This study reports an attempt to measure implementation of Head Start Planned Variation, a national experiment designed to compare the relative effectiveness of 12 education programs. The report first gives the background of the experiment, describes the problem of attempting to assess effectiveness without first measuring implementation, and reviews research on implementation. The process of designing instruments is outlined, and 10 of the models and their instruments are described. Methodological problems are discussed, data analyses are presented, and alternative strategies for the evaluation of implementation are suggested. The final chapter contains a summary and conclusions. It is suggested that the ideal design for the study of implementation has two components: (1) an adequate description of the intervention with input from all members of the training staff as well as the sponsor; and (2) an adequate evaluation of implementation, performing primarily a formative function. Implementation checklists and figures on interobserver agreement are included in the appendices. (GO)
AN EXPLORATORY STUDY OF THE MATCH BETWEEN
CLASSROOM PRACTICE AND EDUCATIONAL THEORY:
MODELS IN HEADSTART PLANNED VARIATION

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HURON INSTITUTE
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Straight Percentage Agreement on Rating of Classes Between Observer Pairs: Sister-Site Visits

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Sponsor Weighting of Checklist Items

List of Classes Included and Excluded from the Data Analysis

Bank Street
BDC
Far West
High-Scope
REC
The University of Arizona
The University of Florida
The University of Kansas
The University of Oregon  
The University of Pittsburgh  

**APPENDIX B**

**THE IMPLEMENTATION CHECKLISTS**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Page</th>
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<tbody>
<tr>
<td>Bank Street</td>
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<td>EDC</td>
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<td>B-36</td>
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<td>The University of Pittsburgh</td>
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**RELATED CHECKLIST MATERIAL**

<table>
<thead>
<tr>
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<tr>
<td>Guidelines For The Use of Model Implementation Checklists</td>
<td>C-1</td>
</tr>
<tr>
<td>Model Time Response Form</td>
<td>C-3</td>
</tr>
<tr>
<td>Face Sheet For The Model Implementation Checklists</td>
<td>C-4</td>
</tr>
<tr>
<td>Special Face Sheet For The University of Florida Implementation Checklist</td>
<td>C-5</td>
</tr>
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I. INTRODUCTION

A. Overview of the Study

This study reports an attempt to measure implementation in a national experiment designed to compare twelve educational models, Headstart Planned Variation. The first chapter describes the problem, reviews relevant research, and gives the background of the experiment, introducing the participants, decisions and assumptions which influenced our study. In the second chapter we outline the process of instrument design and describe each model and its instrument. The third chapter discusses the methodological problems of the study; the fourth presents the data and results of two separate analyses. The fifth chapter suggests an alternative strategy for the evaluation of implementation and the sixth and last chapter presents our summary and conclusions.

B. The Problem

For some time, public concern, as well as that of professional educators, has focused on achievement or I.Q. gains as the appropriate measure of success for educational programs. Using traditional pre-post tests of educational interventions, researchers report negative, positive or indifferent results and attribute them to the intervention. Only recently has research focused on the inherent difficulty in this approach to evaluation - its failure to consider whether, in fact, an intervention is
actually present and in full operation during the testing period. If an intervention is not present, attributing results to it of any kind is meaningless and, more seriously, misleading.

The enactment of a theoretical educational model is called "implementation". As an area of inquiry, implementation includes both process and product questions. From a process point of view, an implementation study asks how a theoretical idea is transmitted: Who transmits it? If more than one person is involved in transmission, what is their degree of consensus about model contents? What kinds of material and emotional supports are employed to inform and reinforce those who must implement an educational intervention? What was the behavior and capacity of these persons prior to, during and after the intervention? Are elements of the intervention systematically or idiosyncratically modified by all implementors? Are some elements more susceptible to such modification than others? What conditions account for successful and less successful implementation?

Important as the foregoing questions are, investigation of the implementation process seems profitable only if we can establish that specific interventions are "real" phenomena which occur as planned. Accordingly, this paper focuses on the "product" aspect of implementation of an educational program, how much of the intervention is present.
C. Previous Research

One of the few studies on implementation appears in a brief article by Ralph W. Tyler entitled "The Purposes of Assessment". About 20 years ago Tyler and others evaluated programs of "activity schools". They observed extensively in the 18 schools identified as activity schools in order to define their exact components. The evaluators identified some 61 characteristics combined from all the 18 schools. They then grouped the schools on the basis of their possession of either a great many of the 61 characteristics, a moderate number, or a few.

This procedure illustrates the examination stage, at which we check to see whether or not the curriculum plan is in operation before taking the more expensive step of evaluating pupil achievement in a particular program. (p. 5)

Student gains within these schools were compared across the three implementation groups.

Tyler also refers to Goodlad's study of the Physical Science Committee (PSSC). Teachers implementing the PSSC curriculum were interviewed to determine the degree to which their attitudes toward science teaching reflected the attitudes of the persons who developed the PSSC curriculum and methods. Tyler suggests that pupils participating in an intervention should also be interviewed for (1) their

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conception of the program's objectives, and (2) to determine the extent to which learning is, in fact, taking place.

The only study of innovation we have found which closely resembles our own is that of Gross, Giaquinta and Bernstein. The innovation, which takes place with a single school, is a new definition of the teacher's role called "the catalytic role model". The researchers obtained from the innovator both a verbal and written statement of what the catalytic role model contained. The goals of the innovation in the Gross study bear considerable similarity to some of the Headstart Planned Variation (HSPV) models. A major part of the innovation purported to achieve qualities in children, such as self-motivation, ability to cope with the world, satisfaction in intellectual and aesthetic energies. (p. 11) The study describes the process that unfolds after the innovation was presented by the innovator to the staff. The research attempted to determine the degree to which it was implemented by the staff. The measurement of implementation is based upon two hours of observation for each of eight classes as well as "spot checks" made by a single Observer. The two broad questions which the study sought to answer were:

1. What quantity of time is devoted to the innovation? (This was also measured by how frequently teachers engaged in their former "traditional" behavior.)

2. What is the quality of performance?

The criteria for "spot checks" were straightforward - either teachers had children at their desks all doing the same thing (evaluated "traditional") or children would be working individually or in small groups with freedom of movement (evaluated as the innovation taking place). The period assessed was five months, January to May, with the following findings:

"Analysis of the evidence gathered showed that the staff, in May, was still behaving for the most part in accord with the traditional role model, and was devoting very little time to trying to implement the innovation. Moreover, we presented evidence that showed that the staff's performance, when efforts were made to conform to the catalytic role model, was of low quality." (p. 121)

The Gross study does not cite lack of time as a barrier to implementing the innovation which, on the surface, might be the most plausible explanation. Rather, Gross attributes the lack of implementation to the following four factors:

1. Teachers lack of clarity about the innovation.
2. Teachers lack of skills and knowledge.
3. Lack of necessary materials and equipment.
4. Lack of compatible organizational setting.
Since the bulk of literature on educational change suggests that "initial resistance" to an innovation is the most significant barrier, these are interesting additions which the reader should keep in mind when reading our account of HSPV. The Gross study designates alteration of teacher behavior as fundamental to educational change and suggests that a successful innovation needs to:

1. Know the difficulties teachers will encounter, and
2. Have useful feedback mechanisms.

Tyler, Goodlad and Gross share, in our view, rather loosely defined programs which remain vague despite evaluation efforts to concretize their educational features. We judged that measurement attempts ought to rest on more complete and concrete statements of an innovation.

The exploratory study of HSPV presented here began with a simple objective: to construct an instrument or instruments to measure the amount of correspondence between a theoretical program description and its classroom implementation. If the instrument was concrete, we hoped that the data would allow us to make specific statements about which program components in various interventions were more likely to be reliably present in classrooms and which were not. We felt this information would be valuable to both program developers as well as consumers.
educational models. Effectiveness was defined primarily in terms of achievement gains. A complete list of the models participating in Headstart Planned Variation appears below:

<table>
<thead>
<tr>
<th>Model Name</th>
<th>Alternate Names by Which Model is Known</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Street</td>
<td>Education Development Center</td>
</tr>
<tr>
<td>E.D.C.</td>
<td>Nimnicht/New Nursery/Responsive Model</td>
</tr>
<tr>
<td>*Enabler</td>
<td>Weikart</td>
</tr>
<tr>
<td>Far West</td>
<td>I.D.S./Institute for Developmental Studies/N.Y.U.</td>
</tr>
<tr>
<td>High-Scope</td>
<td>Responsive Environment Corporation</td>
</tr>
<tr>
<td>*New York University</td>
<td>Tucson/Henderson/Marie Hughes</td>
</tr>
<tr>
<td>Univ. of Arizona</td>
<td>Gordon/Parent-Educator</td>
</tr>
<tr>
<td>Univ. of Florida</td>
<td>Bushell/Operant Conditioning/Behavior Modification</td>
</tr>
<tr>
<td>Univ. of Kansas</td>
<td>Engelmann-Becker/E-B</td>
</tr>
<tr>
<td>Univ. of Oregon</td>
<td>Pittsburgh/P.E.P.-I.P.I./Individually Prescribed Instruction</td>
</tr>
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<td></td>
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</tbody>
</table>

The HSPV experiment began in 1969 as a downward extension of Follow Through, a kindergarten through third grade program which compared models. HSPV compared some of the same models in programs for 3-5 year olds. Because the HSPV data was to be combined with Follow Through data to permit study of the models' long term effects on individual children or groups of children, HSPV was forced to locate in Follow Through communities, and, more specifically, in Headstart centers that would "feed" Follow Through schools. Each HSPV model had classrooms in at least one community (site) but no more than four. Each site had at least four

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3 The models preceded by an asterisk did not have implementation problems identical to the U.S. The reason was discussed in Chapter 11, page 9.
classrooms but could have as many as sixteen. The sponsor (the model "inventor") introduced the Headstart "version" of his model to the community either in the first (1969) or second (1970) year of the three-year Planned Variation experiment. Most models were classroom oriented. Each sponsor had his training staff, contracted to teach site personnel to implement the model: the persons most directly responsible for implementation were classroom staff, and sometimes a locally-hired model representative trained by the sponsor especially for a supervising role. Other individuals and groups in sites vested with both formal and informal responsibilities included Headstart Directors and Parent Advisory Councils (PAC), but their participation was usually more peripheral.

For the duration of the HSPV experiment, the evaluation data was collected by the Stanford Research Institute (SRI) which also coordinated and supervised the total

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4 Therefore, at the end of the experiment, almost every model had sites, half of which were in operation for two years, half for three years.

5 This is true of all models with the exception of the Florida and Enabler model though both have classroom components. The former is a home-based program and the latter works with the community to establish educational goals.

6 The clearest exception to this is EDC which expects a good deal of responsibility from the administrative structure of the school or school system within which HSPV functions.

7 The sole exception to this is the data reported in this paper and case studies by the University of Maryland.
evaluation effort. SRI analyzed the data for the first year; during the third operating year of the experiment the Huron Institute assumed the task of analyzing the second and third year data. For the entire course of HSPV, the Program Branch of the Office of Child Development (OCD) in Washington, D.C. hired consultants who functioned independently of models, sites, and SRI. Their assigned task was "to monitor implementation". OCD was quite specific that the consultants (hereafter to be referred to as "the Observers") should primarily observe and they should have no contact with sponsors other than to familiarize themselves with the model before their first site visit. With this as a brief and general overview, we will describe the relationship of these groups to the specific implementation work of 1971-72 which this paper reports so that the reader will be aware of some of the constraints within which our work proceeded.

E. Working With Givens:

Two major features of HSPV were fixed: the cast of characters and the formal and spontaneous relationship of these groups to tasks and the procedures arising from planning decisions. A scheme for measuring implementation had to accommodate itself to both features.

1. The cast of characters

Seven groups have had an influence on the study of implementation since the beginning of Planned Variation in 1969:
The Office of Child Development was divided into two branches: the Research Branch and the Programs Branch. The Research Branch was generally responsible for summative evaluation. In the summer before the experiment's third and last year, it urged that the format of reporting and anecdotal records formerly used by Observers in 1969-71 be made more amenable to conversion into data. The Research Branch authorized the implementation of instruments that were subsequently developed. Its role was supportive in the actual collection of data.

The Programs Branch had been the most active group in urging consideration of implementation since the beginning of the experiment. It initiated the hiring of a large number of Observers to "monitor" implementation. The Observers reported directly to the head of that branch, the senior education specialist. Information about models and sites came to the Programs Branch not only from Observer reports, but also from site personnel seeking redress for complaints. Accordingly, this Branch was the center of a great deal of both formal and informal communication.
which it sometimes took action. If any group could be said to have its finger on the pulse of what was actually happening at sites and with sponsors, it was the Programs Branch.

c. Observers

A group of Observers was hired by the Programs Branch and initially served as a special group of ombudsmen. Their task, "to monitor implementation", was to help guarantee that sponsors meet the conditions of their contracts, and more generally, "to see how a model gets implemented". Observers were hired on a consulting basis and then assigned, each to one site within one model.

By the second year of the experiment (1970-71), there were 39 Observers each making ten visits a year. Roughly two-thirds of the group were affiliated with Departments of Child Study or Early Childhood Education at universities or colleges, and one-third claimed extensive program experience in Headstart. Observers were instructed to make their own arrangements with sponsors to be trained in the sponsor's model. OCD is vague as to whether each consultant was asked to spend a fixed number of days with a

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8 For example, when a particular teacher was cited as exceptionally punitive, an attempt was made by OCD to remove that teacher from a classroom role.

9 The few exceptions to this were either emergency situations of Observer illness or pregnancy when another Observer assigned to the same model would take on a second site.
guaranteed per diem reimbursement for training. (Sponsors received no reimbursement for training the Observers.)

In 1969 through 1971, Observers were primarily responsible to one individual at the OCD Programs Branch to whom they submitted written anecdotal reports. In the final year, 1971-72, the Huron Institute assumed the task of directing their activities. However, the Programs Branch requested that Huron's communications with consultants, whether as a group or individually, be discussed first with the Programs Branch.

d. Sponsors

We believe that in 1969-71 sponsors had minimal contact with the other groups described here, with the exception of site personnel. Huron made a recommendation to the Programs Branch that sponsors receive Observers anecdotal reports and instrument ratings at the end of 1971-72, but it was rejected. Consequently, sponsor Observer interaction continued to be significantly limited. The main concern of sponsors was to implement their model in as many of their HSPV classrooms as possible. In 1971-72 they cooperated with the Huron Institute in the development of model-specific implementation instruments, but they received no immediate feedback per se on this or any other evaluation effort.

e. Sites

In 1969 the Programs Branch correctly anticipated that site personnel would seek to take advantage of the visiting
Observers' expertise by requesting their assistance in any and all areas related to the operation of pre-school programs. The Programs Branch strictly prohibited Observers from offering "model-specific" assistance, but stated that non-model assistance was allowable. This assumes, of course, that the line between "model" and "non-model" is equally clear to Observers and sites, when in fact the distinction is quite blurred. It further assumes that sites will equally understand and tolerate an Observers display of expertise in non-model areas, on the one hand, and partial answers, pretended ignorance and continual references to the nature of an experiment and the dangers of contamination in relation to model-specific issues on the other. Over the course of a year's contact containing 10 ten visits of two or three days each, we imagine it was not humanly possible for consultants to be both properly ignorant when discussing the models and suitably helpful when discussing non-model areas. As a result, site personnel must have experienced difficulty with such a dichotomy of behavior.

Sites, like sponsors, never received written implementation reports from Observers.

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10 This was the standard number of Observer site visits per year in the first and second years of HSPV.
f. The Huron Institute

This organization was a small educational research and consulting firm which was awarded a contract to analyze the 1970-72 data of the Headstart Planned Variation experiment. In 1971-72 it was responsible for designing implementation instruments and (informally) directing Observers' activities.

g. PTTA

An agency, PTTA handled the administrative arrangements for the Observers: travel, receipt and reproduction of their data and payment for services rendered. This agency had its strongest contacts with the Programs Branch and acted on its orders.

2. Procedures arising from planning decisions

Two important assumptions concerning the nature of Headstart affected the interactions among these various groups:

-- Each model is an educational intervention for pre-school children. Education takes place in classrooms.

-- If sponsors agree to participate in an experiment, they can train others to both implement and/or understand their model.

11 The author was employed by this organization in the summer of 1971.
If interventions take place in pre-school classrooms, it follows that model implementation will be observed there. Accordingly, appropriate Observers of implementation were thought to be persons who had extensive experience in the field of pre-school education. Secondly, if models were ready to be "exported" to communities, it followed that sponsors could readily train an experienced group (such as the Observers) in the definition of the model. On the basis of this reasoning, the Observers were hired and trained.

Once the Programs Branch made a decision to monitor HSPV programs, the obvious candidates for that job were persons with extensive experience observing young children and early childhood programs. "Monitoring implementation" required that Observers know what constituted the particular model to which they were assigned and what forms implementation of the model might take. Monitoring also required some useful format for recording and transmitting this information. According to our information Observer training was of varying content and duration. As a result, some Observers visited sites and wrote reports before meeting anyone from the sponsors' staff. Others spent several days at the sponsors' headquarters being trained along with prospective model teachers, where they were able to question the sponsors' staff and become thoroughly familiar with the models' subtleties. We can only guess at the reasons for the non-comparable nature of training:
1. a lack of funds;
2. an assumption that the models were not complex and therefore could be easily understood—perhaps merely through a telephone discussion; or
3. the Programs Branch may have felt no real need to register any more than a judgment of "pretty good", "not so good" for implementation.

In addition, for the first two years the form and content of the Observers' written reports was not standardized, and thus varied considerably. Some Observers covered only classroom issues while others reported political influences in the community and administrative practices.

3. Further constraints

The other influential factors were the role of timing and the assumptions about models. We discuss these here not to excuse the instrument design or data, but to document the all too familiar exigencies of a world in which ideals must be compromised in the interests of decision and action.

a. The role of timing

The fall of 1971 was the final year of HSPV. Any implementation instruments had to be ready by the end of September for the first observations. Sponsors' cooperation, specifically sponsor time, was a necessary input for the instruments if they were to reflect their own version of their model. But sponsors were given only a brief period to respond to this task.
Time constraints most seriously militated against the proper order for the reliability work. As our recommendations for the form and draft content of instruments were not accepted until August, 1971, a reliability study could not possibly be organized to precede use of the instrument.

b. Assumptions about models

A second contributing factor with which a design for an implementation measure had to work was the assumption that models were well developed and articulated programs which could be exported and easily plugged into any educational "outlet" with a minimum of complications. Accordingly, there was great pressure for across-model comparisons in all aspects of evaluation, implementation being no exception. The OCD Research Branch, therefore, favored a single comparative instrument.

There were two sources which suggested that models were not developed and/or well articulated: each sponsor's own literature, and the Observer reports of 1969-71. Literature on each model contained a great many statements about goals, attitudes, philosophy and in most cases, very little about what a day in school would be like for children, or how, specifically, the ideal model perfect child would be spending time. (The exceptions to this were High-Scope.) When Observers' reports described supposed model specific components, phrases such as "I think this is what the model wants to happen ..." (emphasis supplied) usually qualified their statements. There was little
consensus even among Observers within a model about the definition of that model (at least little appeared in the narrative reports). The lack of clarity about day to day and minute to minute activity within each model from both sources, led us to believe that models were not developed in any fine sense. Yet researchers and sponsors themselves expressed no serious doubts that models were defined; they behaved as if measurement were the only problem.

All the above factors influenced both the design of the implementation instrument and the gathering of data. The background and training of persons who would use the instruments led to a focus on classroom observations (whether or not the model contained other components). Time constraints reversed the usual procedure for instrument design. Finally, the assumption that models were fully developed educational programs led to the belief that instrument design would be both a relatively easy task and one which could utilize the comparative approach of other instruments in HSPV.
II. THE PROCESS OF INSTRUMENT DESIGN

A. Introduction

In the first two years of HSPV there was no strong emphasis on the measurement of implementation. This can be partially explained by OCD's confidence that implementation would present no problem because each model had been tried in at least one experimental setting. As the first year data became available (in the second year of the experiment), models were not clearly differentiated on many variables. Simply put, there seemed to be very little evidence that some models were clearly better than others. As a result, it seemed possible that an implementation study might explain why. It was also thought that implementation information would reinforce any significant outcome measures. (For example, well-implemented classes might contain children with greater achievement gains.)

As we have described, the Observers' reports were the only specific material on implementation. These reports had a relatively unstructured format of several open-ended questions. Both within and across models, reports were essentially noncomparable and, although of general interest, they could not be converted to data.

In the summer before the third and final year of the experiment, the research branch of OCD requested that the Observers' reports of the first two years be reviewed and a new format for their reports be considered. At this point, we began to work with the experiment. For each tab...
to design an instrument or instruments that Observers would use to assess implementation.

This chapter discusses the process of developing measures of implementation for the HSPV models. The process involved cooperation with each model's sponsor. The end of the chapter describes each model, noting our sources of information and giving examples of what we see as the important components of each model.

B. Describing The Models

Any instrument measuring implementation had to come primarily from the available written material on each model. Our initial idea was to provide Observers of each model with identical descriptions of their model and then to devise one instrument which would comprehend all models.

The process of developing these checklist descriptions had two phases: (1) formulating descriptions of each model as completely as possible; and (2) soliciting the cooperation of sponsors and the comments of Observers to make the description both as exhaustive and as clear as possible.

1. Phase one: draft description of models

In the first phase, we extracted from sponsor publications and past Observer reports those features of each model about which some consensus existed. Observer reports contained references both to what they knew the model contained or what they saw in programs as demonstrating what the model contained. For example, in the
University of Kansas model, each Observer refers to the presence or absence of special aprons which children wear in order to have a big pocket in which to keep "earned" tokens. "Token aprons" is the specific feature or typical phenomena of this model. This feature was then listed in the Kansas draft as "children wear aprons with token pockets during earn periods". (The fact that aprons are only worn during earn periods appeared in one Observer's report.) On this basis, the descriptions I could extract for each model proved quite sparse.

At this point, we could have considered these lists of model components the final instruments, assuming that what we found in the sponsors' program literature and Observers' reports must be sufficient. However, as a former nursery school teacher, it was clear to me that by reading these lists I could neither perform any of the model components from such inadequate descriptions, nor could I recognize as an observer, what behaviors were included or excluded by model specifications. I would need to know considerably more of what the sponsor had in mind in order either to implement or observe the model. Assuming that sponsors were able to be clearer and more specific about what they wanted to happen in the classroom, especially after they had been working with disparate communities for several years, we decided to treat what we had gleaned from publications as a "draft" description of the model. We then drew up a list of questions we had concerning
specific items in each draft and sent each sponsor the
draft with questions attached.

These questions were intended to serve both a specific
and a general function. Specifically, we wanted each final
item to be as clear as possible and questions we asked
sought to accomplish that. Secondly, the sponsor, as the
creator of the model, was the only source of a complete
model description. Since we would be measuring the imple-
mentation of that description, it was necessary that the
sponsor "authorize" any description used. The draft and
questions were, in other words, simply an elaborate request
for a more complete behavioral, operational description of
each model.

The draft questions were intended to encourage each
sponsor to be as specific and clear as possible. For any
one item, one could imagine an infinite number of questions.
For example, in the Bank Street draft, the item "Materials
are located so that children know where they are" can
raise the questions:

1. What specific materials?
2. Materials included and excluded by what princi-
   ples?
3. What is the evidence for children "knowing"?
4. What is sufficient evidence to stand for
   "children" as a group?

We usually selected only one of these questions at random.
Answers to all of them would have been helpful but as we
were forced to communicate with sponsors primarily in writ-
ing, we thought they would only respond to a limited number
of questions. The general rules we followed were:
1. Do not attach a question for every item.¹
2. By repeating similar emphasis on questions about several different items, I hoped to communicate that we were interested in as much specific information as possible and as many principles as possible.

At the draft stage, there appeared to be a rough dichotomy between those programs which were more specific, and those which were less so. One could also characterize this as a procedure versus principle, techniques versus attitude, or a means versus ends dichotomy. For the group of models tending to emphasize "means", it seemed possible to elicit even greater specificity from them and, in some sense, ask them harder questions. For example, the University of Kansas draft contained a category called Teacher Techniques, Responsibilities and Training. We attached a general question for the entire category which read:

Q. B. General Question: What is the specified role of the teacher during earn period?² What is her location, what does she focus on, what are her interactions with children to emphasize?

This question really asks that the sponsor justify the component with a reason and/or a belief about the nature of

¹We ended up asking about one-half as many questions as draft items for each model.
²"Earn period" is the University of Kansas phrase for instructional time when children's correct responses (in terms of academic content or behavior) "earn" them tokens.
learning. Our conscious goal was to have each model description contain both specific behaviors as well as categorical principles which sponsors believed subsumed the behaviors. In this way, all the model descriptions would combine the "nitty-gritty" of "how to do it" as well as theoretical and philosophical rationales.

Surely models can be distinguished on more than one dimension, but as our work progressed the dichotomy of principle and procedure persisted, as shown by the final version of sponsor statements. The "principle" or "ends" models were extremely reluctant to give examples because they were afraid the examples will become formulas, hindering rather than promoting further thinking of the staff and preventing new examples from being generated. The models that favor procedure or means, on the other hand, felt that principles leave teachers without ways to operate on a minute-to-minute basis in class. Since specific behaviors are the stuff principles are made of anyway, why not specify what you want and never mention principle? Models stressing principles seem to have appeal for the development of the professional human being. Models stressing procedures seem to be more suitable for the hard core problem of training a huge and varied teaching staff to employ specific "pay-off" teaching techniques.

2. Phase two: the sponsor replies

When all the drafts were returned, we had the most complete versions of each model that we could get in two
months. The descriptions were primarily the result of written communication and a few phone calls to sponsors.\(^3\)

In some cases, sponsors had completely rewritten their drafts (e.g., Bank Street, the University of Arizona). Two models, the University of Florida and High Scope furnished additional published material which they said was more suitable for the checklist. High Scope had prepared many examples of model appropriate teaching sequences within curriculum areas. The University of Florida's checklist was largely extracted from two documents - one, a self-monitoring report to be filled out by the Parent Educator's following her home visit, the other a behavioral list of the components of a successful "task", the delivery point of the model. Other models sent teacher training material, but the materials frequently did not contain examples at the level of specificity required for an observation instrument. Though the final version of each model checklist was more comprehensive and relatively more specific than the draft, each still contained ambiguous items. Below are listed the final checklist items of four models describing materials; each is followed by questions found to be unresolved:

**Bank Street**

**Final item:** Materials are located so that children know where they are and can reach them readily.

\(^3\)The exception to this was EDC with whom we had several meetings in order to persuade them to cooperate in developing a checklist as well as urging them to proceed in completing it.
Question: What principles differentiate children's materials from other materials in the room?

Far West
Final item: Children's materials are in evidence in the room, visually and physically accessible.

Question: Does "children's materials" mean made by children, that children can use them, or both?

University of Pittsburgh
Final item: Materials are organized in the room according to various learning centers; for example, one would find the prescribed exploratory learning materials for math in the math area.

Question: Does this model have any interest in the arrangement of materials outside of the learning centers?

REC
Final item: Materials are attractively arranged and within easy reach of children.

Question: What is the model criteria for "attractively arranged"? By "easy reach of children" does the program include this in some more general notion of what children can touch, when, and what the conditions of use of materials are?

Sponsors had complete control of the content of the implementation instruments for their model. They were asked to make any changes in the instrument during the year to reflect any possible major program additions or deletions. At the time, we strongly believed that the best way to obtain an exact program description would have been to visit sponsors: more time could have been spent on devising

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4Observers were asked to raise questions about any items they felt they could not rate in order to make the instruments as functional and clear as possible. Two Observers of two different models contributed to substantial checklist revisions after their first use in the field. Beyond this, virtually no questions came from Observers about the definitions of components for their model.
the checklists and the number and range of questions we could have asked would have been greater. This process would have required less of the sponsor's time in the end, another benefit for them. However, as previously mentioned, time as well as funds prevented us from using what might have been a more productive approach. The sponsor authorized versions of the model descriptions became an implementation checklist for that model.

C. Models Omitted From The Process

Of the twelve models participating in the Planned Variation experiment, only ten had instruments for implementation. New York University and the Enabler model were omitted. New York University had only one site which was dropped from the data collection of 1971-72. Since this would give no comparison data for implementation, it was omitted. The Enabler model presented a different problem. As a model, it consisted of five early education specialists, each working in a consulting capacity with their own community. The purpose of the work was to help a community develop its own educational model. The consultants were not selected on the basis of their agreement about goals, nor did they meet in advance of their work with the express purpose of agreeing on procedures or practices which would be "The Enabler Model". During the course of the experiment they met occasionally to try to extract what similarities there might be in their work. In the fall of 1971, this model had no formal publications available, though
there were anecdotal reports of site visits. In the absence of published material, with sparse consensus of methods and goals in the anecdotal reports, and without an opportunity to meet with the "sponsors", it was impossible to construct an implementation instrument for this model.

D. A Measurement Controversy

The ten instruments which were used in the field varied in length and specificity. Categories of items in all of them covered materials and teacher behaviors but beyond that, items did not address identical areas of education.

One might ask at this point what the benefits of multiple instruments were? At the draft stage it appeared that models might well share common specifications. Below are draft items we submitted to sponsors referring to materials and teacher praise which suggested that some models might be more similar than different:

1. Items relating to materials

Bank Street
Materials are located so that children know where they are.

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5We offered on several occasions to meet with this group to work on a checklist, making our offer to the Programs Branch of OCD. That office had a great investment in this particular model. The Enablers had been personally selected by the Senior Education officer of that branch and the group represented a strong child development orientation favored by Programs at OCD. The relatively low cost of the model (only the expenses of one individual, ten times a year) gave it a great deal of appeal if its results were comparable to other models in any way. Our offers were never acted upon by OCD.
EDC
Materials are arranged in such a way that children have access to them.

University of Arizona
Space is handled in such a way that children can find things.

REC
The classroom stimulates children to explore on their own.

2. Items relating to praise

Bank Street
Teacher praises children for good behavior.

University of Kansas
Teachers understand the subtleties of the use of positive reinforcement.

University of Oregon
Each teacher uses systematic, positive reinforcement at all times in working with children.

University of Arizona
Teachers positively reinforce children.

While the above items are close to one another in meaning, there are, in fact, possible appreciable differences. Thus, Bank Street's "knowing where things are" may be quite different from EDC's "having access to them". Children being able to find things is important to Bank Street and University of Arizona, but Bank Street emphasizes materials, while the University of Arizona emphasizes the organization of space. One assumes in the REC specification that both materials and space might figure in constructing an environment where children "explore on their own". None of the four statements differentiates materials into those which may be appropriate for the child in terms of the model. That is, children may know where a year's supply of paper towels is, but should they have access to them?
It was possible that each set of examples could be fairly represented by a single item in one comprehensive checklist. If all the drafts had been returned stating these items with greater similarity on their final sponsor corrected versions, we could have justified a single instrument. In fact, however, the final checklists contained greater divergence on such items. To return to examples referring only to materials.

3. Items relating to materials: final checklist versions

Bank Street
Materials are located so that children know where they are and can reach them readily. (Item expanded.)

