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ABSTRACT

The effectiveness of instruction in the use of the Program Improvement Project (PIP) model for helping teachers become informed classroom decision makers was examined. Subjects were 60 teacher volunteers from inner-city elementary schools in Indianapolis, Indiana. The teachers were exposed to the main concepts of the PIP model in six seminar sessions, and the pretest/treatment/post-test design was used to evaluate the effects of the treatment. A variety of tests were used to measure the effects, each test being self-constructed and content validated. Data gathered were analyzed statistically using the chi-square technique; informal evidence also influenced the conclusions. Results showed that (1) teachers showed significant gains in making informed decisions on a paper and pencil exercise, (2) there was evidence of informed decision-making in the actual classroom situation, and (3) although the cognitive knowledge of the teachers did not increase significantly, there were indications of some cognitive gain from chi-square frequencies movement upwards in the quarter categories of the 2 by 2 array of data. It was concluded that the PIP model was useful as a program improvement guide to help teachers become informed decision-makers in the classroom. References are included. (VJ)

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SETTING

Traditionally, the classroom teacher was not regarded by the public or by himself as a decision-maker in school affairs. Recently, however, teachers have voiced demands for more pay, more free time, and more involvement in spending school funds. Implicit in each demand was a willingness to accept more responsibility. Spending money was one clear example of a process which requires decision-making.

However, teachers spent more than money. Under the regius of academic freedom, teachers implemented and thus controlled the entire instructional program for individual children.

NEED

The role of the teacher as a decision-maker in the school was evident and well recognized. What methods do we have for developing an awareness of this decision-making role in the teacher? Guba (1969) says that creating decision-making awareness is a formidable task in itself but ventures no clue as to how to do it. A review of several of the evaluation models (Stake, Provus, Metfessel-Michael, etc.) reveals no "how to do it" advice directly aimed at the teacher.

A "how to do it" guide was needed. One which would lead the teacher to an awareness of his role as a classroom decision-maker. But more than awareness of decision-making was involved in producing an appropriate guide. A teacher must also be made to understand his role as a classroom decision-maker and have some means to achieve the status of an informed decision-maker. He needed a practical method by which he could learn the basic concepts of continuous evaluation. He needed to apply evaluation concepts to decision-making in the actual classroom situation.

PROBLEM

The problem then, was to determine if an evaluation model with emphasis in decision-making could serve as a guide to informed classroom decision-making for teachers. Next, the investigator faced a choice. He needed to select an appropriate evaluation model. The model needed to make the teacher aware of his role as a decision-maker and make him understand the role, too. The same model must serve as

a method by which the teacher could learn continuous evaluation and informed decision-making. What the teacher learned about continuous evaluation and informed decision-making, he must apply in the classroom. The terminology of the existing models seemed complex and foreign to the reading teachers' everyday world.

Therefore, the investigator chose to fashion a model for the study which was a close imitation of an existing evaluation model, but which related better to the teachers of reading. The evaluation model used in the study was called the PIP model and was modeled after Guba and Stufflebeam's CIPP model.*

PURPOSE

The purpose of the study was to explore the effectiveness of teaching teachers about decision-making and evaluation. The investigator wanted to know if teachers would be able to make informed decisions about the learning needs of their children after being exposed to an evaluation and decision-making guide. The decision-making and evaluation content came from the PIP model. The results of the study indicated whether or not the PIP model served as a useable guide or "roadmap" to informed decision-making by the classroom teachers. The study sought to answer one main question, "Was instruction in the use of the PIP model useful for helping teachers become informed classroom decision-makers?"

*(Guba-Stufflebeam, 1968) C--context evaluation, I--input evaluation, P--process evaluation, P--product evaluation

POPULATION SAMPLE

In order to determine if instruction in the use of the PIP model was useful for helping teachers become informed classroom decision-makers, a population of teachers was required.

The population sample which was selected, consisted of Indianapolis elementary teachers. They were sixty teacher volunteers from a setting of grade levels one through six, inner-city, Title I funded, Indianapolis Public Schools.

This study was completed as one aspect of the Program Improvement Project in Reading conducted in Indianapolis Public School System. The project, a cooperative effort by that school system and a research team from Indiana University, School of Education Program in Reading, examined the means for accomplishing continuous program improvement in the school corporation's Title I - ESEA reading program. The project examined how and where decisions were made concerning the Title I reading program and whether a special seminar-training program could enable teachers and administrators to make more effective program improvement decisions.

TREATMENT

In order to "treat" the population sample of teachers an evaluation model, PIP, was used as the basis for the seminar instructional treatment outline. The teachers were exposed to the main concepts of the PIP model in six seminar sessions. The plans for the seminar instructional treatment were influenced by the content of the PIP model.

The actual treatment followed the plans closely. The major headings of the six seminars were: 1. An orientation to PIP and teacher survey, 2. The learning environment or setting, 3. Objectives and procedures, 4. Monitoring and adjusting instructional activity, 5. Summary evaluation: final results, and 6. A summary of PIP.

