

1-1-1974

The Shanti evaluation : a study of the Fortune-Hutchinson methodology in a public alternative school.

David Jules Rosen

University of Massachusetts Amherst

Follow this and additional works at: https://scholarworks.umass.edu/dissertations_1

Recommended Citation

Rosen, David Jules, "The Shanti evaluation : a study of the Fortune-Hutchinson methodology in a public alternative school." (1974).
Doctoral Dissertations 1896 - February 2014. 2153.
https://scholarworks.umass.edu/dissertations_1/2153

This Open Access Dissertation is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Doctoral Dissertations 1896 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

312066 0296 6374 8

**FIVE COLLEGE
DEPOSITORY**

THE SHANTI EVALUATION:
A STUDY OF THE
FORTUNE/HUTCHINSON EVALUATION METHODOLOGY
IN A PUBLIC ALTERNATIVE SCHOOL

A DISSERTATION
by
DAVID JULES ROSEN

Submitted to the Graduate School of the
University of Massachusetts
in partial fulfillment of the requirements
for the degree of
DOCTOR OF EDUCATION

May 1974

Major Subject: Educational Evaluation


THE SHANTI EVALUATION:
A STUDY OF THE
FORTUNE/HUTCHINSON EVALUATION METHODOLOGY
IN A PUBLIC ALTERNATIVE SCHOOL

A DISSERTATION

by

DAVID JULES ROSEN

Approved as to style and content by:


School of Education Graduate Faculty, Level 1, Chairperson

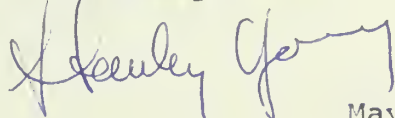
Dr. Thomas E. Hutchinson

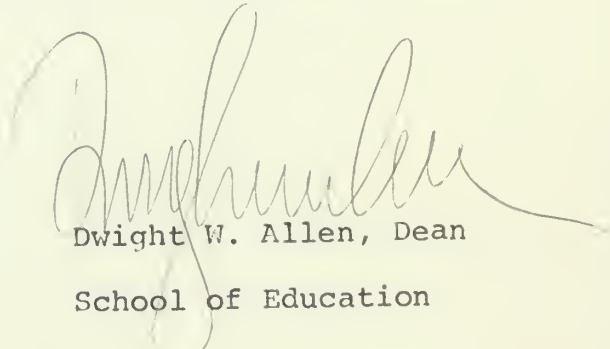

School of Education Graduate Faculty, Any Level, Member

Dr. A. Donn Kesselheim

Outside Member, Member

Dr. Stanley Young




Dwight W. Allen, Dean

School of Education

May 1974

ACKNOWLEDGEMENTS

For the completion of this study I am indebted to many people: Students at Shanti, especially Donald Conant, Wendy Walker, Gregg Davis, David Conant, George Smith, Bob Baechler, Beverly Kehoe, Marilyn Rossetti, John Petrauskus, Cheryl McCain, and Chip Conway; Shanti Staff Members, especially J. Sinner, Gregg Sinner, Gene Mulcahy, and Geoff Thale; Shanti Home Group Leaders, and Shanti School Board Members.

Thanks are due to A. Donn Kesselheim and Stanley Young who helped guide me in writing the dissertation, to Horace Reed who served on my committee, to Tom Wolf and John Allison who supported the evaluation upon which this research is based, and to Kate Wong, Pat Gordon, and Gay Flannelly.

Special appreciation is due to Thomas E. Hutchinson whose brilliance, care, and commitment were sources of inspiration during this undertaking, and throughout my graduate studies.

A B S T R A C T

THE SHANTI EVALUATION:

A STUDY OF THE

FORTUNE/HUTCHINSON EVALUATION METHODOLOGY

IN A PUBLIC ALTERNATIVE SCHOOL

(May 1974)

David Jules Rosen, B. A., University of Michigan

M. Ed., University of Massachusetts

Directed by: Dr. Thomas E. Hutchinson

The evaluation of Shanti, a public alternative high school in Hartford, Connecticut, was carried out from September, 1973 to May, 1974, using a new evaluation methodology developed by Hutchinson, Fortune, et. al. at the University of Massachusetts. The evaluation provided an opportunity to study the evaluation methodology in an alternative school setting.

The problem for this research was fourfold: 1. to investigate the success of parts of the evaluation methodology by field-testing them, 2. to investigate the success of a part of Metamethodology (a methodology for developing and researching methodologies) by field-testing it, 3. to do methodological development work on some parts which were field-tested, and 4. to investigate the feasibility of using

this evaluation methodology to evaluate public, alternative schools.

In the first four chapters of this dissertation it is argued that the social sciences need systematic procedures to solve social problems, and that this is particularly true in education. Models, it is suggested, may be inherently inadequate for solving these problems, and "methodologies" may offer a better strategy for social problem-solving. The need is presented for appropriate evaluation of alternative schools, and the setting for this particular evaluation is described. The new evaluation methodology and Metamethodology are introduced, and major parts of the evaluation methodology are described.

Two kinds of methodological research: decision-oriented (applied research) and conclusion-oriented (basic research) are defined, and the decision-oriented research problem of this study is posed. The potential for adding to knowledge, not only about the particular evaluation methodology, but also about Metamethodology is discussed. The problem is put in a context of continuing research on the evaluation methodology, and results from previous studies and recommendations for further research from earlier dissertations are presented. General procedures for doing this research are described, and Shanti is considered further as a site for methodological research.

The results of field-tests of several parts of the evaluation methodology: "The Negotiation of the Contract Phase," the "Contract Decision-Maker Reporting Process," the "Allocation of Resources Section," and "The Goals/Parts Integration Process" are reported in detail and summarized in Chapters five through eight. Also, recommendations are made for further research and development. In the case of some of these parts, where pre-field test and/or post field-test methodological development was undertaken, it is described. Some development and field-testing of Metamethodology was also undertaken to enable the design of better field-test procedures, and the results are reported in these chapters.

Chapter nine contains the results of the evaluation of the evaluation, and data are reported here on the feasibility of the evaluation methodology and its success in accomplishing its purpose--to provide data for decision-making. In the final chapter, the results of the research are summarized in terms of the problem for research, and recommendations are made for further research and development of the evaluation methodology, as well as for its proper use in evaluating alternative schools.

While individual parts of the methodology were found to have accomplished their purposes quite well, and while the judgements of the evaluator, decision-makers, and the Contract Decision-Maker were that it was feasible to use

this methodology to evaluate alternative schools, it was also clear that in this application the methodology did not accomplish its purpose to the satisfaction of anyone concerned, and that this was due to an impractical apportionment of evaluation resources to the earlier parts of the methodology, and to the great amount of time needed by decision-makers to define their goals in operational terms.

A Reader's Aid to the Dissertation

It is anticipated that most readers of this study may be described by one or more of the following categories:

1. An alternative school person (student, teacher, parent, administrator, etc.) who is interested in the Shanti school.
2. An alternative school person who is interested in evaluation models for alternative schools, the evaluation methodology studied here, or the evaluation of Shanti.
3. An evaluation specialist (theorist, practitioner, student, etc.) who is interested in evaluation models or in this evaluation methodology.
4. A methodologist (methodological researcher, methodological development specialist, etc.) who is interested in research on and/or development of evaluation methodologies or other methodologies.

Readers who are primarily interested in data or results concerning Shanti's degree of success in accomplishing its goals, i.e. evaluation data or results, will not find these contained within this work. The focus of this dissertation is a study of the evaluation methodology, not a study of Shanti, per se. These readers are referred to the monthly reports and final report of the evaluation, available at the Capitol Region Education Council, Windsor, Connecticut, or

at the Shanti School, Hartford, Connecticut.

The following chapters and sections of chapters will be of particular interest to each of the audiences identified above:

1. Chapter II, "The Shanti School: Setting for Evaluation," Pps. 24 to 28 ; Appendix A, Pps. 326 to 337 .
2. Chapter II, Pps. 21 to 28 ; Chapter III, "The Fortune/Hutchinson Evaluation Methodology," Pps. 29 to 40 ; Chapter IX, Pps. 271 to 306 (especially "Summary of the Evaluation of the Evaluation," Pps.302 to 306); Chapter X, Pps. 307 to 321 .
3. Chapters I-IV, Pps. 1 to 56 ; Chapters IX-X, Pps.271 to 321 .
4. Entire dissertation, especially the recommendations sections of Chapters V, VI, VII, and VIII, Pps. 125 to 129 , 170 to 171 , 193 to 196 , and 262 to 263 ; Chapter X, Pps. 307 to 321.

Following is a chapter-by-chapter synopsis to aid the reader who wishes at a glance to perceive the flow of logic of the dissertation. For readers who do not intend to read the whole work, but who would like to see how the parts relate to the whole, this section should be particularly

helpful.

Chapter I: The Need for an Evaluation Methodology in the Social Sciences. It is argued in this chapter that the social sciences need systematic procedures to solve social problems, that this is particularly true in the field of education, that current models are often ineffective because they have inherent inadequacies as models, and that "methodologies" may offer a better strategy for social problem-solving than models.

The distinction is made between evaluation methodology and "an evaluation methodology," and the recent development of "evaluation methodologies" is looked at in an historical context of methodological growth in evaluation. This historical discussion is continued to the present, where different purposes for doing evaluation which have developed through the years are shown to be so different as to require very different procedures for accomplishing them. It is suggested that this implies the need for different methodologies in evaluation. The existence of one such methodology, the topic for this research, is briefly noted, with the promise of further treatment in Chapter Three.

Chapter II: The Need For Evaluation of Alternative Schools. The notion of "alternative schools" is defined, the need for evaluating them is argued, and the problem of

inappropriate evaluation is discussed. One such alternative school, Shanti, is described both to introduce the reader to the school, and to portray the setting where the particular evaluation to be studied will take place.

Chapter III: A New Evaluation Methodology and Meta-methodology. The Fortune/Hutchinson Evaluation Methodology is introduced by describing implications which were derived from its purpose "to provide data for decision-making," and then by describing the major parts of the methodology which were systematically derived from these implications.

Metamethodology, a methodology for creating and studying methodologies, is introduced, and methodological development (design, research, and redesign) is described here for the following reasons;

1. The origins of the Fortune/Hutchinson Evaluation Methodology are to be found in Metamethodology.
2. Procedures for doing methodological research are described in Metamethodology.
3. This research has implications for further development of Metamethodology, as well as the Fortune/Hutchinson Evaluation Methodology.

Chapter IV: Methodological Research on the Fortune/Hutchinson Evaluation Methodology. Two kinds of methodological research are defined: decision-oriented (applied), and

conclusion-oriented (basic), and it is argued that decision-oriented research is legitimate and important. The problem for this study is posed and it is suggested that based on this research, methodological developmentttdisions may be made not only on this particular methodology but also on Metamethodology, which makes this study potentially even more valuable.

The problem is put in a context of continuing research on the evaluation methodology, and results of previous studies and recommendations for further research from earlier dissertations are presented here. General procedures for doing this research are discussed, Shanti (earlier described as a site for evaluation) is considered as a site for methodological research, and general procedures are described for field-testing.

Chapter V: Negotiation of the Contract Phase: Field-Test and Methodological Development. "The Negotiation of the Contract Phase" is the first part of the evaluation methodology. Before being field-tested as a part of this study, it was further developed, based on recommendations from a logical analysis, the investigator's experience using it, and a formal study. The result of the development work, "The Negotiation of the Contract: Rosen Draft I," was field-tested. The results of the field-test are described here in detail and then summarized. Recommendations based

on the results are made for redesign of this phase. These recommendations are then used in further methodological development, the result of which is "Phase I of the Fortune/Hutchinson Evaluation Methodology: Rosen Draft II."

Chapter VI: Field-Test of the Contract Decision-Maker Reporting Process. The purpose of this process is to determine procedures for returning data to the Contract Decision-Maker (the contractor for the evaluation) on the progress of the evaluation. The results of the field-test of this process are presented and summarized, and recommendations are made for further development of this process.

Chapter VII: Field-Test of the Allocation of Resources Section. The purpose of this section is to allocate evaluation resources among the parts of the methodology and among the decision-makers for whom data are being collected. The procedures of the field-test are described, and the results are presented and summarized. Recommendations based on the results are made for further development.

Chapter VIII: Goals/Parts Integration Process Field-Test. In Chapter Three, the relationship between a given methodology and Metamethodology was briefly described. Here it is discussed more completely. This is because Metamethodology was itself further developed and studied as it was being used to design the field-test for this part of the

evaluation methodology.

This chapter is complex, and consequently difficult to summarize. Hopefully, the following outline of activities which the investigator/evaluator performed will help the reader to find his way through this metamethodological maze.

1. Before the field-test could be carried out it had to be designed.
2. To design it, the investigator turned to Metamethodology for procedures.
3. The procedures of Metamethodology were not developed to the satisfaction of the investigator.
4. The investigator (methodological developer) further developed the field-test procedures of Metamethodology to enable the research to be carried out to his satisfaction.
5. The investigator then used these developed procedures of Metamethodology to design the field-test of "The Goals/Parts Integration Process."
6. While using these, the results were recorded by the investigator, providing data on the effectiveness of these newly developed procedures (called by the investigator "Pre-Redesign Procedures.")
7. The investigator carried out the field-test following the design.
8. The results were described in detail and recorded in this chapter. The results were also summarized, both in terms of the success/effectiveness of "The Goals/Parts Integration

Process," and in terms of the success/effectiveness of the newly designed ~~field-test~~ procedures of Metamethodology.

9. A minor recommendation was made for redesigning a part of "The Goals/Parts Integration Process."

10. Recommendations for redesign of the field-test procedures of Metamethodology were made, and subsequently incorporated in a revision, "Pre-Redesign Procedures for Metamethodology, Draft II, 21, December, 1973," which is included in this chapter.

Chapter IX: Results of the Evaluation of the Evaluation

The criteria (goals and dimensions of goals) for the success of the evaluation are presented in this chapter. They are followed by detailed results and a summary of the results of the evaluation. This is not a field-test of the "Evaluation of the Evaluation" section of the methodology, however, this section did provide the procedures for doing this part of the research.

Chapter X: Summary and Recommendations. The results of the research are summarized in terms of the problem for research, and recommendations are made for further research and development of the evaluation methodology, as well as for its proper use in evaluating alternative schools.

T A B L E O F C O N T E N T S

	Page
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
READER'S AID TO THE DISSERTATION	viii
LIST OF FIGURES	xxi
CHAPTER	
I THE NEED FOR AN EVALUATION METHODOLOGY IN THE SOCIAL SCIENCES	1
The Need for Systematic Problem-Solving Processes in the Social Sciences	1
The Need for Systematic Problem-Solving Processes in Education	3
The Inadequacy of Models	5
An Alternative to Models: Methodologies	9
The Growth of Evaluation "Methodology" and the Need for Evaluation "Methodologies"	11
Current State of the Art: Disagreement about Definitions and Purposes	15
The Difference Between Pro- viding Data for Decision-Making and Collecting Data for the Purpose of Social Control	17
The Difference Between Research --Adding to Knowledge--and Evaluation--Providing Data for Decision-Making	18

	Page
A New Evaluation Methodology	20
II THE NEED FOR EVALUATION OF ALTERNATIVE SCHOOLS	21
The Alternative School: A New Need for Evaluation	21
The Shanti School: Setting for Evaluation	24
III A NEW EVALUATION METHODOLOGY AND METAMETHODOLOGY	29
The Fortune/Hutchinson Evaluation Methodology	29
Methodologies and Metamethodology	40
IV METHODOLOGICAL RESEARCH ON THE FORTUNE/HUTCHINSON EVALUATION METHODOLOGY	44
Decision-Oriented and Conclusion-Oriented Research	44
The Need for Decision- Oriented Research	46
The Problem for Research	47
Summary of Previous Research on the F/H Evaluation Methodology	49
Research Procedures	53
V THE NEGOTIATION OF THE CONTRACT PHASE: FIELD-TEST AND METHODO- LOGICAL DEVELOPMENT	57
Pre-Field-Test Methodological Development	57

	Page
Field-Test Results of The Negotiation of the Contract: Rosen Draft I	70
Summary of Results	123
Recommendations for Redesign of the Negotiation of the Contract Phase	125
Post Field-Test Methodological Development	130
 VI FIELD-TEST OF THE CONTRACT DECISION- MAKER REPORTING PROCESS	 156
General Description of the Field Test	156
Detailed Results of the Field-Test	157
Summary of Results	170
Recommendations	170
 VII FIELD-TEST OF THE ALLOCATION OF RESOURCES SECTION	 172
General Description of the Field Test	172
Detailed Results of the Field-Test	173
Summary of Results	192
Recommendations	193
 VIII GOALS/PARTS INTEGRATION PROCESS FIELD-TEST	 197
Methodological and Metamethodological Development	197

	Page
Pre-Field-Test Metamethodological Development	199
Results of Pre-Redesign Procedures Field Test	200
Observational Techniques	232
General Description of the Field-Test	242
Detailed Results of the Field-Test	246
Summary of Results of the Pre-Redesign Procedures Field-Test	262
Summary of Results of the Field-Test of Goals/Parts Integration Process	262
Recommendations for Redesign of Goals/Parts Integration Process	262
Pre-Redesign Procedures for Metamethodology	264
 IX RESULTS OF THE EVALUATION OF THE EVALUATION	 271
Goals, Dimensions, and Detailed Results.	275
Summary of the Results of The Evaluation of the Evaluation.	302
 X SUMMARY AND RECOMMENDATIONS	 308
Summary of Results of This Study	308
Recommendations for Further Development of the Evaluation Methodology	311

	Page
Recommendations for Further Research on the Evaluation Methodology	316
Recommendations for Use of the Evaluation Methodology in Public Alternative Schools.	319
REFERENCES	322
APPENDICES	
APPENDIX A	325
APPENDIX B	338
APPENDIX C	350
APPENDIX D	370
APPENDIX E	375

LIST OF FIGURES

FIGURE		Page
1	Broad Outline of F/H Evaluation Methodology (from Benedict A.E.R.A. February, 1973)	80
2	Lexicon	82
3	Implications of the Purpose "To Provide Data for Decision-Making"	83
4	Shanti Potential Decision-Makers	105
5	Evaluator Resources Consumed by Contract Decision-Maker Monthly Reports	159
6	Decision and Data Log	183
7	Resource Allocation Chart	185
8	Filled in Resource Allocation Chart	190-190a
9	"Figure C": Percentage Recommended Allocations of Resources Among the Parts of Evaluation Methodology	191
10	Direct Observation Record #1	233-234
11	Direct Observation Record #2	240-241
12	Parts of the Evaluation	274
13	Parts of the Methodology Completed by Decision-Makers	277
14	Usefulness and Worthwhileness of Parts of the Evaluation from the Perspective of the Contract Decision-Maker	300
15	Usefulness and Worthwhileness of Parts of the Evaluation from Decision-Makers' Points of views: Staff Members	301

LIST OF FIGURES

(cont'd)

FIGURE	Page
A Results of Contracting Group's Prioritization of Decision-Makers Using Alternative 1 and <u>nine</u> Decision-Makers	154
B Results of Contracting Group's Prioritization of Decision-Makers Using Alternative 1 and <u>thirteen</u> Decision-Makers.	155

C H A P T E R I

THE NEED FOR AN EVALUATION METHODOLOGY IN THE SOCIAL SCIENCES

The Need for Systematic Problem-Solving Processes in the Social Sciences

A traditional and prevalent response of the social sciences to important social problems has been to study them: to determine their extent, to ascertain their causes, to make recommendations, but in any case to add to our knowledge about them. A more recent and less common response by some social scientists has been to offer skills and services to actually solve such problems. Concerned, for example with such problems as achieving widespread justice, reducing urban crime, creating better conditions for learning, building more responsive political structures, controlling increasing world population, and resolving international conflicts, many have undertaken "action-oriented" research.