EDC
(No specific rewritten item referring to location of materials in space. Old item omitted.)

Far West
Children's materials are in evidence in the room visually and physically accessible. (New item.)

University of Pittsburgh
Materials are organized in the room according to various learning centers: for example, one would find the prescribed exploratory learning materials for math in the math area.

Teaching materials for prescribed learning are clearly labeled so that children can find them. They are keyed to the objectives included in each of the curriculum areas.

(Two new items.)

REC
Materials are attractively arranged and within easy reach of children. (Item expanded.)

University of Arizona
The materials are attractively arranged and easily accessible. (Item expanded.)

When the items formerly somewhat similar in the draft stage assumed a greater discrepancy in their final versions, it
seemed reasonable to conclude that a single instrument could not fairly represent the whole group of models.

The question of multiple versus single instruments raised other issues. If HSPV included 12 distinct "treatments", a first step in measuring each model implementation would be to view each model as an entity and thus compare it to its own standards. If the models had been developed our assumption was that items for a checklist instrument would have existed in sponsor published material. Since they did not, our premise was that fostering, developing, refining, and paying attention to the distinctive attributes of each model would help to obtain a clearer picture of what each represented as a treatment. Moreover, a thorough expression of each model's program would offer some basis for an estimate of any unique characteristics they might possess. By contrast, the development of a single instrument would force omission of many unique aspects of models, or, in the process of reducing them to a compatible form with components of other models, dilute most of their meaning.

A second drawback of a single measure was related to earlier sponsor objections to test measures. Some sponsors felt the P.V. test battery did not address the specific outcomes for which their programs were designed. A single implementation measure would have been vulnerable to similar criticisms.
The drawbacks of a group of instruments, on the other hand, are clear. Realistically, they can only permit within model comparisons. One cannot use them to compare the level of implementation across models since model components are not equal across models. Therefore, we cannot equate 50% of one model with 50% of another. To do so, we would need to know how components are weighted within models and further, what arrays of components composed each 50%.

While the limitations of multiple instruments are obvious, in weighing the advantages and disadvantages of a single instrument against multiple ones, we decided in favor of the latter.

E. Description of Selected Model Checklists

The ten models discussed in this report are Bank Street, EDC, Far West, High-Scope, REC, University of Arizona, University of Florida, University of Kansas, University of Oregon, and University of Pittsburgh. They represent a range of approaches - from emphasis on academic instruction with the teacher as an active director of learning to an emphasis on child-initiated learning with the teacher responding and lending support. The University of Florida represents another model of learning entirely as it takes place outside of a classroom in the home. The teaching situation is one-to-one and the immediate target

6This information was requested from sponsors during the course of the final year.
"pupil" is the parent.

We have grouped models in two categories. In Group I, we have placed models which have a child development base and a whole child approach. These models are Bank Street, EDC, Far West, High Scope and Arizona. In Group II, we have placed models which purport to teach the child something specific and which specify some or all of the following in their checklists: specific materials, clear procedures, and/or monitoring devices for the key parts of their program. These models are REC, Florida, Kansas, Oregon and Pittsburgh.

The following section describes each model and gives some examples of important (key) items from each model's checklist.
BAN'K STREET COLLEGE
(Group I/Sources of information: published material, slide tapes, teachers training materials, personal communication and training at the college over a 1-1/2 year period.)*

Bank Street has been a teacher training institution at the graduate level for many years. It has been considered a leader in the field of Early Childhood Education. One of the strong influences on its educational philosophy has been psychoanalytic theory, and this is reflected in its style of teacher training. Bank Street has adapted the analytic model in the sense that the diadic relationship between the teacher trainee and his college faculty Advisor is seen as a central learning experience. Advisor-student contacts are intense and verbal, emphasizing discussions of students' feelings about themselves, their teaching and teaching issues. Assignment to ongoing classrooms is a part of a student's training. The student works under a master teacher several days a week for a semester. The master teacher usually gives no explicit directions to the student but is conceived of as an embodiment of the philosophy which the student should emulate.

In our opinion, emphasis on the development of the teacher as a person sensitive to and aware of children's needs is the heart of the model. This is encouraged and

*We have not had an opportunity to visit a Head Start program of this model. However, we have reviewed Bank Street's training by reading their training material and talking to Follow Through personnel. The author has had a year of graduate work at Bank Street and attended one Follow Through training session there.
supported at an individual level by the sponsor. Given this conception of teaching, it is not surprising that the Bank Street checklist tells us more about what the teacher is to be than what the teacher is supposed to do. Similarly, the qualities which children should exhibit are defined, rather than their concrete behavior. Put differently, the Bank Street model is global rather than specific. The teacher's task is all-encompassing. She is asked to follow a set of complex and high level goals without specification of the stages or steps by which these goals might be achieved.

In many ways, Bank Street is the prototype of Group I models. The items specifying child behaviors read like a list of adult qualities. The checklist items directed to adults are as exhaustively complete. If a teacher were rated 4 on each item, she would be a paragon of virtue. The theme of Bank Street and Group I seems to be the creation of optimal human qualities for all individuals associated with the model - children, teachers, ancillary personnel and parents. The pre-school is meant to be a learning-teaching environment for everyone who comes into contact with it.

In our opinion, the key ideas in Bank Street are individualization, diagnosis as a psychological approach to instruction, and a stress on learning that has relevance to the child. Staff members are to support this process. In contrast to other models, we found it difficult to select specific items from Bank Street's checklist which express...
its core ideas. This is partly because the model seems to exclude nothing and the checklist seems like a description of an ideal life.
Bank Street

Materials and Curriculum

II:B.4 There is emphasis upon use of natural materials within the child's own environment, and child-made, teacher-made and parent-made materials and equipment, as well as commercial items.

III:A.2 Curriculum is structured according to basic educational principles but is completely flexible in response to the developmental stages of the children, their evolving competencies, and opportunities for learning as they arise in each situation.

III:A.4 The curriculum is based upon the adult's study of how each child organizes and reinterprets his experience through "play" and his own choice of activities.

Children as self-motivated persons who live in the classroom

I:A.2 Children demonstrate active participation in their own learning through self-initiated expression and through seeking more understanding of facts, ideas and processes.

I:A.12 Children organize their ideas, reason, plan and solve problems.

Adults as responsive to individual children's needs

I:B.4 The adult challenges and supports problem-solving and coping behavior.

I:B.10 The adults take into account each child's interests, strengths, weaknesses, and learning styles in developing individualized curriculum.

I:B.11 The adults encourage children to work cooperatively and to interact in many ways with one another.

I:B.12 Adults encourage children to describe out-of-school experiences, and show interest in the child's whole life.

Expectations of the total staff

I:B.17 Each adult provides a role model with which the children may make positive identification.
I:C.5 There is continuing interaction, sharing of information and insights, and mutuality of goals between teaching staff and ancillary staff (such as nurses; family workers and guidance personnel) with the latter observing and sometimes participating.

IV:C.4 The consultant services of field representative, resource persons and central Bank Street staff are viewed as an essential component of the circular process of staff development. The Sponsor provides input to the community, considers feedback from the community and eventually plans jointly with the community to meet differentiated needs with continuing support and guidance.

V:A.5 Parents and teachers cooperate in planning out-of-school reinforcement of what children are doing and learning in school, which is facilitated by home visits by both the teaching teams and ancillary staff.

The following items include some items which are unique among models and are items pertaining to parent involvement.

V:A.1 Parents are encouraged to participate in the school's learning activities, such as helping with story time, field trips, cooking, and making materials.

V:A.6 Parents develop and/or use checklist for classroom observation, i.e., what to look for in a Bank Street-sponsored classroom.

V:C.3 Parents are being trained to interview each other, using the new Questionnaire for Parents.

V:D.3 In some communities a special room or house may be set aside for the use of parents, which is often used for educational and community activities as well as for the primary social function.
2. EDC
(Group I/sources of information: published material, staff interviews.)

The EDC model incorporates the earlier work of its earlier incarnation, Educational Services Incorporated (ESI). ESI worked on the development of so-called teacher proof materials since they perceived large scale teacher training and/or retraining as an impossible task. The importance of materials is a key part of the EDC model. A second key input to the model occurred a few years prior to its Follow Through participation, when the staff had become increasingly interested in the British scheme of Open Education. Open Education stressed the individual nature of learning and had a unique system for supervising and assisting teachers called the "Advisory". In England, the Advisory is a group of senior teachers, most frequently with expertise in a specific curricular idea. Advisors do not have classroom teaching responsibilities but are consultants in their curricular areas. They function in two unique ways: (1) they can be summoned directly by teachers, and (2) they do not have any power to dismiss teachers or advise that they be dismissed. The advantages of this scheme to teachers (and indirectly to children) are obvious. Teachers who wish assistance, if they are not required to make that request of or through Administration (1) may be more likely to ask for help, (2) more likely to use the help they get, and (3) not suffer the intense anxiety of the
if-I-need-help-I'm-not-a-good-teacher syndrome, which is more typical of this country.

The EDC model adopted much of the British scheme stressing that children work individually and began developing its own Advisory of former classroom teachers.

In relation to the classroom, the model views children as persons capable of serious effort and work, to be respected, supported and, more often than not, left to structure their own learning. The role of the teacher is to be responsive and subtly encouraging rather than initiating or directive. Teachers (1) primarily provide materials, and (2) leave children alone.

A strong component of the model (though there is only one item devoted to it in the checklist - III: lb) is that a classroom must have an individual or "unique" flavor. This is a logical extension of the notion that children's work be individual and self-determined. A phrase used often by the sponsor's staff is "do your own thing" which applies to everyone associated with the model.

The emphasis on individual freedom in the interpretation and enactment of the model probably allows, from a positive point of view, exhilarating leeway to creative teachers (and sponsor staff) who have been waiting to get out from under doctrinaire educational systems. On the other hand, the lack of concrete specification that typifies the model may cause a good deal of confusion and/or
hostility from teachers and administration. Whether or not this inspired EDC, a large section in their checklist specifies administrative behaviors. The items in this section are unique among models, are refreshingly concrete, and represent a successful attempt at spelling out some ways administration can support or destroy an innovation.

We feel it is both interesting and important to keep in mind that the organization of the Planned Variation experiment (as well as Follow Through) necessarily compromised the two central principles of the British definition of an Advisory: (1) Advisors responding to the direct solicitation of individual teachers, and (2) the nonevaluative stance of an Advisory. Planned Variation was selected by community and/or school representatives, usually from administration. The nature of the Planned Variation contracts required a fixed number of consulting days from the sponsor to work in designated Planned Variations classrooms. This means every Planned Variation classroom teacher saw a member of the EDC Advisory at least once a year whether or not she or he wished it. Secondly, as a national experiment, HSPV was constantly attempting to evaluate teachers. Obviously, the model could have adapted the British scheme to fit the circumstances. However, it was our definite impression from conversations with the EDC staff that this was not the case. Members of the Advisory maintained a standard of the ideal role they should play, i.e., responding to teacher requests for assistance. As part of Planned
Variation, Advisors were put in the position of taking the initial steps to establish a relationship with teachers, trying to create an understanding of the model and a desire to work with it. While this was no different from the problems faced by other models in their sponsor representative-site relationships, it violated the EDC principles.

The key items which characterize this model are as follows:

**Items Pertaining To Individualism And Self-realization**

I. 2. Children take initiative and take responsibility for their own work - they do not have to have things prescribed.

I. 8. Children show signs of humor, fun, and joyousness.

I. 17. Children can make mistakes and learn from them. They can do things themselves even when the teacher might do it more neatly or better.

II. 5. There is something that is unique to this classroom, i.e., the classroom should have an individual quality to it.

**Items Pertaining To Materials**

I. 20. Children use materials in a variety of ways.

III. 2,f. Resource Center: materials are organized so that they are easily available. There is a system for keeping teachers supplied with materials from a functional working space.

IV. 18. The teacher provides a variety of materials during the school year.

**Items Pertaining To The Teacher's Role**

IV. 6. Teachers are sensitive and responsive to children's needs.

IV. 12. Teacher encourages children to persist in things which capture their interest by extending those interests.
Items Pertaining To Support Outside The Model

III. 1,f. Administrators share information about the budget with the local advisors.

III. 2,b. Staff Development. (Note by circling which components are observed or administratively supported according to your information.)

Release time, pay fares to workshops, help provide local workshops, encourage cross classroom visitation.

III. 4. Administrators make an effort to understand the model by attending workshops, reading and/or thoughtful questioning.

III. 7. The administration has clearly delegated some nonsupervisory responsibilities for supporting the program to the local advisor is not asked to evaluate teachers and has a minimum of administrative chores.

Below Please Underline Any Phenomena That You Observe.

1) A curriculum imposed by the administrators. 2) Imposition of lesson plans either made by the teacher of the Director. 3) Required reports from the teachers to the administrators which are not useful to the teachers and children. 4) Prescribing certain books, ordering the same thing for all classrooms without consulting the teachers.

Items Pertaining To The Advisory

V. 2. The advisor does not take on supervisory evaluative responsibilities.

V. 3,b. Helps staff develop their own classroom materials.

V. 6,b. Devises a system for keeping teachers supplied with materials, particularly consumable items.
3. FAR WEST
(Group I/sources of information: formal publications and teacher training materials.)

The Far West Laboratory was established in 1966. By October of 1967 it began developing an experimental inservice training program for Headstart teachers and assistants. The "responsive model," as it was then called, was developed at the Glen Nimnicht's New Nursery School in Greeley, Colorado.

In a document called "Summary of a Three-year Experimental Program to Train Headstart Teachers and Assistants" put out in 1970, Far West outlines its objectives as "... to help children maintain or develop a healthy self-concept and to develop their intellectual ability (i.e., ability to solve problems)" (p. 1). The environment in which learning takes place is described in ideal ways ("it informs the learner immediately about the consequences of his actions") and the activities in the environment are means to be "autotelic", that is, the child's essential satisfaction stems from the activity itself. In other words, learning is self-rewarding.

By 1971, problem solving became an avowedly unique aspect of this model. "Problems" have three major classifications:

1. A noninteractional problem (a physical or one-person problem", e.g., a puzzle).
Interactional problems ("... involves two or more people and requires a person to think." E.g., chess).

3. Emotional problems, which are seen as blocks to solving the other kinds of problems and which are to be mastered to produce a "healthy self-concept".

Problem solving ability rests on "developing the senses, language and concept formation" (p. 3).

Other "major" objectives that are discussed in this paper are (1) a child's knowledge and positive feeling for his cultural background, and (2) a child's ability to learn how to learn.

The three kinds of problems to be solved and the abilities they require do not comprise a narrowly defined set of objectives. On the contrary, they could describe any and all of a child's school (or out-of-school) experiences. In attempting to uncover whatever something specific might lie beneath these overall objectives, we searched the training materials of Far West. In a document entitled Program Advisor's Seminar, the following sets of activities are outlined; the first for teachers, the second for Program Advisors in their follow-up of the teachers "First Classroom Unit".

PHASE-IN WEEK

First Classroom Unit (Teachers)

1. Help Children Adjust to School
Provide name tags
Provide individual space with full name and photo
Practice calling each child by name

2. Establish Rules And Routines For Children

3. Observe Class Behavior
   What they do and do not do

4. Establish Adult Relationships
   Working as a team

First Workshop For Teachers (Program Advisors)

1. Discuss Children’s Adjustment To School
2. Discuss And Evaluate Rules And Routines
3. Discuss Teachers Observations Of The Class
4. Discuss Adult Relationships
5. Discuss One Of The Activities For Children
   Songs using children’s names
6. Discuss Specific Language For Teachers To Practice
   Use verbs to describe action

In no way do these suggestions vary from any which would be espoused by an institution for teacher training in early childhood. We find a few highly specific practices believed to lead to successful achievement of a goal such as children wearing their name tags in school equated with assisting adjustment to school along with dictums of enormous scope unaccompanied by suggestions of how they might be carried out. For example, "establishing professional working relationships" is a simple matter of reminding a teacher that they should be attended to. The remaining classroom units show a similar dichotomy with the greater proportion of activities being defined by general rather than by specific examples. Classroom units containing suggestions such as "use cuisenaire rods to develop the concept of size" are few and far between and even then,

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Page 2, Point 3 of the Seventh Classroom Unit.
do not explain how one might use the rods.

In the Lab's 1971 objectives statement, 9 examples of noninteraction and interactional problems are given. They are all in the context of games (even though earlier, marriage had been given as an example of an interactional problem). This has the effect of making this aspect of the model suddenly seem narrow, and one has a vision of children not as pupils but as players. However, under a heading which warns in upper case letters that General Characteristics of a Good Problem Solver Should Apply To Many Although Not All Problems, some of the following child qualities are listed:

- Asks questions requiring extended answers ('How', 'Why', 'What would happen if' questions).
- Reflective, focused, not impulsive (for example, in tasks that ask 'Which one is most like the letter d, b, p, h, or q?' delays ('thinks') before responding.
- Makes and honors bargains, agreements and contracts."

Far West admits that developing such characteristics is more than a one or two year job. The end of their paper mentions the lack of a specific curriculum. It suggests

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that the real job is for individual teachers (as opposed to what the model provides). The sponsor is not to dictate the quantity or content of teacher behavior. "... an immediate objective would be to increase the amount of time the teacher deliberately uses some form of experience that she could clearly identify" (p. 20).

Typical of the Group I models, we find the child stalking his education alone, and the teacher being the best "person" she knows how to be by encouraging and respecting the child's interest and efforts.

The checklist items that reflect this approach are:

**Items Relating To The Self-Rewarding Nature Of Child Activity**

II. A. Teachers do not routinely interrupt children with teacher-initiated activities.

II. L. Teachers provide for experiences that are self-rewarding for children.

III. B. Children move at their own pace in most of the activities they engage in.

III. D. Children are involved in experiences that are self-rewarding.

III. T. Children do things for the internal satisfaction of doing them rather than through external reward or punishment.

**Items Relating To The Three Types Of Problems**

II. M. Teachers provide for experiences which allow children to engage in a variety of problem-solving activities.

II. N. Teachers provide for the development of self-esteem (for example, a child's picture will appear next to his cubicle).

III. F. Children are frequently involved in a variety of experiences that provide for problem-solving.
III. G. Children are solving a variety of problems: some are personal interactional problems and some are physical.

III. I. Children show evidence of developing self-esteem.

III. N. Children maximize use of their own and other available resources to solve problems.

III. R. Children cope well with their own emotions.

Items Relating To Curriculum And Materials

II. A. Teachers direct early program work toward basic concepts such as color, position and relation.

II. J. Teachers use resource material from the Lab.
4. HIGH-SCOPE
(Group I/sources of information: published material, teacher training materials, site visits (2), sponsor interviews, staff interviews, local site staff interviews.)

David Weikart, the Director of the High-Scope Foundation, has been conducting research with pre-school age children since just before the inception of Headstart in 1965. His early work focused on children whose achievement test scores fell into the retarded range. Prior to Follow Through and Headstart, he also collaborated briefly with Constance Kamii in an attempt to operationalize some of the work of Jean Piaget for classroom use.

The importance which Weikart still places on Piaget's work is evident from the High-Scope checklist. Approximately one sixth of its items deal with "Temporal Relations, Spatial Relations, Classification and Seriation". The reader may wonder, then, why this model has been placed in Group I with models which are both child development oriented and lack specific curricula. When models have been grouped in the past, High-Scope usually falls into a category which merges "cognitive" and/or "structured" models, with child development ones. Though High-Scope has used Piagetian terms in its checklist, it has neither specific curriculum materials nor a particular sequence which must be followed in teaching the concepts, either of which would have sufficed to place High-Scope in Group II. There is, however, one point which distinguishes High-Scope from other Group I models. When a High-Scope specification
is rather global and general, it is usually accompanied by one or two specific suggestions for implementation. The teacher training materials for this model\(^{10}\) (which will be published as a book) are mimeographed and contain many suggestions for teachers. They talk about ideas as well as activities. Nonetheless, we believe that what High-Scope wishes teachers to do is very similar to what characterizes Group I models. We think the differences rest in calling teacher behavior by a different name and offering more suggestions. For implementation: for example, under the checklist heading of Spatial Relations, one item (II F., 2) reads:

"the teachers help the children to interpret and make symbolic representations (such as pictures and models) of the way things are arranged in space. Examples: (a) the teachers help children learn about how their bodies are put together and get them to move in different ways and to find out what can be done with various body parts; and (b) the teachers call the attention of the children to where things are located in the classroom, school and neighborhood."

In my experience, the pre-school activities suggested to student-teachers in curriculum training courses as well as practiced by certified teachers in pre-school classrooms always include (1) rhythms and movement (involving different body parts); (2) tracing around the figure of a child as he lies or stands on brown paper, he then cuts and/or paints this form; and (3) field trips. Any of these, I

\(^{10}\)These papers in mimeographed form were under separate covers for "Language", "Action", "Child Management", "Levels of Representation (Part I and II)" and "The High-Scope Cognitive Pre-school Curriculum: the Open Framework."
would think, might be seen as implementation of High-Scope "spatial relations" concepts. However, these activities might also be found in programs of other PV models (especially Group I) or of non-PV classrooms. It is simply the phrases describing these activities which are unique.

We had an opportunity to visit a High-Scope site and interview Dr. Weikart and his training staff extensively. The checklist does not give an indication of the heavy emphasis which three features of the model received in the sites we visited:

**Implemented across the classrooms of one site:**

1. The number of divergent questions asked by all classroom staff (Item II: C, 2).

2. The amount of physical movement on the part of children which is tolerated by teachers and which they obviously view as a function of learning (Item II: B, 7).

3. The routine occurrence of a planning period in which each adult takes small groups of children at the beginning of the morning; each child makes an initial plan of work (self-selected play) and then "reviews" it (in response to the teacher's question "What did you do?") at the end of the day.

Group I models frequently talk about routines, but none has them spelled out as completely.
High-Scope

Items pertaining to model specific equipment and organization

I:C. Planning Boards represent the areas of the room.

V:G. Children use their symbols to represent their choices during work time.

II:A.1 During planning time, the teacher discusses the daily routine and helps children to make individual plans about where they will work and what they will do.

V:C. During planning time, children tell or act out one activity they plan to do in their chosen work area.

II:A.5 The teacher reviews with the children what they have done during work time at each area, talking about how plans have been carried out and discussing what might be done the next day.

Items pertaining to special emphases of the model

II:B.1 The teachers encourage the active manipulation and exploration of the things in the classroom.

II:C.2 The teachers use divergent questions (questions with many "right" answers).

II:D.1 The teachers begin a learning sequence or a theme with a concrete experience (the object level) - not a representational one.

"Piagetian" items

II:F. Spatial Relations
   1. The teachers help children to look at things from different spatial viewpoints.
   2. The teachers help the children to interpret and make symbolic representations (such as pictures and models) of the way things are arranged in space.

The items in this Section are reproduced without the examples that appear in the checklist. For the full content of each item, the reader should refer to the High-Scope checklist in Appendix B.
II:G. Classification
1. The teachers encourage children to investigate the uses and attributes of things.
2. The teachers help children to notice and describe similarities and differences among objects.
3. The teachers describe an object or sort a set of objects in several different ways and help children learn to do this.

II:H. Seriation
1. The teachers provide materials which can be arranged in order along some dimension.

II:I. Number Concepts
1. The teachers help children to compare quantities of "continuous" materials like water or clay.
2. The teachers give children sets of distinct objects like buttons or beads to arrange and rearrange.
3. The teachers show children how to compare the number of items in two sets by matching them up in one-to-one correspondence.
From the limited information we have about this model, it appears to be organized around hardware. The central part of the REC program is the Talking Page, a computerized instructional program. According to our limited information, a child sits in front of the Talking Page for 10-20 minutes a day listening to recordings of written material. As a voice reads the material and/or talks about it, the child follows the recording by looking at his own book which is identical to that being read.

Specifications dealing with other aspects of the model are quite similar to those of other group I models but do not seem as internally consistent.

The key items in this model refer to the Talking Page.

I. A,2. The "Talking Page" is used either every day or every other day.

I. A,7. Children are encouraged to use voice mirrors without direct supervision by an adult.

III. A,2. The adults work with small groups to introduce the Talking Page during activity time. Lessons are usually introduced in a group context, with the child having opportunities later to go through the material—or previously introduced material—on his own.

III. A,3. The adult follows up and reinforces children who choose the Talking Page lesson of the day as an activity. Children may also repeat favorite materials they have had at an earlier time.

*We have also talked with two staff members who interviewed the sponsor of this model.
III. A,4. The adults sit down with one child at a time to go over the Talking Page progress check when a child has finished a Talking Page Book.

III. B,6: The teacher keeps daily records on each child in a notebook on the Talking Page. Aides may assist in record-keeping.
The Arizona model is related to Marie Hughes' conception of children's education and teacher training. Dr. Hughes assigned specially trained personnel called Program Assistants one each to several elementary and pre-school classrooms. The Program Assistant had training in early childhood development and curriculum, and performed such varied functions as locating and/or purchasing materials for a teacher, teaching some children in assigned classes or recommending courses of action the teacher might take in relation to behavior management problems in the classroom. The Program Assistant stood ready to provide any and all kinds of assistance to teachers. As the Program Assistant assumed the role of a guide, the needs and capacity of the teacher actually determined the intensity and direction which the Program Assistant's work assumed.

A mimeographed statement of the Hughes version of the model was written by Mary Coxon. This paper contains much

12 Mrs. Ann Seigal, Director of The Cary Leadership Fellow Program at Bank Street College worked with Marie Hughes and is my source for the description of the Program Assistant's role.

13 Coxon, Mary, "An Informal Statement of the Tucson Early Education Program". (An undated mimeographed paper from the time when Marie Hughes directed the Arizona Research and Development Center.)
of the basic material of Arizona's checklist description for Planned Variation. At its end, Ms. Coxon suggests that the Program Assistant (or "change agent") must introduce and maintain "the program's innovative practices". Since the Program Assistant has both "a training and a supportive role", it seems that the Program Assistant is responsible for implementation, and, at least under Dr. Hughes, shouldered the major burden of the program.

Dr. Hughes' program for Headstart children emphasized language. The primary technique recommended is modeling. "Language", says Ms. Coxon, "is taught through an accelerated, systematized natural system based on studies of the way a child learns language in the home. Language is best learned in a natural setting ... the teacher is constantly modeling the language as she interacts with the children individually and in small groups."

Coxon's paper introduces another objective, "societal arts and skills", defined as including "cooperation, planning and democratic processes". (p. 9) Yet these processes are not explicitly or concretely described.

Later, under the direction of Dr. Ronald Henderson, Arizona maintained much of the model constructed by Dr. Hughes, especially the role of the Program Assistant.

"... the primary training strategy advocated for use by the program assistant is to work with teachers in their own classrooms, demonstrating desired techniques, critiquing one's own performance to show how self-evaluation may be used to
refine teaching procedures, and assisting the teacher in developing strategies and techniques for planning with aides, volunteers and other personnel.  

But the Arizona checklist describes this apparently central feature of the model with only one item (III, B).

In a November 1970 paper called "The Tucson Early Education Model", Dr. Henderson summarizes the model's four major objectives:

1. **Language competence.**

2. **Intellectual base** ("... a collection of skills assumed to be necessary in the process of learning ... for example, ordering events along certain dimensions such as size, color and form....").

3. **Motivational base** (... a collection of attitudes and behavioral characteristics related to productive social involvement").

4. **Societal arts and skills** ("reading, writing, arithmetic ... cooperation, planning and democratic process").

This is such a comprehensive program statement that one wonders, as one does with other Group I models, what this might exclude?

This 1970 paper mentions "structured lessons" taught in small groups of five children, but does not indicate what the content of the lessons might be, save for the brief example above under 2.

Arizona's checklist for Planned Variation is very similar to the content both of the Coxon and Henderson

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papers, and is stated with not much more specificity. However, after the checklist items are divided into the broad categorial objectives of the model, even the specific skills mentioned in some Arizona papers disappear. Under "societal skills" in the checklist, providing "options" and "success oriented activities" are the key ideas. Under intellectual skills, a model-specific format for instruction appears, although it is unmentioned in any material we had previously read. This consists of "intellectual kits", a series of materials centered around a concept. (For example, a videotape we viewed showed a box

15While the checklist was in use, we were sent an interesting in-house document from Arizona entitled, "The TEEM Implementation Inventory". This is a December, 1972 mimeographed publication from Arizona. It lists characteristics found in "an ideal TEEM classroom on a typical day" though there is a statement to the effect that it is not an evaluative instrument, it is much more specific than the HSPV checklist as to what teachers should be doing, for example, the expectations for language activities include:

"1) Evidence of phonetic and structural analysis skills ... which
   a) use the child's language as a basis of instruction
   b) identify sound-symbol associations
   c) present a sequence which allow for consonant and vowel substitution and word building
   d) include a range of phonetic elements in a variety of reading materials."

It is possible that this level of specific direction to teachers was operating during Planned Variation, even though the checklist did not reflect it.
containing clocks, timers, hour glasses, watches, etc., which was used to discuss time.)

The concept of modeling is probably given more emphasis by Arizona than by other sponsors and it could be considered a unique feature. The items that express the core of Arizona's program are:

**Items Pertaining To Societal Skills**

I:B.1 The teacher provides, when possible, options for pupils to make choices.

I:B.6 The teacher provides success oriented activities relevant to children's experiences, interests and needs.

**Items Pertaining To Intellectual Skills**

I:C.1 The teacher uses intellectual kits and open-ended questioning or lift the level of child response.

**Items Pertaining To Orchestration**

II:A.1 The teacher interaction is planned to include development of any or all of the societal art skills, provide language development, stimulate intellectual growth and to develop positive attitudes about learning.

**Items Pertaining To Modeling**

II:B.1 The teacher provides opportunities for peer imitation.

II:B.2 The teacher provides opportunities for adult imitation.

III:A. During on-site monthly visits, the field representatives train program assistants. This training is done by modeling and small group discussions, as well as other strategies.

III:B. The program assistants plan and evaluate with and model for teachers.
7.
THE UNIVERSITY OF FLORIDA
(Group II/sources of information: published material, unpublished papers, teacher training material, site visits (2), sponsor interviews, staff interviews, and site-staff interviews.)

Dr. Ira Gordon, who heads the Florida model, had conducted research on "disadvantaged" children for several years prior to the Follow Through and Headstart experiments. Florida's Planned Variation model bears some relationship to Gordon's earlier Florida program which instructed new mothers about infant play. The key features of that program were (1) individual instruction, (2) teaching in the home, (3) early intervention, and (4) the mother as the most effective teacher of the child. Dr. Gordon has published a program handbook entitled, "Baby Learning Through Baby Play".

These same features underlie Florida's Planned Variation Program, though it involves children 3-5 rather than infants. We use the word "involves" here intentionally because the Florida model, in our opinion, is directed not at children but at their parents. In Florida's PV model a paraprofessional called a Parent Educator (PE) is assigned one-half of the families in the PV class in which she works. (Another PE is assigned the remaining families.) The PE visits each family's home weekly, bringing a "task" (usually a game) which she teaches to the Parent (called "mothering one" in the model). The assumption is that the Mothering One (MO) will teach the task to the child, though
this is never directly monitored in the program. There are no specifications for what happens in the classroom.

