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AUTHCR   Rector, Douglas; And Others
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ABSTRACT
        The teaching protocol Encouragement, which emphasizes
simple verbal praise, specific praise, and the use of student ideas
for motivational reinforcement, was selected for testing. The
protocol was tested in a 2-week graduate workshop to determine the
extent to which a group of experienced teachers could, upon
completion of the protocol training module, demonstrate the skills
and behaviors emphasized in a peer-microteaching lesson. The protocol
was given during a 1-day period in the workshop. On the day prior, a
pretest teaching session was taped, recording the subjects teaching a
short lesson. Pre- and posttest behaviors were categorized according
to conventions developed at the Far West Laboratory. Results indicate
that this group of teachers was able to demonstrate the acquired use
of the three encouragement skills stressed in the protocol to a
significant degree in a microteaching peer-teaching demonstration
lesson. (Two tables of data are given.) (Author/JB)

A Field Test Of The Effectiveness Of

One Of The Utah State University Protocol

Training Materials, In An Inservice

Workshop Setting

Douglas Rector, Ronald Hull
and
Madan Mohan

Teacher Education Research Center

State University College

Fredonia, New York

Introduction

The development of materials and procedures for effecting desired changes in the specific instructional behaviors of teachers has been of interest and concern in the preparation and in-service education of teachers. The work has considerable apparent relevance to the current interest in performance-based certification and evaluation of teachers.

A major portion of the effort has been in the development and testing of materials and proc dures involving microteaching and micro-teac,'ng practice, both in the college pre-service setting and in the classroom. The effectiveness of these procedures in changing the teacher's instructional behavior has been demonstrated.[1]

A protocol module is a self-instructional package of printed and filmed materials, designed for the same purpose as the microteaching materials and procedures, to enable the teacher or prospective teacher to understand a skill concept, and to relate the concept to classroom practice in terms of specific instructional behavior. Proponents and developers of the protocols point to the simplicity and economy of the protocols, in contrast to the frequently expensive and time-consuming procedures of micro-teaching.

In a typical protocol module, actual scripts, or protocols, of teacher-pupil classroom inter-action are used as teaching and practice materials, as a form of simulated teaching to replace micro-teaching practice. The assumption is made that, after protocol practice, the teacher will be able to translate the knowledge and understandings into actual classroom behavior.

The protocol selected for use with a summer workshop group of experienced teachers, and for testing under the conditions of the Fredonia Skills Laboratory setting was a protocol entitled,

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An account of a four-year series of studies in the pre-service preparation of elementary teachers is to be found in The Fredonia Teaching Skills Laboratory, Final Report, by Douglas Rector and Alice Hilton. (Teacher Education Research Center, State University College, Fredonia, New York, 1972).

"Encouragement," one of six developed by the Utah Protocol Materials Project, Utah State University, Logan, Utah, under the direction of Walter Borg. The protocol is a completely individualized study unit, self-directed, with self-pacing and branching study characteristics. Its purpose is to increase the understanding and use of behaviors related to three forms of encouragement: simple verbal praise, specific praise, and the use of student ideas for motivational reinforcement.

The setting for the use of the protocol was a two-week graduate workshop which focused upon the individualization of instruction, and was under the leadership of Ronald Hull and Madan Mohan.

Objective:

The objective of the study was to determine the extent to which a group of experienced teachers could, upon completion of the protocol training module, demonstrate the skills behaviors emphasized in the module in a peer-microteaching lesson in the Fredonia Skills Laboratory.

Procedures:

The protocol was given to the workshop participants during one day of the workshop, according to the self-directed study procedures of the manual.

Prior to this, a reading study group was requested to teach a short lesson, using peer teaching procedures. During the televised teaching the teachers were aware that there was an interest in their teaching behavior, but were unaware that there was a study in progress, or that any specific teaching skills were to be studied. The post program recorded teaching was done a week following the protocol lesson, toward the close of the workshop. Teachers were told that insufficient time remained in the workshop for any complete analysis of their teaching, and that their performance, or even participation, would have no effect upon their workshop grade. Pre and post tapes were obtained from twenty-six teachers.

Behaviors were defined and counted under categories and conventions developed initially at the Far West Laboratory, under the direction of Dr. Walter Borg, for use with similar behaviors in the field-testing of Minicourses I and V. The measure of variety of praise was developed at Fredonia, for use with the 1971-72 studies. Though many tapes ran much longer, analysis was limited to the first seven minutes of each tape, thereby eliminating any need for adjustment of scores.

In testing the group scores for significance, t was calculated using t for correlated sample, with 1 and 25 degrees of freedom.

Discussion of Findings:

It must be emphasized at this point that the protocol used in the experiment had been prepared, as have most protocols, for use in preservice preparation. Its use with inservice teachers was justified on the basis of the assumed importance of the skills, and on the basis of the low level of use of encouragement techniques noted in previous studies, both in field-testing of the Minicourses,[2] and informally by the Fredonia staff in a previous field study.