Too often, however, their best efforts have been disappointing. Occasionally the research is inadequate because it does not actually add to knowledge about a problem, but more often it does not offer successful solutions to the problem being studied. Technical reasons are often offered to explain these failures: inadequate training of researchers, weak research designs, and other problems inherent in extra-laboratory, multi-variable, human-centered studies.

One possible cause, an important one, has received almost no attention. That is the logical difference, even possible incompatibility, of the two broad purposes to which social scientists address themselves, i.e. to add to knowledge, and to solve social problems. One will not necessarily be able to add to knowledge about a problem while successfully solving it, nor will one necessarily solve a problem while adding to knowledge about it. This may be obvious, but it is often ignored. If each of these purposes is to be successfully accomplished it may require unique efforts, activities, and procedures.

This is not to argue that social scientists should confine themselves to studying social problems. On the contrary, while social science must continue to strive to improve its capability to add to our knowledge and to explain the world, it must also set about logically and systematically, using the results of research where possible, to improve the world. It is crucial that social scientists be clear about which of these purposes they are trying to realize, and that with equal clarity, commitment, and rigor they set about to create and use processes and procedures which can accomplish each purpose.

The Need for Systematic Problem-Solving Processes in Education

The need for systematic processes to accomplish worthwhile social purposes and to solve social problems is particularly evident in the field of education. This can be well illustrated by looking at a single problem, one which has received a great deal of attention, and whose symptoms can be seen in the large numbers of school "drop-outs," "push-outs," or "sleep-throughs." Many students, parents, and educators are painfully aware of the inadequacy of current models of public education in meeting the needs of many students whom they are to serve. Bored suburban youngsters, angry urban working-class and Third-World youngsters, young people who take drugs, young people with psychological problems, young people who want to have significant choice about their learning; all these have needs not currently being met by most public schools. Parents, teachers, and administrators are concerned about this problem. Many want educational programs which will "meet the needs of the students" the schools are to serve.

This problem, expressed by the purpose "to meet the needs of the students," may also imply several other prerequisite and resultant purposes. This purpose may imply, for example, that the needs of the students must be known. Hence, we may first need "to determine the needs of the

students," what is commonly referred to as Needs Assessment, or Needs Analysis. Another implied purpose may be "to plan a program to meet the identified needs," (Program Planning), and another, "to implement the program," (Implementation). Finally, "to meet the needs of the students" may imply that efforts should be made "to determine if the program has accomplished its goals," (Evaluation). There is need for clear, systematic, tested procedures which will enable each of these purposes to be accomplished.

Where social scientists in education have moved outside the sphere of research (adding to knowledge) to the sphere of solving social problems (needs assessment, planning, implementing plans) they have too often left behind the scientific rigor and the insistence on logic, clarity, and systematic procedures which they have found so important in doing research. They have developed vague theoretical models instead of creating operational procedures derived from well-defined purposes. They have sometimes implemented these without field-testing. And they have frequently not studied the effectiveness of their models in accomplishing the purposes or goals for which they were designed. This results in inadequate solutions for difficult problems, and the widespread belief that the social sciences are ineffective agents for social change.

The Inadequacy of Models

A social science model, whether largely theoretical, or both conceptual and operational, consists of a set of parts: concepts, methods, processes, objects, physical spaces, etc. which are grouped, joined, or linked together because of their believed power or use in addressing a social problem or condition. While model-building is a frequently employed strategy for solving social problems, it has many drawbacks. The following are a few of the more important ones:

1. Models suffer their greatest limitation in the inadequate statement of their purpose(s). Even when stated, the purpose is often vague, and rarely defined operationally. Consequently, when the model has been implemented, it is difficult to know in any precise way if it has actually accomplished the purpose for which it was designed. It may have accomplished very well a different purpose, or in unfortunate cases, an antithetical purpose.
2. Because the parts of a model are not systematically derived from a statement of purpose, it is possible that either the parts which have been developed

are not sufficient to accomplish their purpose, or that some parts which have been developed are actually unnecessary. This would be difficult to determine, of course, where there is no clear statement of purpose in light of which to examine the parts.

3. Model building processes vary considerably. For example, some include opportunities for creativity, invention, and innovation; others do not. Some provide for systematically surveying the thinking of others in the field or in related fields; others do not. Hence, the quality of models can also vary a great deal.
4. Where conceptual parts of a model have been described in operational terms, i.e. in observable terms, the relationship of these conceptual parts and the operational definitions of them is not always clear; in some cases the two may bear little resemblance to each other. This is because some model builders do not use systematic and reliable procedures for deriving their operational components from their concepts, goals, or purposes.
5. Models which are designed to solve a specific problem at one level of complexity are not always

capable of solving that problem at a higher or lower level of complexity, nor where problem-solving resources are considerably greater or fewer than those in the particular situation for which the model was designed. For example, a model designed to address the "drop-out" problem for one school, in one community, may not be useful for addressing the problem at a state or national level or even for other communities.

6. Where a model has actually been found to work, to accomplish its purpose(s) it may not be replicable because the actual steps for implementing the model were never fully described in operational terms.

A popular problem-solving model, with which most readers will be familiar, will serve to illustrate some of these problems with models, and later some of the advantages of a methodological approach to problem-solving.

Imagine that you would like to serve a dish for a meal that you have never tasted or cooked before, a dish for example, from Northern China. Imagine further that all you have to guide you is a recipe sent to you by a friend, and that this recipe is in the form of several paragraphs of a letter. All the parts of the recipe seem to be included:

a list of ingredients, a list of instructions, and even some helpful hints.

As you begin to follow these instructions, however, you observe that many things are unclear and problematic. You discover that some of the instructions at the end of the letter would make more sense if they were carried out before some of the ones at the beginning. At places where you are told to turn the heat up but never told to turn it down, you suspect that there are some instructions missing. You find that for several of the steps it is not clear whether they are essential or optional. For several other steps, you are unclear about what is meant by "some salt," "a dash of ginger sherry," and "enough chicken stock."

When you have finished cooking and eating the dish, although it was palatable, you wonder if it was "authentic," if it was properly done. You wonder if all the instructions were necessary, and if some were missing. You wonder to what extent you could have modified the instructions and still have accomplished the purpose. You wonder, too, if the steps as they were described, enabled you to produce the same dish that your friend's grandmother had cooked many years ago in Peking, or if in the description, some essentials had been lost. And you wonder, if you needed to cook for twice as many or three times as many people, if you could simply double or triple the amounts of the ingredients and get the same results. Finally, you wonder, if you were

to give the letter to your neighbor who likes to cook and if he were to follow the same instructions, if he would come up with the same results.

An Alternative To Models: Methodologies

If models are inadequate paradigms for solving social problems, one might reasonably ask what the alternative is. One approach to social problem-solving has been tried at the University of Massachusetts since 1967 (Hutchinson, et.al.), and is called methodological development. A methodology is a "systematic, standardized, operationalized set of rules or procedures designed to accomplish a definable purpose." (Hutchinson, 1971). Several methodologies which fit this description have been created, including methodologies for needs analysis, decision-making, curriculum development, and for promoting the general welfare. These are in the developmental and field-testing stages, although they are also at the same time being used by people who have such need in these areas that they are willing to try out untested procedures.

The notion of a methodology will be introduced briefly at this point, and treated in greater detail later in Chapter Three. For each of the above methodologies, the methodologist stated a purpose which, if it were accomplished, was thought to be likely to solve a given problem of concern.

In most cases this was preceded by reading the literature, talking to people who work in the area, examining actual work done in the area, brainstorming about the problem, and/or trying out tools that already exist for solving the problem. Next, the purpose was tested for its desirability, its "operationalizability" (whether or not it could be defined in observable terms), and its practicability, i.e. whether or not it was practicable to develop a methodology for it. Then the sufficiency of existing methodologies was determined, to avoid unnecessary development efforts.

Implications of the purpose then were systematically generated, and parts of the methodology were systematically derived from these implications. The derived parts were organized into a rational order of steps, which were critiqued by others, and re-ordered where necessary. They were then defined operationally, and operational steps were designed to accomplish each of the parts. These steps were then tested, and where necessary, revised. The steps were further tested for logical gaps, and were then field-tested in parts, and as a whole. Ultimately these methodologies will be subjects for experimental research.

To continue with the illustration, and the advantages a methodological approach might have over a model development approach, imagine now that the same friend has sent you an actual recipe which has the following features:

1. Although it is not explicitly stated, there is a clear implicit purpose of the recipe, to enable any person who uses it to prepare the dish properly, so that it tastes "as it should."
2. Each of the steps of the recipe is carefully derived from this purpose and ordered according to which must be carried out first. If there is a step for example which requires adding chopped scallions or thin slices of ginger root, this step is preceded by a step which tells you to first chop the scallions, or to slice the ginger root thinly.
3. There are no steps which are superfluous or redundant.
4. No essential steps have been omitted (Some steps, however, are marked "essential" and some are marked "optional.")
5. Each step is described in operational (observable) terms so that there is no question about what is to be done, and later, whether or not it has been done.
6. This recipe is therefore replicable, capable of producing the same results, whoever uses it, provided that all the steps are followed completely, and in their proper sequence.

The Growth of Evaluation "Methodology"
and the Need for Evaluation "Methodologies"

The word "methodology" is not new in the field of education. "Teaching methodology" and "evaluation methodo-

logy" are commonly used phrases which refer loosely to collections of methods for teaching and for evaluation. While a body of precise techniques and methods for accomplishing a general and vague purpose is not what is meant here by the term "a methodology," this latter, more precise term owes its existence to a history of theoretical thinking in education which may be described as the growth of methodology.

Growth of evaluation methodology has usually occurred when existing theory and the practices derived from it have not been able to encompass new needs for evaluation. We can see this pattern early in the history of educational evaluation. By the late 1920's, measurement specialists, responding to administrators' need to judge the effectiveness of teachers and schools, had created an extensive testing methodology to enable them to assess efficiency in the teaching of long-established, nearly standard course content. Then, in the early 1930's, new needs to identify and place students in advanced programs, to diagnose individual student learning deficiencies, and to assign marks required further development of measurement methodology, and subsequent creation of new tests to measure students against a standard.

In the late 1950's and early 1960's, new post-Sputnik curricula presented evaluators with a new set of

problems. Existing measurement methodology, largely test theory built on measuring individual differences, was unsuitable for providing information on the effectiveness of new curricula on large groups of people. Realizing the inadequacy of evaluation limited to traditional measurement practices, Lee J. Cronbach, in his 1963 "Course Improvement Through Evaluation," broke the grip of measurement methodology on evaluation practices, and encouraged fresh theoretical thinking about the problem of curriculum evaluation. Cronbach cautioned that,

"...measurement specialists have so concentrated upon one process--the preparation of pencil-and-paper achievement tests for assigning scores to individual pupils--that the principles pertinent to that process have somehow become enshrined as the principles of evaluation."

and that,

"Evaluation is too often visualized as the administration of a formal test, an hour or so in duration, at the close of a course. But there are many other methods for examining pupil performance, and pupil attainment is not the only basis for appraising a course."

and urged for example that,

"One can accept the need for a pragmatic test of the curriculum and still employ opinions as a source of evidence." (Cronbach, 1963)

More recently, since the late 1960's, the need to evaluate federally-funded programs for the disadvantaged, and other E.S.E.A.—funded projects has found existing

methodology a poor guide for doing program evaluation. The problems exist at both theoretical and practical levels. At the theoretical level, the need for data to improve these programs has prompted evaluation specialists to distinguish more clearly between research, whose purpose is to add to knowledge generally, and evaluation, whose purpose is to provide data for decision-making about a specific program or project. Daniel Stufflebeam puts it very well when he says that "The purpose of evaluation is not to prove but to improve." (Stufflebeam 1971) Also at this level, the tendency for federal evaluations to provide judgements of worth rather than on-going data which decision-makers need for making improvements, has led some evaluators to discard traditional definitions and purposes of evaluation and to create new ones.

At the practical level, until recently, no evaluation model or methodology has been either general enough to encompass a wide variety of evaluation situations, nor clear, specific, and detailed enough to enable an evaluator to use it well. Several models have been proposed for program evaluation in the past few years, but none seems likely to encompass all possible programs or projects, and they offer little to evaluators concerned with classroom, teacher or school evaluation. Sara M. Steele, in the most comprehensive

review of evaluation models to date, specifically designed for the consumer of evaluation, has said of these models,

"Most models, frameworks, or approaches to evaluation have been designed for a specific type of situation. Such frameworks seldom handle the variety of other needs and evaluative responsibilities of local programming personnel. For example, a model designed to provide the social policy maker with sound generalizable data may have little value in helping the programmer guide and improve a program that is in-process, and vice versa." (Steele, 1973)

Largely descriptive rather than prescriptive, these models are seldom set forth in operational terms, and leave large gaps for the practicing evaluator to fill with intuition.

Current State of the Art: Disagreement about Definitions and Purposes

The current "state of the art" of evaluation is characterized by widespread disagreement about definition and purpose. Theoreticians and practitioners generally agree that evaluation is concerned with the collection of data or information, but there is considerable difference of opinion about the purpose for which those data are to be collected and used. Some, such as Ralph Tyler, Robert Stake, and Michael Scriven believe that it is for the purpose of making value judgements. According to Tyler,

"'Evaluation' designates a process of appraisal which involves the acceptance of specific values

and the use of a variety of instruments of observation, including measurement, as the basis for value judgments." (Tyler 1956)

Similarly, Stake believes that evaluation is

"...the discovery of the nature and worth of something....The purposes for our evaluation may be many but always, evaluation attempts to describe something, and to indicate its perceived merits and shortcomings." (Stake 1969)

and Michael Scriven holds that

"...the typical goals of evaluation require judgments of merit and worth." (Scriven 1967)

Other theorists and methodologists, such as Daniel Stufflebeam, Egon Guba, Marvin C. Alkin, and Thomas Hutchinson believe that evaluation ought to provide information for enlightened decision-making. The first theorist to suggest this purpose was Lee J. Cronbach, who in the early 1960's argued that,

"We may define 'evaluation' broadly as the collection and use of information to make decisions about an educational program."
(Cronbach 1963)

And later, in 1969, Stufflebeam argued that

"Stated simply, evaluation is the science of providing information for decision-making."
(Stufflebeam 1969)

Hutchinson, using data for decision-making as the purpose for evaluation, as a first step, went on to consider the practical implications of accomplishing that purpose, for example the use of the data by decision-makers. (Hutchinson

1972)

This disagreement has important implications for the development of a new evaluation methodology, for one would develop one set of procedures if the data collected were to be used for decision-making, and possibly very different procedures if they were to be used to make value judgments. As Blaine Worthen has observed about evaluation models,

"The various models are built on differing--often conflicting--conceptions and definitions of evaluation, with the end result that practitioners are led in very different directions depending on which model they follow."
(Worthen 1972)

Disagreement over purposes and definitions is not necessarily a sign of confusion or disintegration in the field. Indeed, it is welcome if the disagreement is acknowledged and clear, and if methodological development proceeds from the implications of a particular purpose to be accomplished.