We visited a PV site of the Florida model, accompanying many PE's on home visits. We interviewed both PE's and program Administrators. We also attended a three-day training workshop for the Florida model held at the University in 1971. This latter experience impressed us as stressing three aspects of the model above and beyond the basic outline of the checklist: first, the sponsor places great importance on role-playing; second, tasks are to be developed through the mutual cooperation of the PE and the teacher to whom she is assigned; and third, the important role which Florida sees the local PAC playing. Though each of these points is mentioned in single items on the checklist, they deserve additional explanation.

1. Role Playing

Role playing refers to one of the ways in which PE's and MO's learn and review the content of the task. The PE may "teach" the task by describing the rules, the goals, etc., to the MO and then repeat it. Repeating the task is to involve each party pretending they are the MO or the child actually teaching (or learning) the task. The values of this technique are obvious from either a teaching or a learning perspective. Ideally, there is no value on a

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16As is mentioned in the checklist, a second way for task development is the PAC.
"right" way for a task to be done; instead the emphasis is on exploring and investigating what responses and confusions the task might precipitate for both the teacher and the learner. This process not only informs the person teaching the task about the learner's assets and deficits, but also helps stress that teaching is a responsive act as well as a didactic one. Teaching is not just searching for the right answer and tasks are not exercises in pass fail.

2. Task Development:

One Florida field representative told me he had never been "allowed" (i.e., by the staff - one assumes the teacher in particular) to sit in on a conference where the PE and the teacher developed a task. On the one hand, Florida presents the design of the tasks as a formal and necessary step in the entire model process (for example, this step has a significant place in a series of Florida videotapes). However, the absence of adequate monitoring schemes for this step indicates that the step is not regarded as crucial. This may be because in practice PE's often give the same task to each MO every week, use "old" tasks, or even tasks from a "library" located at the University. In summary we assume both the working relationship between teacher and PE and the origin or precise individual nature of task assignment is not crucial.
3. PAC:

At the 1971 workshop we attended, a series of smaller work sessions were offered one afternoon. Dr. Gordon led one entitled "Parents as Decision-Makers" which dealt with the potential power of PAC's (Policy Advisory Committee, a parent group which is a necessary component of the Head-Start structure). In this workshop, Dr. Gordon said that Florida had translated the federal guidelines (which are lengthy) for PAC's "into English", and had employed a former PAC chairman on his staff who consulted with each site two weeks a year at the invitation of the local PAC chairman. It should be noted that this represents the longest consecutive period which any Florida staff member spends at a site on a contractual basis. By contrast, consultants from Florida who work with PE's and teachers are rotated rather than permanently assigned to sites because Dr. Gordon felt one staff member should not become identified with a site.

Following the workshop, we commented to a staff member that our interpretation of the central interest of the model was "community control". The staff member agreed, indicating that he thought Dr. Gordon would also, but that some staff members might not. Interestingly enough, there is no checklist item which indicates that the model invests almost equal staff time in advising the parent group structure as it does with the PE's and the model.
The checklist items which describe the key parts of the Florida model are:

Items Pertaining To Program Structure

I:A. There are weekly home visits made by parent educators, two for each class. These visits occur during days, evenings or weekends.

I:B. The PE is a paraprofessional hired locally.

Items Pertaining To Task Development And Delivery

I:B. The PE and the teacher work together to develop tasks for mothers to give to children. (However, tasks can also be designated by the policy committee.)

II:E.6 If possible, home materials are used.

II:A. Teachers, PE, mothers and children must know reason for task.

II:C.2 The task is to be role-played between the MO and PE.

II:E.5 The task encourages the PE to use a lot of ways to teach and the MO to try different ways to do it.

II:F. Mothers are asked for suggestions for future tasks.

II:I. PE's take ideas from home to school.

Items Pertaining To Monitoring Of Program:

II:R. The PE evaluates her own progress with the Parent Educator Weekly Reporter.
The University of Kansas performed the first major work in behavior modification in the United States. At present, Kansas prefers to label its model "behavior analysis". Briefly, behavior analysis concerns itself only with the surface or "presenting" behaviors of children, not with interpreting these behaviors and looking for causes. The theory is that desirable behavior can be produced and undesirable behaviors suppressed (or "extinguished") through the technique of selective reinforcement. "Desirable" behaviors are those defined by the public school system as it now operates in most cities and towns. Depending upon the child's age and the nature of the task, reinforcement might be quite concrete (for example, candy), or highly symbolic and social (for example, praise). In the Kansas Planned Variation program, reinforcers are called "tokens"—usually poker chips.

In the first week of the Kansas program children are reinforced for sitting in chairs and raising their hands when they wish to say something or need help. Central to the program is that children work to achieve certain levels of performance in handwriting, arithmetic, and reading. In the PV program, children are tested at the beginning of school and placed by ability in
homogenous, small groups of 4-6 children. They work on identical material as a group. In a typical classroom, academic instruction (called Earn) is followed by a child's participation in "back-up activities" (called Spend). Back-up activities are usually the standard nursery school play activities, blocks, dress-up, puzzles, etc. Back-up activities are priced (e.g., 15 tokens, 5 tokens) and children choose according to what they can "afford". Several Earn-Spend sequences occur during a morning. Kansas is flexible about the arrangement and length of the total sequence so long as each child covers each curricular area, has some play time, and the general arrangement is made in consultation with the sponsor.

We visited a Kansas pre-school classroom which, though not part of the PV experiment, was, we were assured by the sponsor, an excellent example of Behavior Analysis. Most of the program was as the checklist described it. However, we had two impressions of the program which we had not received from published material or from the checklist descriptions.

1. The teachers conception of the teaching task is limited to Earn.

Teachers must give tokens to children for correct behaviors during the academic, Earn portion of the day. They must be skillful at holding a great many tokens, giving them out without severely interrupting the attention of the children to the task for the teachers can attend
for that matter) and must deliver tokens each time an appropriate behavior is demonstrated. If teachers are reinforcing properly, this is an extremely demanding task, even for a very skillful teacher. The teachers we observed worked very hard during Earn period and did very little during Spend, except stand in the room in which children were playing.

The sponsor sees Spend time as a time when children can interact together, an occurrence which is not really possible during Earn. The teacher's role during Spend is not defined by the model.17 In addition, although Kansas uses a good many teacher monitoring devices, it takes no data on Spend time, thus strongly indicating to the teacher that her behavior at this time is not crucial. The teacher therefore sees her job in the model as associated entirely with Earn. Our guess is that Spend is interpreted by her as recess and/or rest time.

2. Tokens are clear indicators of teacher preferences for children and training and monitoring devices for teachers.

It is clear that teachers could use tokens in such a way that they, rather than the work itself, would be of greater interest to children. They could create competitive situations either by directly encouraging it (e.g., "Let's see who can get the most tokens.") or by carefully

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17 A sponsor interview that includes an extensive discussion of Earn-Spend appears in chapter V.
tailoring the price of each back-up activity. In the classrooms we observed, it seemed to make very little difference to children how many tokens they received. In addition, it seemed that the pricing of back-up activities could never be optimal. Theoretically, if one wished each child to perform maximally, the highest priced activity must be the one each child wants. However, so long as activities are the same price for each child, a child's "favorite" activity or preferred activity within a group may be middle-priced or even low priced. In our opinion, tokens work much more strongly by simply emphasizing to children what the teacher is attending to. For teachers, tokening is an extremely effective training and monitoring device showing them how frequently, to what and to whom, they give attention.

The key items in this model are the following:

Items Pertaining To Scheduling And Organization

I:A.2 All children can have experience in each of the three basic curriculum areas once a day during "Barn" periods.

I:B.4 Percent of the day to be devoted to the academic areas should be about 15 percent (although the range of acceptance is from 15 to 30 percent).

Items Pertaining To Sponsor Monitoring

II:B.3 Daily observation by the trained observer is an essential part of the ongoing training. The teacher observed receives feedback the same day from the trained observer.

II:B.5 The sponsor has established specific goals to be met for the classrooms by the next site visit. These goals are posted for all to see.
### Items Pertaining To Token Reinforcement

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<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>II:A.5</td>
<td>Teachers understand the subtleties of the use of positive reinforcement. (E.g., she uses tokens and praise contingently, doesn't nag or make errors in praise or tokens. Her children are on task 90%+ of the time.)</td>
</tr>
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(elaborations of the above item)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>II:A.1</td>
<td>Teachers consistently use token and social reinforcement in relations to curriculum work.</td>
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<tr>
<td>II:A.4</td>
<td>The token system is always accompanied by positive verbal reinforcement, contingently delivered.</td>
</tr>
<tr>
<td>II:A.6</td>
<td>Teachers correct incorrect responses by means of modeling or prompting.</td>
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</table>
This Planned Variation model, under the direction of Sigfried Engelmann and Wesley Becker, was developed in 1964 by Carl Bereiter and Engelmann. The 1964 model version, The Academic Pre-school, is described in a series of pamphlets printed in 1969 called It Works. Starting with a population that were then called "retarded" in development, the Pre-school's assumption was that language, reading, and math skills must be acquired at an accelerated rate for this group in order for them to "catch up". The school employed a technique called "direct instruction". Fourteen "minimum goals" are listed in the It Works description of The Academic Pre-school. We find them useful to quote in full.

1. To respond to both affirmative and not statements when asked "What is this?" "This is a book. This is not a book."

2. To respond to both affirmative and not statements when told "Tell me about this ______ [book, pencil, etc.]."

3. To use polar opposites ("If it is not ______, it must be ______") for four or more concept pairs, e.g., big-little, up-down, etc.

4. To use the following prepositions correctly in sentences: on, in, under, over, and between.
5. To name positives and negatives for at least four classes, e.g., "Tell me something that is a weapon." "A gun is a weapon." "A cow is not a weapon."

6. To perform simple if-then deductions. The child is presented a picture with large and small squares. All the large squares are red, but the small squares are of various other colors. "If the square is big, what do you know about it?" "It is red."

7. To use not in deductions. "If the square is little, then it is not red. What else do you know about it?" "It is blue or yellow."

8. To name all the basic colors.

9. To count to 20 without assistance and to 100, assistance at tens (30, 40, 50, etc.)

10. To count objects up to ten.

11. To recognize and name the vowels and at least 15 consonants.

12. To distinguish words from pictures.

13. To select rhyming words in jingles.

14. To possess a sight-reading vocabulary of four words or more, with evidence that the word on the flash cards has the same meaning for the child as corresponding spoken word.

These goals give a specific picture of the by-now-famous drill technique which Bereiter and Engelmann described in their book, Teaching Disadvantaged Children in the Preschool, which brought either high praise or vitriolic condemnation from professional educators and laymen alike.

Again, though we have not visited a PV site of this model, we have viewed a videotape from Oregon which shows segments of teaching in each major area of their PV program. Within each segment, several individual teachers are
taped consecutively. There is almost no variation among them in style or pacing and virtually none in content. This is not surprising as the materials are programmed and supervision of teachers is quite rigid. The teacher must "read her part", fast and loud, and direct a children's chorus of answers.

Instruction takes place in groups and primarily covers language, arithmetic and reading (though occasionally individuals will respond). The teacher is in control of all material and gives directions. She is the authority in the classroom and, by implication, the source for learning. Supervision in this program is the responsibility of a locally hired sponsor's representative (as it is with most of the models) but also the responsibility of the sponsor. The local supervisor sends records of each child's progress to Oregon, where computer records are made and returned to the site.

The items which express the core of this model are as follows:

**Items Pertaining To Organization**

I:B. Each teacher or aide teaches each child one lesson each day in the reading, arithmetic and language parts of the Distar materials.

I:F. Three or more instructional groups of 4-9 children have been formed, on the basis of pretesting by teacher and aides.

**Items Pertaining To Teacher Techniques**

II:A.1 Teachers know format of lesson and lock down at book only for examples.
II.A. Teachers are properly using diagnostic tests and employing appropriate correction procedures. Teachers do not vary from form unless otherwise specified.

II.A.2 Teachers are accomplishing criterion learning within 3-6 days of all new skills and within 2 days on all other new skills.

II.A.3 Teachers use correct terminology. Teachers are not taught by blinders and clearly mark all materials on hand and clearly

II.A.4 Teachers do not vary from form unless otherwise specified.
This program is a Group II model based at the University of Pittsburgh and it uses a specific sequenced curriculum. The analysis and sequencing of Pittsburgh's learning objectives is a complex matter. One of the most interesting discussions we have had of this process is in a paper by Lauren B. Resnick. Dr. Resnick points out the importance of identifying critical early behaviors related to school performance. The process which Pittsburgh's R & D Center uses to achieve this is called "task analysis" — that is, it asks what behaviors are prerequisites to the performance of others. It starts with school-desirable behaviors and "reasons backwards" to determine what they require. The task analyses in this paper are in the form of tree diagrams, which show, for example, that if "measuring a line in standard units" is a terminal objective the primary, basic tasks crucial to obtaining the objective are "lining up rods at one end" and "seeing if the rods match at the other end." Most of the examples are math oriented dealing with matrices or sets of objects. A discussion of the examples suggests that Piagetian tasks might be used, for example, comparison of equal numbers of identically

shaped, but differently colored, objects in similar and
dissimilar row arrangements. Another way of presenting the
curriculum is found in an Appendix, 20 which lists skills
such as Orienting and Attending, Sensory Skills, Classifi-
cation Skills, 21 etc., and the behaviors associated with
each skill.

The model concentrates on two major portions of a
school day: "prescriptive" and "exploratory". In the por-
tion of the morning devoted to the prescriptive curricular,
(30-45 min.) each child individually works through the com-
ponent steps required to master a skill or concept, at his
own rate. During the prescriptive period, each child gets
his prescription cards, matches a code on this card to a
box with the same code containing his work for that day and
selects his work from these boxes. Staff members prepare
these boxes. Adults are usually needed to explain the work
and then to check it when it is finished. One adult role
during this period is called "traveling" - going to each
child as he raises his hand when he needs help or his work
needs to be checked or evaluated. One teacher "tests"
during this time.

20Page 14, Appendix A, Skills for Inclusion in an Early
Learning Curriculum.

21In one IEP, 1970, Classification was the first "unit"
which teachers hope to cover in 1971-72.
The exploratory period, on the other hand, includes typical nursery-school activities: blocks, books, hand puppets, etc.

This program's key items are as follows:

**Items Basic To The Program**

1:4. The staff consists of one teacher and one teacher aid. Staff members rotate responsibilities of class teaching and tutoring, and the "traveling teacher."  

1:5. There are two main components to the schedule: a prescribed learning activity period and an exploratory learning activity period.

1:6. Teaching materials for prescribed learning are clearly labeled so that children can find them. They are keyed to the objectives included in each of the curriculum areas.

**Items Specific To The Prescribed Learning Period**

IV.4. In assigning tasks teachers provide different ways for a child to master a task if it is too difficult for him.

IV.5. The teacher, in administering diagnostic tests to the child, treats them as a guide for prescribing learning activities and not as a "failure" or "success" on the part of the child.

IV.6. Teachers assign tasks for every curriculum component of the program: quantification, classification and perceptual development.
III. METHODOLOGICAL PROBLEMS

A. What We Want To Know

This chapter discusses a variety of methodological problems associated with our study. First, we describe the problems posed by the implementation instruments. Second, we present some circumstances under which data was collected. Third, we discuss conditions surrounding data collection and how those conditions determine what questions we can answer. Fourth, we review the results of the reliability study.

B. The Instruments And Their Use

The instrument each Observer used in the field was the "sponsor authorized" description of the model. Each item was written to express the specification as it would be if fully implemented, and each item was followed by a line with the numerals 1, 2, 3, 4, 5, X at equal intervals on it. The Observer was to circle (rate) each item using only one of those numbers. The definition of each numerical point on the scale is as follows:

1 = specification not at all implemented
2 = specification implemented to some extent
3 = specification implemented to a great extent
4 = technically implemented
5 = beyond technical implementation
X = no opportunity to observe the specification

The Observers were instructed to reserve the "X" rating for exceptional implementation of an item within a field.
During 1969 and 1970 a precedent had been established for observation procedures: consultants were to take no notes while in the classroom. This precedent presented a substantial problem in the case of those checklist items which described teacher behavior. Each item was to be rated for all permanent paid staff members in each classroom.

(Few PV classrooms are staffed by at least two and sometimes as many as six adults.) Since some checklists contained many "teacher" items, to prohibit note taking or direct rating of the checklist in the classroom seemed a significant barrier to accurate data collection. When we pointed this out to CED Programs, they recommended we ask consultants directly whether the section on teacher behavior could be rated after an observation or if it was necessary to make these ratings during the observation.

Though consultants unanimously agreed they could rate teacher items without taking notes, we found this a surprising response and are skeptical about the accuracy of these ratings for some models.

1. Observer response data in regard to the model

The Observers' understanding of their models was formed by whatever period of model training they had. But it was also influenced by their professional standards, as well as their definitions of how preschool programs should be operated and what they should contain. These factors interested in such a way as to confound the problem of item definitions and item ratings. (We can hypothesize that Observers will draw upon a variety of examples from their
pant experience as well as what a sponsor can convey to them in training for what constitutes evidence of the presence of an item such as "children feel good about themselves" (an 84C item). A "4" rating for this item would encompass a large, perhaps an infinite series of examples. A further problem exists in recognizing the "3", "2" and "1" versions of this item.

The interpretation of language also contributes to problems in determining ratings. For example, in an item which states "the teacher provides ..." the evidence required by one observer for "provide" may be that the teacher take visible action. For another, however, the implied signs of "providing", materials placed in the room or the teacher's conversational references to what she "provided" at some other time, may serve as legitimate bases for ratings.

Conservatively viewed, the absence of repeated model training for the Observers during the experiment left each of them with their original understanding of the model which varied among them. Our own impression is, moreover, that in fact, each Observer's definition of items and ratings became increasingly personal over the year. Though this is not a strict methodological problem, we can assume that a formal and consistent avenue for both training and

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There were meetings during 1969-71 for the Observers, the Program Head, and the Research staff at which the Observers could process, but there was no formal interpretation in terms of the task, then put in which for a solution to determine the exact parameters of each specification of a model.
Improvement in the use of the instrument during 1971 might have led to data of better quality.

2. Confusion of "X" and "1" ratings:

Confusions arose which were not identified until the middle of the year. We will describe two examples in order to illustrate their nature.

In some schools, items were scored based on the rating

"X" (no opportunity to observe specification) and "1" (no implementation) interchangeably. This occurred in the Bank Street model. A sample of two items from that checklist, and one Observer's ratings follow:

Parents are being trained to interview each other using the new Questionnaire for Parents.

(Observer's comment: "Questionnaires are 'just around'. Site personnel have not been informed as to how the Questionnaires are to be used.")

Parents who have actively been involved in the above-mentioned activities interpret the model and the school's educational goals to other parents.

It is clear that the first item is one the Observer can rate only by "poking around" and talking to people. She says quite clearly that no one knows how to use the questionnaires. From our point of view this is clear evidence for a "1" rating whereas she gives it an "X". It is rather typical that Observers of some models use an "X" rating in the place of "1". To us, this is part of

Observer comments were specifically solicited on one item but that is not one. Some Observers are using a good deal of their evidence for ratings, others did not.
the general phenomena of observers assigned to models they favor. An "X" rating is their way of saying "if I could be at the site (or in this classroom) long enough, I would see this specification and give it a numerical rating."

"X" is, therefore, a way of saying: "I believe the specification is there at some time", whereas "1" is a final and

the item's implementation at any level. This confusion of "X" and "1" is a clear one in going over the data, but in, we are afraid, only the tip of the iceberg. One observer's remarks on the first sheet of a classroom checklist are

pertinent here:

"(Ratings) in pencil represent responses based on specific behavior or from information obtained by interview. (Ratings) in ink represent speculation as to level of implementation."

We would like to think this Observer is atypical in "guessing" the level of implementation. After meeting her and talking with her, she may be atypical, but only in that she consciously differentiated "information" from "speculation" and realized it might be important to both register and convey this difference to evaluators.

3. Is the model the entire school day

While visiting a site with its Observer in 1971, we both observed the same class at the same time and independently rated its implementation on separate checklists. Later comparing our ratings item by item, we discovered our assumption was that the model was meant to occur the entire
day, and the observer's assumption was that it need occur only part of the day. For example, the item:

"The teachers begin a learning sequence or scheme with a concrete experience (the object level) - not a representation of one."

seemed to us, but not to the observer, to pose a problem of whether one defined learning - (specifically model learning) as occurring all day. This disagreement about the time during which the checklist should be applied precipitated a mailing to all observers to discover their assumptions about the period of time covered by their model checklist. 3

4. Components which require information in excess of observation

In each checklist there are at least a few items which could not be rated during a single classroom observation. They can be categorized as:

a. Items requiring more than one observation in order to make rating (e.g., CE; "The schedule is flexible"; University of Pittsburgh: "Parents tutor children in specific P.E.P.-I.P.I. subject matter").

b. Items which must be observed in another location or outside of the time children are in class (e.g., High-Scope: "The teachers plan as a total team").

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3See Appendix E, page 1, for the form of this request.
c. Items for which a rater must rely on interview information. (E.g., Bank Street: "Parents are encouraged to participate in the school's learning activities, such as helping with story time, field trips, cooking and making materials.")

We expect these items to give us less accurate and hence less valuable information.

C. The Conditions Surrounding Data Collection

The conditions outlined here were largely unforeseeable and can be attributed in most cases to the short time period within which we worked. The total time for data collection, substantially eight months, effectively limited us to correcting for anticipated errors and watching helplessly as the inevitable "hitches" of a natural experiment unfolded at times when we could not alter our strategy. The most serious ones were:

1. Noncomparable periods of data collection

The Observers were hired on a consulting basis and in most cases, had full time jobs. This limited our capacity to direct the exact date of each Observer site visit. Therefore, the patterns of observation times were disparate among Observers, within and across models. The noncomparability applies not only to the date of each Observer's visit, but also to the dates and total number of observations of each class within sites. At the extremes, classes (both within model and site) may have only two observations at equal time intervals from the beginning of September to
the end of May. A further complication was our inability to direct the duration of each class observation.

To our best knowledge, no other pattern of employment (such as a full-time traveling team of Observers, trained in several models) was considered for this task.

2. Data retrieval

There were always substantial time lags between an important occurrence such as an Observer's neglected submission of checklists for a visit, or an extremely late report of a site visit, and PTTA registering the fact and informing the Huron Institute. Effectively, the result of these occurrences is insufficient data. (This applies to late reports as well because there is a substantial basis for believing that the checklist was not rated immediately after a classroom observation.) As far as we know, an Observer was never penalized for tardy data in any way. Initially, we had asked OCD for a sample contract between PTTA and an Observer to be informed of its substance in order to anticipate just this kind of situation. This request was denied. CCD did not include PTTA in any joint meetings it held with Huron. The lack of coordination between these three institutions probably resulted in a greater amount of irretrievable data than was necessary.

3. Special cases

a. The EDC checklist

EDC insisted on following a procedure during the period of checklist development which we find completely
praiseworthy, but which affected collecting the data on that model. First, theirs was the only model which went through as many (4 or 5) drafts of their checklist. After meeting several times within their own staff, and with on several other occasions, one member of the EDC Advisory met each HSPV Observer at his site to train them in the exact meaning and use of the EDC checklist. EDC also intended to incorporate Observer response to their model statement to clarify their checklist. However, one practical impact of this procedure was to delay the use of EDC's final, authorized instrument. No data was submitted for the first site visit made by two of the three EDC Observers. Therefore, the total period of time covered by the EDC data is shorter than for other models.

b. Substitution of Observers

In a few cases Observers became pregnant or ill. In every case they were replaced by current Observers of that model who observed one extra site for the remainder of the year. If the period covered by a single Observer did not cover December to March, these sites were dropped from the data analysis.

c. Observers' personal feelings about sites

In addition to the possible general bias of the pool of Observers in favor of child development models, against "academic" ones, there were special cases of personal feelings which may have interfered with ratings or reports.

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4 A term EDC uses to designate its staff.
For example, one Observer, friendly with the Headstart Director at the site to which he was assigned, gave four ratings to nearly all components in all classes at all times. Several observers exhibited political biases. A case in point is a black Observer who felt that the model observed might misuse research information it was gathering on black mothers. This Observer submitted only two reports, the last of which was in December. She made other visits but submitted no checklists or other further information. We simply wonder to what extent her personal feelings influenced her submission of data.

d. The effect of observation on the ratings of the Florida model

The location in which the Florida model takes place, and is therefore observed, is the home not the classroom. Observers traveled with Parent Educators and sat in homes while PE's taught MO's tasks which MO's, in turn, would later teach the PV child. One imagines that this must have had a great deal of impact on both the performance of the PE and the response of the MO. In our observations of this program, we felt the performance of the MO was in general inhibited by observation. Observers reported this feeling as well. We assume ratings for this model are somewhat deflated.

e. Teacher intention and Observer perception

Finally, a significant problem appears to be whether the teacher performs the model by intention or by accident.
In reading the accidental reports of Observers, we were interested in how their understanding of how a model concept might be implemented could affect their reporting and rating of implementation. For example, an excerpt from a superb Observer's report on a Weikart site reads:

"In the block area, some children became very involved in constructing an inclined plane by putting one end of the plank on a hollow block and the other end down on the floor going into another hollow block. They then took trucks and rolled them down the inclined plane and they went through the hollow blocks. Gradually they would reverse the incline and experiment to see if it would work the other way. They would experiment with turning the trucks around to see if they would go backwards and experiment with the size of truck - some would go through the hollow block, others were too large and could not go through.

Another activity that provided opportunity for experimenting with spatial relationships was outside when the teacher got up on a rail fence and began walking on it, and children followed her working their way along the rail using balance."

It is clear that a child's use of materials in accordance with Weikart principles and/or even a teacher's apparent use of model-specific concepts may be purely accidental. It is also possible that teachers may be consciously implementing the model, and the Observer may not have a sufficient number of opportunities to note it or, if it only takes a moment to implement, may miss an item's implementation entirely. These multiple possibilities raised questions we faced more squarely when we later reconsidered the effort to measure implementation.
D. The Reliability Study

1. The plan

A reliability study of the checklist instruments should have preceded their field use with rotation of paired Observers to all sites within model as the preferred design. However, OCD stated it could pay for only a few reliability checks (called "sister-site visits") which, because of time constraints, were arranged after the instrument was in use. Sister-site visits took place during 1971-72 sometime after the second observation, arranged by each pair of Observers to suit their own schedules. Approximately one-half of the Observers visited another site, the other half remained at their "home" site. (E.g., Observer A assigned to site A stays at site A all year. For the reliability study, Observer B, regularly assigned to site B, joins Observer A at site A.) Within each model, the sites for these visits were selected arbitrarily from those sites with test classes. During a sister-site visit, the Observer pair made simultaneous observations of four classrooms which they then rated independently. Sixteen sister-site visits took place. Data from 13\textsuperscript{5} of these visits are the substance of the reliability study.

\textsuperscript{5}Data from one member of an Observer pair for each of two sister-site visits never reached the Huron Institute. In the third case, one Observer was clearly not familiar with the instrument for her model, therefore, the data from her sister-site visit could not be used.
2. The midyear data on reliability

If one were to designate any methodological problem which assumed overriding importance in this effort to study implementation it was the reliability of the instruments. At midyear we studied a part of the reliability data, that is, several site visits of paired consultants which we had received at that time. The data we had showed generally poor agreement between raters measured by both straight percentage agreement and the Kappa-Max formula. The exceptions to this result were IPI and the University of Kansas which showed .70 and .67 agreement respectively across classes.

The plan for assessing all the reliability data from sister-site visits, took into account the midyear work. We had noticed then that though Observers did not give items identical ratings, that frequently they placed items in analogous relationships. For example, if one Observer rated a series of items 1, 1, 2, the other Observer might rate the same series 2, 2, 3.

We made a decision that a better method for working with the reliability data would sacrifice working with specific items to explore a more stable, though perhaps cruder, measure: a figure which would represent the Observer's perception of the overall level of implementation for each class. The figure could average the total

6 A table of this inter-rater agreement can be found in Appendix A, page 1.
ratings or a subset of the ratings each Observer made for each class. We used several approaches. The first method was a simple average of the total number of items an Observer rated for each class. The second method was a weighted average of item ratings based on the relative importance sponsors assigned to their checklist items. Sponsors had used a three-point scale ranging from items crucial to the model ("1") to items essentially a detail of the model ("3"). The third method was an average computed on only those items which sponsors rated "1", on the theory that these might have higher reliability.

We used each method of averaging all ratings given to each class by each Observer in the reliability study. The classes at each site were rank ordered for each Observer according to each method of averaging. We compared the rank order of classes for each pair of Observers within site. Although we had hypothesized that these three different methods of computing averages would produce different results. There was agreement in rank ordering between simple and weighted averages (with one disagreement in twenty-two cases). Rank ordering classes using the sponsor weighted "1" items showed the greatest disagreement between Observer pairs. Only six out of twenty-two Observer pairs agreed on the rank ordering of classes using this measure.

Therefore, we used the simple average of each Observer's within class ratings to indicate a general implementation figure for that class. Using Spearman rank order
coefficients, the following reliabilities were obtained comparing the rank order of classes between Observer pairs.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OBSERVERS</th>
<th># OF CLASSES</th>
<th>RANK ORDER CORRELATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Street</td>
<td>C and D</td>
<td>3</td>
<td>.5</td>
</tr>
<tr>
<td>Bank Street</td>
<td>B and D</td>
<td>4</td>
<td>.2</td>
</tr>
<tr>
<td>EDC</td>
<td>A and B</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td>Far West</td>
<td>A and C</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Far West</td>
<td>B and D</td>
<td>3</td>
<td>-.5</td>
</tr>
<tr>
<td>High-Scope</td>
<td>A and B</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td>High-Scope</td>
<td>C and D</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>REC</td>
<td>Only 1 site</td>
<td>no reliability</td>
<td></td>
</tr>
<tr>
<td>U. of Arizona</td>
<td>A and C</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>U. of Florida</td>
<td>A and D</td>
<td>3</td>
<td>-.5</td>
</tr>
<tr>
<td>U. of Florida</td>
<td>B and C</td>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>U. of Kansas</td>
<td>A and B</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td>U. of Oregon</td>
<td>A and B</td>
<td>4</td>
<td>.4</td>
</tr>
<tr>
<td>U. of Pittsburgh</td>
<td>A and B</td>
<td>1.0</td>
<td>.167*</td>
</tr>
</tbody>
</table>

*Two classes were tied for one Observer, therefore Kendall's tau coefficient was used.

There is a fair amount of agreement produced by this measure of reliability. In 11 of 13 cases the rank order correlation between Observer pairs is positive. In 7 of 13 the agreement is .8 or better, which exceeds the agreement which could be achieved by chance.

The drawbacks of this measure are in large part the drawbacks of both the HSPV sample and the restrictions placed on the design for the reliability study. There were a small number of classes that could be observed by each Observer pair at each site due both to the finite number of classes located at a single site as well as the necessity of limiting the sister-site visit to a few days for financial reasons. In five models (EDC, REC, Arizona, Oregon, and Pittsburgh) we have no replication for the reliability
study, for a variety of reasons which again include financial restrictions.