An examination of Table 1, page 4, shows a pre-program mean of 13.885, in "Total Encouragement", approximately double that which had been expected. Since care had been taken to ensure lack of knowledge of the experiment, an assumption can be made that a group of teachers interested in individualization are atypical in regard to use of encouragement techniques with the individual child. In spite of the initially high score, the post program mean of "Total Encouragement" score of 19.115 was found to be significant.

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[2]
Borg, Walter and others. The Minicourse, Beverly Hills, California: Addison-Wesley, 1970, p. 157.

TABLE 1

Encouragement Behaviors, Tot�   ﹐ ﹐﹐﹐

BEHAVIOR	PRE-PROGRAM	POST-PROGRAM	t	LEVEL OF SIGNIF.	DIRECTION OF INDIVIDUAL CHANGE		
					+	-	0
Total Encouragement	13.885[1]	19.115	2.00	$>$.05	20	5	1
Simple Praise[2]	9.557	9.308	-	n.s.	13	13	-
Specific Praise	4.154	7.308	8.93	$>$.01	22	3	1
Using Student Ideas	.077	2.423		s.	25	-	1
Variety of Encouragement[3]	7.154	13.154	18.72	$>$.01	24	2	-
Teacher Talk (percent)	80.04	87.08	-	n.s.	21	4	1

1. Number of separate "eposides," mean score.

2. In each Simple Praise episode, only the first praise words used were recorded. Simple Praise words or phrases were not counted when they were part of a more complex "Specific Praise" or "Using Student Ideas" episode.

3. This measure does not include the exact repetitions of simple praise words and phrases, which are included in "Total Encouragement."

TABLE 2

Encouragement Behaviors, Selected High

and Low Encouragement Teachers

BEHAVIOR		FREQUENCY (MEAN)	
		Pre Program	Post Program
Total Encouragement (Episodes)	High E.[1]	23.0	23.1
	Low E.	6.7	14.9
		(13.9)[2]	(19.1)
Simple Praise	High E.	16.4	10.9
	Low E.	4.0	8.0
		(9.6)	(9.3)
Specific Praise	High E.	6.4	10.0
	Low E.	2.4	5.1
		(4.2)	(7.3)
Using Student Ideas	High E.	.14	2.0
	Low E.	.14	1.7
		(.08)	(2.4)[3]
Variety of Encouragement	High E.	11.3	15.3
	Low E.	4.7	10.7
		(7.2)	(13.2)
Teacher Talk (Percent)	High E.	77.9	85.7
	Low E.	82.0	88.9
		(80.0)	(87.0)

1. A group of seven teachers constituting the highest quartile, and a group of seven teachers constituting the lowest quartile, on the Pre-Program measure, "Total Encouragement."

2. Total group means in parentheses, for reference.

3. It might be noted that the middle quartiles achieved a final mean of 3.0.

Similarly, the scores for "Specific Praise" and
"Variety of Praise" showed highly significant
changes in the behavior of the total group.

The data in Table 2, page 5, may serve to
clarify the data in Table 1. Examination of the
individual scores for the total group shows a
strong pattern of correlation of gains from pi
to post teaching for most individuals in most
skills, with the exception of the group of
teachers who originally made heavy use of en-
couragement techniques. (It must be noted that
initial mean scores of over 20 in a seven minute
peer-teaching performance represents an average
of three encouragement episodes each minute.
These behaviors are not unusual; similarly high
scores have been characteristic of students both
in the laboratory training with Minicourse V,
and in the follow-up study at the close of student
teaching)[3].

As may be seen from an examination of Table 2,
the group of teachers making high initial use of
Encouragement appeared to make increased use of
"Specific Praise" and "Using Student Ideas," while
tending to reduce their use of "Simple Praise."

The category, "Use of Student Ideas" represents
a somewhat more complex teaching strategy than the
other encouragement behaviors, and is a behavior that
has been assigned a high theoretical importance in
the studies of teaching interaction. It is en-
couragement and praise, but is rarely recognized
as such by the untrained observer, since simple
praise words and phrases are not fundamental to
its use. With this technique the teacher may
place a high value on the child's contribution, and
involve the child in the work of the group. An
examination of Table 1 shows the behavior to be
functionally non-existent in the pre-program teaching.
It is considered to be highly significant and of
considerable importance that almost all of the
teachers were able to demonstrate the behavior in
the post-program teaching.

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Rector, Douglas and Hilton, Alice, op. cit. p. 26.

"Variety of Encouragement" was included as a measure, and showed significant changes in encouragement behavior had taken place. It must be noted that use of a variety of encouragement was not a stressed objective of the protocol, and specific practice was not provided. Some of the effect is the result of substitution of other encouragement behaviors for repetitive simple praise words and phrases, but some may result from the self-evaluation that may have taken place during the viewing of the preliminary microteaching.

Finally, the nature and magnitude of changes in the measure "Teacher Talk", though not found to be significant, may raise questions for further study concerning the use of specific skills study materials in isolation, as was done in this experiment.

Conclusions:

It may be concluded that this group of experienced teachers were able, upon completion of the protocol "Encouragement," to demonstrate the three encouragement skills stressed in the protocol to a significant degree, in a microteaching peer-teaching demonstration lesson, in comparison with a similar pre-program teaching performance.