The Difference Between Providing Data for Decision-Making and Collecting Data for the Purpose of Social Control

Although the issue of control, of who controls an institution or an enterprise, is not a problem with which this dissertation is concerned, it may be important to point out that it is an inherent problem in the current state of the art. Evaluation is perceived by many people, both within

an institution and externally, as a process by which the control of the institution: goals, activities, style, even its very existence, may be taken out of the hands of internal decision-makers. Often this perception matches the reality, particularly in the case of evaluations of federally-funded programs and projects. If the amount of control over an enterprise which an evaluation model gives to external decision-makers or to the evaluator is considered, the difference in the purposes for evaluation, or in the models derived from these purposes, clearly has great significance for internal decision-makers of enterprises to be evaluated.

The Difference Between Research--Adding to Knowledge-- and Evaluation--Providing Data for Decision-Making

Research and evaluation have different purposes, and to accomplish each implies the use of a different methodology for each purpose. To add to knowledge, one must follow the procedures of research methodology painstakingly to assure that (s)he actually accomplishes that purpose. If research methodology is compromised so that data may also be collected for other purposes, the likelihood that research will add to knowledge is lessened. Similarly, to improve educational enterprises by providing data for decision-making one ought to take every possible measure to ensure that (s)he accomplishes that purpose, and if compromises are made to

accomplish research, the likelihood of accomplishing evaluation may be lessened.

These different purposes imply the need for different data collecting designs. Experimental research may require setting up laboratory control conditions so that it can be known that the results are caused by the particular treatment being studied. In evaluation, however, the problem is not how to set up conditions in which extraneous variables are controlled, but how to invite interference from all the sources which might actually influence how the goals of the enterprise are being accomplished. Decision-makers need data on how well their goals are being achieved in the real situation at hand, and do not necessarily need to know which variables are responsible. This kind of data, essential for evaluation, would not be useful for research.

Some evaluators would maintain that research and evaluation are enough alike to be carried on simultaneously, using most of the same procedures for both. They are not dissuaded by the problem that for a "classic" research design only one study can be conducted at a time because of possible interference caused by uncontrolled variables introduced from simultaneous studies. They would argue that there are adequate solutions for this problem: involving different treatment types for different groups of subjects which are then rotated through each treatment, or simply com-

promising "classic" research methodology assuming that the study can be replicated if detailed records are kept. But compromise has invariably been unsatisfactory for both evaluation and for research.

A New Evaluation Methodology

An evaluation methodology--a set of systematic, standardized, operationally defined procedures for accomplishing a defined purpose in the field of evaluation--has been developed, documented, and has been the subject of some methodological research. It appears to have potential for solving a large class of evaluation problems, namely those related to the purpose of providing data for decision-making.

This methodology, unlike current evaluation models, offers operational solutions to the class of problems defined by its purpose. Also unlike current models, it is not limited to certain evaluation situations, but claims to be able to accomplish its purpose for any undertaking or enterprise, given that the decision-makers connected with that enterprise actually want data for their decision-making, and have sufficient resources to make it feasible for data to be provided. This methodology, a major subject of this research, will be introduced in Chapter Three.

C H A P T E R I I

THE NEED FOR EVALUATION OF ALTERNATIVE SCHOOLS

The Alternative School: A New Need for Evaluation

Alternative schools present themselves as offering something, whether goals, content, style, ethos, or milieu, which is very different from what has currently been offered by the standard traditional public school. The notion of "Alternative Public Schools," as used by Mario Fantini, Dwight Allen, The National Consortium for Options in Public Education at Indiana University, the National Alternative Schools Program at the University of Massachusetts, and other leading proponents, suggests that there should be a diversity of schools within the public school system, each different from the others, and all together offering significant choice in the kind of education young people can pursue. Alternative schools and their advocates insist upon the difference between "alternative schools" and the public schools which have existed until now, a difference in the student needs these schools are trying to meet and in the goals which they hope to accomplish.

As these schools continue to grow in number and as their continued existence becomes more likely, questions are growing in the minds of parents, educators, administrators, and students concerning the effectiveness of what these

schools are trying to do.¹ Parents want to know if the school is giving their children at least minimal skills. Staff and students want to know how well their vision is being realized, and school board members want to know if the latest innovation in public education is delivering to children and young people more than what existed before.

With the exception of a few people who argue that it is too soon to evaluate alternative schools--by which they mean to make judgements about their worth--most alternatives look forward to having data upon which to base their decision-making. As Joe Nathan, teacher at the St. Paul Open School in Minnesota has put it in an article describing why the Open School is interested in doing evaluation,

"We don't agree that anyone should be left to improve him or herself alone." (Nathan 1973)

Nevertheless, there are some justified fears about the form that evaluation may take. The most serious danger is that a school will be evaluated upon criteria which are inappropriate to its intents and the needs it is trying to meet, that it will be judged by standards which it doesn't

¹A survey of alternative schools recently conducted by the National Consortium for Options in Public Education found that "The most dramatic insight gained in the survey was the steady growth in the number of alternative public schools since the mid-60's." The current directory published by the Consortium lists 464 alternative public schools.

hold for itself. The possibility that evaluation will focus on aspects of the program which are not priorities, or where attention has deliberately not been given is also a legitimate fear. The likelihood that tests and measurements will be used which are not only incapable of providing the data needed, but which intrude and interfere with the spirit of what the school is trying to bring into being, makes alternative school people wince at the prospect of evaluation. As John Hurst, an advocate for alternative schools evaluation in Berkeley, California has pointed out in his proposal, "An Alternative School Evaluation Project," there is

"A general revulsion of alternative school people toward the tools and procedures of evaluation used in traditional schools."
(Hurst 1972)

There is clearly need for appropriate evaluation in alternative schools. If a process (a model or methodology for example) were developed which could provide data directly related to a school's most important goals, and which its decision-makers (students, parents, staff, school board, etc.) wanted to use, if the procedures of this model did not interfere with the school's accomplishing its goals, and if it could be tested and found practical in alternative school settings, especially under minimum resources conditions and atypical organizational structure, then such a

process would be a valuable contribution to education.

The Shanti School: Setting for Evaluation

Shanti has been a regional, public, alternative secondary school since 1971, and is located in part of the railroad depot in downtown Hartford, Connecticut. Based upon a "School Without Walls" model, like Parkway in Philadelphia and Metro in Chicago, it uses learning resources in the city and in surrounding communities such as space for classes, community expertise for specialized student learning, and opportunities for students to intern and apprentice themselves in businesses, cultural institutions, social service agencies, and community organizations.

Classes, tutorials, and meetings of home groups (peer-support-groups), task forces, and the Shanti community may take place in small rooms which were formerly railroad offices; they may be held in an "arts loft" above the row of small rooms, in four dri-wall "learning modules," on and around the Shanti stage, or in other areas of Shanti's part of the main hall of the depot. They are also held outside the depot in student and staff member homes, in the meeting rooms of corporations, in local business establishments and in community organizations in downtown Hartford.

Most of Shanti's 88 students are drawn by lottery from those in each of the eleven cooperating metropolitan school

districts who indicate a desire to attend Shanti. A few students, thirteen this year, are non-publicly supported. Hartford district students have comprised approximately half the student population, as Shanti wishes to be an urban-based and urban-focused school. Other students come from suburbs of Hartford and a few come from surrounding rural areas. Currently, more than twenty-five percent of Shanti students are Black or Spanish-speaking. There is roughly an equal number of male and female students, and a wide range of family incomes is represented.

The school is governed by the Shanti community, comprised of students, staff members, interns, and home group leaders. At community meetings, held at least monthly and sometimes more frequently, issues of concern to the community, for example curriculum and day-to-day operation, are decided. On most issues majority rules, however, issues of major policy require consensus. Each community member has one vote.

On-going task forces: Curriculum and Resources, Administration and Budget, Communications, Internal Environment, Arts, and Evaluation are responsible for day-to-day decision-making in these areas, but they are ultimately accountable in their decision-making to the Shanti community. Financial resources available to Shanti (\$1,000/student from the school districts and tuition payments from

non-publicly supported students, with limited supplementary state and local business funding for special projects) are allocated by the Administration and Budget Task Force. Decisions about the arts program, for example the hiring of an artist in residence, are made by the Arts Task Force, and evaluation, both internal and external, is handled by the Evaluation Task Force.

The director, as director, is responsible for carrying out decisions made by the community and its task forces. Although empowered with special decision-making authority by virtue of his role, the current director does not use this special power. The Shanti director may participate in decision-making as a member of the Shanti community, as a member of a task force, or as a member of the teaching staff.

Shanti has two policy-making boards under which it operates. Its own Shanti School Board is composed of one appointed representative from each of the participating boards of education, the Executive Director of the Capitol Region Education Council, six students, six parents, and six members of the outside (or greater Hartford) community, and is responsible for approving Shanti community decisions in the areas of personnel and budget expenditures, and for approving major structural changes. The Capitol Region Education Council, the umbrella agency of central Connecticut school districts under which Shanti operates, must approve

fiscal and personnel decisions made by the Shanti community or Shanti School Board.

The Shanti school year is divided into four cycles of seven weeks each. Between the first two cycles and the last two cycles is January Project Month, a time in which the school is closed, and when students do projects of their own choosing in Hartford, other parts of Connecticut, the U.S., and the world. Staff members use this period for planning, training, paper work, and their rejuvenation. The schedule, determined by the Administration and Budget Task Force and revised annually includes Saturdays and some holidays.

The curriculum is divided into five areas: Communicating Self (including English), The World Out There (including Social Studies), The Physical World (including Mathematics and Science), Me the Creator and Craftsperson (including the Arts), and Body Wonderful, Soul Complete (including Physical Education). Each cycle survival courses, for example basic courses in Mathematics or English, courses which have been requested by students, and special interest courses of staff are offered. Some of these are on-going; others are offered for only one or two cycles. (Included in the "Shanti-School Information Brochure," in Appendix A, are a list of courses and learning experiences offered during the 1971-1972 and 1972-1973 academic years.)

Shanti has considered evaluation an important part of

its program. Internal evaluation of students, courses, and teachers, in terms of student and teacher goals, is a regular part of each course cycle. In addition, internal evaluation of the school is carried on weekly in home groups, where such problems as attendance, behavior, adjustment, and overall evaluation of day-to-day and long-range experiences are discussed. Each home group also appoints one member to the Evaluation Task Force, which is responsible for developing course evaluation forms, for establishing procedures by which the staff may be evaluated, and for contracting for external evaluation.

C H A P T E R I I I

A NEW EVALUATION METHODOLOGY AND METAMETHODOLOGY

The Fortune/Hutchinson Evaluation Methodology

A methodology was earlier defined as "a systematic, standardized, operationalized set of rules or procedures designed to accomplish a definable purpose." (Hutchinson, 1971) The purpose of the evaluation methodology created by Fortune, Hutchinson et. al. at the University of Massachusetts (the F/H Evaluation Methodology) is "to provide data for decision-making." (Hutchinson 1971) The major parts and sub-parts of this methodology were systematically derived from implications of its purpose. They were ordered logically, and were then tested for possible logical or experiential gaps. Below are implications of the purpose "to provide data for decision-making" generated by Hutchinson, Benedict, Rosen et. al. (Rosen 1973) Following the implications are a list of parts of the methodology which were derived from these implications.

Implications of the purpose.

1. If data are actually to be used for decision-making, then those who will use the data, the decision-makers must be identified before the data are collected for them.

2. If data are to be used by the decision-makers, the data must be collected on goals which the decision-makers actually have.
3. If these goals are to be measured or observed, they must be described in observable or measureable terms.
 - A. It is important that the decision-maker's meaning for goals not be lost in the process of describing them in observable or measurable terms.
 - B. It is important that meanings which were not a part of those goals for those decision-makers not be added by the evaluator unless desired by the decision-maker(s).
4. If data are actually to be used for decision-making the decision-maker must feel they are valid.
 - A. Goals must be measured in appropriate parts of the enterprise, from the decision-maker's point of view.
 - B. Observational techniques must be valid from the decision-maker's perspective.
5. When data are reported to decision-makers, the data must be reported in terms of the decision-maker's goals and in a convenient form which makes sense to him/her.

6. Since the evaluation may be considered by decision-makers as a part of the enterprise, they may want data for their decision-making on the evaluation itself.

The major parts of the F/H Evaluation Methodology. Each of the major parts of the F/H Evaluation Methodology has been directly derived from a major implication of its purpose. In some cases the major implications have also been subsequently stated as sub-purposes, and implications of each of these sub-purposes have in turn been used to derive sub-parts, or sections of major parts of the methodology. In other cases, sub-parts of the methodology have been developed as a result of logical or empirical testing of the methodology which has revealed gaps for which new steps or sections have needed to be designed.

The major parts of the methodology as they exist at this time will be set forth and summarized. A copy of the entire methodology, with all its major parts, (currently described as "phases" or "processes", e.g. "The Negotiation of the Contract Phase," "The Evaluation of the Evaluation Phase," "The Goals Process," or "The Goals/Parts Integration Process,") sub-parts, (currently described as "sections," or "sets of procedures,") and steps, is documented elsewhere. (Benedict, ed. 1973)

Part I: The Negotiation of the Contract Phase. The first major part of the methodology is "The Negotiation of the Contract Phase," whose purpose is "to develop the scope of work for the evaluation" with the Contract Decision-Maker. (Gordon 1972) In this part, the person or group contracting for evaluation (the Contract Decision-Maker) is identified, the purpose of the evaluation and its implications are explained, and it is determined whether or not the methodology will satisfy the needs of the Contract Decision-Maker. If so, the "enterprise" (that which is to be evaluated), resources for the evaluation, and decision-makers who will get data for their decision-making are then identified, after which a written contract is prepared and signed by the Contract Decision-Maker and evaluator.

Part II: The Goals Process. The second major part is "The Goals Process." Its purpose is "to arrive at an approximation of the decision-maker's intents for the enterprise which is as complete as possible," (Benedict 1972) or "to enable decision-makers to produce as complete a set as possible of their real goals in order of priority to them." (Rosen 1973) There are three cases of this process: Case I, where the decision-maker is an individual who makes decisions relative to the enterprise individually; Case II, where the decision-maker is a group who make decisions as a single decision-making body; and Case III, where the decision-maker is a group of individuals who make decisions

relative to the enterprise individually.

While the procedures differ somewhat for each case, almost all the activities for Case I also occur in the other cases. In Case I the decision-maker is asked to describe what (s)he wants the enterprise to be and to accomplish for him/herself and for others.² The response of the decision-maker is then analyzed to break down complex goals statements into simple ones, to discover implied goals and to eliminate any redundant goals.

Following the goal analysis, the list of goals is checked by the decision-maker for completeness, using one or more of several "tests of completeness" which "The Goals Process" provides. For example, in the "document test of completeness," the decision-maker looks at goals for the enterprise taken from an enterprise document and considers the possible addition of some of those goals to his/her list. In the "others test of completeness," the decision-maker looks at lists of goals generated by other people who are connected with the enterprise or with a similar enterprise. There are many other tests of completeness, as well, which are intended to serve the same purpose, to make sure the list of goals is as reasonably complete as possible.

Following the test(s) of completeness, the decision-

²There is an attempt made throughout this work to use both masculine and feminine impersonal pronouns to avoid discrimination on the basis of gender. The reader is asked to pardon the occasional awkwardness of this form.

maker re-examines, and commits him/herself to his/her list of goals. Then (s)he orders this list by priority using one or more of several criteria which (s)he chooses. In the final step, the decision-maker examines the list to determine if it represents a reasonable order in which to proceed with the operationalization, a later process of the methodology.

Part III: The Parts Process. The purpose of "The Parts Process" is "to identify the parts of the enterprise from the point of view of the decision-maker for whom data is to be collected," (sic) (Benedict 1974), in particular to have each decision-maker list parts, in priority order, in which the decision-maker's goals are to be measured. There are three cases of this process: Case I, where the decision-maker is an individual; Case II, where the decision-maker is a group who act as a single decision-making body; and Case III, where the decision-maker is a collection of individual decision-makers making individual decisions. Again, the procedures differ somewhat from case to case, but Case I activities almost all occur in the other cases.

The decision-maker in Case I is asked to describe the conceptual elements or components that (s)he sees as the major parts of the enterprise. These lists are then checked for completeness using one or more of several tests of completeness: an input/interface/output test, an activities test, and a goals test. The decision-maker then orders

the expanded list of parts by priority, using one or more criteria of his/her choice. If resources permit, parts are then broken down into sub-parts, beginning with the highest priority part. The sub-parts are tested for completeness and prioritized. Finally, a list of all the parts (and sub-parts) in order of priority, with activities assigned to each part and goals assigned to each part, is given to the decision-maker for approval.

Although "The Parts Process" was designed primarily to enable data to be provided on the extent to which goals are accomplished in specific parts, clearly the process itself also provides the decision-maker with data on the extent, complexity, and priority of the parts of the enterprise.

Part IV: Goals/Parts Integration Process. The purpose of this part is to relate (integrate) goals from the goals list and parts from the parts list of each decision-maker, so that the evaluator will know which goals the decision-maker sees operating in which parts of the enterprise. This will then enable the evaluator, once the goals have been operationally defined (the next process) to observe whether or not the goals are being accomplished in those parts.

The decision-maker decides in which parts each goal operates, and puts marks in the appropriate squares on the matrix provided. Then the decision-maker decides which goals operate in each part, and marks the appropriate squares

on the same matrix. When the decision-maker has finished, all the squares are marked on the matrix where a goal operates in at least one part, or where a part has at least one goal operating in it.