It is worth noting at this point that when paired Observers did not rank order classes identically, they were invariably small intervals between the class averages of at least one Observer if not both.

For example, in the reliability study for Florida at site D, Observers C and D rated 3 classes (i.e., home visits). Below, we present the code of each class, the simple average of all ratings each Observer gave that class and the resulting rank order of the class for each Observer.

<table>
<thead>
<tr>
<th>Class Code for Observer C</th>
<th>Simple Average of Ratings Within Class for Observer C</th>
<th>Rank Order of Class for Observer C</th>
<th>Simple Average of Ratings Within Class for Observer D</th>
<th>Rank Order of Class for Observer D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.306</td>
<td>3rd</td>
<td>2.618</td>
<td>2nd</td>
</tr>
<tr>
<td>2</td>
<td>2.472</td>
<td>2nd</td>
<td>2.765</td>
<td>1st</td>
</tr>
<tr>
<td>3</td>
<td>2.528</td>
<td>1st</td>
<td>2.200</td>
<td>3rd</td>
</tr>
</tbody>
</table>

The lowest and highest ranked class of Observer A differs by only .222, the simple average of a class might be changed by a different rating for only a single item. By the same token the rank ordering would be changed. When an Observer registers differences in classes using a small scale, classes appear to be interchangeable. If the Observers were rating differences on a scale with a larger range, it is possible better agreement on the rank ordering would have resulted. In all cases of disagreement between Observers,
at least one Observer shows only small differences among classes. At the most the differences are .40 but are more frequently near .10. In 7 cases of disagreement of this kind between Observer pairs, 4 are due to the Home Observer making small distinctions, 3 to visiting Observers. Two cases, EDC and Pittsburgh, are particularly interesting because both Observers see little difference among classes, which may indicate that the differences among classes at those sites are in fact negligible.

E. Questions We Can Answer

There are distinct complications which are introduced by the level of reliability of the instruments. We cannot, in any absolute sense, determine how much implementation exists both within and across models. Each instrument can only suggest the relative state of implementation (1) within and across class at the site level, and (2) with qualifications, across site, at the model level. Within site, we can use each Observer's judgment to answer questions about the relative relationship (rank ordering) of classes and of groups of items within classes. Across site, within model, we can compare the similarities and differences among the patterns of Observer rank ordering of these groups of items. However, we cannot make across model comparisons when the reliability of the instruments are not equally high, and when we have no adequate estimate of the sets Observers hold in relation to what they observe or how they rate.
IV. IMPLEMENTATION AS A MEASUREMENT PROBLEM: DATA ANALYSIS AND RESULTS

A. Introduction

We analyzed our data for 1971-72 in two ways. First, we used the total data from each checklist at two points in time. Secondly, we attempted to adjust for the problem of the instruments' low reliability as well as the unmanageable amount of data by analyzing only one site in each model, and only selected items in each instrument. Each analysis and its results are described separately in this chapter. Neither analysis shed much light on our original question and, if anything, the results seemed to obscure rather than reveal the degree of implementation present in classrooms.

B. The Pool of Data

Observers were directed to submit no less than three checklists for each SRI test class at their sites. Each class' checklists were to represent observations made at the beginning, the middle, and at the end of the school year. The resulting full year data collected for all models was voluminous. For example, High-Scope's checklist has 59 items and six classes were observed at each of its four HSPV sites. A total of 67 checklists were submitted for High-Scope containing approximately 3,953 individual

1While some Observers submitted exactly three checklists for each class, most Observers submitted more. A few did not meet the criteria.
item ratings. Of the nine remaining models, some had more and some had less data. Overall there was an average of five visits to 31 sites using instruments containing a range of 24 to 90 items. The sheer volume of the data posed a substantial problem for analysis.

We had hoped that the data would allow us to speak quite specifically about models and to identify those model specifications (items) which were more solidly present than others. But an analysis at this level of specificity was not possible. As we have discussed in Chapter III, reliability of the instruments presented a substantial problem. Accordingly, the only way we could begin to manage the problem was to group or select items in order to produce more robust data.

We should note here an initial effort we made which, unfortunately, produced no meaningful result. We requested that sponsors weight their checklist items 1, 2 or 3 - most to least important. We thought this would help to achieve descriptive clarity for the models and permit us to manage the sheer volume of the data by analyzing only the most important items from the sponsor's point of view. The effort proved a vain one, however. Most sponsors weighted over half of their checklist items "1". The volume of data was, therefore, not dramatically reduced. In addition, the

2 The results of this weighting are shown in Table IV in Appendix A.
individual components that comprised the one, two and three categories for each model seemed to us lacking in any coherent conceptual scheme (for example, teacher techniques, materials, or model supports). All kinds of items appeared in each category. Since analyzing items in the "1" category would neither reduce the analysis task to manageable proportions nor explain differential implementation, our analyses were determined by other criteria.

C. First Analysis:

Phase One: Grouping all items from each checklist

We first searched for informative ways of looking at the data using all checklist items. We attempted to find "dimensions" or perspectives which, both singly and in combination, would provide a meaningful analysis. The more dimensions - the more ways of looking at the data - the better. We tried to find dimensions whose categories would be designed to exhaust all the items of each model's checklist. We could find only two such dimensions: Occasions for Observing Implementation (the amount of time available to observe the implementation of items), and Persons (those who are observed in order to rate how well an item is implemented). Our plan was to sort each checklist item into each of these dimensions.

1. Dimension I: Occasions for Observing Implementation

Model items were sorted on this dimension according to the amount of time an Observer could theoretically "see" them. With a few exceptions, a teacher has the same amount
of time to perform items, or "produce" implementation. Therefore, we postulated the existence of a real and direct relationship between the amount of time to observe and the amount of time to perform an item. This dimension seemed to be a measure of what creates high and low ratings rather than an indication of which items are high and low in fact.

"Dimension 1" (Occasions for Observing Implementation) includes six categories, ranging from frequent to infrequent opportunities to observe model components. Each subcategory is followed by an example from a checklist.

1. Constant (or present and observables at all times): (High-Scope: "The room is divided into several areas or interest centers. For example: block area, art area, housekeeping area, quiet area").

2. Specific and substantial period of the day (Kansas: "Exchange periods vary from 10 to 45 minutes.")

3. Moments:
   A. Specification requires that the implementor create opportunities for implementation (i.e., initiate an action). (Bank Street: "The adult provides opportunities for skill development.")
   B. Specification requires that the implementor recognize opportunities for implementation. (EDC: "When a child indicates he doesn't know, the teacher encourages him to expect to find out.")

4. Across Visits:
   Specification can only be rated after two or more observations of the same class and two or more visits. (REC: "Assortment and arrangement of materials are occasionally varied to stimulate exploration and experimentation.")

5. Outside Class:
   Specification occurs outside of usual observation location and usually requires interviewing.
(Tucson: "The program assistants conduct periodic inservice workshops for teachers, aides, and other staff.")

6. Unclear:
(Far West: "Teachers direct early program work toward basic concepts such as color position, and relation.")

Dimension I, in addition to categorizing time, also has an implicit space component because the checklist was designed to be used in the classroom. Category 5 of this dimension contains those items in each model which could not be observed in a classroom.

2. Dimension II:
   Persons: Who is Observed

   Categories in this dimension were created inductively by taking the names of all groups or individuals named in checklist items:
   a. The teacher.
   b. The teaching team.
   c. The child.
   d. The sponsor.
   e. The parents.
   f. Administration.
   g. General.
   h. Unclear.

   No item falls into more than one category. Two categories in this dimension "general" and "unclear" did not appear as such in the checklists. Both cover checklist items in which no one is named yet it is implicit that someone must implement the item. These categories derive
from our inability to extract from sponsors who would or should implement a given item.

Items sorted into the "general" category (g) are those bearing all the following four characteristics: (1) "the teacher" is implied but not explicitly named, (2) the items are meant to be implemented in her domain, the classroom, (3) it is possible that other personnel - local model supervisors, sponsors, directors, aides, other teachers - who have classroom authority, can implement the item, and (4) the items are actually performed only once (e.g., the ordering of materials, the arrangement of the room). Thus "general" covers a rather diverse range of items. It may include items toward which teachers are basically indifferent and/or which have little influence upon the degree of model implementation since they do not guarantee (or possibly even facilitate) model appropriate behaviors.

The "unclear" category contains items in which (1) no one is named (the teacher in particular is not implied), and (2) occur outside the classroom. For example:

"There is an ongoing effort to help parents understand the learning experience built into the program and to understand open education." (EDC)

3. Sorting Items Into The Dimensions

The checklists were written for a group of informed "users". Therefore, the best person to sort checklist items into the dimensions would have been someone completely and equally familiar with all models. Familiarity
with practice as well as theory was necessary because no model checklist was explicit enough for accurate sorting. We could find no one with this much information about all models.

Another possible qualification for the task of sorting would be a person who was completely uninformed. Such a person is at least free of the often hidden and unarticulated biases and judgments which stem from differential knowledge about a few models, and has a better chance of taking the items at their face value. We chose a person with the latter qualifications as a sorter fully recognizing that items might be sorted incorrectly, thereby giving us a slightly distorted picture of the emphasis of models. The endless difficulty of understanding items, even those which appeared to be clear, is exemplified by my accidental discovery of the real meaning of the Oregon item "records are kept of the continuous progress of each group in each subject". In "translation", this item is as follows:

1. "Group" really means "of individual children within the group".
2. "Continuous" means "daily".
3. "Are kept" means recorded by a person whose special full-time job is charting "continuous progress".
4. "Are kept" also means these records are sent to Oregon's headquarters.

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I was precluded from sorting items, since I was only familiar with the practice of a few models.
5. "Records" means Oregon returns computer print-outs on each child to the site.

6. "Records" means the teacher also keeps records of progress of groups in more informal ways (e.g., the number of pages covered in readers, etc.).

This item, correctly sorted, on the persons dimension, would be put into the "sponsor" category. However, without the above information, it would be sorted into "general" or "unclear". Yet despite the danger of erroneous sorting, it seemed to us that on balance, the impartiality of the uninformed sorter was preferable to the undisclosed biases of the semi-informed.

4. Sorting Questions

Not surprisingly, sorting produced many questions for the sorter. The most frequent type of question appeared to be of a semantic nature; for example, in the Bank Street checklist, a group of items is called "adult behaviors". Items within that group begin "the adult" as well as "adults". In this case, it was questionable whether "the adult" referred to the head teacher and "adults" the teaching team, or if "adult behaviors" was meant to signify that all adults (e.g., director, social worker, etc.) associated with the model who have contact with children are to exhibit these behaviors. (Only one checklist, Oregon's, explicitly states that "teacher" refers to all members of the teaching team.)

The most important point, however, is that the sorter had difficulty assigning to categories some items in every
checklist. Our view is that this difficulty was not simply
the result of either semantic confusion or the sorter's
inexperience. Rather, our interpretation was that these
items all too frequently indicated the areas of each
model vulnerable to lack of implementation. Our hypothesis
is that they are unclear to teachers and administrators as
well as to the sorter. The "semantics" problem is, in
fact, a function of relatively less sponsor attention and
thought to these items not only in terms of writing and
expressing them clearly, but also in terms of the whole
process of transmitting their content to persons unfamiliar
with them.

5. The Results Of Sorting Items

The number and percent of items in each category of
Dimension I and II are shown in Table IV A, and IV B. For
simplicity, we will refer to these dimensions, respectively, as Occasions and Persons.

As we have said, Dimension I, Occasions, seems to per-
tain directly to how Observers make ratings and therefore
this dimension probably bears a distinctly greater rela-
tionship to the reliability of items than to actual
differences in their level of implementation. However, we
have speculated Occasions can also describe the amount of
time a specification can be performed as well as observed.
This is especially true in the case of categories which
contain specifications that can be only directly observed
or performed in the classroom (1 through 3 B). We have
TABLE IV

Dimension I

Occasions for Observing Implementation
The Percent And Number of Checklist Items Which Are Sorted Into Each Time Category

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Periods of Time</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 constant</td>
<td>2 specific</td>
<td>3A moment</td>
<td>3B moment</td>
<td>4 across</td>
<td>5 outside</td>
<td>6 unclear</td>
<td></td>
</tr>
<tr>
<td></td>
<td>period of time</td>
<td>period</td>
<td>created</td>
<td>recognized</td>
<td>visits</td>
<td>class</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>.09</td>
<td>.00</td>
<td>.12</td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
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<tr>
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<td>(4)</td>
<td>(1)</td>
<td>(1)</td>
<td>(1)</td>
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</tr>
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<td>EDC (90 items)</td>
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<td>.03</td>
<td>.05</td>
<td>.09</td>
<td>.05</td>
<td>.48</td>
<td>.00</td>
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</tr>
<tr>
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<td>(3)</td>
<td>(4)</td>
<td>(8)</td>
<td>(4)</td>
<td>(41)</td>
<td>(0)</td>
<td></td>
</tr>
<tr>
<td>Far West (48 items)</td>
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<td>.00</td>
<td>.00</td>
<td>.06</td>
<td>.06</td>
<td>.02</td>
<td>.08</td>
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<td>(0)</td>
<td>(3)</td>
<td>(3)</td>
<td>(1)</td>
<td>(4)</td>
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</tr>
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<td>.27</td>
<td>.00</td>
<td>.02</td>
<td>.17</td>
<td>.00</td>
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<td>(1)</td>
<td>(10)</td>
<td>(0)</td>
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<tr>
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<td>.04</td>
<td>.10</td>
<td>.07</td>
<td>.07</td>
<td>.00</td>
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<td>(5)</td>
<td>(3)</td>
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<td>U. of Arizona (41 items)</td>
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<td>.25</td>
<td>.12</td>
<td>.00</td>
<td>.10</td>
<td>.02</td>
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<td>.11</td>
<td>.03</td>
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<td>.00</td>
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<td>(0)</td>
<td>(13)</td>
<td>(0)</td>
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<td>.00</td>
<td>.06</td>
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<td>.34</td>
<td>.03</td>
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<td>(2)</td>
<td>(3)</td>
<td>(11)</td>
<td>(1)</td>
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<td>.04</td>
<td>.08</td>
<td>.04</td>
<td>.21</td>
<td>.00</td>
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<td>(1)</td>
<td>(5)</td>
<td>(0)</td>
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<tr>
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<td>.13</td>
<td>.25</td>
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TABLE IV  B  
Dimension II  
Persons Who is Observed  
The Number And Percent of Each Models Checklist Items  
Which Were Sorted Into Each Category  

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<th>MODEL</th>
<th>1 teacher</th>
<th>2 the teaching team</th>
<th>3 the child</th>
<th>4 sponsor</th>
<th>5 parents administration</th>
<th>6 general</th>
<th>7</th>
<th>8 unclear</th>
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<td>.00 (0)</td>
<td>.00 (0)</td>
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<td>(10)</td>
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<td>.19 (17)</td>
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<td>.40 (19)</td>
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<td>.07 (3)</td>
<td>.00 (0)</td>
<td>.17 (7)</td>
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<td>(0)</td>
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<td>(41 items)</td>
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</tr>
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<td>.00 (10.5)</td>
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<td>.11 (4)</td>
<td>.00 (0)</td>
<td>.00 (0)</td>
<td>(0)</td>
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<td></td>
</tr>
<tr>
<td>U. of Kansas</td>
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<td>.22 (7)</td>
<td>.00 (0)</td>
<td>.31 (10)</td>
<td>(3)</td>
<td>(10)</td>
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<tr>
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<td>.00 (0)</td>
<td>.00 (0)</td>
<td>.00 (0)</td>
<td>.04 (1)</td>
<td>(0)</td>
<td>(0)</td>
</tr>
<tr>
<td>(24 items)</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>U. of Pittsburgh</td>
<td>.00 (0)</td>
<td>.42 (10)</td>
<td>.21 (5)</td>
<td>.04 (1)</td>
<td>.04 (0)</td>
<td>.16 (4)</td>
<td>(3)</td>
<td>.13</td>
</tr>
<tr>
<td>(24 items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
implied earlier that the more frequently a specification is expected to be performed, the better its performance (or the higher its rating) ought to be. We believe it generally true that the more time a model allocates to performing a given item, the higher the priority it sets on that item. And if the item is high priority, our further assumption is that the sponsor will train and supervise more intensively in relation to it, which, in turn, should result in better implementation.

Sorting items on the Persons dimension has two general results:

a. Models vary in the number of specifications they direct to the teacher and/or teaching team.

b. Models vary in the number of persons and/or groups they involve in the educational process.

When one examines the eight Persons categories, it seems clear that they can be subsumed under two larger groupings, "producers" and "consumers"; that is, those who have a formal responsibility for model implementation, and those (such as parents (5) and children (3)) whose behavior is a product of an implementation effort. Models with a high number of "consumer" items (which we define as approximately .25) are EDC (.24), Far West (.40), REC.

---

4 We would like to note that Florida has single items which describe the behavior of both the PE (teacher) and the MO (pupil). We treated these items as two halves, placing 1/2 in the teacher category, the other half in the pupil category.
(.34), Florida (.40) and Pittsburgh (.25). Our assumption is that items specifying consumer behaviors will not receive high ratings because consumers lack a stake in producing model-appropriate behaviors; certainly it is unlikely that they will be aware of what these behaviors are. The models, however, implicitly assume the contrary. They assume that if persons whose behavior is dictated and/or controlled by the model (i.e., teachers; the teaching team) efficiently perform their jobs, appropriate consumer model behavior will follow. Therefore, in the model's view, there is no intrinsic reason why ratings on consumer and producer items should differ.

Our questions about consumer items suggested it might be more reasonable to view implementation as related only to those model specifications which describe enacting or producing the model. Specifications related to model results should perhaps form a separate category or be omitted altogether. This becomes even more plausible once it is recognized that all programs, with the exception of REC, direct a significant number of specifications to either the teacher of the teaching team. The lowest percent of specification is .27 (REC), but several models have approximately .40 of the items in these categories while Arizona and Oregon are .76 and .96 respectively. Teachers and teaching teams are the two groups most likely to implement models and therefore to have a major stake in implementation results. The Persons item sorting also
makes implicitly clear that if teacher items are so dominant, model success will depend on either teacher training or a very careful system of teacher hiring.

The following chart shows for each model the location of major implementation responsibility along the Persons dimension:

<table>
<thead>
<tr>
<th>Model</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Street</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDC</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Far West</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-Scope</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REC</td>
<td>X</td>
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<td></td>
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<td>X</td>
</tr>
<tr>
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<td>X</td>
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<td>X</td>
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<td></td>
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</tr>
</tbody>
</table>

6. Procedure and Analysis

The total number of classes included in the analysis was 126 out of a pool of 162.5 Two checklist observations,

5 A list of the codes of classes included and excluded from the analysis appears in Appendix A, pages 3-5.
the first and last, of each class were the only data used in this analysis. Classes were excluded if the time period covered between the first and last observation was less than one month.

Our basic purpose was to analyze the similarity and differences in the implementation patterns of sites within models. If a model showed a pattern, we also sought to determine its strength or consistency by within site comparison of classroom implementation patterns. Our definition of "pattern" is identical rank ordering of categories on the theoretical dimensions. If models showed patterns, using two observations of each class, the first and last would answer whether class patterns were a stable or changing phenomena over the year.

We would like to emphasize here that our analyses do not attribute any absolute value to Observer's ratings. Though we must report the figures based on each Observer's ratings, it is only the pattern of relative emphasis within class and site which we think is meaningful. The figures cannot be used to compare across models or even across site within model.

We proceeded with our analysis in the following three step manner:

Step 1. Every item on a model's checklist was sorted into one category on both the Occasions and the Persons dimension. For example, items 1A, 1C and 1E in the High-Scope checklist might be sorted into the "constant"
category (1) on the Occasions dimension; in the Persons dimension, item lA might be sorted in the "general" category (7), item lC into the "sponsor" category (4), and item lE in the "teacher" category (1).

Step 2. Item ratings for each classroom observation were then sorted into their appropriate categories within each dimension. For example, if three items in the High-Scope checklist (1A, lC and lE) had originally been sorted into the "constant" category on the Occasions dimension, the ratings on these items were then entered into that category for each classroom observation. Thus, on a specific observation of classroom 2 at High-Scope site A, item IA, might have a rating of 2, item lC might have a rating of 4, and item lE might have a rating of 3. For that specific observation, the ratings of 2, 4 and 3 were placed in the "constant" category. Then the ratings for all the items in each category were summed for each separate class observation.

Step 3. The summed ratings were then averaged for each specific classroom observation. Since the "constant" category on the previous illustration has three figures (2, 4 and 3) – the average implementation of the "constant" category for this particular classroom observation is 3.

The category sums were used in two ways: First, we averaged each category sum across class within site to obtain one site figure for each dimension category. Second, we compared dimension category averages across site.
TABLE IV C

Patterns of Implementation
Dimension I: Occasion
This table averages the sum of ratings within each category on the Occasion Dimension for the first and last observation of each class within site. Only categories which contain .20 or more of a checklist's items are reported with the exception of Bank Street and Far West where the next highest category is reported and starred. (*)

<table>
<thead>
<tr>
<th>Periods of Time</th>
<th>MODEL: Site</th>
<th>1 constant</th>
<th>2 specific period of time</th>
<th>3A moment created</th>
<th>3B moment recognized</th>
<th>4 across visits</th>
<th>5 outside class</th>
<th>6 unclear</th>
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<td></td>
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<td>D</td>
<td>2.48</td>
<td></td>
<td></td>
<td></td>
<td>3.08</td>
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</tr>
<tr>
<td>Kansas</td>
<td>A</td>
<td>2.63</td>
<td></td>
<td></td>
<td></td>
<td>2.82</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>3.06</td>
<td></td>
<td></td>
<td></td>
<td>3.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>2.99</td>
<td></td>
<td></td>
<td></td>
<td>3.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>A</td>
<td>3.41</td>
<td>3.18</td>
<td>3.32</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>B</td>
<td>2.88</td>
<td>2.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.66</td>
</tr>
</tbody>
</table>
within model. We then looked for patterns which we defined as identical rank ordering of category averages. We were interested in two questions:

1. Is there a model pattern from site to site? What is the match of patterns across sites within model?

2. What is the strength of the model pattern? How consistent is a model's effect at each site? Here we looked for the match of class patterns to the site pattern using each class observation as the unit of comparison.

This limited analysis, based on somewhat scant and crude grouping of items, was all we felt the questionable reliability of the instruments warranted.

7. Results

The category averages on the Occasions dimension for each site are reported in Table IV C. Only categories containing .20 or more of a checklist's items are reported since they include larger n's and are, therefore, more reliable.

Four models show patterns or a similar rank ordering of Occasion categories from site to site. They are EDC, Far West, Florida and Kansas. We wish to note here that Bank Street, High-Scope, Arizona, and Pittsburgh have no

6 The exceptions to this method of selecting reportable categories for each model were Bank Street and EDC. These models would have had only one category reported by these standards so their next highest category was reported, containing .12 and .09, respectively, of each checklists items.
### TABLE IV D

THE MATCH OF CLASS TO MODEL PATTERNS IN THE OCCASION DIMENSION

The match of patterns in each class observation to the model pattern (1 indicates the category which has the highest rank ordering in the pattern).

<table>
<thead>
<tr>
<th>Model Pattern</th>
<th>Total Number of Class Observations</th>
<th>Number of Observations That Match Model Pattern</th>
<th>Percent of Total Class Model Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODEL</strong></td>
<td>1 2 3A 3B 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Street</td>
<td>No Pattern</td>
<td>A 6 5</td>
<td>.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B 8 4</td>
<td></td>
</tr>
<tr>
<td>EDC</td>
<td>1 2</td>
<td>A 12 8</td>
<td>.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C 12 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D 12 10</td>
<td></td>
</tr>
<tr>
<td>Far West</td>
<td>2 1</td>
<td>A 16 8</td>
<td>.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B 8 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D 4 4</td>
<td></td>
</tr>
<tr>
<td>High-Scope</td>
<td>No Pattern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>No Pattern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>1</td>
<td>A 10 7</td>
<td>.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B 10 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>C 8 7</td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>2 1</td>
<td>A 10 7</td>
<td>.68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B 10 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>C 8 7</td>
<td></td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>No Pattern</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
pattern. We are unable to perform these analyses on either REC or Oregon because they each had data on only one site.

The patterns are similar for three models, different in the case of EDC. Of two reportable category entries, for Far West, Florida and Kansas, the category which is not directly observable during class time (either the outside class (5) or unclear (6) categories in all cases) has a uniformly higher average rating than the category entry which is directly observable - (1) "constant" in the case of all three models. On the other hand, EDC's "constant" category average is higher than that of its "outside class". In order to determine the strength of these patterns of these four models, we compared their individual class patterns to the model pattern. Table IV D reports these. The match of class patterns to model pattern at each site was never lower than .50 and was often as high as .85-1.00.

a. Interpretation of Occasions patterns

We approach these results warily. As we have said, reliability of the instruments and the resulting data is questionable. Moreover, the patterns, as we have defined them, are subject to several other important caveats:

---

7 This occurred at only three sites, B of EDC, A of Florida and B of Kansas.
a. Each model's checklist contains at least a few items which were stated ambiguously. Accordingly, some items may have been inaccurately sorted.

b. On the Occasions dimension, all but two models had only two categories with a sufficiently high number of n's to analyze. This increased the possibility of a consistent pattern from site to site within models.

c. For those models which reported averages in only two categories, the categories were frequently those which we would normally expect to show a regular difference in their averages, though perhaps not in the same direction from site to site.

d. As we have stated many times, we think the finding of patterns (as well as no patterns) is related to how Observers make judgments for each category on the Occasions dimension. We will outline our speculations.

Only categories 1, 2, 3A and 3B can be observed directly in the classroom on each site visit. We think these items are judged with more specific evidence and probably more harshly. Our occasion results show these category averages as lower. We think the remaining

---

8 Though we could have established reliability on the sorting of items, this seemed a task tangential to the core problem of obtaining model checklists which were clear enough to prohibit missing.
categories 4, 5 and 6 are judged more leniently and therefore have higher ratings. Items in "across visits" (4) are judged globally, the memory of past situations shaping the rating. Items "outside class" (5) must be rated on the basis of material from an informant or by "guessing". Items in "unclear" (6) are probably rated in all the ways listed above as this category contains items that belong, in fact, to other categories.

The models with patterns on the Occasions dimension have only two category entries: one in a category of directly observable items (constant (1)), and the other in a category for which they need an informant (outside class (5)) (except in the case of Far West whose second category is "unclear"). However, the relationship between the two categories - which has the higher average - differs among the models with patterns.

We find it interesting that the average rating for "outside class" items is higher for Florida and Kansas, than the "constant" items, indicating that the informants' judgments are either more positive or are so judged by the Observer. The result, of course, is that items the informant "rates" appear to be better implemented. By contrast, in the case of EDC, "outside class" averages are lower. We believe that the EDC checklist items sorted into this category are in fact extremely difficult to implement. Primarily, they specify intense support of the model by local school administration. As a result, the bias of both
### TABLE IV E

**Patterns of Implementation**

**Dimension II: Persons**

This table averages the sum of ratings within each category on the Persons Dimension for the first and last observation of each class within site. Only categories which contain .14 or more of a checklist's items are reported.

<table>
<thead>
<tr>
<th>MODEL: SITE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>the teacher</td>
<td>teaching</td>
<td>child</td>
<td>sponsor</td>
<td>parents</td>
<td>admin-</td>
<td>general</td>
<td>unclear</td>
</tr>
<tr>
<td>Bank Street A</td>
<td>3.79</td>
<td>3.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.55</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>2.66</td>
<td>2.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.46</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3.61</td>
<td>3.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.53</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2.72</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>2.71</td>
<td></td>
</tr>
<tr>
<td>EDC A</td>
<td>2.96</td>
<td>2.98</td>
<td>2.61</td>
<td></td>
<td></td>
<td>2.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3.72</td>
<td>3.19</td>
<td>2.97</td>
<td></td>
<td></td>
<td>3.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Far West A</td>
<td>3.10</td>
<td>2.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.73</td>
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</tr>
<tr>
<td>C</td>
<td>3.32</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.09</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>3.44</td>
<td>3.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.37</td>
<td></td>
</tr>
<tr>
<td>High-Scope A</td>
<td>2.06</td>
<td>2.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.76</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>2.71</td>
<td>3.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.70</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2.57</td>
<td>3.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.75</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2.93</td>
<td>3.39</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.67</td>
<td></td>
</tr>
<tr>
<td>Arizona A</td>
<td>2.44</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.23</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>3.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.78</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>2.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.64</td>
<td></td>
</tr>
<tr>
<td>Florida* A</td>
<td>3.82</td>
<td>3.81</td>
<td></td>
<td></td>
<td></td>
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<td>2.97</td>
<td>2.87</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>2.52</td>
<td>2.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas A</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.80</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>2.80</td>
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<td></td>
<td></td>
<td></td>
<td>3.28</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>3.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.24</td>
<td></td>
</tr>
<tr>
<td>Pittsburgh A</td>
<td>3.10</td>
<td>3.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.95</td>
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</tr>
<tr>
<td>B</td>
<td>2.89</td>
<td>2.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.09</td>
<td></td>
</tr>
</tbody>
</table>

*Note that categories 1 and 3 designate PE and MO items respectively in the Florida model.
informants and the Observer, might tend to be in the direction of lower implementation ratings.

b. Conclusion: Occasions dimension

The patterns exhibited by the four models, EDC, Far West, Florida and Kansas, may have emerged solely as a result of the number and type of their category entries. If there are only two major entries, one category is virtually certain to have a higher average than another. Accordingly, to assume that patterns on the Occasions dimension are meaningful is presumptive. We need more categories, or different ones, represented to feel secure that these models do in fact have patterns or regular effects. It is also possible that the Occasions dimension cannot by itself effectively distinguish models.

c. Results: The Persons dimension

Table IV E shows the site average for items within each category on the Persons dimension. Only categories whose n's exceed .14 are reported. Four models show a similar rank order of categories across site within model: Far West, High-Scope, Florida and Kansas.

When the patterns of individual class observations were compared to the model pattern (Table IV F), High-Scope, Florida and Kansas show .71 or more of their total classes matching the model pattern. Each Far West site has less than .50 of its classes matching the model pattern. Accordingly, we eliminated this model from the group with
TABLE IV  
THE MATCH OF CLASS TO MODEL PATTERNS IN THE PERSONS' DIMENSION

The match of patterns in each class observation to the model pattern (1 indicates the category which has the highest rank ordering in the pattern).

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Persons Categories</th>
<th>Sites</th>
<th>Total Number of Class Observations</th>
<th>Number of Observations That Match Model Pattern</th>
<th>Percent of Total Class Which Match Model Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Street</td>
<td>No Pattern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDC</td>
<td>No Pattern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Far West</td>
<td>1 3 2</td>
<td></td>
<td>A 12 5</td>
<td>.42</td>
<td></td>
</tr>
<tr>
<td></td>
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<td>C 12 5</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D 12 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-Scope</td>
<td>3 2 1</td>
<td></td>
<td>A 12 9</td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td>B 10 10</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>C 4 4</td>
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<td></td>
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<td>D 12 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>No Pattern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>1 2</td>
<td></td>
<td>A 16 10</td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B 8 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D 4 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>2 1</td>
<td></td>
<td>A 10 8</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B 8 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C 8 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>No Pattern</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
patterns, and, as revised, the group with patterns was comprised of High-Scope, Florida and Kansas.

