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ABSTRACT

The methodology used in carrying out a project, the aim of which was to develop a pamphlet which would be meaningful and easily understood by teachers, dealing with classroom application of research on reinforcement principles is described. Preliminary steps of the project included: (1) a review of literature; (2) data gathering by conducting a survey of teacher's perceived problems or main concerns with reference to classroom situations; and (3) selection of consultants. Writing the interpretive report involved the writing and critiquing of several drafts. The final phase consisted of further rewriting and refining of the manuscript into a finished product, "Reinforcing Productive Classroom Behavior: A Teacher's Guide to Behavior Modification." (Author/KJ)



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APPLICATION OF REINFORCEMENT PRINCIPLES TO THE CLASSROOM

Human Interaction Research Institute 10889 Wilshire Boulevard, Suite 610 Los Angeles, California 90024

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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APPLICATION OF REINFORCEMENT PRINCIPLES TO THE CLASSROOM

This report describes the methodology used in carrying out OE Project No. 9-0537, Contract OEC-0-70-0009 (508). The project began on December 1, 1969. Its aim was to develop an interpretive report -- in this case a pamphlet which would be meaningful and easily understood by teachers -- dealing with application to the classroom of research on reinforcement principles. It was intended that the report would digest the findings of existing laboratory and applied studies of reinforcement and show their relevance to the classroom situation.

I. PRELIMINARY STEPS

Reviewing the Literature

Much of the first several months of the project was devoted to a review of the literature relevant to the topic to be covered by the pamphlet. The literature reviewed included books, various types of abstracts such as Dissectation Abstracts and Psychological Abstracts, plus relevant and tangential journals. An especially intensive survey was conducted in the Journal of Applied Behavior Analysis because it contains a substantial amount of the literature on applications of reinforcement to practical situations. As a result of the literature review several hundred reprints were collected, as well as many books, handbooks, and research reports. In addition to published material, it became possible to examine many unpublished research reports dealing with reinforcement to the classroom and other situations.



After the literature survey had been conducted, we distilled and sorted the material reviewed in terms of relevance to the pamphlet's topic. The main criterion we employed was that of applicability of procedures and principles to the classroom situation.

Data-Gathering

We felt it was important to confront the needs and problems of teachers as early in the project as possible. To help us develop a pamphlet addressed to teachers' expressed needs and to assure that it actually would be read, we conducted a survey of their perceived problems or main concerns with reference to classroom situations. This was done by means of an inquiry form asking questions concerning what teachers are worried about, what aspect of children's behavior they feel inadequate to cope with, what their educational objectives are vis-a-vis classroom management, and what pupil behaviors they consider to be most desirable and what behaviors to be most undesirable.

Responses were received from groups of teachers in the states of Washington, California and Kansas. Also, a small Micronesian sample was obtained in Hawaii. The teachers were asked to indicate those behaviors they regarded as desirable in their pupils and would like to increase in frequency. They also were asked for responses concerning pupils' unproductive behavior which they would like to manage more effectively.



Emerging as a significant finding from the survey of several hundred teachers was their concern with the maintenance of a reasonable degree of "law and order" in the classroom. The teachers want their pupils to be attentive, cooperative, "on the quiet side" and highly motivated. At least at the present time, concerns about achieving these goals seem to outweigh such needs as reexamining the school structure and programs to see if they (rather than the students) can be changed to provide a more meaningful, relevant and interesting situation which will motivate students to want to learn.

To complement the data provided by our paper-and-pencil survey, we also interviewed selected groups of teachers, pupil personnel service workers and college of education faculty members. We noted considerable wariness, especially among teachers, concerning what they regarded as impersonal, behavioristic and mechanistic techniques applied to the classroom. This observation had clear implications for the development of our interpretive report. It indicated that ethical issues must be dealt with directly.

Selecting Consultants

Another step that was taken during the early months of the project was the selection of consultants who would be used at various stages in the course of our work. Among the consultants we have employed are: Harold Ayabe,



Clarence Bloom, Victor Ganzer, Vance Hall, Florence Harris, Lloyd Homme, Madeline Hunter, Merle Meacham, Barbara Sarason, Robert Schwitzgebel, Arthur Staats, Ralph Stueber, Albert Thompson, Roland Tharp, Goodwin Watson, Gilbert Wrenn.

II. WRITING THE INTERPRETIVE REPORT

On the basis of the preliminary steps described above, work was begun on a first draft of the interpretive report. This was completed in March, 1970. We circulated our draft to more than a dozen persons who provided critiques and suggestions. The readers included Human Interaction Research Institute staff members, psychologists, experts in special education and behavior modification, pupil personnel service workers, and elementary school teachers. Mr. Richard Elmendorf of the United States Office of Education read this draft for us and offered some helpful suggestions.

Reactions to the first draft were distinctly favorable. Critics pointed out omissions, inelegancies in language, and studies that should be referred to in subsequent drafts. However, overall it appeared that we were on the right track.



On the basis of the reactions obtained to the first draft, a second draft was completed in April. It made use of the comments, criticsms and suggestions of the consultants and resource persons. We felt it important to add an additional group, which would include teachers in training, to those who read the first draft. A group of over 200 teachers, teachers-in-training, and other students read our second draft. Many of these persons responded with written comment. In addition several dozen persons were interviewed to explore in greater detail their reactions to the report and the knowledge they derived from it.

Sample reactions were obtained from Washington, California, Hawaii and Kansas. As with the first draft, we obtained favorable responses and encouraging comments from the readers. A few objected to what they saw as an overly simplistic approach in the pamphlet. At the other pole, however, a few readers objected to what they regarded as its perhaps-too-high difficulty level. Generally, reviewers of the second draft found the material both accurate from a scientific standpoint and interesting to read.

During the early part of June another revision of the interpretive report was prepared. Paper-and-pencil responses were obtained from various categories of readers, and interviews were conducted with samples of individuals. By the time we had reached the stage of the third draft, we had



fairly well satisfied ourselves (our consultants were satisfied, also) concerning the scientific basis for the material we were presenting. Our efforts were devoted more and more to selecting the right phrase and maintaining the reader's interest throughout the entire pamphlet. Considerable time was spent on seemingly minor but actually important problems such as how much dialogue and how many examples should be given in the report. Several persons commented that the dialogue approach to presenting behavioral principles increased readability. However, since several other groups of readers found the dialogue contrived, we finally reduced those portions in order that the right balance might be struck (it is hoped) between scholarly values and readability. In the end, by the time we completed the third draft, we had evidence that our pamphlet was, to an appreciable degree, capable of influencing teachers' attitudes and developing their skills in behavior modification.

The final phase of our project consisted of additional drafts and further refining of the manuscript into a finished product. This included a change in the title of the pamphlet, the final title being "REINFORCING PRODUCTIVE CLASSROOM BEHAVIOR: A Teacher's Guide to Behavior Modification."

III. RECAP OF STRATEGIES USED FOR LINKING THE REPORT WITH ITS POTENTIAL USERS

We feel that the approach used in decloping this interpretive report has much to recommend it. The project staff is responsible for its content, but we have benefited enormously from the use of expert consultants, samples of potential users, and literally hundreds of readers. The goal of readability was persistently pursued in an attempt to avoid the pitfall of dry, overly technical language. The combination of "laboratory" testing of our ideas and the "market" surveys conducted have contributed to an interpretive report that we think is readable and well founded in research. We hope that the product will be of optimal use to school personnel.