Part V: Operationalization of Goals Process. This process, based on "The Operationalization of Fuzzy Concepts" process (Benedict and Hutchinson, 1970), is designed to allow the decision-maker to systematically define a "fuzzy" (non-operational) goal into its directly observable and measurable components. The decision-maker first imagines hypothetical situations in which the goal is operating, then in which it is absent, and in each case writes down the observable components of his goal. These components are then checked for completeness by using dimensions generated by others who have operationalized the same goal, by re-exploring the original hypothetical situation for overlooked yet relevant components, and by a surprise, lateral-thinking step which asks the decision-maker to think of something which has nothing to do with the fuzzy goal, and then to consider whether or not in fact it does.

The list of components, with one component per line, and with duplicates eliminated, is reviewed by the decision-maker and approved or changed. The decision-maker prioritizes (rank orders by priority) the components in terms of the importance of having evaluation data on them. These

components are then tested to see if they are actually observable. Those which are not are prioritized and further operationalized, using the earlier steps of the process. Those which are observable are ready for the next process.

Part VI: Development of Observational Techniques

Process. The purpose of this process is to design valid techniques for observing or measuring the operational components of a decision-maker's goals. Three criteria are set forth in this process for the design of observational techniques; ideal techniques are those which observe directly, under natural conditions, and unobtrusively. An ideal technique for a given operational component is found or designed; then it is tested for cost, and if the decision-maker finds it reasonable, it is field-tested, documented, and given to the decision-maker for approval, change, or rejection. If a technique which is less than ideal must be designed or used because the cost for an ideal technique is not reasonable, this technique is field-tested, tested for validity, documented, and then carried to the decision-maker for approval, change, or rejection. Where the decision-maker does not approve the technique and asks for changes, it is redesigned, then approved or rejected.

Part VII: Implementation of Measurement Process.

The purpose of this process is to implement the approved observational technique for an operational component. If

needed, a recording device for observation is developed, and field-tested. A sampling plan is developed, if a sample is required. The plan is documented, taken to the decision-maker for approval, and if accepted, implemented. Observations are carried out and recorded. Deviations from the specified technique or sampling plan, and any other problems that occur are noted for later reporting to the decision-maker.

Part VIII: Reporting Procedures. This set of procedures describes how to report data back to decision-makers. It currently provides for reporting to individual decision-makers, and when fully documented, will provide for reporting to groups of decision-makers. It provides a format for reporting the data which includes: the goal, its priority, the component, its priority, the degree of completeness of operationalization, the name of the part in which the goal was observed, its priority, higher systems in the same sequence, their relative priorities, the name of the observational technique, and dates of observation. It includes the data and possible difficulties in interpreting it, but does not include the evaluator's interpretation of the meaning of the data, or evaluator's judgments or recommendations. It is an unusual and important feature of this methodology that such interpretations, judgements, or recommendations are not provided. A basic premise of an evaluation whose purpose is to provide data for decision-

making is that it is the legal and ethical right of the decision-maker to make decisions about his/her enterprise and that an evaluator should not usurp or erode this right.

As a part of such a report, if it is not the first time data are reported on a component, previous data are also presented so that trends may be observed. Appendices, including documentation of the operationalization of the goal, the observation technique, and the sampling plan are also attached.

The report is presented to the decision-maker. Items which have not been written are presented orally to the decision-maker. (S)he is asked to read the written report. Consequences of difficulties of interpretation of the results are pointed out. The decision-maker is asked if (s)he would like to review previous reports (if any have been prepared) on the same goal in the same part, on the same part, or on the same goal. If so, (s)he is provided with these.

Part IX: Evaluation of the Evaluation Phase. There are three cases of this phase of the methodology, depending on who initiates it and for what purpose: Evaluation of the Evaluation (Eval/Eval) initiated at the request of the Contract Decision-Maker or a decision-maker (Case X), Eval/Eval initiated by the evaluator as a regular part of a long-term evaluation (at the end of a year interval in a two-year or longer evaluation) (Case Y), and Eval/Eval

initiated by the evaluator for the purposes of methodological research (Case Z). The extent to which data provided were actually used to make decisions, whether or not data were provided in time for the needs of the decision-maker, whether or not they were provided on the highest priority decisions as opposed to the lowest, and the extent to which decisions were made without data provided for them are examined in all three cases.

Part X: Redesign Phase. There are four cases of this phase: Redesign initiated by a decision-maker (Case W), Redesign initiated by the evaluator for one or more decision-makers (Case X), Redesign at the request of the Contract Decision-Maker (Case Y), and Regular redesign in a long-term evaluation (Case Z). Redesign is not automatically undertaken; it is only if the evaluator decides that it is really necessary, as indicated by an occurrence of one of the above four situations, that the evaluation is redesigned. When this is necessary, redesigned parts are tested, then adopted, or redesigned as necessary.

Methodologies and Metamethodology

Metamethodology is a methodology whose purpose is "to develop and research (or test) methodologies," (Thomann 1973) or "to develop, research and/or improve methodologies" (Rosen 1974). Although the F/H Evaluation Methodology was

not formally derived from Metamethodology, the realization that the procedures were systematic, operational, and designed to accomplish an operationally definable purpose led to the supposition that they were in themselves a nascent meta-methodology, a methodology for creating methodologies. This supposition prompted Hutchinson and Thomann to formalize these steps, and Thomann to document and do research on them (Thomann 1973).

Methodological development, as set forth in the procedures of Metamethodology, consists of the following major processes: 1) creation of a methodology, 2) field-testing, 3) redesign, and 4) experimental research. The first process includes the following major parts:

- I. Putting the methodologist in contact with a problem for which a methodology needs to be designed.
- II. Investigating the problem area, (reading the literature, talking with people who work in the area, examining work done in the area, brainstorming about the area, trying out tools that already exist) narrowing down the area into a manageable piece, investigating possible purposes within the chosen piece of the problem area, choosing the most appropriate purpose, checking to see that it is not trivial and that it really is likely to solve the problem, and stating this purpose in

writing.

- III. Testing the purpose to see if it is desirable, operationalizable, and practicable, and to see if existing methodologies are insufficient.
- IV. Analyzing the implications of the purpose in order to develop the methodology, (identifying the attributes the methodology must have), choosing the initial set of major parts of the methodology, organizing these into a rational order of steps.
- V. Operationalizing the purpose.
- VI. Designing steps and sub-steps of the methodology, testing them for completeness, examining them in terms of the purpose or sub-purpose, filling in gaps, and redesigning where necessary.

(Based on Draft VII of Metamethodology, Thomann 1973)

The other three processes of metamethodological development do not necessarily follow the first in a linear way. Once the major parts of a methodology have been created, for example, they could immediately be field-tested, and/or redesigned before other parts are created. Redesign can take place without having to be preceded by field-testing. Experimental research can take place on a small part of a methodology while other parts have yet to be field-tested or redesigned.

Metamethodology and its continued development holds the key to the creation of new methodologies and to testing and redesigning existing methodologies.

C H A P T E R I V

METHODOLOGICAL RESEARCH ON THE FORTUNE/HUTCHINSON EVALUATION METHODOLOGY

Decision-Oriented and Conclusion-Oriented Research

Methodological research has been introduced in the previous chapter in the context of methodological development, a broader effort which includes research. Two kinds of research were referred to: decision-oriented (or applied) research, whose purpose is the further development and improvement of the methodology, and conclusion-oriented (basic or experimental) research whose purpose is to ascertain the generalizability of the attainment of the claims of the methodology. Both of these are provided for by Metamethodology.

Methodological research on the Fortune/Hutchinson Evaluation Methodology would concern itself, at different phases of development of the methodology, with the following kinds of substantive questions:

Decision-Oriented Research Questions.

1. Can the methodology actually accomplish its stated purpose in at least one evaluation situation?
2. Is the methodology complete? Are there gaps of logic, gaps in the description of procedures, or gaps found while actually using the methodology?

3. Are all the parts of the methodology capable of accomplishing their sub-purposes in at least one evaluation situation? Are the parts complete? Are there gaps in the parts?

Conclusion-Oriented Research Questions.

1. In what situations, and under what conditions, can the methodology be shown to accomplish its stated purpose?
2. In what situations, and under what conditions, can each part of the methodology be shown to accomplish its stated sub-purpose?
3. With respect to the criteria established for accomplishing its purpose, how successful is this methodology compared with other evaluation methodologies which have the same purpose?

Research which can provide answers to these questions for formative decision-making about the methodology, or ultimately to add to knowledge about the generalizability of the methodology will be a valuable contribution to evaluation science. While major evaluation theorists and researchers frequently cite the need for this kind of research, unfortunately it is rarely done.

The Need for Decision-Oriented Research

The particular research problem which has been posed for this study is one of developmental rather than conclusion-oriented research. This distinction was first made by Lee J. Cronbach, Patrick Suppes and other members of the National Academy of Education in their report in 1969. There they presented the belief that a study whose purpose is to add to knowledge about a given entity or product is legitimate and valuable research. While such studies do not follow traditional experimental research paradigms, they must show evidence of being logical, systematic, and capable of providing the needed data. However, Cronbach and Suppes caution that:

"Developmental research is untidy. It is disciplined in that the investigator is expected to be systematic, so that other qualified persons can follow his reasoning. But the process is one of reacting rationally to the unexpected."

and that

"Rigor in developmental research is likely to express itself differently than the rigor of conclusion-oriented research just because there is more improvisation and less design."

On the depth of such research they offer the following:

"To ask only 'Is product A better than competing product B?' is to provide information of transient usefulness at best. To identify conditions under which the product performs best is more helpful to decision-makers and very likely adds to the general understanding of how such products function. A still more penetrating study will ask not about overall merit but about each separate educational effect." (Cronbach and Suppes 1969)

Rigor and depth in this study are not derived from an experimental design, but rather from thorough, systematic observation of the parts of the methodology as they are carried out. This approach, used by previous researchers who have studied the methodology, has proven useful. Its strength will be seen in the continuity of decision-oriented research and design, each new study incorporating the results of previous research for redesign and further testing, as this study in part will do. This approach is further justified by the existence of the field-test and redesign procedures of Metamethodology previously mentioned.

The Problem for Research

Statement of the Problem. To study empirically the Fortune/ Hutchinson Evaluation Methodology and to generate data for decision-making about the methodology and its use in an alternative school setting. Specifically:

To field-test sections of the methodology which have not been formally tested: "The Allocation of Resources Element" of "The Negotiation of the Contract," "The Contract Decision-Maker Reporting Process," and "The Goals/Parts Integration Process."

To do methodological development on a part of the methodology for which gaps have been identified in previous studies, and to field-test this redesigned part: "The

Negotiation of the Contract."

To provide an additional field-test in a new evaluation setting for part of the methodology found valid in one or two previous field-tests: "The Negotiation of the Contract."

To examine the feasibility of using the methodology in a public alternative school setting.

To examine whether or not there will be sufficient cooperation from decision-makers to complete all parts of the methodology.

To examine whether or not the methodology can accomplish its purpose--to provide data for decision-making--in an alternative school setting.

To examine whether or not the evaluation methodology will interfere with the accomplishment of the school's goals.

The potential for providing decision-oriented data not only on the F/H Evaluation Methodology, but also on Meta-methodology. A methodology is systematically derived from Metamethodology. (Hutchinson 1971). The success of Meta-methodology in accomplishing its ultimate purpose--the generation of successful methodologies--can finally be determined by the success of the methodologies it produces in accomplishing their various purposes. The success of a given methodology, on the other hand, may well depend on data from critiques, field-tests, and conclusion-oriented research used for further development or redesign, all of

which are functions of the field-test and redesign sections of Metamethodology.³ Because of this relationship between a given methodology and Metamethodology, field-testing parts of a given methodology to provide decision-oriented data on them, or re-designing parts of a given methodology, based on data from critiquing or field-testing, can also provide data for decision-making on the field-test and redesign sections of Metamethodology.

Thus the empirical study of a given methodology, in this case an evaluation methodology, has the more generalized advantage of providing information for decision-making concerning parts of Metamethodology.

Summary of Previous Research on the F/H Evaluation Methodology

The F/H Evaluation Methodology has been the subject of three doctoral dissertations (Jones 1971, Gordon 1972, and Benedict 1973). Leon Jones' study, which was a field-test of the only documented part of the methodology at that time, "The Operationalization of Fuzzy Concepts," (O/F/C) found that this part was workable. The results of his study supported the hypothesis that the O/F/C was capable of:

1. generating a set of quantifiable variables, and
2. preserving the decision-maker's intent in goal statements.

³Field-testing is step VII A of Metamethodology. Re-design is step VI.

Although Jones identified some problems which some decision-makers encountered while using it, he concluded that

"...there exists a need for wide-range, large-scale research regarding this methodology."

and recommended several

"...areas of concern needing further research and new knowledge (that) include:

1. arriving at a way to ascertain whether or not the decision-maker used the data presented.
2. working out a criterion that promotes the use of the data generated by the decision-makers.
3. applying this methodology with various kinds of decision-makers.
4. establishing the training limitations of this methodology, i.e. can any person enter a training program and learn to use this methodology? (What are its limitations with respect to trainers, decision-makers, cultural differences, etc.?)" (Jones 1971)

Gordon's dissertation was an empirical study of the then documented parts of the methodology for the purpose of suggesting weaknesses and improvements, and for determining how feasible was its use in evaluating private street academies. Between Jones' dissertation and Gordon's, the methodology had been tested for logic in an evaluation of the Mark's Meadow Early Childhood Program (Benedict and McKay 1971) but had not as a whole been field-tested. Gordon assembled all of the then existing parts or major elements of the methodology, implemented them, and kept a log on the progress of the implementation.

The results of Gordon's research indicate that some parts of the methodology, while exhibiting minor weaknesses, accomplished their stated purposes, while others failed to accomplish their purposes. "The Negotiation of the Contract Phase" and "The Goals Process" succeeded, while "The Parts Process" was a notable failure. "The Operationalization of Goals Process" was accomplished to its fullest extent with only the first priority decision-maker. Other parts of the methodology, while the subject of Gordon's research, were at that time not sufficiently documented to provide a solid basis for field-testing.

The following are some of Gordon's recommendations for further research:

1. Redesign of the parts of the methodology found lacking, using the redesign steps of Metamethodology.
2. Conclusion-oriented research, preceded by further field-testing, so conclusions can be drawn across field-tests.
3. Decision-oriented research, including:
 - a. further investigation of each phase in various settings.
 - b. revising phases found inadequate, specifically the observational techniques, data collection procedures, and the parts process.
 - c. developing new cases for specific phases of the methodology, e.g. 1) where the evaluator makes

a bid for a contract, or 2) where an evaluator is approached by an enterprise for services.

d. examining the use of data provided.

Gordon also emphasized the importance of replication of his study to support his results and interpretations.

Benedict undertook in his study systematic, methodological development on "The Goals Process." After documenting the process, he identified one specific gap, developed "The Goals Analysis Procedures," and field-tested them.

The results of Benedict's work were the complete documentation of "The Goals Process," the identification of gaps in it, field-testing of a major gap, and development of procedures in the form of a self-instructional module to fill that gap. Benedict's recommendations for further research were:

1. A decision-oriented field-test of the self-instructional module in the "Goal Analysis Procedures."
2. Revision of the module on the basis of that field-test.
3. Subjecting each of the major gaps identified to field-testing and methodological development.
4. Prioritization, field-testing, and methodological development of gaps in other cases of "The Goals Process."

These studies identified parts for which further design

work needed to be done, and which subsequently needed to be tested. "The Parts Process" and "The Goals/Parts Integration Process" had not yet been tested. Recent sets of steps for identification and allocation of resources and "The Contract Decision-Maker Reporting Process," developed since Gordon's work and based in part on his recommendations, had also yet to be tested. For those parts of the methodology which had received only an initial field-test, development and further field-testing had yet to be done. Clearly, a great deal of research needed to be done on the methodology.

Research Procedures

Procedures for methodological research and development are provided for in Metamethodology, sections VI and VII (included in Appendix B). While the procedures for design/redesign were documented before this research was begun, the procedures for field-testing and conclusion-oriented research were not. (Procedures for conclusion-oriented research have not yet been documented.) Thomann, in his dissertation on Metamethodology (Thomann, 1973), outlined procedures for field-testing (included in Appendix B), and Benedict clearly had many of the same procedures in mind as he designed his field-test.

In Chapter II of Benedict's dissertation (Benedict 1973) he provides a rationale for the field-test procedures

and suggests that the investigator keep in mind the following considerations, that:

1. the field-test be decision-oriented, and that
2. it be conducted in the simplest available situation,
3. that the investigator is the decision-maker for whom data are being provided, and thus,
4. the design must have validity for the investigator as decision-maker.

Following these broad procedures for his field-test, Benedict:

1. stated the purpose of the field-test,
2. examined the implications of the purpose,
3. designed the field-test so that it was likely to accomplish the purpose, given the implications,
4. performed the field-test,
5. reported the results,
6. analyzed the results and
7. made recommendations for modifications of the methodology and the current training procedures.

The work of Benedict was used as a guide in field-testing earlier parts of the methodology: "The Negotiation of the Contract Phase," "The Allocation of Resources Section," and "The Contract Decision-Maker Reporting Process." The work of Thomann was incorporated in the development of pre-redesign procedures, (see Chapter VIII), and in field-testing "The Goals/Parts Integration Process."