With "1" representing the category with the highest average, we present a simplified version of the patterns in Table IV E below. None of the patterns for any model are duplicated in any other.

### RANK ORDER OF CATEGORY AVERAGES FOR MODELS WHICH SHOW PATTERNS ON THE PERSONS DIMENSION

<table>
<thead>
<tr>
<th></th>
<th>1 the teacher</th>
<th>2 the teaching team</th>
<th>3 the child</th>
<th>7 general</th>
</tr>
</thead>
<tbody>
<tr>
<td>Far West</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>High-Scope</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

There seems to be no generalization about models which will explain these patterns. Rather, the patterns are specific to individual models.

d. **Interpretation of Persons patterns**

There are two category entries for Florida and Kansas and three for High-Scope on the Persons dimension. The categories in which entries appear are the teacher or
teaching team, the child, and general. Here it is useful to recall how ratings for all the categories are made. Items in the teacher, teaching team, child and general categories (1-3 and 7) are rated by direct classroom observation. Items in categories of the sponsor, parents or administration (4-6) are rated by interviewing an informant or by "guessing". Items in the unclear category (8) are rated in at least one of the ways described above. Since we are uncertain of the meaning of these items we cannot be clear about the source of rating judgments.

The three models which show patterns, High-Scope, Florida, and Kansas share three characteristics which we list below with comments.

a. All category entries for the three patterned models are directly observable.

We think this fact lends a greater credibility to the Persons patterns, since we had no a priori basis for expecting differences among directly observable categories, only between directly and indirectly observable ones.

b. When the general category is reported for a model, it shows the highest relative average (High-Scope and Kansas).

---

9 One could raise the question that for the Florida model PE items should be sorted into category 5 (parents). However they were sorted into the teacher category (1), since the function the PE performs is a teaching one.
We think these items are in fact, relatively better implemented because they can be taken care of by any one of a number of persons, are usually performed only once and are highly visible. That is, if they aren't present, someone sees to it that they are.\(^{10}\)

c. Comparing the ratings of teacher and pupil categories where they occur, the pupil category has a consistently higher average (High-Scope and Florida).

We have speculated that consumer items would be rated lower than others. Two ready explanations for why child items are rated higher are (1) a rater's possible willingness to judge children's behavior less strictly than that of adults, or (2) the ease of finding evidence for higher ratings when the pool one is drawing upon is larger.\(^{11}\)

These explanations are not as convincing, in view of the 1-1 teaching structure of Florida (the PE-MO diad) where the pupil is in fact an adult and the "pool" is only one person. Both the diadic (Florida) and large group (High-Scope) learning situations show pupil ratings higher than teacher ratings. Our assumption, therefore, is that raters may be biased in favor of "consumers" versus "producers". Observers may apply more rigorous standards to

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\(^{10}\) See discussion on pages IV 5 and IV 6.

\(^{11}\) Most checklist items in category 3 begin "children ..." it is obvious that individual behavior must be rated to stand for the group.
judge those who have knowledge about the behavior they are to be demonstrating. While the target population is treated more leniently.

When we thought about what might explain the patterns of these three models, we recalled other information we had about the models which might distinguish these models from others. Though we have not detailed our observations of sponsor style to this point, the specific kind of response we received from sponsors to the checklist drafts and each sponsor's general allocation of responsibility in our contacts with them has always been of interest to us.

Table IV G shows that the three models which show patterns on the Persons dimension have an interesting common attribute. Each model was managed by one individual over at least a two-year period. Though this may be simply a chance characteristic correlated with patterns, it seems to us more plausible that model definitions and thereby guidelines for model transmission and implementation remain more consistent with one person in charge. Accordingly, the model has a greater chance for uniform implementation.

The response to the checklist draft also shows that High-Scope and Florida were the only two models which sent Huron teacher training material from which items could be taken directly that is, the teacher training material was already in the form of specifications. We interpret this to mean the model has devoted much thought to how to communicate both what it wants to achieve and how it is to
TWO SPONSOR CHARACTERISTICS OBSERVED DURING THE IMPLEMENTATION STUDY.

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Response To Checklist Draft</th>
<th>Allocation Of Responsibility For HSPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Huron</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pittsburgh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kansas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-Scope</td>
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<td></td>
</tr>
<tr>
<td>Par West</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank Street</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Consistent Personnel | Changing Personnel | Group | Individual Group | | |
|----------------------|--------------------|-------|------------------|-------|
|                     |                    |       |                  |       |

*Note: The table above details the characteristics observed during the implementation study, including response to checklist draft and allocation of responsibility for HSPV.*
be achieved. Certainly, clarity and the uniformity of published guidelines would seem to at least support, if not insure, better model implementation.

In summary, the group of models showing patterns on the Person dimension are diverse both in number and kind of category entries. By contrast, "Occasions" showed no such diversity. Moreover, while the category entries for models showing patterns on Occasions could be expected to yield differences based on the source of information with which ratings were made, we did not expect to see differences on the category entries on the Persons dimension. Our experience, therefore, leads us to believe that Persons is, in fact, a more discriminating dimension.

D. A Matrix Of Models And Dimensions

A matrix* composed from the Occasions and Persons dimensions, based on Table IV A and IV B, may further illuminate our findings. One contrast along the Occasions dimension is that models concentrate or disperse their time specifications differently. The rows of the matrix describe three different categories of time demands for implementation: intense (many items in one time category); middle intensity; and finally, varying time demands (i.e., some items have to be performed all the time, some most of the time, some once in a while).

On the Persons dimension, though each model directs a good many specifications to teachers, there are differences.

*Table IV H.
<table>
<thead>
<tr>
<th>Intensity of Time Demands</th>
<th>High</th>
<th>Middle</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Intense</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.70 or more teacher</td>
<td>.40-.50</td>
<td>less than .32 teacher</td>
<td></td>
</tr>
<tr>
<td>specifications in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>one category</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B. Intensity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.50 of checklist items in one category</td>
<td>Bank Street</td>
<td>EDC</td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Varying</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution of items across several categories</td>
<td>Florida</td>
<td>Kansas</td>
<td></td>
</tr>
<tr>
<td><strong>C. Time Demands</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-Scope</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pittsburgh</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
as to how much of the model the teacher is responsible for.
The columns of the matrix describe these differences.

We find it interesting that the models which show
differences on the Persons dimension all appear in one row of
the matrix. (One model in this row, Pittsburgh, did not
show a Persons pattern.) Each of the three patterned
models (High-Scope, Florida and Kansas) differs in degree
of teacher direction, "high" (over .70 of the model items
are teacher specifications), "middle" (over .40-.50 are
teacher specifications) or "low" (less than .32 are
teacher specifications). Yet all three models are the same
in the Occasions dimension. This leads us to the tentative
conclusion that how much the teacher is responsible for
within a model does not guarantee a definite model effect
and is, therefore, not as important as one might assume.

On the other hand, there is a possibility that if a model
has different expectations or requirements for how much of
the time different specifications must be performed, a
staff can respond to the model with varied attention.
Perhaps category A and B (high and middle intensity time
demands) are similar in that models in those categories
ask for an unrealistic level of high uniform care to imple-
mentation. It may be that the meaning of varying time
demands is that these models can set priorities on their
demands of a staff which are humanly more possible. There-
fore, these models would be concerned about the things it
wanted done all the time, less about those specifications
it expects done most of the time, and least about those things that are to occur only once in a while. A sense of priorities may also make a training effort clearer. Certainly the reverse of differentiated time expectations, a rigid time required applied equally to all items, would appear to make inevitable individual teachers simply selecting model specifications as they wished because time for them all is impossible. This in turn would vary the emphasis a model would have in each classroom and reduce any uniform effect. Though this may be desirable for a program, it is not a "model", a word we interpret to mean regularity of effect.

E. Second Analysis:
   Key Items

1. Pool of Data

   The second analysis uses data from only one site in each model. The criterion for data selection was the accuracy of the Observer reporting, not our belief, or the sponsor's, that the data was from the "best" site. This criterion entails a subjective choice on our part, made primarily on the basis of the anecdotal records submitted with the checklist data. We selected those consultants whose records raised more questions, made fewer assumptions and noted the possibility of alternative explanations for events. The choice of Observer was naturally dependent upon the pool of Observers assigned to each model. For some models, there was only one Observer, and there the
choice was forced; in other models there may have been several Observers who appeared equally accurate, so the choice was random.

The data we present in this second analysis are the ratings which key checklist items receive on the last site visit of one Observer per model. The purpose of this analysis is to answer the question "Are the core components of a model present in its classrooms?". Though the answer will be one Observer's opinion (i.e., ratings), we assume that by studying the ratings made by a relatively more reliable Observer, we can determine with some confidence whether the major characteristics of a model are present, that is, whether the model is delivered.

We have chosen four classrooms for one site in each model. Tables for each model show the ratings which each of the key items received on the Observers' last visit in 1972. The median rating for both individual items and classrooms is also shown.

2. Results

The ratings for key items are fairly similar within Group I and II but different between groups. In general,

12 Key item tables are in Appendix A, pages 5 through 14.
13 See chapter II, pages 16-60 for a listing and discussion of key items for each model.
14 Figure I and II report the range of the median ratings for items and classes for Group I and Group II models respectively.
the median rating of both items and classes in a Group I model is 2 or 3, while in Group II models it is 3 or 4.

Figure I

GROUP I MODELS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>NUMBER OF KEY ITEMS</th>
<th>RANGE OF ITEM MEDIAN</th>
<th>RANGE OF CLASS MEDIANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Street</td>
<td>17</td>
<td>2 - 3</td>
<td>2 - 3</td>
</tr>
<tr>
<td>EDC</td>
<td>19</td>
<td>3 - 4</td>
<td>3 - 4</td>
</tr>
<tr>
<td>Far West</td>
<td>14</td>
<td>2.5 - 3</td>
<td>2 - 3.5</td>
</tr>
<tr>
<td>High-Scope</td>
<td>17</td>
<td>2 - 3</td>
<td>2 - 3</td>
</tr>
<tr>
<td>Arizona</td>
<td>8</td>
<td>2.5 - 3.5</td>
<td>2 - 3.5</td>
</tr>
</tbody>
</table>

Figure II

GROUP II MODELS

<table>
<thead>
<tr>
<th>MODEL</th>
<th>NUMBER OF KEY ITEMS</th>
<th>RANGE OF ITEM MEDIAN</th>
<th>RANGE OF CLASS MEDIANS</th>
</tr>
</thead>
<tbody>
<tr>
<td>REC</td>
<td>5</td>
<td>1 - 4</td>
<td>4</td>
</tr>
<tr>
<td>Florida</td>
<td>10</td>
<td>2 - 4</td>
<td>2.5 - 3.5</td>
</tr>
<tr>
<td>Kansas</td>
<td>9</td>
<td>3 - 4</td>
<td>2 - 4</td>
</tr>
<tr>
<td>Oregon</td>
<td>9</td>
<td>3 - 4</td>
<td>3 - 4</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>6</td>
<td>3 - 4</td>
<td>3</td>
</tr>
</tbody>
</table>

The fact that a model has been placed in Group I or II does not explain an interesting phenomena of the models, namely, the spread of ratings across class within items. We list the models below in two categories, those which...
show a variation across class within some items, and those that do not, taken from Tables V A - V J in Appendix A.

<table>
<thead>
<tr>
<th>MODELS WHICH SHOW A RANGE OF RATINGS ON SOME ITEMS ACROSS CLASSES</th>
<th>MODELS WHICH SHOW PREDOMINANTLY UNIFORM RATINGS OF ITEMS ACROSS CLASSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDC</td>
<td>Bank Street</td>
</tr>
<tr>
<td>Far West</td>
<td>High-Scope</td>
</tr>
<tr>
<td>Arizona</td>
<td>REC</td>
</tr>
<tr>
<td>Florida</td>
<td>Oregon</td>
</tr>
<tr>
<td>Kansas</td>
<td>Pittsburgh</td>
</tr>
</tbody>
</table>

What does the presence or absence of a spread of ratings on items mean? We speculate that when a single item shows ratings of 2, 3 and 4 or 1, 2, 3 in different classes, the item is highly vulnerable to teacher skills and/or preference. On the other hand, models whose items generally have ratings only 1 point apart (1 and 2, 2 and 3, 3 and 4) are able to ensure a consistent and solid level of performance on certain specifications. Of course, the distinctions we make could be the result of Observer scaling: that is, a model showing a spread in ratings within item across class is, in fact, an Observer who registers a great degree of difference on the performance of items than exists. Whereas models that show relatively uniform item ratings across class are, in fact, Observers who make littler distinctions among item performances in different classes, even though distinctions may exist. In
other words, whichever way we turn, the methodological problems described in Chapter II constrain, confine and reduce any interpretation or information the data might afford us.
V. IMPLEMENTATION AS A DESCRIPTIVE PROBLEM

A. Introduction

The generally poor reliability of the instruments might explain the meager and tentative findings of our data. That "explanation", however, merely poses a question; it does not answer it. The critical inquiry is, why weren't the instruments reliable?

Our initial assumption was that, due to our inexperience with models, parts of each checklist were unclear only to us. We believed, however, that Observers, trained in each model, would find the checklist descriptions a "code" which was meaningful to them and, of course, that this was the sponsors' intention. But poor reliability would not have occurred if the latter beliefs were correct. Accordingly, we needed a quite different explanation for the unreliability of the instrument. We developed such an explanation while we were gathering, as well as analyzing, the data. During that process we were continuously receiving additional information about models in the form of written materials or through interviews. Each piece of information clarified the particular model to the point where we became convinced that the checklist descriptions themselves were, in fact, not sufficiently accurate model descriptions. And, of course, meaningful implementation studies could not occur without clear and precise model descriptions.
We thought it insufficient for us simply to conclude our study of model implementation with a pious admonition that careful descriptive work on each model was necessary before measurement of implementation was undertaken. We felt an obligation to both develop and try a tentative plan for more successful descriptive work. What follows is an account of our efforts.

Experience derived during the course of our study led us to reject an important, initial decision we had made: that the definition of the theoretical model would be the standard against which implementation was judged. Our study mainly compared classroom behaviors to a theoretical statement of the model, usually developed by a single or a few individual members of the sponsors' staff. As our study progressed, we were constantly confronted with evidence that models with which we were more familiar were not thoroughly defined, nor was their staff consensus about some model aspects. It was, therefore, clear to us that our original strategy of instrument development, written communication coupled with scattered phone contacts, was inadequate for extracting a complete behavioral definition of the model. We came, instead, to believe that more accurate model descriptions might have been provided by statements around which some degree of consensus, both in terms of intellectual agreements and actions, had been reached by the sponsors' training staff. In our view, the content of statements made by staff members at site training
sessions would provide the clearest description of the model. Training sessions are, in effect, the delivery point for the sponsor. These sessions would, accordingly, show which model parts were actually being transmitted by the sponsors. The further step of observing the classroom tells what portions of the models are being responded to and internalized by teachers.

Focus on staff communication at training sessions implies an approach to the study of implementation very different from viewing it just as a measurement problem. What we propose minimizes the theory and what a single spokesman may say that a model will do. Instead, it emphasizes a model's "behavioral" aspects. Our concern in such a study would stress, almost exclusively, the model in practice, not in theory. Our approach asserts that model "theory" is what the sponsor staff transmits. Realistically, theory cannot be considered as an idea in one individual's head because of the processes involved in working with many communities and large number of teachers.

A fuller and more accurate behavioral description of a model requires personal contact between evaluators and sponsor personnel. Evaluation, rather than sponsors, should have jurisdiction over model descriptions which would be created through a three-step process:

Step 1: Evaluation conducts a series of interviews with the sponsors' training personnel in
order to extract from them areas of consensual agreement concerning model definition.

Step 2: Evaluation observes several of these same staff members training site personnel to determine (1) additional features of the model and/or (2) discrepancies between what trainers say they are doing and what they are actually doing.

Step 3: Evaluation is responsible for a "working" statement of the model.

In this three-step process it is the agreement among sponsor staff in both "word and deed" that serves as the model definition rather than a purely theoretical and ideal description of model requirements as stated solely by the sponsor.

Since we did not wish to propose this solution without attempting it ourselves, what follows is an account of the author's attempt to work with two models in a trial run of her own suggestions.

The trial run occurred during the HSPV phase-out year. There were, accordingly, two practical limitations to our plan. First, training of HSPV site personnel could not be observed as it was not occurring. However, training scheduled by most sponsors still involved Follow Through or other school programs. Secondly, since my contact with sponsors had been linked to HSPV, a request to interview a sponsors' entire training staff would probably have been
refused. As an exploratory effort, we limited ourselves to observing and interviewing a few members of the training staff of two sponsors.

The models we selected were diametrically opposed - EDC and the University of Kansas. The open education emphasis of EDC versus the concentration on the teaching of academic skills (reading, writing, and arithmetic) of Kansas represent a substantial difference in goals and assumptions about the nature of children and learning. We engaged in a two-step process: (1) observation of training, and (2) interviews of sponsor personnel concerning their training content and techniques. Our purpose was to identify model features which were both consonant and discrepant with the HSPV checklist descriptions. The interview was intended to investigate trainer statements and behaviors which were not reflected in checklists or which expanded or modified the present checklist descriptions. Next, we would attempt to determine whether a trainer's emphases were individual or shared by other trainers. Shared trainer emphases would create a new "working" model statement. Obviously, such a statement might contain features which the present implementation checklist lacked (e.g., process features such as sponsor assignment of rotating versus consistent training personnel for the duration of a year), and it might contain modified versions of current items or items might be deleted altogether.
Whereas the implementation checklists had, in our opinion, never presented any model with sufficient clarity the material produced by these visits clarified the EDC and Kansas models and it would have contributed to more complete written descriptions of them.

B. Two Case Studies

A report of the two exploratory studies of EDC and Kansas and a brief comparison of them follows.

1. The EDC Observation

The EDC workshop I attended was held in January 1973 for both Follow Through (FT) and non-Follow Through teachers. Though my purpose was to generate hypotheses about a Headstart evaluation process, since EDC makes little distinction between a HS and FT program in their model definition, I assumed that a Follow Through workshop would not be inappropriate to my ends.

a. Introduction to the sponsors' setting

The offices of EDC are in an abandoned factory which is renovated with care for the arrangement of space and use of materials. Its overall effect is of an extremely well done and modern facility. EDC's offices are on one floor of the building. The space is high ceilinged and loft-like with rows of small offices lined up off of it on either side. The visual distractions and amount of materials scattered on the floor, hung from the rafters, posted on the walls are impossible to absorb. Most office doors are open and are covered with arrangement of

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photographs, children's paintings or the inhabitant's work. My contact at EDC had her door striped with a dozen vertically hung pairs of egg cartons, each painted a different design but using only 3 colors. I commented favorably on it and she admitted in a pleased but joking way that she was the artist. I was taken by a second person to a second equally large, high ceilinged, sunny room chock full of materials, where the math workshop I would observe was taking place. My initial impression was a room swarming with materials. At a few low tables a handful of workshop participants (about 10 adults) were working.

Immediately to the left of the entrance, an isolated desk was pushed next to the wall but facing the room. A serious looking man was seated there doing paper work in a shirt and khakis. This was the director of the model. Upon arrival, I was introduced to John Tuchman and Ellen Damson who were jointly leading the workshop.\(^1\) The Advisors dressed casually, Ellen in pants, John without tie or coat. John mentioned both Advisors would like to talk with me after my observation. I was offered a seat next to a middle aged black woman, who was working alone on a game. There were several other participants at this table, also working alone. A second table, close by, was occupied by five participants: two girls in their twenties (who I

\(^1\)I will refer to these instructors as Advisors - their preferred title within the EDC model. All names have been changed to insure anonymity.
later learned were first year teachers) and three slightly older teachers, all playing with games. The only male participant was in the latter group, making most of the suggestions for any modifications of the rules by which the group was playing. He kept himself and the two young women in his group amused and entertained. I observed this group the longest because they were more comfortable with observation and possibly also because they were enjoying themselves more. John Tuchman joined the new teachers at the end of the table, playing with them for some time. Ellen Damson came up several times during their game asking all three such questions as "Would you rather be the first or second player?". John and the two participants would answer these questions. The girls simply answered "Second." or "Just not the first one.". John, on the other hand, offered more reasons for his choices. After about ten minutes, John got up and looking at me suggested informally "maybe you'd like to play a game with them". I moved to his former seat, and picked up a white 5" x 8" typed card laying near the game. It briefly outlined some rules, and asked a series of questions, included in which were "Which would you rather be, the first, second or third player? Why?". Since I didn't understand the rules, or the point of the game from the 5" x 8" card, I asked the participants several questions. They too were unsure of the rules. After two games with them, I moved to another table. A young woman I sat near asked "Do you want to know
what I'm doing?" in a friendly way. Indicating I did, she explained a number puzzle she was doing and we then played a number board game together. The final observation was of a participant (A) who had learned a game from John teaching it to the woman with whom I had just played (B). 'A' explained the rules to 'B' in a simplified form, but added rules (that is, remembered additional rules) as the game proceeded. 'B' mildly confronted 'A', implying that she, 'A', couldn't win or play well if she didn't know all the rules, but this was repeated humorously and the game was played to its finish. 'A' won as she had the continued advantage of additional rules.

Putting myself in the place of the various participants, I had a number of questions revolving around what I myself would learn from the workshop and how, generally, I would feel about it as an experience. Many of my questions related to the nonstructured, free choice aspect of the format. Were participants choosing materials by some criteria the Advisors had outlined? (E.g., "Try games you do alone, then games you do with others.".) What determined the length of time each participant spent on each task? What were participants to get from the workshop? Familiarization with new materials? Identification of pupil behaviors - i.e., matching how they felt with how their own students might feel in a similar environment? Consciousness of teaching strategies in open education? A way of
classifying math activities and their resulting learning possibilities?

While I had missed the pre-activity introduction of this particular workshop, I had a feeling it would not have altered the ambiguity and/or lack of purpose of the workshop.

My specific impressions and observations of the two hours I spent at this workshop were the following:

1. The implicit message of the setting: (the abundance of materials and the fact that they were "homemade") as well as the content of at least one Advisor's (John) comments, was that materials are extremely important, if not the most important aspect of the model, and that the source of good materials is the imagination of individuals, not commercial catalogues.

2. If one takes seriously the modeling aspect of the Advisor's own teaching style and it appears from the EDC checklist that modeling is desirable, one could extract from some of the staff's behavior the following model goals (all of which deal with distinctions between traditional and "open" education):

a. Workshops leaders and participants (teachers and pupils) are not required to use different forms of address. Everyone is on a first
name basis. (Everyone is to be equally respected as a person.)

b. Learning is not lock-step teacher dominated activity, but is "fun" (game-like) and ideally self-selected and motivated.

c. Administration is not remote from and uninvolved with learning, but is available and interested in what goes on in the classroom. (The director of the model as an analogue to the principal of a school.)

These two impressions are consonant with the model checklist.

There were other impressions which seemed either antithetical to my understanding of the model or which were simply "new" approaches I was unaware of.

3. Each Advisor was always working with one or more participants; that is, contrary to the model statement, teachers did not ever leave students alone but were constantly involved with them. The EDC checklist implies more student motivated activity over longer periods of time.

4. Each Advisor had a role distinct from the other. One focused on the explanation of game rules, and the overt translation of the materials aspect of games — ("If you were using this game with sixth graders, you might want to make it simpler by doing....") The other Advisor's contact with
participants was almost exclusively through asking questions about the math games they were working on, as well as laughing and joking more frequently. My impression was that this difference was unplanned, and reflected more a matter of personal preferences than model beliefs.

This led to my observations of their roles, some questions about their techniques and a brief discussion of the appropriate training time and vehicle for the model.

I commented on the number of questions Ellen asked participants, saying I wish I'd kept track, but it seemed to me that her communication was comprised entirely of these questions and of what seemed to me to be an effort to make people comfortable. I added that there seemed to be a clear differentiation between Advisor and participants as exemplified in Ellen's questions to them. I felt her questions were different from a participant's because her questions had authority and demanded an answer. She claimed she asked a question and walked away. That is, her perception was that she "left" participants with questions. Looking at John, Ellen said:

"Because you don't want to be and I don't want to be in that role of them (the participants) doing it because we told them to, I think I probably do behave in a rather peculiar way, in the sense that if I asked you, 'Does it matter if you go first or second' (in a game) I would bug you...

There was no feeling on my part that this Advisor behaved "peculiarly", but she kept insisting that she did.
until I got some response out of you ... but because I don't want to pressure them or I don't want to push them around, I ask the question and then leave them."

Perhaps it is too strong to call these behaviors antithetical; they are simply not explicated in the model. However, in regard to the observed "roles" Advisors played, they are both exhibiting behaviors which participants did not. Though participants could discuss with one another adaptations of curricula to different age levels and ask each other questions about strategy, it is unlikely that they would. Almost certainly they will not if that is not clearly stated as a goal of the workshop. If this was the case, these behaviors of Advisors are clearly a different order of "teaching" behavior than their other behaviors. And participants would clearly see a difference in the Advisors' teaching role and their "learning" role. Accordingly, if the goal of the model is to blur traditional teacher-pupil distinctions, does that goal admit that there are any distinctions worth preserving and how is that made clear in training? It is at the heart of the difficulties of open education that teachers, used to conceiving their jobs as managing, giving orders - being in control - suddenly don't know what they are supposed to do, even in the cases where they may most earnestly want to change.

An interview with the two Advisors was to occur later. I wrote down the following questions after my observation.

1. What is the purpose of the workshop?
2. What is its content, as you see it?

3. How would you describe your role?
   a. Why are there two people and are there role differences between you?
   b. How do you differentiate yourself from the participants?

4. What is the preparation for this workshop?
   a. What instructions did you give participants?
   b. How did it happen that certain people worked together?
   c. Why did some people remain working together?

5. On what basis did each instructor select the persons with which to spend time?

6. Participants seem to see their role as interacting rather than teaching each other. Do you see your roles this way also? How would you like the participants to perceive their role?

The purpose of the interview was to extract any conscious and/or shared consensus about teaching goals and techniques from these Advisors.

Three days later, I met with the two Advisors at their convenience. The way in which my questions were finally stated was much more informal than my list, partially

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3 In an ideal scheme, if there were consensus, I would meet with other Advisors in order to establish the degree and kind of consensus among the models' total pool of Advisory personnel.
because I had had lunch with John Tuchman and two of the EDC research staff after the workshop and also because Ellen Damson and I recalled that we had briefly attended the same college course two years previously. Overall, the interview was friendly, especially considering EDC is "research shy", so to speak, and that I was identified with a national evaluation. Both Advisors agreed the interview could be taped.

I introduced myself by explaining that I had collected data on implementation. After looking at the year long data, I had become wary that the instruments would be used without modifications or that people would say, "let's do this with our program". I considered the checklist as a beginning, but crude, effort. The instruments by nature presented every model as being fixed, which I didn't believe to be the case even for Kansas or Oregon. I had also thought sponsors might be somewhat unaware of some characteristics of their models. For example, models had been presented in terms of classroom behaviors and, quite obviously, that wasn't the only areas models covered. By talking with sponsors about training, I hoped to find ways to study implementation better. One area I wanted to investigate was staff development and that was my reason for observing and talking with them.
b. The interview: questions and answers

1. Necessary components to model training

Questions:

"Are there sequential things you ... do, let's say, in your workshops?"

-- "Are there things you feel you should cover, whether sequentially or not?"

-- "How did you introduce your workshop? What kind of direction did you give?"

The answers to these questions indicated that the workshops are not sequential. Some are for teachers as "adults" and others for teachers as "teachers". The teachers as "adults" emphasis came from observations of British schools where individual interests, hobbies and skills of teachers and administrators were very noticeable. It strengthened EDC's belief that "a richer human being in the classroom is somehow in the end a better teacher".

Some additional significant quotes during this part of the discussion were: (1) "There are two parts of the model: developing the classrooms and developing the Advisory. We never designed workshops dividing teachers by how their rooms look - sometimes for new teachers though... This one we just did." (2) "In my thinking about (the workshop). I was hoping that people would get interested in math kinds of activities and get a little bit excited about it, as

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4 The Advisory basically refers to the group of people that are Advisors. It also is used to refer to the methods Advisors employ.
sort of an initial step to what might happen in a classroom over a long period of time."

In an ideal process, these responses would be followed by discussions to further clarify the model's description. For example:

1. The notions of developing classrooms and developing the Advisory imply that there are sequences or steps toward achieving both open education classroom or a working Advisory. Though some of the behaviors of teachers and Advisors are included in the EDC checklist, they are not articulated in any step by step progression.

2. "How teachers' rooms look." This phrase of John Tuchman's indicates that kinds or amounts of materials may be a criteria for an open classroom that can be spelled out in greater detail.

3. Workshops are apparently not planned. If this is the case, how can the model show which model specifications it is training teachers to perform - i.e., for which model components can it guarantee some level of "delivery"?

4. The phrase "in my thinking about" is typical of the intense amount of personal involvement and private emphasis with which EDC staff members talk about their work.

I see nothing inherent in a model goal of "getting interested in math activities" such that staff and participants
could not become conscious of whether they reached this goal. However, the interview material suggested that explicitly setting a standard (even one of "getting interested") and asking teachers to consciously track their degree of interest was prohibited. This prohibition on explicit expectations was suggested with increasingly greater force during the course of the interview.

2. Workshop planning

Question: "Do you always try to elicit from the participants what some of the agenda for the workshop will be?"

Comments: This question arose because an initial advance schedule for the workshop had been made. The plan, which was mailed to participants, stated that the first few days would contain activities for "adults", (1) "you" (that is, the participants as adults) and then (2) "kids". Ellen outlined the second part of the schedule as containing:

Day 1: What goes on in participants' classrooms.
Day 2: Sharing of good things as well as problems.
Day 3: Talking about how to follow up certain activities.

She went on to mention that "we didn't get many problems raised by the workshop group" when they, the Advisors, had solicited them.

Ellen had enunciated a very clear training sequence. Participants are expected and encouraged to talk about their classrooms, a clear aspect of model implementation,
not now included in the current EDC checklist. The "certain" activities Ellen mentioned could probably be categorized across Advisors, by the principles with which Advisors select those activities to follow up. The fact that participants form part of the workshop agenda is another model aspect omitted in the current checklist. In a model like EDC, in which the implicit aspects of training are so important, training techniques become very important to describe.

3. Conscious training behaviors

Questions:
"Do you think of yourselves as having certain roles in the workshop that are either different or the same.

-- "Do you think of what you were doing as modeling?"

-- "Do you tell (participants), 'I'm modeling the behavior I want you to exhibit in the classroom ... why not? Is that because you don't think there should be any set expectations for children?'

