explorations to fit the available time.

FUTURE TRAINING RESEARCH

One of the most challenging areas of the future is that of obtaining more real research and development in business and industrial training. The level of research effort and support is low.

There are several reasons for this. General research in business and industrial training is a difficult field, exceedingly complex and dynamic. It is one where facts and relationships are hard to come by and where the controlled experiment of the laboratory is difficult.

In undertaking this type of research, patience and understanding is needed. Perfection of analysis to include all kinds of variables is a laudable goal for the researcher. Occupation and skill

training programs are surely sufficiently well established and accepted to allow a questioning and discriminating attitude about their practices, procedures, techniques and even the *programs* themselves. But research without development is insufficient. One of the major challenges for the training researcher of the future is the need for developing more training innovations. This would place more alternatives in the hopper to be tested in order that the *best* be chosen.

NEW INDUSTRY ALONE WON'T SOLVE RURAL JOBLESSNESS

New industry alone will not solve the problems of rural unemployment and underemployment, a report by Loyola University of New Orleans indicates.

Unless the inhabitants have a good education or skill training, "often the introduction of new industry does nothing for the local people, but rather imports a new work force," the report states.

The report was based on results of an experimental and demonstration program funded by the U.S. Department of Labor, and carried out by Loyola's Institute of Human Relations. Copies of the report are available from the Department's Manpower Administration, Washington, D.C., 20210.

It concludes that "a concentrated program of employment and skill training in these rapidly industrializing rural areas" is needed if the jobless or underemployed men and women "are to be fully integrated into the industrial society."

The 15-month project involved 933 men, women and youths in the rural Louisiana parishes of St. James, St. John the Baptist, St. Charles and St. Tammany.

Over one-half of all those recruited listed no skills, and few of the others had the skills required by employers in the area. Almost one-third had never

been employed in a regular job.

Nearly all had had trouble finding suitable work despite the dramatic economic expansion of the region, spurred by the growth of the space and petrochemical industry.

Most participants were 16 through 45 years old and were classified as hard-core rural unemployed. Women slightly outnumbered men. They learned about job placement and training during a 10-day, 6-hours-per-day period. They were taught how to prepare for a job interview. The project was structured to give the people it enrolled the work attitudes required plus special placement assistance. Through group counseling sessions, the project sought to transform self-defeating negative behavior by the poor into a set of creative and positive attitudes.

Despite intensive efforts at placement by the project, only 244 of the 933 enrollees had jobs at the time of final tabulation. Another 191 were in school, the armed services or a training program. The rest were unemployed.

"Perhaps the most important conclusion to be drawn from Project Reach is that the people served need additional, or in many cases their first, skill training," the report notes. "These individuals stand with one foot in the traditional agrarian culture of the South, and with the other in the space age."