Shanti: site for methodological research. The Shanti

school has been described earlier as a site for evaluation. Here it will be briefly described as a site for research. Decision-makers at Shanti were told by the investigator that the evaluation methodology was going to be studied, and that this effort was to be the substance of the investigator's dissertation. Since the decision-makers were sympathetic to the investigator as a person, this may have influenced their willingness to cooperate in the research. They were, without exception, extremely cooperative, and at least one decision-maker showed interest in the research to the extent of requesting to see a copy of the dissertation when it had been completed. As the research design for this study consisted of systematic implementation of the steps of the methodology and careful recording of the results of each step, rather than an experimental research design, and as it was the methodology, not Shanti, which was the focus of the study, there were no special problems which an unconventional site such as Shanti might be expected to offer an investigator.

General description of the field-testing. With the exception of "The Goals/Parts Integration Process" field-test, which was more sophisticated, (and which is described in detail in Chapter VIII), field-testing of the parts of the methodology can be described in general as follows: The decision-maker in each case was not told whether or not a particular part of the methodology then being implemented

was also being field-tested (with the exception of "The Goals/Parts Integration Process," for which the decision-maker was told that it was being studied). The steps of a part were implemented in the order prescribed by the methodology unless there were good reasons to change the order. Whenever this occurred, it was noted, and appears in the results here. The results of each step were carefully recorded, immediately after the implementation of the step, in a journal kept for this purpose. When there were unexpected occurrences or negative results, these were noted in detail. The investigator played a dual role, as researcher and as implementer (evaluator) of the methodology being studied. While this offered the advantage of ease of coordination of both efforts (research and evaluation) it had the disadvantage that there may have been times when the results were not as thoroughly observed as they would have been if the two roles were carried out by two different people. There was, however, no time when the dual role clearly presented itself as a problem for the research.

C H A P T E R V

THE NEGOTIATION OF THE CONTRACT PHASE: FIELD-TEST AND METHODOLOGICAL DEVELOPMENT

Pre-Field Test Methodological Development

In April 1972, at the Graduate Colloquium of the University of Massachusetts' School of Education, Gene Gordon presented the first documented and field-tested version of "The Negotiation of the Contract Phase" of the Fortune/Hutchinson Evaluation Methodology. In this paper (included in Appendix C), he set forth procedures to follow when negotiating a contract for evaluation; he also described his experience using these procedures and made suggestions for improvements. These are contained in the section from that paper which follows:

"Discussion

Project Matthew is an informal inner-city program subject to a host of problems characteristic of the inner-city. During the first day of the Negotiation Process, time was virtually unavailable. The project had been robbed of several items of equipment and the day was spent in discussions with staff, police and insurance adjusters. The purpose of the project was confused with the description, and the temporary decision-maker was more inclined to provide written rather than verbal responses.

It was difficult to determine resources as the really tangible resource--money--was not available. The Negotiation of the Contract was accomplished in one week utilizing a total of sixteen hours, ten with the temporary decision-maker and six with the staff. This arrangement (a little at a time) proved to be an enervating exercise for enterprise personnel. The concept of evaluation

was difficult for the staff to grasp because they had not previously thought in that context. Consequently, much of the time spent with the staff was on an explication of the methodology. Some impatience was exhibited primarily because the staff expected the evaluator to get money for them. The staff and the temporary decision-maker, though much less the latter, found the processes difficult and often requested overnight 'thought' to answer the questions.

Essentially the Negotiation of the Contract part of the methodology did what it was intended to do. Time was available although the evaluator was forced to 'beg' for it in the face of constant disruptions and both non-programmatic and programmatic crises.

Suggestions for Improvement

1) The evaluator might take a more active role in making suggestions on what resources might be available and who might be a decision-maker.

2) The temporary decision-maker should be taken away from the enterprise for perhaps a day so that the interruptions are eliminated and the process less tedious.

3) More work needs to be done to ensure that the purpose is in fact acceptable to all and not merely given lip service to." (From Gordon Colloquim Paper, 1972)

Later, in his dissertation, Gordon elaborates upon these suggestions and makes specific recommendations for further development of this phase. Gordon's suggestions and recommendations were considered, as part of the pre-field-test methodological development work on this phase. These are recorded below. Where a recommendation has been incorporated, Gordon's reasoning has been accepted and not commented upon. Where a recommendation has not been incorporated, reasons have been given for not doing so. Preced-

ing some of the recommendations are the steps of the methodology to which they refer (as documented in Gordon's dissertation.) These are set off in boxes.

"Additional steps should be provided for a more definitive choice of temporary decision-maker. This step may take the form of cases for dealing with different situations. Case I could provide steps in the situation where the evaluator was hired by the temporary decision-maker; Case II, where the evaluator was assigned; Case III where the evaluator was a decision-maker within the enterprise wishing to perform an evaluation. A fourth case might also be established for choosing among several possible temporary decision-makers." (From Gordon, 1972, Chapter V)

Gordon fails to distinguish in his use of the term "temporary decision-maker" between the holder of evaluation resources and the negotiator of the contract (the Contract Decision-Maker), which may be two different roles played by different persons or groups. The choice of the holder(s) is one problem; the choice of the Contract Decision-Maker is another. Additional steps do need to be provided to help the resources holder in choosing the Contract Decision-Maker, and possibly to help the evaluator in determining the holder(s). Gordon may be correct when he suggests that there should be different cases for negotiating the contract, however, the important difference lies in whether a contract is being negotiated with an individual or a group.

- Step 1.0 Explication of the evaluation methodology and determination of whether it satisfies the needs of the temporary decision-maker.
- 1.1 Identify the temporary decision-maker or the person who has control of evaluation resources for the enterprise.
 - 1.2 Give the purpose of evaluation, "to provide information for decision-making."
 - 1.3 Provide the temporary decision-maker with a broad outline of the methodology, especially the definition of terms.
 - 1.4 Ask the temporary decision-maker if the purpose is acceptable. If no, go to 1.5; if yes, go to 1.7.
 - 1.5 If the answer given by the temporary decision-maker is no, ask what concept of evaluation the temporary decision-maker has.
 - 1.6 Determine if there is a real conflict and if the temporary decision-maker's concept cannot still fit into the broad definition of the evaluation purpose. If this is not possible, suggest to the temporary decision-maker that this evaluation methodology would not be suitable.
 - 1.7 If the answer given by the temporary decision-maker is yes--proceed.

"Step 1 should provide procedures for setting up a time schedule for phase I and include directions for alternatives where it is impossible to actually utilize the schedule. It seems clear that a schedule using as little time as possible to which additional time could be added as needed would be an ideal course to take."

Step 2.0 Identification of the Enterprise

- 2.1 Ask the temporary decision-maker to state the purpose of the enterprise starting by naming it and thereby substituting the name for the word 'enterprise' hereinafter.
- 2.2 Ask the temporary decision-maker to provide a description of the enterprise in narrative and written form.
- 2.3 Ask the temporary decision-maker if the total enterprise or only parts of it are to be evaluated in order to determine the extent of the enterprise.
 - 2.31 If parts of the enterprise are to be evaluated, as opposed to the whole, ask the temporary decision-maker to identify which parts. This will establish a new enterprise. Rename as necessary.

"Step 2 requires a more precise way of insuring that the purpose of the evaluation is acceptable."

"Obtaining the purpose of the enterprise is an unnecessary requirement of the methodology."

"It would be more appropriate for the evaluator to solicit a description and eke out the purpose by adding the words 'the purpose of the enterprise is to provide...'"

Step 3.0 Elimination of Misunderstanding (Test of Completeness)

- 3.1 Provide the temporary decision-maker with feedback on the information gathered thus far in completing step 1 and 2, in order to insure that a mutual understanding is being maintained and to make revisions if necessary.

Step 4.0 Identification of Resources for the Evaluation

- 4.1 Ask the temporary decision-maker to list the resources available to the enterprise without making judgements concerning the reality of the choices. (Ask, what do you have or can get hold of by way of resources for your enterprise?)
- 4.2 Ask the temporary decision-maker to indicate which resources are available from the first list and for evaluation.
 - 4.21 Advise the temporary decision-maker of the danger in committing so many resources that the ability of the enterprise to deliver its objectives is jeopardized.
- 4.3 Test of completeness of 4.2
 - 4.31 The temporary decision-maker identifies 'others' who prepare lists of resources.
 - 4.32 The evaluator adds the lists prepared by 'others' to the list prepared by the temporary decision-maker, eliminating redundant or overlapping items.
 - 4.33 The temporary decision-maker inspects the final list, makes revisions if necessary and indicates if the list is complete with respect to the best estimate.

"Step 4 should be redesigned so that the evaluator lends more assistance in the determination of resources."

"The evaluator perhaps would also be a more effective 'other' in the test of completeness than decision-makers."

The evaluator's test of completeness of resources would be valuable, but it should not replace a test of completeness from decision-makers. They may know about available resources of which the evaluator and temporary decision-maker (Contract Decision-Maker) are unaware.

"The Methodology should add a step to include the evaluator and to admit others outside the enterprise directly, at least not other decision-makers."

This recommendation is unclear.

"Decision-makers also should be selected before the resources are determined because their own time is a resource."

Gordon is correct when he points out that decision-maker time is an important evaluation resource, but he does not go far enough in his recommendation. As the temporary decision-maker (Contract Decision-Maker) cannot necessarily estimate how much time decision-makers will be willing to commit to the evaluation, these decision-makers must be asked directly, by the evaluator. Perhaps this should be done while negotiating the contract, but this has the disadvantage of delaying the negotiation process until each decision-maker has been contacted. This could be an unreasonable delay, especially if there were many decision-makers.

"The Negotiation of the Contract needs a determination of fixed resources. If this is done the amount of resources to be consumed during the phase has to be set beforehand. The solution of this problem could be linked to the previous one for the development of cases. In Case I the evaluator would specify the time he would spend in Negotiation of the Contract, in Case II the time would be allocated, in Case III the evaluator would make a request for the time to be estimated. The time estimated could be free time and the evaluator provides for the Negotiation of the Contract as his 'bid' for the evaluation or he could be paid for the time expended."

The problem Gordon seems to be addressing here is one of planning the activities for negotiating the contract. This will depend on how much time the Contract Decision-Maker agrees to make available and, as Gordon points out, how much time the evaluator can or will make available. It is not necessary to determined fixed resources, as much to have commitments of minimum resources, and possible additional resources.

"Subsequently, when resources for the evaluation are identified they should be allocated immediately to all phases of the methodology eliminating the need to make the determinations later. During the implementation of each phase it would then be necessary only to indicate the amount of resources available for the activities of the phase."

"The questions instituted by the evaluator to elicit resources should be adopted. Those questions were: What can you get me if I have to do (such and/or such)?"

"Following step 4 of the Negotiation of the Contract, Step 5 should become Prioritization of Resources

rather than Identification of Decision-makers.
The additional step would appear as follows:

Step 5.0 Prioritization of Resources

- 5.1 List resources in order of priority with the assistance of the temporary decision-maker using some agreed upon criteria such as Importance, Availability, Risk, or otherwise. The use of "Instructional Alternative on Prioritization," (as used in the Fortune/Hutchinson Methodology, mimeo. U. Mass, School of Education, Center for Educational Research) is recommended.

Step 5.0 would then become step 6.0 and 6.0 become 7.0"

Gordon rightly suggests that the resources for evaluation need to be ordered by priority, but this is a task for the evaluator who presumably knows, on the basis of past experience or training, the resources that are most important. Of course, this could then be inspected by the Contract Decision-Maker, who would act as a test of completeness for the prioritization.

Step 5.0 Identification of Decision-Makers

- 5.1 Ask the temporary decision-maker to provide a list of all decision-makers associated with the enterprise without making judgements concerning the reality of the choices.
- 5.2 Perform a test of completeness for 5.1
- 5.21 Ask the temporary decision-maker to identify 'others' who can develop lists of decision-makers.
- 5.22 The temporary decision-maker inspects the total list and revises, eliminating

those who do not desire to be included, whose decision-making is extremely remote or indirect or those for whom the temporary decision-maker does not want information gathered.

- 5.3 Advise the temporary decision-maker of the consequences of identifying a list of decision-makers too large to be reasonable in relation to the available resources.
 - 5.31 Evaluator prepares final list of decision-makers and clears with temporary decision-maker.
- 5.4 Prioritize decision-makers with assistance of temporary decision-maker using some agreed-upon criteria such as when they need the information, importance to the enterprise, degree of involvement, amount of time they can make available to the evaluator and the like. Two separate criteria may be used to develop two lists from which a final list is drawn.
- 5.5 Perform a test of completeness for the prioritization of decision-makers.
 - 5.51 Provide 'others' with the final prioritized list and ask them if it is acceptable.
 - 5.52 Clear list with temporary decision-maker.
- 5.6 Provide a gross matching of decision-makers and resources to determine for how many information may be gathered.
 - 5.61 Determine estimate of resources needed by each decision-maker with the highest priority descending to the second highest and so on until all resources have been exhausted.
 - 5.62 With the assistance of the temporary decision-maker determine if the matching process is realistic.

"In Step 5 as presently provided, the Test of Completeness should again be used with 'others' not as close to the temporary decision-maker as they were in this field-test, because their use rendered the Test of Completeness useless."

Step 6.0 Preparation of the Contract

- 6.1 Using the prepared outline "Letter of Agreement" (below) or other contract form, fill in the details gathered in steps 1 through 5.
- 6.2 Provide the temporary decision-maker with a copy of the contract for a test of completeness and revision.
- 6.3 Secure the final approval and signature of the temporary decision-maker and present two copies of the contract.

"Step 6 the Letter of Agreement should be revised so as to read 'the evaluator will: (1) have access to the use of the following resources:' under Scope of Work rather than '...will obtain use...'"

"The Letter of Agreement should also provide recourse to amendment by including the following in the final section:

'This agreement may be amended by agreement by both parties at any time that such amendments or renegotiation shall become necessary.'

"The methodology should then provide steps for renegotiation of the contract and for amending the Letter of Agreement."

In addition to Gordon's work, there were two other sources of knowledge upon which this initial development work was based: a logical analysis performed by this

investigator, and the recommendations made in a letter to Gordon in the spring of 1972, which grew from this investigator's experience using this phase of the methodology.

Results of logical analysis.

1. The purpose of step 2.1 is not evident.
2. The purpose of step 2.2 is not evident.
3. In step 5.22 the temporary decision-maker is to eliminate decision-makers who do not desire to be included, but there is no step for securing this information. Perhaps this logically should occur after the evaluator has met the decision-makers and determined if they want to be included.
4. Step 5.5 seems rather a test of acceptability than a test of completeness.

Recommendations based on experience using this phase of the methodology. These recommendations were made in a letter to Gordon in the spring of 1972 as a part of a critique of the graduate colloquim paper referred to earlier.

1. "Step 1.4. The temporary decision-maker can answer 'yes and no' meaning that the purpose given is acceptable but that he has other purposes as well. In fact, from my experience evaluating the Teacher Corps project in Providence, he is likely to have other purposes, and

although he may not have thought of this purpose before, or at least not have given it high priority, he may be agreeable since it doesn't appear threatening and may even have benefits.

I suggest you add a step:

'Ask the temporary decision-maker if he has other purposes for the evaluation. If no, go to step 2.0. If yes, ask him for his other purposes, and discuss with him the likelihood of each of those purposes being able to be achieved using the F/H methodology. After this discussion ask the temporary decision-maker if he thinks the methodology will meet enough of his purposes to warrant proceeding with the evaluation. If no, stop. If yes, proceed to step 2.0.'

2. "I suggest the addition of step 2.4.

'Ask the temporary decision-maker if the enterprise he wants evaluated is actually larger, if it includes for example (give examples which expand his concept of the enterprise.)'

3. "I suggest adding step 2.5.

'Ask the temporary decision-maker if the enterprise he wants evaluated is actually smaller, if it includes more parts than he really wants evaluated.'

4. "I suggest adding step 2.6.

'Add or subtract parts of the enterprise as the temporary decision-maker suggests these changes.'

5. "In step 4.2. I have found that some decision-makers don't fully understand the word 'resources,' i.e. in terms of money, the evaluator's time, decision-maker time, secretarial help, etc.

It would be good to specify these in this step."

"The Negotiation of the Contract: Rosen Draft I August 1973" is the result of development work which grew from the thinking described here. It is the version which was used to field-test "The Negotiation of the Contract Phase" with the Shanti school. A copy of this draft is included in Appendix C and each step, followed by the results of having performed it, also appears in the Field-Test Results section of this chapter. In this draft the Contract Decision-Maker, referred to in Gordon's work as the "temporary decision-maker," is called the "contractor." "Contractor" was chosen to replace Gordon's term because the focus of this role is the negotiating and monitoring of the contract. More recently, "Contract Decision-Maker" was chosen to replace "contractor" to emphasize the decision-making aspect of this role. "Contracting Group" will also be found in this work. It is a Contract Decision-Maker which is a group rather than an individual.

Field-Test Results of The Negotiation of the Contract:

Rosen Draft I

During August and September, 1973, a Letter of Agreement was negotiated between the Evaluation Task Force of Shanti, the Contract Decision-Maker, and David Rosen, the evaluator, using Case II (Rosen Draft I) of "The Negotia-

tion of the Contract Phase" of the F/H Evaluation Methodology. This was undertaken both as part of the process of evaluating Shanti, and as a field-test of the redesigned phase of the methodology. The detailed results of the field-test and discussion, where appropriate, of special circumstances, variance in the performance of the steps of the methodology, and apparent methodological gaps, are preceded by a general description of the field-test. The results are followed by a summary of results and recommendations for redesign.