Comments: These questions arose quite naturally from our discussion of planning workshops in which I felt we were beginning to touch on the modeling aspect of training. I persisted in questioning the Advisors on this topic. It was clear from their discussion of their roles that the rationale for the workshop was "exposure" to materials
around the subject of math. This, combined with the fact that individual interest and self-pacing are the style with which the learner is encouraged to interact with materials, results in Advisors modeling teaching behavior whether they intend to or not. However, though teacher-learner equality is a fairly conscious assumption on the part of Advisors, Advisors were neither aware of their own behavior or of each other's. The idea that modeling could be objectified and stated explicitly to participants as part of what the workshop was offering had not really occurred to them. They made these comments when I pointedly raised these questions:

Ellen: "We do the other half of that - we say (to participants) that's a tough problem for you" or "you get frustrated and kids sometimes do too." Though the parallel was drawn between participant's behavior in the workshop and children's behavior in school, she indicated that no attempt had been made to focus participants on the Advisor's teaching behavior in order that they identify with the Advisors as "teachers".

John felt they couldn't really model because the time allotted to workshops was too short. "People are here two days and go back to a community that says, 'what did you learn? Let me see it.' And that's where modeling breaks down. We feel anxious. They do."

To me, this part of the interview expressed very poignantly the difficulty of this model. Ellen had
demonstrated a very clear ability to analyze the range of problem-solving strategies she expected participants to use. But somehow to hold out a set of expectations toward which participants would work was perceived as a possible violation of the individual. I suppose the Advisors' fear is that "what if the participants (or children) fail?" Their failure may temporarily, or perhaps permanently, crush interest in learning. However, I think EDC has not weighed this fear against the boredom, frustration or more destructive responses of humiliation and/or confusion that can result from unclear expectations.

4. Outside of the format

Every model seems locked into training periods of no more than one week at the sponsor's headquarters. The funding of HSPV may partially account for this. However, no sponsor, to my knowledge, has attempted to get outside of this framework. It seemed clear to me after the EDC interview that a model requiring a great deal of information about individual learners and heavily relying on modeling as a training technique could not begin to accomplish its goals with such short training sequences. I wanted to know if these Advisors had thought about this problem, and how they might respond to it.

Question: "Do you think it is possible to develop, for this model, short training sequences that work? Or do you think you need a
longer training period (than you currently use)?”

Comments: I would say the Advisors were stymied by this. I had the impression that a greater length of time for training would be rather frightening. On the other hand, designing shorter training sequences or having the same training time with different goals raised the forbidden "explicit expectations" problem. We ground to a halt here.

c. Institutional communication

A tangential area of interest that arose were words or phrases that clearly had special connotations for the Advisors. In this interview they were "starting point", "instructor", and "crisis".

Providing workshop participants with a "starting point" was one function of the Advisor's role that both Advisors agreed upon. When I questioned them about the specific meaning of this phrase, one Advisor said, "the cards" meaning the 5" x 8" cards on which rules for the game were typed. It appeared this phrase only referred to materials and not to Advisor behavior or instructions.

"Instructor" was a word used with obvious negative connotations. The Advisor's answer to a request to describe an "instructor's" role was that an instructor had all the materials, demonstrated their use, did all the talking and stood up in front of a group. The Advisor had
said "we are not instructors" during our discussion of the role of Advisors in a workshop.

One of the Advisors was persistently critical (and by the same token apologetic and defensive) of her own behavior during the workshop. She described herself as doing what she had often observed some classroom teachers to do, moving from group to group, interacting in a superficial way with each one, asking a question and leaving, never sitting down or becoming involved with one person or group. She prefaced the entire interview by saying she was uncomfortable with the workshop participants, didn't know any of them, and had therefore acted in a way about which she was not sure she herself approved. She said she "never sat down ... I was just nervous ... kept myself ready to meet any crisis". When I asked what a "crisis" was and how frequently they occurred both Advisors cited examples of participants becoming overtly bored or leaving the room.

The language which conveys special meaning within the sponsor staff, but needs further explanation would probably appear in intensive studies of other models.5

The distinctive in-group communication of an organization could provide a rich source for the underlying

5 "Behavior analysis" a phrase associated with the Kansas model is a case in point. It does not convey what the meaning of behavior is, which behavior might be selected, what the purpose of analysis is, how it proceeds, what it includes, what its intended duration is, or when it is achieved. The phrase nicely suggests that there are answers to these questions.
sponsor assumptions of HSPV models. In some cases these assumptions may have broad and conscious ramifications in the sponsor's training and transmission efforts. On the other hand, and I believe this is the case with EDC, this special language (e.g., "starting point", "crisis") may simply be covert and unarticulated efforts at directive control.

The primary impression I received from the single cycle of training observation and interview of EDC sponsor staff was the absence of explicit communication in the training. My opinion is that EDC's working assumption is that involvement with materials is the true source of learning, both in training sessions and in model classrooms. As a corollary, it is the individual learner rather than the "teacher" who best knows his own pace and interests and, therefore, is the only suitable judge of where to begin, how long to work, and on what. In and of themselves, these assumptions represent a coherent position.

The difficulty for EDC is in presenting what they do as a model. This is partly a result of their participation in the Headstart and Follow Through experiments in which all programs are called models and therefore the expectation is for replication of model services and pupil outcomes.

A phrase used by the EDC staff to describe their style of work is "do your own thing". EDC encourages the teachers they train to "do your own thing" and would like
teachers to communicate this to children in turn. This "motto" for the model has several interesting repercussions:

1. There is no formal model message. (The motto militates against this.)

2. Hiring a member for EDC sponsor staff (Advisory) does not depend on the commitment of the applicant to any particular theory or familiarity with any set of skills. He or she simply must demonstrate an affinity for "open education", not a well-defined phenomenon.

3. "Do your own thing" militates against any sponsor staff agreement that might be possible. Being part of the staff means you are an individual and to demonstrate you are an individual requires that your procedures only minimally resemble those of another staff member.
2. The Kansas Observation

The Kansas observations were made in several centers in small towns in Texas which all formed a single Headstart program serving a population of predominantly Mexican-American and Black 3-4 year olds. The conditions of the observation of training for this model were somewhat different from those of EDC. The teachers attending the workshop at EDC had been working with the model for over a year and were "invited" by EDC (i.e., probably more or less required by their local administrators) to attend workshops. By contrast, Kansas was working with their group of teachers for the first year. Even more significantly, the Kansas teacher group had fully participated in electing to work with the model, a decision which was made by individual staffs at the center (school) level. Both the EDC and Kansas training sessions were at mid-year, however, and were, therefore, not introductory. The EDC observation took place in the sponsor's setting and was for teachers from different sites, while Kansas' occurred for teachers within one program at their own schools which were slightly scattered geographically.

The Kansas observations spanned three days, two of those spent at a different center in a different town. Mr. Walter Bannig, the Kansas staff member I observed, described the program as going "just like the books say it should". I observed Mr. Bannig in staff interactions of the following sort:
1. Social and formal interactions with the Headstart Director and Educational Consultant.

2. Making observations and giving feedback to teachers on an individual basis.

3. Heading a staff meeting at one center.

Each of these seemed typical of the Kansas activities in this community.

In a typical work day, Mr. Bannigg arrived at a center at around 9 o'clock, eating breakfast in the center kitchen or drinking coffee in the classroom, informally chatting with teachers which mixed social and "business" communications. After this, a sequence known as Earn-Spend, the heart of the Kansas program, would begin. To review briefly, "Earn" is a period (in these centers, 15 minutes) in which each teacher is assigned to work with (ideally) no more than 4 to 5 children on either reading, mathematics or "spelling" (with this age child, handwriting). Children are placed in these groups by ability (tests) and move within them at their own speed in programmed materials. During this time, work appropriate behaviors are "rewarded" by a combination of material rewards ("tokens", such as poker chips) and verbal praise. After an Earn Period, each child "exchanges" his tokens for one of a selection of activities that he can "afford". (Activities are priced differently.)

In observing the ongoing training of teachers, I pursued the same questions as I did with BDC. I attempted to
extract the model's emphasis as it was transmitted to teachers, assuming that the content stressed in training represents the true interests of the model. In general, all the Kansas training practices were directly related to model features and there were no substantial inconsistencies between training methods and the statement of the model.

Mr. Bannigg spent his time in classrooms observing one teacher for each Earn Period. He would sit close enough to hear but not to intrude on the teaching, taking notes on a pad. If the teacher's responsibilities permitted, he would go over these notes with the teacher immediately following the Earn Period. His notations would cover both correct and incorrect uses of teacher attention ("reinforcement") in the form of verbalizations or tokens. He answered questions teachers asked him before or after his observation, and his remarks always included both praise for what the teacher did well and identification of areas in which she needed improvement. "Spend" time was not observed nor were other parts of the program (e.g., rest and lunch), though the latter are not considered requirements of the model.

When Mr. Bannigg was free during the morning, he invited me to share my observations with him (most of which were written) which I did. I found his request pleasantly surprising, since in my years of observing many classrooms it is an implicit code that an individual's written observations are his own. Mr. Bannigg's request had
nothing rude or abrupt about it and it left me free to
refuse. His request was completely consonant with the
model's way of working with teachers. The agenda is clear.
There are no secrets and no parties with superior and/or
more complete information than others. Mr. Bannigg was
completely open to answering any and all of my questions
with involvement and interest but without the partisan edge
of a tense exchange between a believing practitioner and a
more neutral observer.

Though "tone" is impossible to convey adequately and
is highly subjective, this was another aspect of Mr.
Bannigg's dealings with the Headstart staff which were
impressive. I mentioned this particularly since the Kansas
model stirs unfavorable reactions in many persons who claim
it produces robots and see its proponents as cold
mechanics. Whether this is a characteristic of all Kansas
model personnel I can't say. But it was certainly not the
atmosphere created by Mr. Bannigg.

The only discrepancy between model statement and
training emphasis which I could find was one of degree
rather than kind. Most of the Kansas checklist components
refer to both Earn and Spend Periods. Spend seems

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6 This particular site visit was chosen as two Kansas staff
members were planning to train jointly. As I wanted to
pursue the notion of model consensus, developed in the EDC
visit, I chose this site over other possible ones. Plans
were changed at the last minute and only one trainer
arrived.
completely, in practice, rather than comparatively, unim-
portant. A portion of my interview with Mr. Bannigg on
this topic follows:

INTERVIEWER You discussed Earn with teachers (in giving
them feedback) more than anything else today. Is that usually the case?

MR. BANNIGG Yes.

I. What do you say to a teacher who brings you a
problem about Spend Period (gives example)?

W.B. I've always said you should be 24 hours a day
with the kids. But in terms of what (the
teacher's) role should be with those kids, I'm
not going to prescribe it ... Spend is the
time for kids to explore and for children to
interact with other children. That's my
position. I don't know if it's anybody
else's. I don't want kids left alone
entirely. I'm very clear on that one. A
teacher should be there to prevent problems.
But a good B.A. teacher in my book can still
take a very active role or a very passive
role.

I. Would you say you're more interested in Earn
than Spend? Do you consider it the heart of
the program?

W.B. (I guess you could say we have) a higher pre-
occupation with Earn, with emphasis on
Earn-Spend. We know socialization goes hand
in hand with academic preparation.

I. Do you ever observe Spend time and give feed-
back on it?

W.B. Do you mean take data? No. But we observe it
if it's not happening.

I. Is Earn dependent on Spend?

B.A., or Behavior Analysis is another name for the Kansas
model. Mr. Bannigg always referred to the model as B.A.
You could have Earn all day along - but I wouldn't do it.... The work is not that inherently reinforcing to (3 and 4 year olds). For some it might be, but for most it isn't. It (isn't) that much fun I don't think - I don't know what goes on in their minds, but this is my assumption.

Mr. Bannigg and I discussed extensively the design of teacher training that took place at Kansas; whether training sequences varied according to the experience of teachers, whether each sequence was invariant, and what the specific content of training was. His answers to these questions were clear and concise. The design of the initial training sequence was consistent with the model, including:

1. Observation of ongoing B.A. classrooms.
2. Introduction to the meaning of special language and concepts related to the model (e.g., reinforcement, contingent praise, punisher).
3. Familiarizing teachers with curriculum material.
4. Training teachers to use forms developed by Kansas.

During this sequence, teachers are required to pass written tests on the model, i.e., scoring 80% correct answers or better. If teachers do not pass, they are remediated (tutored) by a trainer until they do pass. Examples of test items Mr. Bannigg gave were questions whose answers would primarily involve memory skills.

In several ways during several conversations Mr. Bannigg stressed his belief that knowledge about appropriate social emotional behavior and/or development was not
available and for that reason the model could not legiti-
mately specify behaviors for those areas. We discussed the
basis of knowledge for appropriate work behaviors. We dis-
cussed whether Kansas would change its model if the current
curriculums of the majority of public schools and the
behaviors these schools required changed. That is, prepar-
ing a child for an open education setting would necessitate
that the model "token" for behaviors other than hand rais-
ing and "chair behavior" (staying seated in a chair when
asked). Though Kansas might still retain tokening for
attending to a task, a child's self-selection of a task
would be tokened in preference to teacher assigned tasks.
It is clear that Kansas designs its program to produce pub-
lic school behaviors in children. Justifying the focus of
the Kansas program by asserting there is knowledge of what
is appropriate content academically but not what is appro-
priate emotionally does not admit that school curricula and
behaviors are as arbitrary as social values. Kansas is
transmitting values to the extent that values are embodied
in public school practices and Kansas supports these with
its preferred method of teaching by reinforcement.

A critical aspect of the role this sponsor assumes in
relation to teachers was highlighted by an issue which
arose in a staff meeting between Mr. Bannigg and one
center's six teachers. It is a practice of the model to
set goals for teachers on each of the sponsor's visits.
The goals are usually stated in terms of the number of.
pages in a subject matter book which a group of students and their teacher will cover by the sponsor's next visit. A teacher in this staff meeting stated, partially humorously, that each time a goal was set she was always a little frightened she couldn't reach it. She added reluctantly that her reading group had not reached the page goal Kansas had set on its last visit and her group was currently "behind". Several other teachers presented different aspects of this same problem. One suggested that the goals be smaller increments of progress. Another asked, a bit offended but with great dignity and restraint, why there should be any goal at all since all teachers had "agreed to do their best" when the program started, thereby implying that was the sum total Kansas could get out of them by any standard. At Mr. Bannigg's invitation, I participated in this meeting. I asked why teachers could not set their own goals. Mr. Bannigg turned to the teacher who had initiated the discussion indicating that he wondered what her reaction was to that possibility. I would describe her smile and abrupt intake of breath as expressing her view of the ridiculousness and possibly blasphemous nature of such a suggestion. Mr. Bannigg's response was to discuss possible goal modifications according to children's progress, but he also stressed that modifications would be made in consultation with the sponsor. There was no indication that the sponsor would entirely relinquish control of the rate of child progress.
Later, Mr. Bannigg and I discussed this incident. I asked if he would ever consider forfeiting control of achievement goals. He replied negatively. This is entirely consonant with the model, since the model promises "delivery" of reading, writing, and numerical skills to a specific performance criteria. In order to deliver these skills, it needs a method of insuring that teachers meet the criteria. However, control of the rate of goal achievement poses problems as well. It assumes that teachers' internal motivation is either not a sufficient condition and/or not an innate one, and they will consequently not achieve goals without a system of external criteria and rewards. This assumption affects most strongly those teachers whose prototype at the staff meeting reminded Mr. Bannigg that she had agreed to do her best when she started the program. The question we raised was whether a model with a production standard can allow for different styles of meeting that standard, a question which, quite obviously, applies as well to other models. For example, EDC's lack of explicitness does not account for those teachers who work better under the condition of being told what's expected, or those who, even though they divine what is expected, find a circumspect training presentation simply irritating. The conditions under which

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8 The model makes identical assumptions in regard to children.
individual teachers perform at their best is a question which any educational scheme should address sooner or later.

A "working" definition of the Kansas model based on the interviews and observations reported here would vary only slightly from the current HSPV checklist. The kinds of changes we could explore are listed below, and most of the modifications of the instrument would be in the direction of expanding current content:

1. **Current HSPV item**: "The staff trainer assumes most of the training and implementation functions during the second year."
   **Revision**: A more complete statement of "training and implementation" functions, when they are to occur and under what sets of conditions.

2. **Current HSPV item**: "Teachers consistently use token and social reinforcement in relation to curriculum work."
   **Revision**: The meaning of "consistent", the range of behaviors that can receive tokens, and appropriate social reinforcement need to be completely explicated.

The latter is a key item and one which any Observer should have a much more explicit set of standards by which to judge classrooms.
C. The Models Compared

There are several interesting comparisons between these two models: the written statements of each model; how persons define the model; the framework of beliefs within which the model works; and finally, the form in which information is presented to trainees.

Kansas and EDC are diametrically opposed in their written statements. Kansas stresses limited goals (i.e., definite, specific, and circumscribed). Children must perform to specific criteria in reading, arithmetic, and writing. It is difficult to summarize anything about EDC since the model does not present itself in a concise form. Accordingly, any attempt by outside parties to describe the model raises the fear of misrepresentation. My statements about EDC must, therefore, contain the qualification "in my opinion". The major technique teachers employ in the Kansas model is token reinforcement. EDC, on the other hand, had sweeping goals for children: that they be happy, increase their feelings of self-esteem, enjoy work, etc. EDC implies that teachers do not learn and employ techniques to accomplish these goals, but rather they must embody a set of values and, by so doing, will promote desirable qualities in children. In the Kansas model, the vehicle for achieving goals is academic, teachers assign material which children learn through several techniques of reinforcement for which Kansas trains teachers. For EDC the vehicle is self-selected by children. Materials are
exploratory and open-ended in nature. (E.g., there isn't one way to go, or one solution in building with blocks.) Tasks are self-set. In Kansas classrooms teachers say "now we are going to do X" and children move (usually in a group) through pages in a workbook. EDC teachers are not directed by the model to behave in this way. Primarily, they assist children in working on what children choose to work on.

The foregoing is, of course, a stark presentation of each model. As EDC allows far more personal variation in teacher style, perhaps this description oversimplifies their approach. However, given the nature of each model's goals and the vehicles for achieving it, I will briefly summarize some further contrasting categories between these models, which, in my opinion, characterize as well as separate them.

<table>
<thead>
<tr>
<th>EDC</th>
<th>KANSAS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>I: Model Role in Relation to Classrooms</td>
<td>A. Assists persons.</td>
</tr>
<tr>
<td></td>
<td>B. Works with givens.</td>
</tr>
<tr>
<td>II: Beliefs of Models</td>
<td>A. Behavior can be influenced to some degree.</td>
</tr>
</tbody>
</table>
Children have a basic desire to learn.

Children know when they are learning. Learning proceeds at individual rates in different areas. Children are learning all the time.

Vehicles for Learning

Teachers provide a setting which is rich with materials on which children can act. Teachers both assist and do not "get in the way" of children.

Adult attention, both in the form of social and concrete rewards, is necessary to achieve learning.

The teacher training of each of these models clearly reflects this extremely different approach toward children and learning. Kansas assumes that, initially, the teacher knows nothing about the model and cannot perform the model appropriately. Accordingly, all teachers are taken through identical training sequences. They are taught new techniques of working with children, instructed in how to fill our certain model forms which chart progress of individual children, and taught new terms for their behaviors, a kind of special model language. The content of Kansas, (reading, writing, and arithmetic), is familiar. By contrast,
EPC works with a kind of content and teacher behavior which is unfamiliar to teachers.

EPC requires that teachers reduce, if not relinquish, their authority to direct the actions of children. They also implicitly ask teachers to accept the notion that children can often better select materials and discover ideas for themselves than teachers would for them. In my opinion, EPC is asking that teachers give up some of the very attractions their careers may have held for some of them: the ability to direct groups of people (relatively unchallenged) and to "know what is best" for another individual. In addition to this, EPC would like teachers to acquire new behaviors, but is not explicit about what these are. My hypothesis is that the approach tends either to immobilize some teachers, or to make them very angry and frustrated.

These two training observations clarified the real emphases of the models and produced more useful information than our former efforts.
VI. SUMMARY AND CONCLUSION

The work we did with the RDC and Kansas models seemed superior to our former work. It gave us insight into the model greater than that provided from the data alone and, in effect, produced better model descriptions.

We think the ideal design for a study of implementation has two components: first, an adequate description of the intervention; second, an informative evaluation. We would like to suggest the steps in such a process.

A. Toward An Adequate Description

Our work for the HSPV instruments relied on two assumptions: that the sponsor as an individual could fully and adequately represent the theoretical model, and that a written statement about the model was sufficient. We were in error on both counts. The steps we would outline for future descriptive work are as follows:

1. The source for a model description

An effort on the scale of HSPV requires that sponsors have staff members who help them transmit the model. Therefore, multiple persons are actually responsible for a statement of the theoretical model. As this is the case, to work with a sponsor alone is insufficient. A true and complete model description must reflect the composite view of the total training staff.
2. How the description is created

Asking sponsor staff members to discuss and agree on their view of a model is difficult. We also think that discussions produce a picture of the model different from that based on discussions, in this case the training content staff communicates. For this reason we would follow the procedure we used with EDC and Kansas—observing training sessions from which a description based on consensual staff agreement can be extracted.

3. Jurisdiction over final model descriptions

Our experience taught us that sponsors and their staff were sometimes unaware of important features of their own model (for example, Florida's staff, predominantly white males, was understandably ignorant of the sex/race composition of other models' staffs.) In large experiments such as HSPV, evaluation personnel are the only persons who have the opportunity to create a meaningful general context for work involving all models. Though a description of an intervention clearly must be rooted in the joint effort of evaluators and sponsors, a final description should be the responsibility of evaluation. An in-house product would lack the perspective gained by the evaluation from the overall context of the experiment.

For formative work with educational interventions, evaluation personnel need extensive program experience and a tolerant, non-punitive attitude toward the descriptive development task.
B. Toward An Adequate Evaluation Of Implementation

1. The need for formative evaluation

HSPV is only one of many "experiments" that supposedly test the relative effects of educational programs. Realistically, there is a considerable press to "market" new programs, and thus testing and evaluation often occur prior to adequate program development. Under such conditions, it is simply unrealistic to approach evaluation summatively since there is no definite and "final" product to assess. For this reason, we suggest that in such experiments, evaluation perform primarily a formative function.

A model description would be part of a more encompassing task: tracking model development, explicating the rationale for changes in content, and staffing and documenting subsequent program development.

We think the resulting account would be an extremely useful document for program developers as well as adopters.

2. The use of summative evaluation

Summative evaluation would be a step taken only after models were clearly developed and concretized. Measurement is a relatively easy task with respect to Group II models because in our experience they prefer concrete descriptions. Therefore, a clear instrument can be constructed, evaluators adequately trained, and reliable data produced.

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In this regard some HSPV sponsors were quite candid about their model stating it was unstable during the first year and/or changed during the course of the experiment.
Measurement problems are of a different order of magnitude for Group I models, however. Even if, as we have argued, they can be adequately described, Group I models would seem to require a summative evaluation considerably different from that used for Group II models. For Group I models it seems to us more appropriate to "immerse" the evaluators in many experiences which exemplify the models. Rather than making a series of separate judgments about individual model components, evaluators would rate these models globally.

C. A Final Question

Two of the practical purposes of the evaluation of educational programs-in general, and of their implementation in particular, are to provide consumers—school systems, teachers, parents—with (1) some notion of how good the product is when measured against a chosen set of standards, and (2) whether or not the program delivers what it promises. We are not at all sure, however, if the central reasons consumers adopt programs have much to do with either issue. For example, communities which prefer Group I models may make their choice on the freedom of content and/or style which these models allow teachers and children. Evaluation does not perform its most useful role if its task is rigidly viewed as a summative one in such an educational experiment. The nature of the decisions made by program adopters may be more frequently based upon the values a program communicates than any evaluation.
whether formative or summative. This is a limitation to the entire endeavor which evaluation must ultimately respect and which it cannot really effectively address.
APPENDIX A

ANCILLARY TABLES

Table A-1
Straight Percentage Agreement on Rating of Classes Between Observer Pairs: Sister-Site Visits

Table IV
Sponsor Weighting of Checklist Items

List of Classes Included and Excluded from the Data Analysis

Bank Street
EDC
Far West
High-Scope
REC
University of Arizona
University of Florida
University of Kansas
University of Oregon
University of Pittsburgh
## TABLE A-1

### Straight Percentage Agreement on Rating of Classes Between Observer Pairs: Sister-Site Visits

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SITE</th>
<th>average reliability across classes</th>
<th>class 1</th>
<th>class 2</th>
<th>class 3</th>
<th>class 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Street</td>
<td>B.</td>
<td>.40</td>
<td>43</td>
<td>39</td>
<td>35</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>C.</td>
<td>.49</td>
<td>//////</td>
<td>40</td>
<td>45</td>
<td>63</td>
</tr>
<tr>
<td>EDC</td>
<td>B.</td>
<td>.44</td>
<td>30</td>
<td>45</td>
<td>54</td>
<td>42</td>
</tr>
<tr>
<td>Far West</td>
<td>B.</td>
<td>.29</td>
<td>37</td>
<td>29</td>
<td>21</td>
<td>.54</td>
</tr>
<tr>
<td></td>
<td>C.</td>
<td>.56</td>
<td>33</td>
<td>.60</td>
<td>.63</td>
<td>.48</td>
</tr>
<tr>
<td>High Scope</td>
<td>A.</td>
<td>.57</td>
<td>.47</td>
<td>68</td>
<td>.58</td>
<td>.54</td>
</tr>
<tr>
<td></td>
<td>C.</td>
<td>.47</td>
<td>.49</td>
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<td>//////</td>
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</tr>
<tr>
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<tr>
<td>Univ. of Florida</td>
<td>B.</td>
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<td>//////</td>
<td>//////</td>
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<tr>
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<td>D.</td>
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////// - no observation

Omitting items not rated by consultants from total.
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<td>&quot;some-what important to model implementation&quot;</td>
<td>&quot;not basic to model implementation&quot;</td>
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<tr>
<td>(36 items)</td>
<td>(118)</td>
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<td>(1)</td>
<td>(0)</td>
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<td>(47 items)</td>
<td>(15)</td>
<td>(0)</td>
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<tr>
<td>High Scope</td>
<td>.53</td>
<td>.39</td>
<td>.08</td>
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<tr>
<td>(59 items)</td>
<td>(31)</td>
<td>(23)</td>
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<td>REC</td>
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<td>(40)</td>
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*Bank Street's February checklist revision contained 128 items; 36 of these items were identical to items in Bank Street's original checklist. These 36 identical items are the ones used in all data analyses.
## LIST OF CLASSES INCLUDED AND EXCLUDED FROM THE DATA ANALYSIS

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<th>Total Number Classes in Data</th>
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</table>

A - Less than two months of comparisons.
B - Special circumstances, class enrollment doubled.
C - Observer has reported difficulty with checklist.
D - Special criteria for Florida analysis required that the best and worst observation of each PE be selected. Therefore, if a PE were observed only once, they were automatically not eligible for the analysis.
**V-A**

**MODEL:** Bank Street

**SITE:** D

### CHECKLIST ITEMS

| Classroom Code | II | III | III | I  | I  | I  | I  | I  | I  | I  | IV | V  | V  | V  | V  | V  | V  | V  | V  | Median |
|----------------|----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| Code           | B,4| A,2 | A,4 | A,2| A,12| B,4| B,10| B,11| B,12| B,17| C,5| C,4| A,5| A,1| A,6| C,3| D,3|    | Class Rating |
| 2              | 2  | 2   | 2   | 2  | 3   | 2  | 2   | 3   | 3   | 3   | 3   | 2   | 1   | 2   | 1   | 4   | 1   | 2     |
| 3              | 3  | 2   | 2   | 2   | 3   | 2   | 2   | 3   | 3   | 3   | 2   | 2   | 1   | 2   | 1   | 4   | 1   | 2     |
| 4              | 3  | 3   | 2   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 2   | 2   | 1   | 2   | 1   | 4   | 1   | 3     |
| 5              | 3  | 2   | 2   | 2   | 3   | 2   | 2   | 3   | 3   | 2   | 2   | 2   | 1   | 2   | 1   | 4   | 1   | 2     |

**Median Item Rating:** 3 2 2 2 2 3 2 2 3 3 3 2 2 2 1 2 1 4 1
### V-B

**MODEL:** EDC

**SITE:** B

#### CHECKLIST ITEMS

| Class- | I | I | I | II | I | III | IV | IV | IV | III | III | III | III | III | III | V | V | V | Median |
|--------|---|---|---|----|---|-----|----|----|----|-----|-----|-----|-----|-----|----|---|---|---| Class |
| Code   | 2 | 8 | 175 | 20 | 2 | f | 18 | 6 | 12 | 1 | f | 2 | b | 4 | 7 | a | b | c | d | Rating |
| 1      | 2 | 3 | 3 | 2 | x | 3 | 4 | 3 | x | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | x4 | x3 | x3 | 3 |
| 2      | 4 | 4 | x | 4 | x | 3 | 4 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | x4 | x3 | x3 | 4 |
| 3      | 4 | 4 | 4 | 4 | 3 | 3 | 5 | 4 | x | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | x4 | x3 | x3 | 4 |
| 4      | 2 | 3 | 3 | 2 | 4 | 3 | 3 | 4 | 3 | x | 4 | 3 | 4 | 4 | 4 | 4 | 4 | x4 | x3 | x3 | 3 |
| Median | 3 | 5 | 4 | 3 | 3 | 4 | 3.5 | x | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | x4 | x3 | x3 | 3 |

**Item Rating**
MODEL: Far West

SITE: A

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<th>III</th>
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Median Item Rating:
3 3 3.5 2.5 2.5 3 4 3 2.5 3 2.5 2.5 x x
**MODEL:** High-Scope

**SITE:** B

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Median Item Rating: 3.5 3 3 4 2.5 2 2.5 2 2 2.5 2.5 2 2 1 1 1
### V-E

**MODEL:** REC

**SITE:** A

#### CHECKLIST ITEMS

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**Median Item Rating:**

- 2.5
- 3.5
- 2.5
- 3.5
- 3
- 3
- x
- x
MODEL: University of Florida

SITE: C

### CHECKLIST ITEMS

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Median Item Rating

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MODEL: University of Kansas

SITE: B

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MODEL: University of Oregon

SITE: A

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Median Item Rating

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*Note: Ratings are taken from visit before last visit explanation appears in the text.
**V-J**

**MODEL:** University of Pittsburgh  
**SITE:** A

### CHECKLIST ITEMS

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APPENDIX B

THE IMPLEMENTATION CHECKLISTS

Appendix B: Checklists

Bank Street B-1
EDC B-19
Far West B-31
High-Scope B-36
REC B-48
The University of Arizona B-55
The University of Florida B-62
The University of Kansas B-66
The University of Oregon B-70
The University of Pittsburgh B-74
BANK STREET (February Revision)
MODEL IMPLEMENTATION CHECKLIST: 1971-1972

KEY 1=Specification not at all implemented
2=Specification implemented to some extent
3=Specification implemented to a great extent
4=Fully implemented
5=Beyond technical implementation
X=No opportunity to observe

I. LEARNING-TEACHING BEHAVIOR

A. Children's Behavior

1. Children move freely but purposefully among many interest areas.  
   1 2 3 4 X

2. Children demonstrate active participation in their own learning through self-initiated expression and through seeking more understanding of facts, ideas and processes.  
   1 2 3 4 X

3. Children make choices among activities and are able to act upon them.  
   1 2 3 4 X

4. Children select materials that are appropriate to the activity.  
   1 2 3 4 X

5. Children appear to find their activities satisfying.  
   1 2 3 4 X

6. Children show persistence in pursuing a given task.  
   1 2 3 4 X

7. Children generally observe agreed upon limits to their behavior.  
   1 2 3 4 X

8. Children carry through steps in working with materials, i.e.: taking out, using and putting them away in designated locations.  
   1 2 3 4 X
9. Children show some degree of understanding of the identity, characteristics, function, category and relationships of objects and persons.