DESIGN

But how did the investigator know if the instructional seminar treatment was having any effect on the teachers? He knew by applying a pretest/treatment/post-test design in the study. The pretest/treatment/post-test design contained an evaluation "wrinkle". The design was not a "tight" research design because of its obvious limitations of sample and testing instruments. And, more important, the design was not in the traditional mode because it contained an evaluation emphasis.

OBJECTIVES AND HYPOTHESES

To implement the design, it was necessary for the investigator to state his objectives in two ways. First, the objectives needed to be stated in narrative form. After the objectives had been stated in narrative form they needed to be restated in a null hypotheses form, so they could be treated in a statistical fashion. The three objectives converted into null hypotheses for clarity in statistical treatment follow:

1. There is no difference in the pretest scores of the teachers' ability for making informed instructional decisions on a

paper and pencil exercise and the post-test scores of the teachers' ability for making informed instructional decisions on a paper and pencil exercise.

2. There is no difference in the pretest scores of the teachers' cognitive knowledge about the major concepts of PIP as presented in the seminar instructional treatment and the post-test scores of the teachers' cognitive knowledge about the major concepts of PIP as presented in the seminar instructional treatment.

3. There is no evidence of informed decision-making in the classroom after the seminar instructional treatment.

The procedures for studying the stated hypotheses followed the pretest/treatment/post-test design. That is, there was a pretest given for hypotheses one and two, and a post-test given for all three hypotheses. The treatment was instruction in the main concepts of the PIP model during six seminar sessions.

A discussion of the procedural "how" leads into the procedural "what". What were the tests used to tap information about the already stated hypotheses?

TESTS

There were several tests used to measure whether or not the null hypotheses were acceptable. The tests were self-constructed and content validated. Here are the names of the tests and where the tests were used in the framework of the study.

The first hypothesis was checked using self-constructed tests called "Aspects of decision-making take home worksheets" for the pretest and "Using what you have learned" for the post-test. The second hypothesis was checked by using the "Cognitive Knowledge PIP" test for both the pretest and post-test. The third hypothesis was checked using a classroom observation schedule and an interview technique as a post-test only. The classroom observation schedule was constructed originally by Tannenbaum and Cohen and modified by Smith and the interview guidesheet was self-constructed. Attitudes of the teachers were also considered in the study but not as a formal objective. A semantic differential "Attitudes in Your Situation" was used to provide information about the teachers' attitudes concerning assessment and informed decision-making.

ANALYSIS

Once the tests and seminar instructional treatment were administered, there came the task of analyzing the data. The data for the three hypotheses was analyzed statistically by using the chi square technique. The method used is outlined in Hill and Kerber's book, Models, Methods, and Analytical Procedures in Education Research (pp. 300 to 305). Informal evidence also influenced the conclusions of the investigator. The criteria for making the ultimate research decision were these: In the statistical portion of the test there are three hypotheses explicated. Two of the three hypotheses must show a statistically significant difference between the pretest and the

post-test performances. But, hypothesis three, which relates to the actual situation, must be one of the two hypotheses showing a significant difference.

Movement upward within the distinct catagories of the 2x2 array of data on the chi square test was considered as evidence of the useability of the PIP model. However, if the statistical difference was NS, the criterion of significance at the .05 level determined the decision on that given H_0.

In the non-statistical portion of the analysis, an improvement in attitude of the participants must be evident. Some positive feedback must be evident from the participants. The feedback was gained through seminar evaluation sheets and informal conversations and a "feedback" session during the last meeting of the seminars. The feedback should indicate that the content of the seminar treatment was worthwhile. The teachers needed to be aware that they were decision-makers. This informal evidence was non-quantitative for the most part. No level of performance was required. Only an indication of these characteristics was needed.

These criteria were met and a positive conclusion about the main question of the study was made.

RESEARCH DECISION

The main question of the study was, "Was instruction in the use of the PIP model useful for helping teachers become informed classroom decision-makers?" Yes, instruction in the use of the PIP model

was useful for helping teachers become informed classroom decision-makers. First, the teachers showed significant gains in making informed decisions on a paper and pencil exercise. Second, there was evidence of informed decision-making in the actual classroom situation. Third, although the cognitive knowledge of the teachers did not increase significantly, there were indications of some cognitive gain from chi square frequencies movement upwards in the quarter categories of the 2 by 2 array of data. The teachers' overall attitudes toward the project improved and positive informal feedback was evident. The benefit of instruction in the use of the PIP model was in making some teachers aware of themselves as decision-makers in the classroom.

Overall, the investigator concluded that instruction in using the PIP model helped teachers to become informed classroom decision-makers in this setting. The degree to which instruction in using the PIP model facilitates informed classroom decision-making remains an open question. The PIP model was useful as a program improvement guide to help teachers become informed decision-makers in the classroom.

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