General description of the field-test. The field-test of "The Negotiation of the Contract Phase" took place away from the high-energy bustle, demands, and interruptions of Shanti, in a quiet, comfortable conference room in the offices of the Capitol Region Education Council. There, during six (two and three-hour) sessions from August 29 to September 24, 1974, the contract was negotiated between the evaluator, David Rosen, and the Contract Decision-Maker, the Evaluation Task Force of Shanti. The Contract Decision-Maker spent a total of approximately fifteen hours (including a three-hour session on June 3rd in which the evaluation methodology was explained in detail). The evaluator spent a total of approximately thirty hours which included the session on June 3rd, tests of completeness performed outside the negotiation sessions, meetings called

by the Capitol Region Education Council Executive Director, and preparation of a legal contract between the Council and the University of Massachusetts requested by the C.R.E.C. Executive Director. (This time does not include transportation time of the evaluator or subsequent sessions called by the evaluator for revision of the contract after it had been signed.)

Although the attendance of members of the Evaluation Task Force varied somewhat from session to session of the negotiation, there were always both student and staff members present, and one staff member, Dr. Gregg Sinner, was present at all the meetings. At most of the meetings, Dr. Philip Saif, from the Capitol Region Education Council was present as a representative of the Council to aid the Task Force in negotiating the contract. The Task Force made its decisions during the process in its usual way, by voting, and a majority of members present voting for or against was required to make a Task Force decision.

The Rosen Draft I of "The Negotiation of the Contract," a revision of a draft developed by Gene Gordon in 1972, was the version field-tested. Occasionally it became necessary to revise some of these procedures while the field-test was in progress. This is noted when it occurs in the description of results. The steps of this draft, set off in boxes, precede the described results.

Detailed results of the field-test.

ORIENTATION ELEMENT

- 0.0 Identification of the contractor
- 0.1 The evaluator asks the contact person or holder of evaluation resources to identify the contractor, the person or group who will develop the scope of work for the evaluation. The evaluator says "Could you tell me who you would like to develop the scope of work for the evaluation with me? Consider a person or persons likely to be interested in doing this and who might have several hours to devote to this activity. You might like to include yourself."

In the spring of 1973, Gene Mulcahy, the director of Shanti, was contacted and was asked to consider an evaluation of Shanti using the F/H Evaluation Methodology. He read "New Evaluation for New Schools," an article in Changing Schools, May 1973, describing the methodology, and he was interested in joining in the search for funds to do the evaluation. He was not then a holder of resources for the evaluation but was an important contact person.

Late in May there was a meeting with Mulcahy to discuss the purpose of the evaluation and to describe what were seen as important implications of the purpose (the same implications which were later discussed in detail at the first meeting with the Evaluation Task Force on June 3rd). He indicated that the purpose and its implications were acceptable to him, and that the next step would be to present

the same information to the Evaluation Task Force, the school agent responsible for contracting for outside evaluation. He also indicated that the school had two other purposes for evaluation, 1) to provide the Shanti Board and the metropolitan Hartford school boards which Shanti serves with public relations information, and 2) to provide data to the New England Association of Schools and Colleges, which they would use to determine whether or not to accredit Shanti. It was explained that using this methodology neither of those purposes could be guaranteed, but that data which were provided for decision-making might help in accomplishing them. That was acceptable to him.

On June 3rd, 1973, at a meeting with the Evaluation Task Force, the evaluation methodology was introduced and the Task Force was prepared as the potential contractor for the "Negotiation of the Contract Phase." Task Force members were given the purpose of the evaluation--to provide data for decision-making--and they discussed in detail the following implications of that purpose:

1. If data are to be provided for decision-making, then they must be provided to real decision-makers who are identified in advance.
2. This list of decision-makers must be as complete as possible,
3. and ordered by priority.

4. The data must be data these decision-makers want,
5. that they will be able to use, hence
6. data on their goals,
7. particularly, their most important goals.
8. These goals must be described by the decision-makers in operational terms, i.e. in observable or measurable terms,
9. and the description should be as complete as possible.
10. The goals should be observed in the parts of the enterprise which are most important to the decision-maker,
11. and in as many of these parts as possible.
12. When the data are collected it should be with instruments or techniques which the decision-maker feels are valid
13. and which are technically valid and reliable.
14. The data should be collected in time to be useful for the decision-makers' decision-making needs
15. and should be reported to the decision-maker in terms of his goals and his components of those goals.

The results of that meeting were as follows:

1. The Evaluation Task Force agreed that the purpose for the evaluation was suitable, and that the implications were also acceptable.

2. The Evaluation Task Force said that they would be willing to be the Contract Decision-Maker and to prepare themselves to identify decision-makers, state resources for the evaluation, estimate the size of the enterprise for evaluation, and make a contract. In particular, they agreed to consider what decision-maker time, student time, staff time, money, equipment, secretarial help, housing for the evaluator, and time of observers might be available.
3. The director of Shanti, who was also present at that meeting, stated that he had reservations about the methodology, but that they were compensated for by the "fluidity" built into it.
4. It was explained that the methodology itself would be built into the contract, and that the evaluation would follow the procedures described in it, and this was acceptable.

In late August, resources were found to do the evaluation. The holders of the resources were: Shanti (Mulcahy/ Administration and Budget Task Force) \$850, Capitol Region Education Council (Dr. John Allison, Exc. Director) \$850, and the National Alternative Schools Program of the University of Massachusetts (Tom Wolf) \$2,000. There were also the possibility of an additional \$300 for transportation

from C.R.E.C. and Shanti. As Tom Wolf indicated that he and N.A.S.P. were not interested in influencing the process of the evaluation, but only in receiving the products and in supporting an evaluation of an alternative school, he was not included in the deliberations about who would be the Contract Decision-Maker.

On August 27 a meeting was held to discuss the conditions under which C.R.E.C. would make funds available for the evaluation and to determine who the Contract Decision-Maker would be. C.R.E.C. indicated that they wanted to contract for formal evaluation services (and products) through the University of Massachusetts, and it was agreed that a formal University of Massachusetts/C.R.E.C. contract describing the processes and products would be drawn. It was also agreed that the Letter of Agreement (the result of "The Negotiation of the Contract Phase" of the evaluation methodology) would be negotiated between the evaluator and the Evaluation Task Force, and that a representative of C.R.E.C., Philip Saif, would sit in on those meetings. At this meeting the evaluation methodology was briefly introduced, but as Allison and Saif indicated that they were familiar with the methodology, no formal introduction was made.

The above information makes it clear that there are gaps in step 0.1 of the Orientation Element, although in spite of the gaps the performance of this step led to the

identification of the Contract Decision-Maker, and the step was therefore successful. One gap is that there may be more than one holder of resources. A second gap: When there is more than one holder, which one should be asked to identify the Contract Decision-Maker? A third gap: what should be done if all possible holders are asked and they disagree about who the Contract Decision-Maker should be?

- 0.2 If one person is identified as contractor, Use Case I
- 0.3 If more than one person is identified as contractor, use Case II.
- 0.4 If no one is identified as contractor, do not proceed until a contractor has been identified.

Results: More than one person was identified as Contract Decision-Maker, hence Case II was used.

NEGOTIATION OF THE CONTRACT: CASE II

Where the contractor is two or more people who act as a single decision-making body.

Purpose: To develop the scope of work for the evaluation.

- 1.0 Explication of the evaluation methodology and determination of whether or not it satisfies the needs of the contractor.
- 1.1 Give the contractor the purpose of the evaluation, "to provide data (or information) for decision-making."

Results: The Contract Decision-Maker was provided with the purpose in the meeting of June 3, 1973. In the first meeting to negotiate the contract the purpose and implications were briefly reviewed for the benefit of members of the task force who were not present at the previous meeting. This step was successful. At no point then, or later, did the Evaluation Task Force misunderstand the purpose.

1.2 Provide the contractor with a broad outline of the methodology.

Results: The following material, (Figure 1), was presented to each member of the Evaluation Task Force, and each of the major parts was briefly explained. This was successful, and seemed to lead to a greater understanding of the methodology, but as it followed the discussion of the implications of the purpose, it may be that the Task Force members already understood most of the parts of the methodology and their relation to the purpose, and that the list of parts either reinforced that understanding or was unnecessary.

Figure 1: Broad Outline of F/H Evaluation Methodology
(from Benedict, A.E.R.A. February 1973)

1.0 Negotiation of the Contract

- 1.1 Explication of the evaluation methodology, determination of whether it satisfies the needs of the temporary decision maker (contractor)
- 1.2 Identification of enterprise
- 1.3 Elimination of misunderstanding
- 1.4 Identification of resources for evaluation
- 1.5 Identification of decision-makers
- 1.6 Preparation of the contract

DESIGN OF THE EVALUATION

- 2.0 Identification of goals for each decision maker
- 3.0 Identification of parts of the enterprise from the perspective of each decision maker
- 4.0 Matching goals and parts for each decision maker
- 5.0 Operationalizing fuzzy goals for each decision maker
- 6.0 Development of observational techniques

IMPLEMENTATION OF DESIGN

Measurement/Observation

Reporting data to each decision maker

Evaluation of the evaluation

REDESIGN

Redesign of evaluation for each decision maker for whom redesign is necessary.

- 1.3 Provide the contractor with definitions of specialized terms used in the methodology.

Results: The following material, (Figure 2), was presented to each member of the Evaluation Task Force and was also presented orally as a part of several of the initial meetings. Definition of terms and understanding the specialized vocabulary were not a problem in working with the Contract Decision-Maker.

- 1.4 Discuss with the contractor the implications of the purpose.

Results: The contractor was provided with a lengthy discussion of the implications of the purpose on June 3rd, and a brief recapitulation of the implications at the first negotiating meeting on August 29th. (See Figure 3 for a list of implications that were discussed.) This was felt to be useful information, and there was no misunderstanding about what the purpose of the methodology implies, given the implications discussed. One implication, that decision-makers' time is a crucial resource, and that an hour or more a week might be considered a reasonable minimum amount, perhaps should have been made

Figure 2: Lexicon

- Data = Observable or measurable
Behaviors or states
- Decision - Maker = A person(s) identified by the contractor
as someone entitled to have data collected
and reported to him
- Goals = intents of particular decision makers
- Operationalize = to define (e.g. a concept or goal) in
observable or measurable terms, as completely
as possible
- Methodology = A systematic, standardized, operationalized
set of procedures for accomplishing a definable
purpose
- Prioritize = order in a list (e.g. goals, parts etc.) by
priority -- from first to last in terms of a
criterion (e.g. importance, risk, time,
etc.)
- Test of Completeness = a set of procedures for expanding
one's initial list of ideas (e.g.
goals, d-makers, parts, etc.)
- Enterprise = That which is to be evaluated
- Contractor = Person(s) in control of resources for evalua-
tion, able to "contract" for the evaluation
- Temporary Decision Maker = (Also called contractor) person
who has control of the evalua-
tion resources, who negotiates
the contract with the evaluator
- Evaluation = The process through which information for
decision making is determined, collected and
reported to selected decision makers for
their decision making

Figure 3: Implications of the Purpose "To Provide Data for Decision-Making"

1. If data are to be provided for decision-making, they must be provided to real decision-makers who are identified in advance.
2. This list of decision-makers must be as complete as possible,
3. and ordered by priority.
4. The data must be data these decision-makers want,
5. that they will be able to use, hence,
6. data on their goals,
7. particularly their most important goals.
8. These goals must be described by the decision-makers in operational terms, i.e. in observable or measurable terms,
9. and the description should be as complete as possible.
10. The goals should be observed in the parts of the enterprise which are most important to the decision-maker, and
11. in as many of these parts as possible.
12. When the data are collected, this should be with instruments or techniques which the decision-maker feels are valid,
13. and which are technically valid and reliable.
14. The data should be collected in time to be useful for the decision-maker's decision-making needs,
15. and should be reported to the decision-maker in terms of his goals and his components of those goals.

clear right at the beginning. It is an unusual and important feature of the methodology and one which the contractor needs to understand to know whether or not the methodology will satisfy his needs.

- 1.5 Ask the contractor if the purpose is acceptable. If no, go to 1.6; if yes, go to 1.8.

Results: The purpose was found to be acceptable in the meeting on June 3. The step was therefore not performed here.

- 1.6 If the answer given by any individual in the contractor group is no, then ask what concept of evaluation that person or those persons have.
- 1.7 Determine if there is a real conflict and if the person's concept cannot still fit into the broad definition of the evaluation purpose. If this isn't possible, suggest that this evaluation methodology may not be suitable, and ask the contractor group to decide on its acceptability. If they decide it is not acceptable, do not proceed further. If they decide that it is acceptable, go to 1.8.
- 1.8 Ask the contractor group if they have any other purpose for doing the evaluation. If not go to step 1.9. If yes, ask for the other purposes, and discuss with the contractor the likelihood of each of those purposes being achieved through using the F/H Evaluation Methodology. After this discussion, ask the contractor group if they think the methodology will meet these purposes well enough to warrant proceeding with the evaluation. If no, do not proceed further. If yes, proceed to 1.9.

Results: The members of the Evaluation Task Force indicated that one of their purposes was to have Shanti accredited. They were charged with this responsibility by the school community. It was explained that it could not be guaranteed that they would be able to accomplish this purpose using the F/H methodology, but that there appeared, from the procedures described by the accrediting agency, to be considerable overlap between their purpose for doing evaluation and the purpose of the F/H evaluation methodology. It was also explained that depending on decision-makers' goals, data could be collected which might also be useful for having the school accredited. The Task Force agreed that the methodology would be able to meet this purpose well enough to warrant proceeding.

- 1.9 Set up a time schedule for negotiating the contract.
 - 1.9.1 Ask the contractor for a commitment of a minimum amount of time they would be willing to spend.

Results: A time schedule was set up with the following minimum amounts of time committed: August 29, 3 hours; September 5, 3 hours.

1.9.2 Ask the contractor for an estimate of additional time beyond the minimum which could become available if needed.

Results: September 5, evening. Other time as negotiated.

1.9.3 Ask the contractor for other resources: space, typing, and duplicating.

Results: Typing was made available at Shanti. Space was made available at C.R.E.C., and at Shanti. Photoduplication was made available through Gregg Sinner, or at the University of Mass.

1.9.4 Allocate these resources to the remaining steps of the negotiation of the contract phase so that there is enough time to finish. Do this by dividing the minimum time available by 5. This is the amount of time to assign to each of the remaining five steps.

Results: By this point there were approximately five and one half hours left, a little over an hour for each step. This was kept in mind as time was used for each step. The time would probably have been sufficient except for a gap in the methodology, (Step 5.4: Group-Prioritizing Process), which consumed time allocated for other steps.

2.0 Identification of the enterprise.

- 2.1 Ask the contractor to provide a written and oral description of the enterprise. (Use these for the document test of completeness later.)

Results: The purpose in asking for an oral description, when there was a written description, was not clear. The following were provided: "The Shanti School Philosophy and Objectives Statement," a report of a midwestern tour of alternative schools made by Shanti staff members, a welcome to the school written by a student, an information brochure, a description of courses and other learning experiences, and documents on home groups, task forces, and curriculum. The "Shanti School Philosophy and Objectives Statement" was used to prepare a document test of completeness, as it was judged to be the most likely to contain goals statements.

- 2.2 Ask the contractor if the total enterprise or only parts of it are to be evaluated, in order to determine the extent of the enterprise. (Substitute the enterprise' name for "enterprise.")

Results: The Evaluation Task Force chose to have the whole enterprise evaluated. The enterprise was now named "Shanti."

- 2.3 Ask the contractor if the enterprise, to be evaluated is actually larger, if it includes for example (give examples which expand the contractor's concept of the enterprise.)

Results: The Evaluation Task Force did not want to expand the enterprise.

- 2.4 Ask the contractor if the enterprise to be evaluated is actually smaller, if it now includes more parts than they really want evaluated.

Results: They did not want to contract the enterprise.

- 2.5 Add or subtract parts of the enterprise as the contractor suggests changes. Changes may establish a new enterprise. Re-name as necessary.

Results: No parts were added or subtracted.

- 3.0 Elimination of misunderstanding (Test of Completeness)
- 3.1 Provide the contractor with feedback on the information gathered thus far in completing steps 1 and 2, in order to make sure that a mutual understanding is being maintained and to make revisions if necessary.

Results: The results presented above were given to the Evaluation Task Force. There was mutual understanding. No revisions were necessary.

4.0 Identification of resources for the evaluation

4.1.1 Ask the contractor, "What do you have or what can you get hold of as resources for your enterprise?" Have the contractor list the resources without making judgements concerning the reality of the choices.

4.1.1.1 Encourage the contract group members to produce as many resources as possible, to build on each others' suggestions, to reach for the unusual, but not to comment critically on others' suggestions.

Results: Steps 4.1 and 4.1.1 helped the task force to produce a long list of resources. They are as follows:

Shanti students
 Shanti staff
 Shanti board
 Shanti parents
 Evaluation Task Force
 Local universities
 Intern teachers
 Community resource teachers
 Founders of Shanti
 Education Instruccion
 Union Place
 Bice Clemou/Ford Foundation
 Commission on Higher Education
 Shanti graduates
 John Allison
 U/Mass. School of Ed.
 Antioch/Harrisville
 Space at Shanti
 Space at CREC
 Space at Hartford Insurance Group
 Commission on the Arts
 Legis. Education Committee/Howard Klebanoff
 State Board of Ed./Departments
 State Board of Ed./Secondary Ed.
 Bureau of Teacher Certification
 Feedback from other alt. schools
 EEC/Minneapolis
 Center for New Schools

Local press/T.V.
 Bob Merriman
 Ivan Backer
 Bill Searle
 Internship hosts
 Brad Field
 Huntington's
 Lois Rodenhuis
 George Athanson
 Dick Suisman
 George Riffer
 New Morning
 Greenspons
 Wilbur Smith
 Hartford Design Group
 Jack Dollard
 Joan Shine
 Dottie Peterson
 Fred Bashour
 New Schools Exchange
 Indiana University
 Mary Griswold
 Andreas Lehner
 N.E.A.S. & C.