10. Children show interest in probing, discovering, experimenting and analyzing the outcome of their experimentation.

11. Children organize their ideas, reason, plan and solve problems.

12. Children exercise the freedom to express feelings, spontaneously.

B. Adult Behavior

1. The adult is supportive of exploration and questioning.

2. The adult provides opportunities for skill development.

3. The adult stimulates and encourages creativity.

4. The adult challenges and supports problem solving and coping behavior.

5. The adult shows respect for children's ideas and helps them clarify and extend their thinking.

6. Adults show concern for rights and feelings of children.

7. The adults help children to evaluate their own behavior and its consequences for themselves and others.

*This item may require interview rather than observation alone.
8. The adults plan limits with the children - limits which are rational, understood, and acceptable.

9. Inappropriate behavior is not dealt with by censure but is redirected.

10. The adults take into account each child's interests, strengths, weaknesses, and learning styles in developing individualized curriculum.

11. The adults encourage children to work cooperatively and to interact in many ways with one another.

12. Adults encourage children to describe out-of-school experiences, and show interest in the child's whole life.

13. Adults expect and acknowledge task completion when the task is appropriate to the child's age and capacity.

14. Adults record and place displays of children's language and art work prominently and with respect.

15. The adults places displays at child's eye level.

16. Adults change displays frequently to reflect children's changing interests.

17. Each adult provides a role model with which the children may make positive identification.

See page 2.
18. The staff helps to create an open relaxed, active atmosphere in class.

19. Adults encourage children to plan their own work without adult interference but become involved in their activities as needed.

20. Adults provide opportunities for child-to-child interaction.

C. Interaction in Classroom - (Use Key on first page)
(Child-adult, child-child, adult-adult)


2. Children interact, cooperate and share ideas and material with other children.

3. A teacher and two assistants share the operational responsibilities of the classroom equally.

3a. The diagnosis and prescriptive responsibilities are primarily responsibilities of the teacher.

4. Suggestions from the assistants are sought by the teacher and there is joint planning of each day's activities.

4. There is continuing interaction, sharing of information and insights, and mutuality of goals between teaching staff and ancillary staff (such as nurses, family workers and guidance personnel) with the latter observing and sometimes participating.

*See page 2.
Parents interact with children and adults in terms of children's learning, as the parents' participate in the classroom and on trips.

There is one-to-one conferencing between parents and teachers concerning the learning needs of individual children. (Interaction with other local staff and the community is described under the section on sponsor's delivery system.)

II. LEARNING ENVIRONMENT

A. Organizational

1. The schedule includes work and play periods, both indoors and outdoors, naps, snacks, and luncheons, which are all treated as active learning periods.

2. Field trips occur once or twice a week, usually within the school or the neighborhood.

3. Children's groupings are flexible so as to provide maximum opportunity for choice and mobility, with the exception of a few formal, structured groups, such as meeting time (or circle time) and transition time. Meeting time may be for the whole group or a small group.

4. Most activities, whether formal or informal, are carried out in small groups or individually.

*See page 2.
5. Teachers and aides move from group to group during the day as needed.

6. Lunch is served family style, i.e., in small groups, with the children serving themselves.


B. Physical

1. The classroom is structured and ordered to provide defined areas within which children work and play with materials appropriate for each interest center.

2. Materials are located so that children know where they are and can reach them readily.

3. Materials and equipment are planned, rotated, replenished and changed as the need arises.

4. There is emphasis upon use of natural materials within the child's own environment, and child-made, teacher-made and parent-made materials and equipment, as well as commercial items.

5. Materials are appropriate to the age level, such as including large blocks for motor activity and water, sand and clay for sensory activities.

6. The interest areas are separated from the main activity of traffic.

7. There is a protected area with a minimum of interruption for a child or group desiring to engage in a quiet activity.
8. There is private space for each child's own things.  

9. Adequate storage space is available and storage equipment is often used as room dividers.

C. Social-Emotional

1. Children convey a sense of joy as they work in the room.  

2. There is awareness of children's feelings, in a way of the primary causes for doing or not doing things with one another.  

3. Adults express their own feelings, in a way that is natural but also geared to children's understanding.  

4. Most children show sympathy for other children when they are in trouble, rather than ridicule or teasing.  

5. Most children show friendliness and warmth toward other children.  

6. Most children seem relaxed and comfortable instead of tense, suspicious or fearful.  

7. Children express feelings of approval or disapproval openly, naturally in a milieu of acceptance.  

8. Children's efforts at inner control and mastery of their own world are recognized and encouraged.
III. CURRICULUM

A. Basic Principles Undergirding Specific Activities*

1. Curriculum is differentiated and particularized, i.e., it reflects the individual goals, interests and needs of children.

2. Curriculum is structured according to basic educational principles but is completely flexible in response to the developmental stages of the children, their evolving competencies, and opportunities for learning as they arise in each situation.

3. Curriculum moves from the concrete to the conceptual, through first-hand experiences the meaning of which is clarified for and with the children.

4. The curriculum is based upon the adult's study of how each child organizes and reinterprets his experience through "play" and his own choice of activities.

5. Curriculum is relevant to life styles of families and community.

6. The curriculum reinforces and extends the adult's supportive interaction with children aimed to develop positive feelings about self.

7. Curriculum planning is a team operation with the teacher primarily responsible and accountable for its effectiveness but drawing upon the knowledge and insights of both paraprofessionals and ancillary staff.

*This whole category may require interview rather than observation alone.
8. Curriculum is directed toward cognitive and affective growth in constant interaction.

9. Curriculum provides for motor and sensory experiences for independent investigation for problem-solving and for the development of concepts such as sequential ordering, symbolic representation, categorizing, spatial and time relationships, identifying characteristics, functions, and a wide variety of relationships among objects and persons. (The results of these curriculum emphases are delineated under the sections on Child Behavior I, 17.

10. The activities and materials are centered around various themes such as: home (cooking, household chores); environmental studies (rocks, soil, plants, etc.); creative expression (blocks, dramatic play, music, art, etc.).

B. Language

1. Language, both written and spoken, surrounds the child throughout work and play periods.

2. Language activities include stories read to and by children, experiences dictated and illustrated by children, experience charts, name cards, labelling and frequent free discussion periods.

3. Resources for such activities are drawn from books, pictures, films, and various
other media as well as the children's own experiences at home, in school and in organized field trips.

4. Language is learned as a useful pleasurable tool.

5. The curriculum develops not only basic skills but also competencies at a higher level including the creative use of language in self-expression.

6. A wide variety of commercial materials are creatively adapted to the Bank Street Approach.

C. Math

1. Math also pervades the school day and numerical concepts are related functionally to everything that happens in the classroom.

2. Math is learned through planned activities which are clearly applicable to the "here and now" of the child's world.

3. Math activities include use of manipulative materials such as cuisenaire rods, differentiated by age level and individual competencies.

4. There is continuing practical application in such areas as cooking, block building, field trips, taking attendance, measuring, weighing, care of animals, and in relation to time and space.

5. Specific skills are learned sequentially while gradually exposing the child to more complex concepts and mathematical experiences.
D. Environmental Studies

1. The curriculum moves from themes of home and school into exploration of the neighborhood and finally the broader environment, in terms of both time and space.

2. As in other aspects of the curriculum there is a constant tuning into the child's interest and building with him environmental studies that will seem both important and pleasurable to him.

3. Trips to the immediate community include exploration of food, housing, transportation, public services, and particularly the people who provide such services.

4. Environmental studies include both the physical and social sciences as they relate to one another and also in their discrete aspects.

5. Studies of the physical environment are rich in raw materials, such as water, wind, ice, plants, animals and in experimentation with scientific procedure such as growing plants, feeding animals, and the transformation of ingredients during the cooking process.

E. Art, Music, Dramatic Play

1. Creative experiences are both planned and spontaneous and like other aspects of the curriculum are integrated into the totality of the child's learning.

2. Musical activities include rhythm, use of musical
instruments, singing (structured or spontaneous) and listening to music in various forms as played by staff, parents and invited guests as well as through records and tapes.

3. Art is also both spontaneously expressive through finger painting, murals, easel painting, and interpretive of art created by others as seen in books, pictures, museums, displays.

4. Dramatic play is viewed not only as a valued outlet for the child himself but also as one of the most important diagnostic tools for the adults' insights into children's genuine feelings, anxieties, strengths, and potential for development.

---

IV. SPONSOR'S DELIVERY SYSTEM*

A. Commitments of Sponsor and Community

1. The Sponsor has developed a theory on Early Childhood Education. The Sponsor has and is developing a practical program for individualization which involves interpretation, stimulation, and staff development to enable the community to put the approach into practice.

2. The contractual relationship assumes that the community has a genuine interest in the primary schools serving a population of poor children and that it will support the efforts of the sponsor administratively.

*All categories under Section IV may require interview rather than observation alone.
B. Interpretation and Assistance in Implementation

1. The Director of the Bank Street program maintains a continuing relationship as both consultant and catalyst in all areas of the program: administrative, educational, supportive services, parent involvement, and community relations.

2. An Associate Director coordinates Program Analysis and another Associate Director gives priority to coordinating the Head Start Program.

3. The Sponsor assigns a continuing field representative to each project who not only interprets the sponsor's approach but also works with local staff and parents in its implementation.

4. The Sponsor provides specialists in specific areas as resource persons on-site and at the College.

5. The Sponsor provides interpretive materials such as working papers, curriculum guides, self-study forms, questionnaires, reports, staff evaluational forms, and various media such as films, carousels, videotapes, as well as Bank Street published materials including basal readers, discovery materials and language stimulation materials.

C. Staff Development

1. The Sponsor conducts institutes and workshops at Bank Street for Directors, principals and other administrative personnel in the system, staff developers,
teaching teams, parents ancillary staff.

These institutes include observation of the Demonstration School for Children, visits to N.Y.C. Follow Through program in P.S. 243, and other educational experiments in the New York area as well as seminars, individual consultations and team planning.

2. The Sponsor assists local staff in developing on-site institutes and workshops covering the same type of personnel but including all local individuals in the respective categories. These institutes are held before the school year begins and throughout the year as needed. They cover educational support for each component, assistance in diagnostic teaching with emphasis on psychological, social and parent liaison services as supportive of teaching, and the development of new ways of assessing individual child growth along many dimensions.

3. There is continuing emphasis upon supporting and extending team work throughout both institutes and consulting service: including team work:
   a) between administrative and program personnel;
   b) between field representatives and staff developers;
   c) between staff developers and teaching teams;
   d) within the teaching team;
   e) between all of the above and ancillary staff; and
   f) with and among parents.

4. The consultant services of field representative, resource
persons and central Bank Street staff are viewed as an essential component of the circular process of staff development. The Sponsor provides input to the community, considers feedback from the community and eventually plans jointly with the community to meet differentiated needs with continuing support and guidance.

5. The Sponsor organized courses for the teaching personnel and parents with academic credit to further Career Development.

D. Program Analysis

1. Teachers are using instruments for systematic classroom observation which are designed not only to assess progress toward implementation of the Bank Street Approach but also to strengthen self-analysis and staff development.

V. PARENT INVOLVEMENT*

A. In Children's Learning

1. Parents are encouraged to participate in the school's learning activities, such as helping with story time, field trips, cooking, and making materials.

2. Parents who participate are invited to conference with the teaching team so as to share thoughts, feelings and ideas about program and children.

*All categories under Section V may require interview rather than observation alone.
3. Special skills and talents of parents are searched out and utilized in the classroom, to enrich the curriculum and to enhance the positive feelings about self for both parents and children.

4. Parent and teacher enter into one-to-one conferencing around the learning needs of each parent's child or children, in which the teacher learns from and with the parent about a specific child.

5. Parents and teachers cooperate in planning out-of-school reinforcement of what children are doing and learning in school, which is facilitated by home visits by both the teaching teams and ancillary staff.

6. Parents develop and/or use checklist for classroom observation, i.e., what to look for in a Bank Street-sponsored classroom.

B. In Decision-Making Through PC (Policy Committee)

1. Parents are involved in decision-making through the appropriate representation and responsibility in policy-making boards.

2. The nature and scope of such decisions are determined by the extent to which parents understand and participate in the school's program and also by the stage of organization and functioning which the policy board has reached.

3. Parents are encouraged and assisted when such assistance is desired, in organizing their policy board, in such matters as by-laws,
contracts, committee structure and program planning.

C. In Self-Development

1. Parents participate in study groups often initiated by parents themselves. 1 2 3 4 X

2. Parents' workshops are designed to further interpretation of the Sponsor's Approach to Early Childhood Education and the school's implementation of the model. 1 2 3 4 X

3. Parents are being trained to interview each other, using the new Questionnaire for Parents. 1 2 3 4 X

4. Parents who have actively involved the above mentioned activities interpret the model and the school's educational goals to other parents. 1 2 3 4 X

5. Parents may enroll in courses for high school equivalency or for undergraduate credit, particularly those who are employed as paraprofessionals. 1 2 3 4 X

D. In School-Related Social Activities

1. Parents plan and conduct social activities for parents themselves. 1 2 3 4 X

2. Parents assist in planning and conducting children's social activities such as end-of-year functions, birthday parties, holiday festivals, which bring the ethnic culture of the child into the school. 1 2 3 4 X

3. In some communities a special room or house may be set aside for the use of parents, which is often used for
educational and community activities as well as for the primary social function.

E. In Community Action

1. Parents participate in existing Community Action programs which affect directly or indirectly their children's learnings.

2. In some communities the Head Start parents spearhead new programs and create new organizations.

3. Head Start parents cooperate with Follow Through parents in the above mentioned activities.

4. Parents interpret the program not only to other parents but also to the broader community.
MODEL IMPLEMENTATION CHECKLIST

E.D.C.

OVERALL INSTRUCTIONS

I. Look for change; At the end of the year if a program has changed more, regardless of where it began at the start of the year, this counts more for our model than a program which has stayed at the same stage of growth.

II. Children's behavior is the most sensitive indication of the success of the program. The support from the administration is more diagnostic about the health of the program than looking directly at teacher's behavior. Though the teacher's role is central to the program, what she does will be reflected more accurately by the children's behavior than by observing her behavior directly for one day. In addition, what she can or can't do and how much growth she makes, is largely influenced by policies and actions of the administration.

III. The consultant probably won't see enough to evaluate on all items during each visit, but the expectation is that it will be possible to check more items with more certainty as the year progresses and the consultant becomes more familiar with the project.

IV. These items do not necessarily represent the more important aspects of the program but are the most easily observed.

EDC Evaluation Policy

Unshared evaluation reports are contrary to the whole spirit and approach of open education. Any check list which is used as an observation guide has little value unless the observations are shared with the persons observed (in this case both the staff in the communities and the EDC advisors). If implementation of our program is a desirable goal, for either research purposes or for the staff, parents and children whom we serve, then feedback from trained professionals must be readily available. Indeed, the Planned Variation Head Start review panel has recommended that the consultants reports be shared.

*Check-list is to be used only by Lydia Richards, Dan Oglivie, Camay Brooks.
Limitations concerning EDC Planned Variation Head Start Check-List

(1) The items have not been pretested as no time was allowed for this.

(2) Training in use of the check-list was minimal due to both lack of time and funds.

(3) Because of the above limitations we cannot recommend any summing of items to give overall ratings on people or parts of the program; nor can we recommend this check-list being used for research purposes. It should be useful only as a guide to a sensitive observer making professional judgments.

(4) Individual items are too easily misunderstood. For this reason, the check-list is to be used only by those consultants who have been briefed on the items by an EDC advisor.

Margaret deRivera
Research Director
EDC Open Education Project
FAR WEST (December Revision)
MODEL IMPLEMENTATION CHECKLIST: 1971-1972

KEY 1=Specification not at all implemented
2=Specification implemented to some extent
3=Specification implemented to a great extent
4=Fully implemented

I. ORGANIZATION

A. Some of the following are present: listening posts, tape recorders, language masters, typewriters and phonographs. 1 2 3 4

B. There are a variety of dressup clothes and blocks. 1 2 3 4

C. There are an adequate number of books present in use on approved list, i.e., for the child's level. 1 2 3 4

D. Toys in the room are especially designed or can be used to teach basic skills or concepts. 1 2 3 4

E. There is at least one location that is designed to teach a concept available in the classroom that is near a flow pattern. 1 2 3 4

F. The reading area is a quiet place to read. 1 2 3 4

G. Children's materials are in evidence in the room visually and physically accessible. 1 2 3 4

H. There is an art area. 1 2 3 4

I. The room is arranged to encourage flow of children to different centers. 1 2 3 4

J. A plan for the day is posted or accessible. 1 2 3 4

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# II. TEACHER BEHAVIOR

**A.** Teachers observe children as they work.

- 1
- 2
- 3
- 4
- 5
- X

**B.** Teachers do not routinely interrupt children with teacher-initiated activities.

- 1
- 2
- 3
- 4
- 5
- X

**C.** Teachers circulate among children as they work.

- 1
- 2
- 3
- 4
- 5
- X

**D.** Teachers see play as a spontaneous opportunity for learning and use play as an opportunity for teaching.

- 1
- 2
- 3
- 4
- 5
- X

**E.** There is little visible difference in the responsibilities taken by the teacher and the aide.

- 1
- 2
- 3
- 4
- 5
- X

**F.** The teacher and the aide share teaching learning duties.

- 1
- 2
- 3
- 4
- 5
- X

**G.** Teachers give children freedom to come and go in large group activities.

- 1
- 2
- 3
- 4
- 5
- X

**H.** Teachers direct early program work toward basic concepts such as color, position, and relation.

- 1
- 2
- 3
- 4
- 5
- X

*Please briefly note under starred items the evidence with which you made the rating.*
I. Teachers accept child’s speech, and may expand or restate it.

J. Teachers use resource material from the Lab.

K. Teachers visit with each child’s family if there is time available.

*L. Teachers provide for experiences that are self-rewarding for children.

M. Teachers provide for experiences which allow children to engage in a variety of problem-solving activities.

*N. Teachers provide for the development of self-esteem (for example, a child’s picture will appear next to his cubicle).

O. Teachers use positive redirection as the major technique for handling inappropriate behavior.

P. Teachers are responding verbally to children.

Q. Teachers ask questions that require more than a yes or no answer.

*R. Over 1/2 of the teacher’s time is spent either with individual children or in small groups.

*See page 2.
III. CHILD BEHAVIOR

A. Children are usually either in individual or small group activities set up by the teacher and chosen by children 75% of the time. 1 2 3 4 X

B. Children move at their own pace in most of the activities they engage in. 1 2 3 4 X

C. Children are exploring materials and learning centers designed to teach specific concepts. 1 2 3 4 X

D. Children are involved in experiences that are self-rewarding. 1 2 3 4 X

E. Children initiate conversation and ask questions 60% of the time to both peers and adults. 1 2 3 4 X

F. Children are frequently involved in a variety of experiences that provide for problem solving. 1 2 3 4 X

G. Children are solving a variety of problems: some are personal interactional problems and some are physical. 1 2 3 4 X

H. Children are taking reasonable risks of failure in problem solving. 1 2 3 4 X

I. Children show evidence of developing self-esteem. 1 2 3 4 X

J. Children seek out and use constructive criticism of their work. 1 2 3 4 X

*See page 2.
K. Children take credit for accomplishments and responsibility for failures.

L. Children are neither consistently aggressive or submissive in relationships with other individuals but children can cooperate with peers and adults.

M. Children express themselves frequently in verbal and nonverbal forms.

N. Children maximize use of their own and other available resources to solve problems.

O. Children can concentrate and are not easily distracted.

P. Children require little external control.

Q. Children accept others, and interact with them.

R. Children cope well with their own emotions.

S. Children are observant, noting differences and likenesses.

T. Children do things for the internal satisfaction of doing them rather than through external reward or punishment.

*See page 2.
HIGH SCOPE (January Revision)*
MODEL IMPLEMENTATION CHECKLIST: 1971-1972

KEY 1=Specification not at all implemented
2=Specification implemented to some extent
3=Specification implemented to a great extent
4=Technically implemented

I. ORGANIZATION

A. The room is divided into several areas or interest centers. For example: Block Area, Art Area, Housekeeping Area, Quiet Area. 

B. Equipment is stored in the area where it will be used. Similar items are stored together. The contents of shelves and drawers are labeled with pictures. 

C. Planning Boards represent the areas of the room. 

D. Bulletin boards, planning boards, storage cabinets, etc., are at the child's eye level. 

E. There are many real things in the classroom, not just models, toys and pictures. 

*Ideally, the specifications of this model are intended to appear during the entire school day, when not otherwise specified. 

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II. TEACHER'S ROLE AND RESPONSIBILITIES

A. Routines

1. During planning time, the teacher discusses the daily routine and helps children to make individual plans about where they will work and what they will do.

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   *2. During work time, the teacher assists children who are working in the various areas, helps them to carry out their plans and make new ones when they have finished.

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   3. The teacher converses with children rather than "directing" them or "lecturing" them. (Teacher and child are both participating and listening to one another.)

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   *4. During cleanup, the teacher lets the children do most of the work.

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1The use of the work teachers means each member of the paid teaching group. Responsibilities are shared by this group.

*When a starred item appears please briefly note the evidence with which you made the rating under that item.
5. The teacher reviews with the children what they have done during work time at each area, talking about how plans have been carried out and discussing what might be done the next day. (Underline items observed.)

6. During group time, the teacher divides the children into groups so that each adult in the classroom leads a small number of children in a pre-planned activity focused on some aspect of the curriculum.

7. At transitions between one period of the day and another, the teachers let the children know what part of the routine is next and sometimes give the children special and enjoyable ways to move from one area to another.

8. The routine is consistent from day to day.

9. At activity time, during which there is vigorous outdoor or indoor play, the teachers use this as an opportunity to implement goals of the curriculum.

B. Active Learning

1. The teachers encourage the active manipulation and exploration of the things in the classroom. Examples: a) The teachers show the children how to use all of the senses in investigating

*See page 2.
something new; b) the teachers plan activities which involve children in physical movement; and c) the teachers help children to experience new concepts with their bodies, not merely in words. (Underline those examples observed or write additions.)

*2. The teachers let children discover relations and principles for themselves, not always telling them in advance what to expect.

C. Using Language as a Tool for Thinking

1. The teachers converse in a pleasant way with children.

2. The teachers use divergent questions (questions with many "right" answers).

3. The teachers encourage children to express their ideas in words.

4. The teachers encourage children to speak among themselves as well as with the teacher and other adults in the room.

5. The teachers are a model for children in the use of language. The fact that teachers use a lot of language is the key emphasis. They respond to and expand children's remarks, but do not "correct" their grammar, dialect, or pronunciation.

*See page 2.
*6. The teachers help children learn new words for things and relations, describing for the child what he is doing if he himself cannot yet put this into words.

D. Sequencing Activities from Concrete to Abstract According to the Levels of Representation

1. The teachers begin a learning sequence or a theme with a concrete experience (the object level) - not a representational one.

2. The teachers encourage children to use and investigate real things in many ways. Examples:
   a) The teachers help children learn to identify smell, taste, imprints, etc.; b) the teachers help children identify objects which are partially hidden or have parts missing.
   (Underline those examples or write additions.)

3. The teachers help children distinguish between real objects and representations. Examples: a) The teachers help children to represent objects, events and relationships through pictures, construction of models, and use of toy models; and b) the teachers represent experiences with children through imitation and socio-dramatic play. They help them use and find "props" for make-believe.
   (Underline those examples observed or write

*See page 2.
additions.)

4. The teachers help the child to become familiar with the purpose of written language and its relationship to spoken language. Writing and reading are ways of recording ideas and that written language stands for spoken language. At the preschool level there is no drilling on the mechanics of reading and writing.

E. Temporal Relations

1. The teachers help children to learn to remember the past, anticipate the future, and describe the order of events in time. Examples: a) The teachers help children to experience and label the beginning and ending of time intervals: using signals, timers, start and stop games; b) the teachers help children to complete what they have begun; c) the teachers organize activities which enable children to experience the movement of themselves and objects at various rates of speed and over different distances; and d) the teachers postpone the use of clocks and calendars until the children understand the more basic concepts of time which do not involve measurement and representation. (Underline those examples observed or write additions.)
F. Spatial Relations

1. The teachers help children to look at things from different spatial viewpoints. Examples: a) The teachers help children to find out how things fit together, how they look when turned, folded, twisted, tied, stacked, stretched, etc.; and b) the teachers help children to describe in words the position, direction of movement, and distance of things and people.

2. The teachers help the children to interpret and make symbolic representations (such as pictures and models) of the way things are arranged in space. Examples: a) The teachers help children learn about how their bodies are put together and get them to move in different ways and to find out what can be done with the various body parts; and b) the teachers call the attention of the children to where things are located in the classroom, school and neighborhood. (Underline examples observed or write additions.)

G. Classification

1. The teachers encourage children to investigate the uses and attributes of things: (what you can do with them, where

*See page 2.*
they are found, how they appear to different senses).

2. The teachers help children to notice and describe similarities and differences among objects; for example, helping children to sort similar objects into groups, both in prede
termined ways as when they put away classroom materials at cleanup time, and in ways they suggest.

3. The teachers describe an object or sort a set of objects in several different ways, and help children learn to do this.

H. Seriation

1. The teachers provide materials which can be arranged in order along some dimension, for example, helping children to compare two things along some dimension and to arrange several things in order or matching one ordered set of objects with another.

I. Number Concepts

1. The teachers help children to compare quantities of "continuous" materials like water or clay.

2. The teachers give children sets of distinct objects like buttons or beads to arrange and re-arrange.

*See page 2.
3. The teachers show children how to compare the number of items in two sets by matching them up in one-to-one correspondence.

4. The teachers help children match a spoken number to an object as they count, counting each object once and only once.

5. The teachers postpone the use of written numerals until later grades when the children will have attained conservation of number.

J. Using Themes or Units

1. The teacher plans themes or units which are consistent with the curriculum and implement curriculum goals.

2. The teacher uses the three following general themes throughout the year:
   a) The child himself: his unique characteristics (name, appearance, belongings, cubby or locker, symbol, family. The things he has done and made, learned and achieved); b) the classroom and the things in it; and c) the community: the people and places that can be visited on a field trip. The changes which may be directly observed due to seasons and holidays. (Underline those examples observed.)
K. Planning and Evaluating Every Day

1. The teacher writes up daily plans which incorporate curriculum goals and activities which will implement those goals. (These may not necessarily be visible, but the teacher should have made some brief notes.)

2. The teacher observes the responses of individual children to activities and materials, evaluating each activity and keeping notes on individual children.

3. The teachers plan as a total team.

---

III. HOME-SCHOOL CONTACTS

A. The teachers explain the purpose of home visits to parents and establish a cordial relationship with the parents.

B. The teachers involve the mother or father and the child in an activity using materials available at home.

C. The teachers use activities to illustrate goals and methods of the cognitive curriculum.

D. The teachers suggest ways that parents can initiate learning activities in the home, supporting the goals of the classroom curriculum.
IV. WORK WITH VOLUNTEERS

A. The teachers carefully explain curriculum goals and activities for the day to volunteers.

B. The teachers make sure volunteers are familiar with the basic routines and procedures of the classroom.

C. The teachers provide experiences for volunteers which include interacting with children individually or in small groups, not just performing janitorial tasks.

D. The teachers communicate to volunteers how much they are appreciated, how well they are doing, and provide helpful suggestions to them.

---

KEY
1=Not at all
2=To some extent
3=To a great extent
4=Completely

V. CHILD BEHAVIOR

*A. Children are actively exploring and manipulating things.

B. Children choose their own activities.

C. During planning time children tell or act out one activity they plan to do in their chosen work area.

D. There is much child initiated conversation toward teachers during the entire session.

---

1 If this information is not easily available through casual inquiry, rate items X.

*See page 2.
E. There is much child initiated conversation toward other children.

F. Children define their own activities in the four areas (Art, Large Motor, Housekeeping & Quiet) only during work time.

G. Children use their symbols to represent their choices during work time.

H. Children take the responsibility for cleanup time. (Teachers and children may do this together or children may do it alone.)
REC (February Revision)
MODEL IMPLEMENTATION CHECKLIST:

KEY 1=Specification not at all implemented
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3=Specification implemented to a great extent
4=Fully implemented
X=No opportunity to make a judgment

I. ORGANIZATION
A. Materials and Activities

1. Basic activities are language arts, construction and building, art, math, and housekeeping. 1 2 3 4

2. The "Talking Page" is used either every day or every other day. 1 2 3 4

3. There are a number of books in the classroom. Some are storybooks for children, others resource books for teachers. 1 2 3 4

4. Materials are attractively arranged and within easy reach of children. 1 2 3 4

5. Assortment and arrangement of materials is occasionally varied to stimulate exploration and experimentation. 1 2 3 4 X

6. Home learning units comprised of selected materials with learning guides are taken home roughly every 4-6 weeks. The first unit is shown to parents during registration and taken home shortly after the beginning of the school year. 1 2 3 4 X

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7. Children are encouraged to use voice mirrors without direct supervision by an adult.

8. Classroom materials meet one or more of the model's criteria, including: being open-ended, self-correcting, actively involves child, involves as many senses as possible, related to achieving objectives of model.

B. Space

1. The room is clearly defined through use of shelving, tables, and partitions, into work areas to encourage self-service. Quiet areas are separated from noisy ones.

2. The environment is one in which children can learn through play and use of manipulative materials meeting model's criteria.

3. The classroom stimulates children to explore on their own.

4. Children are able to flow from one area to another during the time when children choose activities freely.

5. 1/2 to 2/3 of the room is carpeted.

6. The functional learning areas of the room include the Talking Page, Library, number concepts, construction, Art, water play, housekeeping, role playing, open space.

7. Seating arrangement is spontaneous rather than assigned.

C. Staffing

1. Each class has one teacher and one aide working with the children. Parent volunteers are optional but desirable.
2. There is a special time for math in three or four small groups with an adult. (Number of groups will depend on whether parents or other volunteers are available.)

3. Lunch and recess occur at regular times each day. Math occurs at fairly regular times, but there is much more flexibility.

