

EVALUATING PROGRAMMED INSTRUCTIONAL MATERIALS¹

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In spite of the apparent emphasis on assessment and evaluation of programmed instruction methodology as well as its basis in principles derived from the laboratory, many instructional programs have not been subjected to appropriate evaluation procedures. Lumsdaine (1965) has noted that a large number of such programs provide only the most general and superficial correspondence to appropriate programmed instructional guidelines. Similarly, Holland (1967) has pointed out that behavioral principles as related to program design "... have lost much of (their) precision and operational statements . . ." (p. 87). Perhaps the most common shortcoming here is the failure to evaluate a program rigorously *as it is being devised* in order to produce a clear statement with regard to that program's effectiveness. Such statements can only come about, of course, if proper testing procedures are carried out in the actual situations in which the programs are to be used.

The purpose of the present paper is to describe an experimentally based method for evaluating instructional materials as they are being developed.² The proposed plan calls for concurrently constructing and testing each segment of the instructional materials as it is devised and moving on to other segments only after required revisions have been subjected to experimental investigations and found to be acceptable. The specific experimental technique consists of an application of multiple baseline procedures (Hall, Cristler, Cranston, & Tucker, 1970).

Essentially, this procedure is a combination of both predictive and validating criteria (Lumsdaine, 1965). It is predictive in the sense that it focuses directly on the development of the program and validating in the sense that it contains an experimentally based and rigorous procedure for testing the actual behavior of Ss. Although this does not eliminate the need to use other validating criteria, it is expected that more successful programs will result when the procedure described here is employed.

REFERENCES

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¹Reprints may be obtained from the author, National Children's Center, 6200 Second Street, N. W., Washington, D. C. 20011.

²The description of this method has been deposited with the ASIS as Document NAPS-01896. Order from ASIS National Auxiliary Publications Service, c/o CCM Information Corp., 866 Third Ave., New York, N. Y. 10022. Remit \$2.00 for microfiche or \$8.00 for photocopy.