- 4.1.2 Assist them in determining resources if assistance is needed by asking:
- 4.1.2.1 "What can you get me if I have to do a lot of writing?"
 - 4.1.2.2 "What can you get me if I need to duplicate written materials?"
 - 4.1.2.3 "What can you provide as a place to work?"
 - 4.1.2.4 "What can you provide if I need a place to stay overnight?"
 - 4.1.2.5 "What can you provide in the way of audio-visual equipment for observation? Tape recorder? VTR?"
 - 4.1.2.6 "What can you provide in the way of observers to do observation?"

- 4.1.2.7 "What can you provide if I need to do data analysis? Computer time? Analysts?"
- 4.1.2.8 "What can you provide that might help me contact people associated with the enterprise?"

- Results: The results of 4.1.2 were more identified resources. They are as follows:
- 4.1.2.1: Secretarial help, typewriter, paper.
- 4.1.2.2: (I asked: "What can you get me if I need to duplicate and distribute a lot of written materials?")
Paper, typewriter, stationery, envelopes, mimeograph, collater, stamps.
- 4.1.2.3: Desk at Shanti, Library at Shanti, CREC Conference room, Wooden Ships, Desk at Hartford Design Group, Conference Room at Hartford Design Group, Bushnell Park, Mad Murphy's
- 4.1.2.4: Sinner's, Mulcahy's.
- 4.1.2.5: Video Taperecorder, taperecorder.
- 4.1.2.6: Observers (specific people identified)
- 4.1.2.7: Phil Saif, computer time, (possibly through Central Conn. State College, R.P.I. Grad. School, or Gregg Sinner).
- 4.1.2.8: Telephone, telephone lists, C.R.E.C.

lists of educators, stamps, stationery,
Shanti course catalogs.

Step 4.1.2. was carried out after it seemed that the group had finished generating resources. However, either because it stimulated new thinking, or because it was an interruption of thinking, more resources continued to be generated. They are as follows:

Brad Noel
Univ. admissions directors
Employers
U/Conn. School of Social Work
friendly guidance counselors
Bill Taylor
Irving Zweibelson, CCSC
Bill Staples
CREC resource center
Shanti file on alternative schools
Mulcahy/Thale tour report
ALP-Providence data
Last National Bank - space
Lee Brown
local boards of education
Trolley Museum
Wadsworth Atheneum

4.2 Ask the contractor to indicate which of the resources listed are actually available and could be used for evaluation.

4.2.1 Advise the contractor of the dangers in committing so many resources that the ability of the enterprise to achieve its objectives is jeopardized.

Results: As a result of step 4.2 and 4.2.1 the contracting group eliminated three resources: the Trolley

Museum, New Morning, and Greenspons.

4.3 Test of completeness using others' lists of resources.

4.3.1 The contractor identifies "others" who could prepare lists of resources, preferably people who might have a very different perspective from the contractor.

Results: The task force identified the following people: Ivan Backer, Rob Winslow, Bob Merriman, and Fred Bashour. It was suggested that they might also want alternative lists from representatives of C.R.E.C. and the University of Massachusetts, and they agreed that they would, so John Allison, Philip Saif, and William Gorth were added to this list.

4.3.2 The evaluator asks as many of the others as resources allow to list their resources for the enterprise.

Results: Ivan Backer, Rob Winslow, and Bob Merriman were not able to be reached within the time the contract was being negotiated; Philip Saif was present at the session when resources were being generated and acted as a test of completeness at that time. William Gorth was contacted

and asked to act as a test of completeness and responded with the following list:

1. Faculty advice
2. Computer time, peripheral equipment (key punch), advising
3. Computer programs, computer tapes on loan
4. Questionnaires and tests
5. Secretarial (Pool)
6. Telephone (WATS)
7. Postage
8. Printing, supplies
9. room

4.3.3 The evaluator combines these lists, eliminating redundancies, and offers them to the contractor to consider as possible additions to the list of resources from 4.2.

Results: The list from William Gorth was shown to the task force without eliminating apparent redundancies, and they decided to add these to their list of resources. The apparent redundancies were not eliminated because they were not the exact same resource. Secretarial help from Shanti, for example, was not the same resource as secretarial help from the University of Massa-

chusetts secretarial pool.

- 4.4 Test of completeness using evaluator's list of resources.
 - 4.4.1 The evaluator prepares a list of resources he feels will be necessary or useful.
 - 4.4.2 The evaluator offers this list to the contractor to consider for possible additions to the list.
- 4.5 Test of completeness using a resource list from a previous evaluation.
 - 4.5.1 The evaluator secures a list of resources generated during the evaluation of another but similar enterprise.
 - 4.5.2 The evaluator offers this list to the contractor to consider for possible additions to the list.

Results: The following list of resources was prepared, based on the evaluator's experience and using Gene Gordon's Project Matthew evaluation as a test of completeness.

1. Time of decision-makers
2. Time of evaluator
3. Money for evaluator's time
4. Time of contract decision-maker
5. Time of others connected with the enterprise for data collection and for doing tests of completeness
6. Secretarial help

7. Duplication equipment
8. Money for transportation
9. Telephone
10. Space to work for evaluator
11. Paper
12. Space to live for evaluator
13. Computer time
14. Desk and chair
15. Money for supplies--paper
16. Volunteers' time
17. VTR
18. Tape recorder
19. Typewriter available

Based on needs discovered while doing this evaluation, this list should be modified in the following ways:

1. Break down duplication into two categories: a) ditto/mimeograph, and b) photoduplication. Both are important resources, and the evaluator cannot always substitute one for the other.
2. Specifically include help with typing, collating, and mailing. Specify in detail paper and mailing supplies.

The list above was offered as a test of completeness to the Evaluation Task Force, and they added the following to their resource list:

1. Decision-maker time
2. Evaluator time
3. Money for evaluator
4. Money for evaluator's transportation

4.6 The contractor inspects the final list, makes revisions if necessary, and indicates if the list is complete with respect to the best estimate.

Results: As a result of this step, the Contract Decision-Maker added the following resources:

Home group leaders
 Administration and Budget Task Force time
 Internal Environment Task Force time
 Communications Task Force time
 Arts Task Force time
 Curriculum and Resources Task Force time
 The Shanti Community's time
 Evaluation Task Force student profiles

The Evaluation Task Force agreed that the list was as complete as possible.

4.7 Committing resources

4.7.1 For each resource on the list, ask the contractor to make a minimum commitment of resources.

Results: After the first few items, committing resources of other people was discovered to be alien to the operating style of Shanti and the Evaluation Task Force. Instead, another category was suggested and agreed upon: "stating a reasonable expectation that resources would be made available." Also, because determining the commitment or expectation for each resource on the list would take a great deal of time, much of which would be wasted, and because this was discovered as a gap in the methodology, step 4.7 was redesigned before field-testing it further. It appears below in the double-lined box.

4.7 Committing resources

- 4.7.1 The evaluator prioritizes the list of resources according to the criterion "Important for the evaluation to succeed."
- 4.7.2 The evaluator begins with the most important resources and determines a minimum amount of that resource needed for the evaluation to succeed. (S)he proceeds through the prioritized list of resources until (s)he reaches resources on the list that are in his/her judgement not important enough to require committing a minimum amount.
- 4.7.3 The evaluator, beginning with the most important resource first, asks the group to indicate how much of that resource it can commit itself to providing, and pro-

ceeds through the list until all resources which require minimum amounts have been reached.

- 4.7.3.1 If the group is unable to commit the minimum amount of a resource because the amount of the resource available is unknown, (e.g. if the amount of decision-maker time is unknown because only the actual decision-maker can determine this and make this commitment) then ask the group to indicate a "reasonable expectation" of the amount available. If they cannot do this, then indicate that the resource's amount is unknown by placing a question mark next to it, and ask the group to try to ascertain the amount of the resource available before the completion of the contract.
- 4.7.3.2 Whenever the minimum amount suggested by the group is below the amount the evaluator believes is necessary, (s)he should indicate that to them and ask them to reconsider.
- 4.7.3.3 Whenever the group asks the evaluator how much of a resource (s)he believes is the minimum needed (s)he should be prepared to give an estimate.
- 4.7.4 The evaluator gives the group the whole list of resources to look at and to indicate to the evaluator resources which they feel are important and which the evaluator has not prioritized.
 - 4.7.4.1 For any such resource, recycle to 4.7.3.
- 4.7.5 The complete list of resources, prioritized by "importance to the evaluation's

success" with minimum amounts committed, expected, or indicated as unknown is provided for the group's review and the evaluator's review. Any changes which need to be made can be made now.

- 4.7.6 The group and the evaluator approve the list, or re-cycle to 4.7.5 until the list can be approved by both the evaluator and the group.

Results: The list of resources was prioritized by "Importance for the evaluation to succeed." Beginning with the most important resources and continuing through all the resources prioritized, commitments were asked for where possible, reasonable expectations where not possible, and "?" was indicated where the amount of a resource available was unknown. The results were as follows:

1. Money for evaluator: \$3700
2. Evaluator time: two days/week
3. Decision-maker time: (two hours/week)
4. Money for evaluator's transportation: \$300
5. Secretarial help: (minimum of fifteen hours/month)
6. Mimeograph: access to as needed at Shanti
7. Paper, stamps, stationery, envelopes: \$25 worth of Shanti supplies
8. Sinners' house: as needed; Mulcahy's house: as needed
9. Observers' time: ?

10. Space to work: Shanti (desk, library), C.R.E.C. conference room as clear on calendar, Hartford Insurance Group (with a week's notice), desk at the Hartford Design Group as scheduled, Last National Bank (with one-two days' notice), Wadsworth Atheneum (with one-two days' notice.)
11. Telephone: as needed, including long-distance, for evaluation purposes.
12. Shanti staff: two hours/week
13. Home Group Leaders: (as individuals, two hours/week, training weekends, time at monthly meetings)
14. John Allison: (half hour/week)
15. Shanti students: (minimum of one community meeting)
16. Intern teachers: One hour/week as a group, addition hour individually.
17. Shanti Board: Up to one third of any board meeting, meet individually with board members two or three times.
18. Shanti parents: (Some will meet with evaluator individually)
19. Evaluation Task Force: ? (as Contract Decision Maker, ten-fifteen hours.)

20. Administration and Budget Task Force: ?
21. Shanti Graduates: (two hours of those who can be found)
22. Typewriter: access to Gene's, Gregg's, school's.
23. Collater at C.R.E.C.: Access to as scheduled if operated by evaluator
24. Telephone lists: available
25. Shanti course catalogs: available
26. VTR: ?
27. Computer time: Univ. of Massachusetts
28. Philip Saif, as mutually convenient.

5.0 Identification of decision-makers

- 5.1 Ask the contractor to provide a list of all decision-makers associated with the enterprise, without making judgements concerning the reality of the choices.

Results: The contracting group members were asked to provide a list of all the decision-makers associated with the enterprise, without making judgements concerning the reality of their choices. They were asked to do this first as individuals; then their lists were combined on the blackboard, producing the following rather lengthy list of decision-makers:

Shanti students	Coord. Council of Founders
Shanti staff	Hartford Fund for Giving
Shanti home group leaders	*Police department
Shanti Board	Colleges sending intern teachers
*Shanti landlord	Internship supervisors
Shanti parents	*Outside community
Shanti participating boards	*Paul Donohoe
Shanti director	*George Athenson
Shanti community	*Boards of education
Intern teachers	*Hartford City Council
Students on task forces	N.E.A.S. & C.
*Adjunct teachers	*Other alternative schools
*Fire marshall	*Shanti supporters
*Building inspector	*Insurance companies
State Board of Education	*Local press/T.V.
State Commission on the Arts	Pete Diresta
C.R.E.C. Exec. Director	H.S. guidance counselors
C.R.E.C. Board	H.S. guidance administrators
C.R.E.C. bookkeeper	*College admissions people
Task forces	*Shanti critics
*Parking lot supervisor	*Potential employers of Shanti grads.
Outside Teachers	*Present employers of Shanti grads
	*Assoc. for Human Potential

* = potential decision-makers who were later eliminated.

5.2 "Others" test of completeness

- 5.2.1 Ask the contractor to identify "others" who can develop lists of possible decision-makers. These should be people who are likely to have a very different perspective from that of the contractor, and yet whose perspective would be valued.
- 5.2.2 Get from as many as possible of the "others" lists of possible decision-makers.
- 5.2.3 Combine these lists, eliminating redundancies.
- 5.2.4 Have the contractor inspect the list from 5.2.3 and consider whether or not they want to add any decision-makers to the list.
- 5.2.5 Have the contractor inspect the list and revise it if necessary, eliminating those whose decision-making is extremely remote or indirect, or those for whom the group does not want information gathered.

Results: The results of 5.2.1 were the following people: Nick Duke, staff member; Ivan Backer, faculty member at Trinity College; Jocelyn Payne, Shanti student; and Ray Blanks, former Shanti staff member. There was no success in getting lists of possible decision-makers from Ivan Backer and Ray Blanks, nor from Jocelyn Payne or Nick Duke. Consequently, steps 5.2.3 and 5.2.4 were not done.

As a result of step 5.2.5, twenty potential

decision-makers were eliminated from the list. They are identified in the above list by asterisks.

5.3 Advise the contracting group of the consequences of identifying a list of decision-makers too large for the available resources.

5.3.1 The evaluator prepares a final list of possible decision-makers.

5.3.2 The evaluator gives this list to the contractor and asks them to approve it.

Results: The contracting group was advised of the consequences of having a list of twenty five decision-makers, but at this point they felt that these were all decision-makers and should therefore appear on the list. Moreover, staff, and task forces were further broken down, adding eleven additional decision-makers. The list which follows (Figure 4) received the contracting group's approval.

5.4 Prioritize decision-makers with assistance of the contractor, using some agreed-upon criteria such as: when they need the information, the importance of their decisions to the enterprise, their degree of involvement in the enterprise, the amount of time they can make available to the evaluator, the risk to the enterprise if they can't get data, their own need for data, etc.

Figure 4: Shanti Potential Decision-Makers

Shanti students	
staff	H.s. guidance counselors
home group leaders	H.s. administrators
board	Gregg
parents	J.
director	Linda
community	Geoff
	Nick
Participating boards	Coord. Council of Foundations
Intern teachers	Hartford Fund for Giving
Students on task forces	Colleges sending intern teachers
State Board of Education	Internship supervisors
State Commission on the Arts	Outside teachers
C.R.E.C. Exec. Director	N.E.A.S. & C.
Board	Pete Diresta
bookkeeper	
Task forces	
Admin. and Budget Task Force	
Internal Environ. Task Force	
Communications Task Force	
Arts Task Force	
Curric. and Res. Task Force	
Evaluation Task Force	

Results: In this step there is a gap in the methodology. It does not provide clear procedures to enable the evaluator to prioritize a long list with a group, using several criteria. The following specific problems were discovered:

1. To prioritize 36 decision-makers takes a great deal of time, much longer for a group than for an individual, and longer than was anticipated.
2. The weighting system used was ill-conceived.
3. Some of the categories of decision-makers overlapped. For example, Gene Mulcahy was both a decision-maker as director and as a staff member. This made prioritizing difficult for some members of the group.
4. Some members wanted to give the same priority number to more than one decision-maker. There were no procedures for doing this.

Major re-design work was done on this step, and it was then field-tested with the contracting group. The following are the re-designed steps and the results of the field-test:

5.4 Group Prioritizing Process

- 5.4.1 Every person in the group must have the same list of items for prioritization.
- 5.4.2 This list must also be put on a blackboard or on a large piece of paper. Leave enough space on the right of the items to draw in several columns.
- 5.4.3 Determine what criteria will be used for prioritizing.
 - 5.4.3.1 Ask the contracting group members if there are any criteria they would like to use to prioritize.
 - 5.4.3.2 Suggest the following criteria as a test of completeness: importance of the decision-maker's degree of involvement in the enterprise, risk to the enterprise if the decision-maker doesn't get data for decision-making, amount of time the decision-maker can make available to the evaluator, the decision-maker's need for data.
 - 5.4.3.3 Ask the contracting group to agree on how many (up to four) criteria, and which criteria they wish to use.
- 5.4.4 If only one criterion is to be used, go to 5.4.4.1. If two or more criteria are to be used, go to 5.4.5.

Results: A list of decision-makers was prepared, with columns to the right of the list. The list was also put on the blackboard. The contracting group was asked what criteria they would like to use to prioritize and they asked for suggestions.

They were offered the criteria listed in 5.4.3.2.above. They considered them and agreed upon "importance," "risk," and "need." As there were more than more criterion, the next step which was followed was 5.4.5.

5.4.4.1 Ask each member to prioritize individually using the agreed-upon criterion. If there is a list of items longer than ten, only have them prioritize the top ten.

5.4.4.1.1 Alternative 1: Ask each member to find the highest priority item on the list and give that a "1." Then ask him/her to find the next highest priority and give that a "2" and to proceed through the list until he/she has prioritized ten items.