4. Not all activities occur each day.

5. The schedule is flexible.

II. CHILDREN'S BEHAVIOR

A. Children work freely and independently. 1 2 3 4

B. Children work in spontaneously formed groups. 1 2 3 4

C. Children rarely work in teacher-directed large groups. 1 2 3 4

D. Children choose activities and materials freely 25%-50% of the time. 1 2 3 4

*E. Children show evidence of a positive self-image. 1 2 3 4

*F. Children experience success at their own pace. 1 2 3 4

G. Children during free choice time are doing what they wish, sometimes alone, sometimes in small groups. 1 2 3 4

H. Children spend less or roughly the same amount of time in whole-class and large-group instruction as in small groups, one-to-one instruction and free choice activities. 1 2 3 4

*Please briefly note anecdotal evidence with which rating was made underneath starred items.
I. When children have a problem they solve it themselves.  1 2 3 4

J. Children actively seek and select what they will do.  1 2 3 4

*K. Children seem to know what to do in the classroom.  1 2 3 4

L. Children seldom argue or fight.  1 2 3 4

M. Disruptive behavior seldom occurs in the classroom.  1 2 3 4

N. When there is disruptive behavior of any kind, it is handled by the teacher or aide in a positive manner by discussing the matter quietly and/or redirecting the child to another activity.  1 2 3 4

*O. Children use adults appropriately to help in problem solving.  1 2 3 4

P. Children volunteer to help adults in classroom tasks.  1 2 3 4

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KEY 1=Specification not at all implemented
   2=Specification implemented to some extent
   3=Specification implemented to a great extent
   4=Technically implemented
   5=Beyond technical implementation
   X=No opportunity to make a judgment

III. TEACHING ROLE AND RESPONSIBILITIES

A. Responsibilities shared by the teaching team

1. During free choice time, the adults observe children in order to select those who will benefit from 1-1 or small...

   a 1 2 3 4 5 X
   b 1 2 3 4 5 X

*See page 3.
group instruction. Adults may also consult records to determine which children need help in specific areas.

2. The adults work with small groups to introduce the Talking Page during activity time. Lessons are usually introduced in a group context, with the child having opportunities later to go through the material - or previously introduced material - on his own.

3. The adult follows up and reinforces children who choose the Talking Page lesson of the day as an activity. Children may also repeat favorite materials they have had at an earlier time.

4. The adults sit down with one child at a time to go over the Talking Page progress check when a child has finished a Talking Page Book.

5. Adults help children to move from one activity to another when appropriate.

6. Adults encourage children to help themselves.

7. Adults allow children to risk failure to learn to do things for themselves.

8. Adults elicit as much language as possible from the children, and try to place equal emphasis on productive
language (speaking) and receptive language (listening).

B. Responsibilities which are primarily the teacher's role but which may be delegated by her when appropriate

*1. The teacher is a catalyst by providing the next logical step in the learning process. This means that, as frequently as possible, when appropriate, the teacher joins children as they work in self-chosen activities and uses language or suggests activities which will help a child understand a skill or concept related to his activity.

   - 1 2 3 4 5
   - a 1 2 3 4 5
   - b 1 2 3 4 5

2. When deciding to join a child, the teacher attempts to be sensitive to the child's wishes and feelings and does not intervene when it seems more appropriate to let the child continue working alone.

   - 1 2 3 4 5
   - a 1 2 3 4 5
   - b 1 2 3 4 5

*3. The teacher provides an individualized program.

   - 1 2 3 4 5
   - a 1 2 3 4 5
   - b 1 2 3 4 5

*4. The teacher makes changes within each learning area of the classroom several times a year, reflecting levels of work ability and interests of children.

   - 1 2 3 4 5
   - a 1 2 3 4 5
   - b 1 2 3 4 5

*5. The teacher follows up with children who need special help.

   - 1 2 3 4 5
   - a 1 2 3 4 5
   - b 1 2 3 4 5

*See page 3.
6. The teacher keeps daily records on each child in a notebook on the Talking Page. Aides may assist in record-keeping.

7. Before the home learning kit is sent home, the activities are done in the classroom, usually organized and conducted by the teacher, though aides and volunteers may participate.

C. Matters for decision of head teacher only

1. The teacher decides when to provide reading activities for those children who have advanced to that level, as determined by the completion of the Talking Page Pre-Reading Program.

2. The teacher provides for ethnic differences among the children, especially through selection of materials.

3. When conducting activities requiring curricula or materials not specifically supplied by REC, the teacher sequences activities so that concepts or skills move from simple to more complex, and from concrete to more abstract, according to guidelines supplied in REC in-service workshops.

*See page 3.
# UNIVERSITY OF ARIZONA (November Revision)

MODEL IMPLEMENTATION CHECKLIST: 1971-1972

**KEY**

1 = Specification not at all implemented
2 = Specification implemented to some extent
3 = Specification implemented to a great extent
4 = Technically implemented
5 = Beyond technical implementation
X = No opportunity to observe specification

## I. PROFESSIONAL RESPONSE

### A. The Teacher and Aide Continually Try to Develop Children's Language

1. The teacher accepts the child's language.  
   - a 1 2 3 4 5  
   - b 1 2 3 4 5

2. The teacher gives "corrective feedback" wherever applicable so that there has been modeling of an acceptable way to say something.  
   - 1 2 3 4 5  
   - a 1 2 3 4 5  
   - b 1 2 3 4 5

*3. The teacher expands the child's language whenever possible to provide more complex sentences patterns, more definitive adjectives and more speech variety. This is done by modeling.*

   - 1 2 3 4 5  
   - a 1 2 3 4 5  
   - b 1 2 3 4 5

### B. The Teacher Tries to Help the Child Develop the Motivational Base Necessary to Function in Society

1. The teacher provides, when possible, options for pupils to make choices.  
   - 1 2 3 4 5  
   - a 1 2 3 4 5  
   - b 1 2 3 4 5

2. The teacher provides options by having a wide range of materials available.  
   - 1 2 3 4 5  
   - a 1 2 3 4 5  
   - b 1 2 3 4 5

*When a starred item appears, please briefly note under the item the evidence with which you made the rating.*
3. The teacher provides options by verbally posing selections for children.

4. The teacher provides options by displaying an attitude that assured children that the choices, both physical and verbal, are indeed acceptable.

5. The teacher reinforces verbally and by means of arranging the environment.

6. The teacher provides success oriented activities relevant to children's experiences, interests and needs.

7. The teacher helps children accept and respect those social restraints necessary, e.g., that there should be no spitting, hitting, etc.

C. The Teacher Uses a Variety of Methods to Foster the Development of Intellectual Skills

1. The teacher uses intellectual kits and open-ended questioning to lift the level of child response.

2. The teacher asks questions that invite children to feel, see, sense and discriminate characteristics of materials.

3. The teacher asks questions that require children to recall and categorize previously stored knowledge.

*See page 1.
4. The teacher asks questions that will encourage pupils to adapt knowledge of the present situation to another situation past or future.

5. The teacher encourages students to judge, evaluate, predict, and is slow to give information.

D. The Teacher Includes the Societal Art Skills in Natural Learning Settings

1. The teacher values the child's language and uses it in teaching learning skills.

2. The teacher provides a wide variety of materials for math manipulation and exploration.

3. The teacher encourages a child's self-selection of reading materials.

4. The teacher provides many opportunities for children to explore and manipulate all art media and many kinds of writing materials.

E. The Teacher and the Aide Mediate the Environment as the Child/Children Interact With the Environmental Activities

1. The teacher explains reasons for actions, e.g., in a cooking experience she labels equipment and talks about the procedures and changes that occur during the experience.

2. The teacher stimulates language facility by mediating the environment through frequent use of open-ended questions.
they mutually explore the learning environment.

II. PROCESS VARIABLES

A. The Teacher is Orchestrated

1. The teacher interaction is planned to include development of any or all of the societal art skills, provide language development, stimulate intellectual growth and to develop positive attitudes about learning.

2. The learning that the teachers provides is not limited to the label given a center.

B. The Teacher Considers Herself a Model and Realizes That Much Learning Will be Gained by Imitation

*1. The teacher provides opportunities for peer imitation.

2. The teacher provides opportunities for adult imitation.

C. The Teacher Uses Reinforcement to Bring About Behavior Change

*1. The teacher praises and identifies the behavior that is being singled out for praise.

2. The teacher reinforces to sustain acceptable behavior.

*See page 1.
D. The Teacher Provides Individualization on Her Records and General Assessment of the Needs

1. The teacher bases her individualization on her records and general assessment of the needs of children.

2. The teacher takes care of some individual needs by providing an abundance of materials that develop the same skill.

*3. The teacher further individualizes by understanding the pupils abilities, by accepting different levels of performance as shown by her attitude as she interacts with different pupils.

III. TRAINING

A. During on-site monthly visits, the field representatives train program assistants. This training is done by modeling and small group discussions, as well as other strategies.

B. The program assistants plan and evaluate with and model for teachers.

C. The program assistants conduct periodic in-service workshops for teachers, aides, and other staff.

1If there is no opportunity to observe training rate, all items X.

*See page 1.
IV. ENVIRONMENT IN THE TEEM CLASSROOM

A. The materials are attractive and easily accessible.  

B. The room is divided into interest centers using tables and chairs for small groups or independent work (committees).  

C. There is an expectation for each child to be responsible for his involvement in a center.  

D. The math area includes a variety of materials; such things as clocks, measuring cups, scales, liquid measures, beads, cuisinaire rods, counting frames, rulers, blocks, and any other type of materials that the teacher knows can be used to develop math concepts. (Underline observed example.)  

E. The reading center has many books. (Underline observed examples.)  

1. Children dictated books.  

2. Trade books, including many picture books.  


4. The range of interest and difficulty is expected to be wide.  


F. There is a place for children to store their own personal materials.  

KEY 1=Specification not at all implemented  
2=Specification implemented to some extent  
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4=Fully implemented
*G. There is a rich reading environment including dictated children's language, labels, invitations to learn about specific centers and work walls.

H. Many materials that invite exploration and manipulation as well as skill development, such as intellectual kits.

*See page 1.
UNIVERSITY OF FLORIDA (December Revision)
MODEL IMPLEMENTATION CHECKLIST: 1971-1972

KEY 1=Specification not at all implemented
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5=Beyond technical implementation

CLASS CODE

I. RESPONSIBILITIES OF STAFF AND P.A.C.

A. There are weekly home visits made by parent educators, two for each class. These visits occur during days, evenings or weekends. 1 2 3 4 5

B. The P.E. and the teacher work together to develop tasks for mothers to give to children. (However, tasks can also be designated by the policy committee.) 1 2 3 4 5

C. P.E.'s from different classes usually give different tasks due to individual nature of children and programs. However, some tasks for children are the same based on similarities among children. 1 2 3 4 5

D. There is always one parent educator in the classroom. 1 2 3 4 5

E. The P.E. is the primary person who has contact with the "mothering one". 1 2 3 4 5

F. There is no stipulated classroom curriculum. 1 2 3 4 5

G. P.A.C. to be involved in operation of models (e.g., assist in hiring P.E.'s and teachers, making decisions regarding curriculum and tasks.) 1 2 3 4 5

H. The P.E. is a paraprofessional hired locally. 1 2 3 4 5
II. GIVING THE TASK

A. Teacher, P.E., mothers and children must know reason for task.
   12345

B. Tasks adapted to children's needs and abilities.
   12345

C. The procedural aspects of giving a task are:
   12345
   1. The P.E. has a friendly but businesslike exchange with the mothering one before starting the task.
   12345
   2. The task is to be role-played between the mothering one and P.E.
   12345
   3. The mothering one is asked to repeat the task.
   12345
   4. Records of P.E. home visits are completed on the day of the visit.
   12345
   5. The parent educator explains to the mother why the task is to be performed.
   12345
   6. The P.E. is alert to the parents' problems.
   12345
   7. The P.E. knows community resources and informs the parents of them appropriately.
   12345

D. There are 7 desirable teaching behaviors to take place between the P.E. and mothering one.
   1. The P.E. gets the mothering one (M.O.) to ask questions.
      12345
   2. The P.E. asks M.O. questions that have more than one answer.
      12345
3. The P.E. get the M.O. to use complete sentences when answering questions.

4. The P.E. uses praise and encouragement when the M.O. does well.

5. The P.E. gets the M.O. to make choices on the basis of evidence or standards.

6. The P.E. gives the M.O. time to think about the task.

7. The P.E. introduces the task and lets the M.O. become familiar with it before teaching it to the M.O.

E. The following components of a good task are present:

1. The M.O. does a lot of talking: she tells about things, gives reasons, asks questions, tells you why, what, where, how.

2. The M.O. has fun doing it.

3. The directions are clear.

4. The P.E. and the M.O. understand why they're doing the task.

5. The task encourages the P.E. to use a lot of ways to teach and the M.O. to try different ways to do it.

6. If possible, home materials are used.

7. The M.O. knows she has learned something. She can see it right away and feels good about it.

8. The M.O. is encouraged to think up new activities or things to do which grow out of the task.

F. Mothers are asked for suggestions for future tasks.
G. Tasks are adapted to children's needs and abilities.

H. The P.E. evaluates her own progress with the Parent Educator Weekly Reporter.

I. P.E.'s take ideas from home to school.
I. ORGANIZATION

A. Curriculum & Materials

1. Curricular areas are math, reading, and handwriting. (However, many acceptable materials fall under the "readiness" category, for example, the Concept Builders, Peabody materials, and Frostig materials which are utilized.)

2. All children can have experience in each of the three basic curriculum areas once a day during "earn" periods.

3. Prescribed curricular materials are in use. Behavior Analysis Phonics Primer which leads into Sullivan; Sets and Numbers by Singer; Concept Builders by New Century, Inc.; and Behavior Analysis Handwriting leading into Write and See by Skinner and Krakower.

4. Prescribed curricular activities take place in groups of 4-6. It can be less. (The adult to child ratio is 1:4 or 1:5.)

5. Tutoring is almost always 1 to 1.

6. An EFI machine is in use in each location.

7. Children wear aprons with token pockets during earn periods.
B. Schedule

1. The daily schedule can alternate between 2-4 earn periods and 2-4 exchange periods. (During field trips and other special occasions there is no earn/exchange.)

2. Work periods are approximately 10 minutes at the beginning of the school year, gradually increasing over the year with an acceptable range of 15 to 40 minutes.

3. Exchange periods vary from 10 to 45 minutes.

4. Per cent of the day to be devoted to the academic areas should be about 15 per-cent (although the range of acceptance is from 15 to 30 per cent.)

5. There is outdoor play at least once a day (preferably as a back up).

6. There is music/dramatic play at least once a week.

C. Staff

1. The permanent classroom staff is composed of a Head Teacher, a para professional and a parent aide - plus the services of a Parent Trainer and the Staff Trainer.

2. The Staff Trainer assumes most of the training and implementation functions during the second year.

3. The Parent Trainer trains all new parents in the program as well as providing follow-up of the initial training.

4. Parents are rotated a 6 week intervals in each class so as many as seven different parents can work in one classroom during the year.
II. TEACHER TECHNIQUE, RESPONSIBILITIES AND TRAINING

A. Techniques

1. Teachers consistently use token and social reinforcement in relation to curriculum work.  
   - 1 2 3 4 5  
     a 1 2 3 4 5  
     b 1 2 3 4 5

2. Teachers use tokens only during earn periods.  
   - 1 2 3 4 5  
     a 1 2 3 4 5  
     b 1 2 3 4 5

*3. Teachers use positive reinforcement all day.  
   - 1 2 3 4 5  
     a 1 2 3 4 5  
     b 1 2 3 4 5

4. The token system is always accompanied by positive verbal reinforcement, contingently delivered.  
   - 1 2 3 4 5  
     a 1 2 3 4 5  
     b 1 2 3 4 5

*5. Teachers understand the subtleties of the use of positive reinforcement.  
   (E.g., she uses tokens and praise contingently, doesn't nag or make errors in praise or tokens. Her children are on task 90% + of the time.)  
   - 1 2 3 4 5  
     a 1 2 3 4 5  
     b ? 3 4 5

*6. Teachers correct incorrect responses by means of modeling or prompting.  
   - 1 2 3 4 5  
     a 1 2 3 4 5  
     b 1 2 3 4 5

*7. Teachers interact with the children as much as possible during the spend time by playing or interacting with the children.  
   - 1 2 3 4 5  
     a 1 2 3 4 5  
     b 1 2 3 4 5

*Please briefly note under starred items the evidence with which you made the rating.
8. Time-outs are the only means utilized to handle classroom behavior problems if the teacher has attempted ignoring (extinction) and it has not sufficed.

B. Training

1. Staff at all levels participate in a one week training workshop early in the program.

2. Teachers are video taped at least once a month.

3. Daily Observation by the trained observer is an essential part of the ongoing training. The teacher observed receives feedback the same day from the trained observer.

4. Each site receives a 1 week visit per month from a Kansas consultant.

5. The Sponsor has established specific goals to be met for the classrooms by the next site visit. These goals are posted for all to see.

6. One person from each class has an opportunity to attend the Lawrence Training Center for one week of practicum experience in the latest techniques of Behavior Analysis during the year.

7. Parents receive an orientation program at the beginning of the year and before each rotation of the parents.

*See page 3.
I. MATERIALS AND ORGANIZATION

A. Teachers and aides are following a 1
schedule including 1 1/2 hours devoted to
basic skill using Distar materials,
time for snack, lunch, hygiene, recess,
and art activities.

B. Each teacher or aide teaches each child
one lesson each day in the reading,
arithmetic and language parts of the
Distar materials.

C. Teachers and aides, are beginning and
ending Distar lessons on time.

D. Teachers and aides are assigned perma-
nently to specific instructional areas.

E. One fourth of the day is allotted to
children's self-selection of activities.

F. Three or more instructional groups of
4-9 children have been formed, on the
basis of pretesting by teacher and
aides.

G. Records are kept of the continuous
progress of each group in each sub-
ject.

H. Provision is made for tutoring any
child requiring additional instruction
on any subject by the teacher or aide
who teaches that subject.

I. Teachers and aides effectively utilize
"free time" when children enter on the

(© Copyright 1971. Dr. Norval L. Bernstein/The Huron Institute)
J. Teachers and aides participate in weekly in-service sessions.

Number of school days since last consultant site visit:

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<tr>
<th>APHREDOIC</th>
<th>READING</th>
<th>LANGUAGE</th>
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<tbody>
<tr>
<td>Top Group</td>
<td>Top Group</td>
<td>Top Group</td>
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<td>Middle Group</td>
<td>Middle Group</td>
<td>Middle Group</td>
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<tr>
<td>Low Group</td>
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Day in program (page number of group on last visit):

Day in program (page number of group on present visit):

Difference in page numbers between last and present visits:

II. FORMAL INSTRUCTIONAL PERIODS

A. Teacher Preparation and Presentation

1. Teachers know format of lesson and look down at book only for examples.

2. Teachers are properly using signals to get attention and ensure responding by all children at once.

3. Teachers use correct terminology.

4. Teachers do not vary from format unless otherwise specified by the consultant and/or curriculum supervisor.

...
5. Teachers demonstrate ability to extend concepts through the use of their exemplars and concrete materials.

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6. Teachers vary pacing to suit the needs of the children or the situation.

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7. Teachers are properly diagnosing causes of error and employing appropriate correction paradigms.

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8. Teachers have all materials on hand and clearly marked to assure continuous flow of lesson.

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9. Teachers are adequately employing individual tasks.

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10. Provision is made for the completion of Take-Homes in each subject area during small-group instruction and distribution of Take-Homes to the children before they are dismissed.

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11. Teachers are accomplishing criterion learning within 3-6 days on all new motor skills and within 2 days on all other new skills.

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B. Control and Reinforcement

1. Each teacher uses systematic, positive reinforcement wherever possible in working with children.

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2. Teacher is consistent in ignoring off-task behavior as much as possible.

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3. Whenever necessary, teachers are able to apply systematic behavior...
UNIVERSITY OF PITTSBURGH
MODEL IMPLEMENTATION CHECKLIST: 1971-1972

KEY 1=Specification not at all implemented
     2=Specification implemented to some extent
     3=Specification implemented to a great extent
     4=Fully implemented

I. ORGANIZATION

A. The staff consists of one teacher and one teacher aid. Staff members rotate responsibilities of a) testing and tutoring and b) "traveling".

B. There are two main components to the schedule: a prescribed learning activity period and an exploratory learning activity period.

C. There is no time line between the two periods, although usually the first period is from 30-45 minutes long and exploratory learning ends around the second hour of the day.

D. During the Exploratory Learning Period the following activities are available:
   exploration activities in subject areas such as math, language arts, reading and writing, social studies and science, as well as non-subject matter related areas such as blocks, construction, sand, water play, sociodramatic play, housekeeping, games, developmental toys, art and a listening corner with stories or music in the form of tape or records. (All of these areas should appear on a regular basis.)

E. Group time is an informal general time for conversation between members of the class and teachers, that is, teacher to child and child to teacher.

*Please briefly note additional evidence with which sample is made up, in it's original form.*
F. Materials are organized in the room according to various learning centers; for example, one would find the prescribed exploratory learning materials for math in the math area.

G. Teaching materials for prescribed learning are clearly labeled so that children can find them. They are keyed to the objectives included in each of the curriculum areas.

II. CHILD BEHAVIOR

* A. Children are confident of their ability to learn, e.g., child says I can do it.

* B. Children cope with their surroundings, for example, following rules and direction.

* C. Children are experiencing success.

D. Children freely move about the environment.

E. Children choose their own activities during the Exploratory Period.

KEY 1-Specification not at all implemented
2-Specification implemented to some extent
3-Specification implemented to a great extent
4=Technically implemented
5=Beyond technical implementation
X=No opportunity to obtain information

III. HOME-SCHOOL RELATIONSHIPS

A. Parent meetings are expected.

B. The parent education program is visited by the home teacher or not.
visit regularly.

C. Parent Trainee Tutoring Program is in collaboration with the Policy Committee and L.R.O.C.

D. The classroom is open to the parents at any time.


IV. TEACHER BEHAVIOR

A. In assigning tasks teachers provide different ways for a child to master a task if it is too difficult for him.

B. Teachers reinforce children for completion of tasks.

C. Teachers do not give attention reinforcement to children who leave tasks but make subtle but neutral attempts to encourage them to complete tasks.

D. The teacher, in administering diagnostic tests to the child, treats them as a guide for prescribing learning activities and not as a "failure" or "success" on the part of the child.

E. The teacher reinforces children's independent learning behavior.

F. The teacher promotes communication skills by:
   a) encouraging children to talk about their paintings and block constructions and writing down what they say.
   b) talking with children while teachers "listen".

*See page 1.
G. Teachers assign tasks for every curriculum component of the program, quantification, classification and perceptual development.

H. Each classroom staff jointly develops tasks for its pupils. (Consult with teachers to determine rating.)

I. Teachers give verbal feedback on tasks.
APPENDIX C

RELATED CHECKLIST MATERIAL

Guidelines For The Use of Model Implementation Checklists C-1

Model Time Response Form C-3

Face Sheet For The Model Implementation Checklists C-4

Special Face Sheet For The University of Florida Implementation Checklist C-5
GUIDELINES FOR USE OF
MODEL IMPLEMENTATION CHECKLIST: 1971-1972

1. The Model Implementation Checklist is for use only in classes being tested by SRI. (A list of these classes and the codes you should use for each class and their permanent staff members are included in this package of materials.)

2. Try to observe all the test classes so that you have at least three checklists per classroom that reflect the implementation early in the year, at the middle of the year and at the end.

3. The items on each checklist are statements of the model as it should be at full implementation. Each section of the checklist has a four point rating scale with the exception of those categories of the checklist which refer to the behavior of staff members. A five point rating scale is applied to items in these categories. Technical "full" implementation on all scales is designated by a "4". On the scale referring to staff behavior, "5" indicates an elaboration of the model which is described as "beyond implementation" which would be used only for ratings of exceptional performance in relation to the model.

4. We would like you to try using the checklist after the observation (that is, not in front of the teachers) on your first site visit.

5. The codes, which you will find on your list of Test Classes and Codes, are to go on the checklists in the place of names.

6. In the usual first contact you have with the Headstart Director we would like you to show him or her the checklist you will be using. If the Director would like a copy of the checklist, feel free to give them one.

7. If the checklist of your model does not apply at all in a classroom, i.e., all or nearly all items being scored "1", please supply us with information as to what is occurring instead.

8. Suggestions for questions which might be answered under Topic II, Teacher Training are listed below.

*The blanks under staff names on the Test Classes sheet should be filled in by you with the names of a student, aide, parent, child, or any paid classroom staff, which should be indicated on the list of paid classroom staff. Copies of this should be to Parent Training, and Teacher Assistance.
1. What does the training person do and say in the training procedure? (What are the methods modellers use? Lectures, modelling, experience-discovery, etc.) What content is covered or emphasized? Use of equipment, child development, relationships, observations, etc. What is the frequency and consistency of personnel in modeller-site contact? What kinds of questions do site staff ask? How are they received?)

2. How is the model interpreted? (What do staff members do with material covered by the modeller? If there is performance variation among staff, what seems to account for it? How much variation can particular model features tolerate and still be "the model"? Does it matter? When do staff meetings take place? What is their content? (Model specifics - not dealing with model.) To whom do staff members turn for help?)
A. The school day for classes at my site begins at _____ (a.m.) (p.m.) and terminates at _____ (a.m.) (p.m.).

B. Approximately _____ hours of that time are devoted to the model. The parts of the schedule (or activities) during which the model occurs are listed below. (If model applies to all parts of the day, simply write all.)

C. When you have rated your classes on the last two visits, under which set of conditions have you rated items (please check one). Have rated items assuming:

   1. Model specifications were intended to occur during the entire school day.
   2. Model specifications were only to occur during the parts of the schedule listed under B.
MODEL IMPLEMENTATION CHECKLIST
1971-1972

FACE SHEET

MODEL ____________________________________________

SITE _____________________________________________

CODE OF OBSERVED CLASS ___________ 1 2 3 4 5 6

OBSERVER'S NAME ___________________________________

DATE ______________________________________________

NUMBER OF CHILDREN ENROLLED _______________________

NUMBER OF CHILDREN PRESENT TODAY ___________________

ESTIMATED ETHNIC COMPOSITION TODAY _________________

LOCATION OF CLASS (check one) 1. PUBLIC SCHOOL __________
PRIVATE
LOCATION __________________

2. WITH:
TEST P.V.H.S. ____________
CLASS ____________________
NON-TEST P.V.H.S. __________
CLASS ____________________
WITHOUT OTHER
CLASSES ___________________

THE TEACHER IS CURRENTLY IN HER 1st 2nd 3rd 4th YEAR of
the model.

THE ASSISTANT IS CURRENTLY IN HER 1st 2nd 3rd 4th YEAR of
the model.

THE AIDE IS CURRENTLY IN HER 1st 2nd 3rd 4th YEAR of
the model.

SESSION AN PM

TOTAL TIME OF THIS OBSERVATION ___________________
MODEL IMPLEMENTATION CHECKLIST
1971-1972

FACE SHEET

MODEL: THE UNIVERSITY OF FLORIDA

SITE

CODE OF OBSERVED (CLASS)  1  2  3  4  5  6

CODE OF P.E.  1a 1b 2a 2b 3a 3b 4a 4b 5a 5b 6a 6b

OBSERVER'S NAME

DATE

NOTE PARTICULAR CIRCUMSTANCES OF TASK ADMINISTRATION:
(E.g., television on, others present, etc.)

1. ______________________________________________________________________

2. ______________________________________________________________________

3. ______________________________________________________________________

4. ______________________________________________________________________

THE P.E. IS CURRENTLY IN HER FIRST, SECOND, THIRD YEAR WITH THE MODEL (CIRCLE ONE)

TIME OF DAY AM PM

TOTAL NUMBER OF VISITS MADE WITH THIS P.E. TODAY  1  2  3  4  5

IN THE TOTAL NUMBER OF VISITS TODAY WITH THIS P.E., THIS VISIT IS NUMBER  1  2  3  4  5
CURRICULUM VITAE

Anne Coolidge Monaghan
12 Hawthorn Street
Cambridge
Massachusetts 02138

Home telephone: (617) 354-6506

Place of birth: Cleveland, Ohio
Date: June 27, 1935

Degrees: Ed.d. Harvard School of Education, expected 1973
M.S. Bank Street College of Education, New York City, New York, 1969
B.S. Wheelock College, Boston, Massachusetts, 1961

EDUCATIONAL EXPERIENCE:

July 1971-
Research Associate, the Huron Institute.
Design of ten model specific instruments to measure classroom implementation in a national experiment, Headstart Planned Variation. Some supervision and administration of field observers who used instruments to collect data.

Spring 1971-
Harvard School of Education. Taught a course on curriculum and methods.

September 1969-
Harvard School of Education. Taught a course on curriculum and methods.

August 1968
Community Administrator for Pupil Services and Teacher Training, Demonstration District, Two Bridges Model School District, 217 Park Row, New York City, New York 10038.

August 1968-
Research Assistant, Bank Street College Headstart Evaluation and Research Center, New York City, New York. Pre-post administration of the Stanford-Binet and cooperation in design of a teacher observation instrument.

September 1967-
Research Assistant, Boston University Headstart Evaluation and Research Center, Boston, Massachusetts. Responsible for a small group of classroom observers, training of an indigenous worker in Mississippi and administration of a
multi-service summer diagnostic clinic serving two elementary school populations

June 1966 - September 1964
Course Assistant, Supervisor of Student Teachers and Head Teacher, Tufts University Laboratory School (Eliot-Pearson Children's School), Medford, Massachusetts (2, 3, 5 year old groups and summer Headstart).

June 1964 - September 1962
Assistant to Guidance Director, Elementary Schools for Dependents of the United States Army, Kaiserslautern, Germany. Design and implementation of program to work with children on the basis of direct teacher referral in a cycle of classroom observation, child interview (and/or play therapy) and teacher consultation.

Child Therapist, Child Guidance Clinic, 2nd General Hospital, Landstuhl, Germany.

August 1962 - January 1961
Assistant Nursery Teacher, South End Family Program, Boston, Massachusetts.
(Research project with NIH grant under the auspices of Massachusetts Memorial Hospital.)

June 1959 - September 1958
Assistant Teacher, First Grade, Brearley School, New York City, New York.

CONSULTING EXPERIENCE:

June 1968
Group Leader, Follow-Through Training Seminar, Bank Street College, New York City, New York.

Spring 1967
Educational Consultant for the design and direction of 16 twenty minute films comparing six teachers across three tasks.

June 1967 - September 1966
Consultant, 1 day per week. Peabody Terrace Nursery Group, Memorial Drive, Cambridge, Massachusetts.

July 1966
Group Leader, Headstart Orientation, Boston University, Boston, Massachusetts.
August 1966
Seminar Leader. Headstart In-Service Program. Wheelock College, Boston, Massachusetts

EDUCATIONAL TRAINING:

Spring 1970-Fall 1969

Spring 1969-Fall 1968
Bank Street College Early Childhood Center. Supervision of a team of teachers working with disturbed 5 year old "disadvantaged" children.

Fall 1967
Bank Street School for Children. Remedial work in reading with a 7 year old child retained in the first grade.

Spring 1961-Fall 1960
James Jackson Putnam Center. Assistant Nursery teacher with group of disturbed children. (Wheelock College) Student teacher with the South End Family Program, Boston, Massachusetts. Small groups of 2-6 year old children from "hard-core" families.

Spring 1960
Student teaching. Second grade Edward Devotion School, Brookline, Massachusetts (public).

Fall 1959
Student teaching. Kindergarten, Winn Brook School, Brookline, Massachusetts (public).