5.4.4.1.2 Alternative 2: Ask each member to find the highest priority item on the list and give that a "10". Then ask him/her to find the next highest priority and give it a "9" and to proceed through the list until he/she has prioritized ten items.

5.4.4.1.3 If a member wishes to give two or more items the same priority, ask him to:

1. Arbitrarily assign priority numbers, in sequence, to all the items (s)he wishes to cluster together, (e.g. 3, 4,5,6 or 7,8,9.)
 2. Find the median of this series. (e.g. 4.5 or 8)
 3. Give each of the clustered numbers the media number (e.g. 4.5, 4.5, 4.5, 4.5, or 8,8,8)
 4. Give the next highest priority item on the list a number which is one higher than the last number in the sequence (e.g. 7 or 10)
- 5.4.4.2 Go to the blackboard or large piece of paper with the list of items on it. Draw in lines next to the list so that there are columns equal to the number of group members plus two.
- 5.4.4.3 Begin by asking for every member's highest priority item. Put a "1" (alternative 1) or a "10" (alternative 2) next to each item which was given the highest priority. Then get each member's next highest priority item. Put a "2" (alternative 1) or a "9" (alternative 2) next to each item which was given the second highest priority. Proceed in this way until you have listed each member's ten highest priorities.
- 5.4.4.4 Summing

- 5.4.4.4.1 If you have used alternative 1, give every blank space in every column the number "11," then sum across the items and record the sum for each item in the next-to-last column.
- 5.4.4.4.2 If you have used alternative 2, sum across the items and record the sum for each item in the next-to-last column.
- 5.4.4.5 Reordering
- 5.4.4.5.1 If you have used alternative 1, find the lowest sum. This is your first priority. Record this in the last column as a "1", then find the next lowest sum and record this in the last column as a "2" and proceed through the sums until you have listed the ten highest priorities.
- 5.4.4.5.2 If you have used alternative 2, find the highest sum. This is your first priority. Record this in the last column as a "1", then find the next highest sum and record this in the last column as a "2" and proceed through the sums until you have listed the ten highest priorities.
- 5.4.4.6 Considering/Approving
- Offer the group the opportunity to consider and discuss whether or not the priorities listed in the

last column reflect the order of priority of decision-makers they as a group actually have. If so, ask them to approve the list. If not, ask them to revise, then approve the list, and go on to step 5.5.

- 5.4.5 If more than one criterion is to be used, determine whether or not the contracting group wishes to order the criteria by priority. If the criteria are ordered by priority, go to 5.4.7. If they are not ordered by priority, go to 5.4.6.

Results: Following step 5.4.5, the group was asked if one of the criteria was more important than the other two, and they agreed that "importance" was. When asked if of the remaining two one was more important, they agreed that "risk" was. As the criteria were ordered by priority, the next step which was followed was 5.4.7.

- 5.4.6 If the criteria are not prioritized, do 5.4.4.1-5.4.4.5 for each of the criteria, in any order. You will need a great deal of blackboard space or several sheets of paper. When you have finished 5.4.4.5 for all the criteria, go to 5.4.6.1.

5.4.6.1 Draw lines after the list of items on the blackboard or sheet of paper such that when you have finished there are a number of columns equal to the number of criteria plus two.

5.4.6.2 Above each of the columns except the last two, write a criterion

and fill in the priority order of the list according to that criterion.

5.4.6.3 Summing and Reordering, Considering/Approving

Do 5.4.4.4 - 5.4.4.6

5.4.7 If the criteria are prioritized, do 5.4.4.1-5.4.4.5 for each of the criteria in order of priority. You will need a great deal of blackboard space or several sheets of large newsprint.

Results: For each of the three criteria, following 5.4.4.1, the group was asked:

1. to prioritize individually the top ten decision-makers, giving the highest priority a 1, the second highest a 2, and so on.
2. when they wanted to cluster several items together, to follow steps 1-4, which they were given verbally, and with illustrations on the blackboard.

Following 5.4.4.2 - 5.4.4.5, columns equal to the number in the group plus 2 were drawn on the blackboard. Each person was asked for his/her first priority. For each one, a "1" was put in the column nearest the list. When more than one person had the same decision-maker for a first priority, a "1" was put in the next empty column, after that decision-maker. The group proceeded

in this way until every person's top ten priorities were recorded in the columns. Then an "11" was added to all the blank spaces. The numbers were summed across and the sums were recorded in the next-to-last column. The lowest sum was found and given a "1", the next lowest sum a "2," and so on until the top ten priorities were listed. Then the group was asked whether or not they wanted to make any changes in the list at that point. They said that they wanted to wait until the lists had been prioritized using each criterion, and until the lists had been combined.

5.4.7.1 Draw lines after the list of items on the blackboard or sheet of paper such that when you have finished there are a number of columns equal to the number of criteria plus 2.

5.4.7.2 Above each of the columns except the last two, write a criterion and fill in the priority order of the list according to that criterion.

Results: The previous columns were erased after a member of the group had recorded the priority list by each criterion. Five columns were drawn on the board and the first was labeled "importance," the second "risk," the third "need," the fourth

"sum," and the last "order." Then the priority lists were recorded by each criterion.

5.4.7.3 Offer the contracting group ways to combine the criteria: the shuttle method or a simple weighting method. Ask them to choose one method, then combine the criteria using it.

5.4.7.3.1 For information on how to use the shuttle method see "Instructional Alternative on Prioritization of the Fortune/Hutchinson Evaluation Methodology.

5.4.7.3.2 Simple Weighting Method

1. If you are using alternative 1, add x (e.g. 2) to every number in the second highest priority criterion column. Then add x plus y , (e.g. $2 + 3 = 5$) to every number in the third highest priority criterion column, etc.
2. If you are using alternative 2, add x , (e.g. 2) to every number in the second lowest priority criterion column. Then add x plus y , (e.g. $2 + 3 = 5$) to every number in the third lowest priority column, etc.

3. Sum across the columns.
4. Re-order.

Results: The group was offered ways to combine the criteria: the shuttle method and the weighting method, both of which were explained. They chose the weighting method, choosing to weight "risk" +2 and "need" +4. The columns were then weighted, the figures summed, and the list ordered, with the lowest sum given a "1," the second lowest given a "2," and so on through "10."

5.4.7.4 Considering/Approving

Offer the group the opportunity to consider and discuss whether or not the priorities listed in the last column reflect the actual order of priority of decision-makers they as a group have. If so, ask them to approve the list. If not, ask them to revise, and then approve the list and go on to step 5.5.

Results: The group was offered the opportunity to consider the list. They decided to make some revisions, to re-order priorities slightly. They indicated after these revisions were made that

they were satisfied and they approved the list.

The re-designed steps worked successfully to enable the contractor to produce a list of decision-makers in order of priority using three criteria. However, as this list underwent several subsequent revisions, there is the possibility that the steps for prioritizing decision-makers did not include all the necessary steps, or it is possible that the priorities of the contractor changed as they received new information from other Shanti decision-makers. It is a question for further research.

- 5.5. Perform a test of completeness on the acceptability of the order of decision-makers.
 - 5.5.1 Ask the contractor to identify "others" with a different perspective who might judge the acceptability of their order of decision-makers.
 - 5.5.2 Provide the "others" with a final prioritized list and ask them if it is acceptable. If it is, record that. If it is not, record that and ask for additions, deletions, or re-ordering so that the list will be acceptable.
 - 5.5.3 Show the results of the test of completeness to the contractor and have them make any revisions they feel are necessary.
 - 5.5.4 Ask the contractor for final approval of the list of decision-makers. If it is approved, go to 5.6. If it is not approved, make the changes they desire to make or re-cycle to 5.0.

Results: When the contracting group was asked to suggest others whose perspective would be different from their own, and who they would like to have judge the acceptability of their order of decision-makers, the following people were suggested: Ray Blanks, Ivan Backer, and Jocelyn Payne. Attempts were made to reach Jocelyn Payne and Ray Blanks, but they were not able to be reached. A meeting was held with Ivan Backer and he was asked to look at the list and add any decision-makers he felt were missing. He added two. He was asked to prioritize the list using a criterion or criteria of his choice. He chose "importance," and checked off decision-makers in priority categories, and then prioritized within categories, producing a list of decision-makers from his perspective.

The results of the test of completeness were showed to the contracting group, and they were asked to make any revisions in their list that they felt were necessary based on these new data. At this time, the contracting group re-prioritized the list of decision-makers. Some of their reasons for re-prioritizing were:

1. Home group leaders, who were the first priority

- decision-maker, were made the fifth priority because it was thought that it would be unlikely that they would make time available to the evaluator on a regular basis.
2. The director was given a lower priority because he indicated that he did not want to be a high priority decision-maker.
 3. The community, which was the fourth highest, was dropped to the seventh because it was thought that it would be unlikely that they would make time available to the evaluator on a regular basis.

The reasons for shifting other decision-makers in priority were not clear. However, it is important to note that the Contract Decision-Maker, the Evaluation Task Force, changed its composition from meeting to meeting; as new people came and others did not return, the point of view of the task force was subject to change. This is consistent, however, with Shanti's goals, which encourage student participation on task forces, even for only limited commitments of time.

- 5.6 Gross matching of decision-makers and resources to determine what percentages of evaluator time for decision-makers will be allotted to each decision-maker.
 - 5.6.1 Take the prioritized list of decision-makers and assign each a number, beginning with the lowest = 1, the next lowest = 2, etc.
 - 5.6.2 For each Case I decision-maker, add a "0" weighting.
 - 5.6.3 For each Case IIA decision-maker, add a "1" weighting.
 - 5.6.4 For each Case IIB decision-maker, add a "2" weighting.
 - 5.6.5 For each Case III decision-maker, add a "5" weighting.
 - 5.6.6 For each decision-maker, add the number assigned and the weighting. This results in the numerator of the fraction of resources for that decision-maker.
 - 5.6.7 Add the numerators. This results in the denominator of each fraction of resources.
 - 5.6.8 Show the list of fractions of resources, or the fractions which have been changed to decimals or percentages, to the contractor. Ask if any changes need to be made, and if so, make them. Be sure that after changes the sum of the numerators still is equal to the denominator.
 - 5.6.9 Ask the contractor to approve this final gross matching.

Results: The following list of decision-makers and fractions of resources was presented to the Contract Decision-Maker:

	Weighting	Assigned #	Fraction
Staff	1	5	6/19
A & B Task Force	1	4	5/19
Eval. Task Force	1	3	4/19
Director	0	2	2/19
Hm.Gp.Leaders	1	1	2/19
Shanti Board			
Community			
Intern Teachers			
C.R.E.C. Executive Director			
Students on task forces			

The evaluator and Contract Decision-Maker agreed that ten decision-makers were too many for the resources available for evaluation. The Contract Decision-Maker decided that only the first five would be considered decision-makers who would receive data. The last five would only go through "The Goals Process." The Contract Decision-Maker also decided to allocate 15% of the resources for collecting goals of the last five decision-makers, and 85% for the first five decision-makers. Consequently, the above fractions represent portions of 85% (not 100%) of the total resources available for evaluation.

The Contract Decision-Maker looked at the fractions and decided to make minor revisions. The list below is the list they approved, after revisions.

Staff	8/19	
A & B Task Force	4/19	
Eval. Task Force	3/19	
Director	2/19	of 85%
Home Group Leaders	2/19	

Shanti Board

Shanti Community

Intern teachers

C.R.E.C. Executive Director 15%

Students on task forces

This section of "The Negotiation of the Contract Phase" was entirely successful. Later changes in the resources apportioned to decision-makers can be accounted for by noting the changes in priorities of decision-makers. The Contract Decision-Maker was satisfied with the resources as they were apportioned here and approved this list.

- 6.0 Preparation of the Contract
- 6.1 Using the prepared outline "Letter of Agreement" or other contract form, fill in the details gathered in steps 1-5.
- 6.2 Provide the contractor with a copy of the contract for a test of completeness and revision.
- 6.3 Explain the procedures for amending the contract or letter of agreement.
- 6.4 Secure the final approval of the contractor, and if different from the contractor, the holder of resources for the evaluation, and then present each with copies of the contract.

Results: A letter of agreement (see Appendix C) was prepared and provided to the Contract Decision-Maker for a test of completeness and revision. The Contract Decision-Maker made no changes. It was agreed that amending the contract was possible at any time, provided that both evaluator and Contract Decision-Maker agreed. Final approval of the Contract Decision-Maker was secured.

Because one of the holders of evaluation resources, C.R.E.C., represented by Philip Saif and John Allison, was different from the Contract Decision-Maker, a copy of the letter of agreement was submitted to them. They made minor revisions and recommendations for further revisions, which were agreed to, and which subsequently were also approved by the Contract Decision-Maker. In addi-

tion, a formal legal contract between C.R.E.C. and the University of Massachusetts was prepared, revised by C.R.E.C., agreed to, and became the only legally binding document between C.R.E.C. and the university.

Although the letter of agreement spells out the scope of the evaluation, and the procedures to be followed, and is the substance of what was to be performed, it was not in this case the legally binding document. This is perhaps a special case, and is no doubt the result of having a contracting group which did not control the evaluation resources.

Summary of Results

The primary purpose of "The Negotiation of the Contract Phase" of the Fortune/Hutchinson Evaluation Methodology is to develop the scope of work for the evaluation with the Contract Decision-Maker. The sub-purposes of the Rosen Draft I of this phase are:

1. to identify the Contract Decision-Maker.
(Orientation Element)
2. to explicate the evaluation methodology to the Contract Decision-Maker.

3. to determine whether or not it satisfies the needs of the Contract Decision-Maker.
4. to set up a time schedule for negotiating the contract.
5. to identify the enterprise to be evaluated, its name, and a rough approximation of its parts.
6. to collect a description of the enterprise to be used later for the document test of completeness.
7. to identify resources for the evaluation.
8. to have the Contract Decision-Maker commit minimum resources needed for the evaluation.
9. to identify decision-makers.
10. to order decision-makers by priority.
11. to test the acceptability of the order of decision-makers.
12. to match decision-makers and resources.
13. to prepare a written contract.
14. to have the contract approved by the Contract Decision-Maker and the evaluator.

Clearly the field-test shows that in this application, the "Negotiation of the Contract Phase" has accomplished its primary purpose. Some of its sub-purposes (2, 3, 4, 5, 6, 7, 12, 13, and 14) have also been fully accomplished.

Other sub-purposes (1, 9, and 11) have been accomplished to a large extent, but have required some revision or further development. Two sub-purposes (8 and 10) were not able to be accomplished without substantial further development of the methodology. This further development was completed during the negotiation, and was field-tested. The results suggest that the new steps of the methodology are successful in accomplishing their purposes, although the new steps for prioritizing may need to have additional steps so that there is less likelihood that the Contract Decision-Maker will want to change the order of decision-makers after the contract has been negotiated.

Recommendations for Redesign of the Negotiation of the Contract Phase

The following recommendations are based on the results of the field-test. They focus upon specific gaps in this phase of the methodology which need to be filled.

Orientation element.

1. Currently the orientation element assumes that there will be only one holder of resources for evaluation. However, as in this field-test, there may be more than one. In such a case it is not clear what the evaluator is to do. Also, if there are two or more holders of resources, each could identify a different person or group as Contract Decision-Maker. These steps need to account for more than

one holder, and to resolve the possible problem of disagreement among holders about who the Contract Decision-Maker should be.

2. The present steps of the orientation element suggest that the evaluator urge the holder of resources to consider as Contract Decision-Maker a person or group "likely to be interested in doing this and who might have several hours to devote to this activity." In addition, this investigator would suggest adding that the holder(s) try to identify the person or group best able to do this work.

Case II.

3. Some steps in this phase could benefit from advance preparation, e.g. "4.4.1 The evaluator prepares a list of resources he feels will be necessary or useful." It would be helpful to call the evaluator's attention to the need for preparation in advance for these steps. It is recommended that each of these steps be preceded by an asterisk, and that a note to that effect be placed at the beginning of each of the three cases.

4. There are a number of test of completeness steps in this phase, which, if anticipated and carried out before they were needed by the Contract Decision-Maker, could avoid unnecessary delay in the negotiation process. It is recommended that these steps be preceded by a double asterisk, and that a note to that effect be placed at the

beginning of each of the three cases.

5. It is not clear that the Contract Decision-Maker is to use the ordinary decision-making procedures of the group to make all decisions during this process. This needs to be specified at the beginning of Case II.

6. An important implication of the purpose of the methodology is that decision-makers' time is a crucial resource. An hour or two hours a week is a reasonable minimum amount of decision-maker time. This should be made explicit in the implications of the purpose section.

7. Because asking for both a written and oral description of the enterprise is unnecessary, it is recommended that either a written, or if this is not available, an oral description be requested from the Contract Decision-Maker.

8. Step 4.1.2.2. Add "and distribute."

9. Step 4.3.3. It is important not to eliminate apparent redundancies, e.g. amounts of the same resource provided by different agents, such as typing from a school secretary and typing from a university secretary.

10. Step 4.7.1. The Contract Decision-Maker, in this case, could not commit resources of other people. When this occurs the Contract Decision-Maker should be asked to indicate a reasonable expectation of the amount of the resource available, and then the evaluator should determine the exact amount of each of these resources needed for the

success of the evaluation. It is recommended that steps be developed to accomplish these tasks.

11. Step 4.7.1. Making a minimum commitment for each resource is unnecessarily time-consuming. The evaluator should prioritize the list of resources according to the criterion "important for the evaluation to succeed" and each prioritized resource should have a minimum commitment made for it.

12. Step 5.0. It is not clear here how the Contract Decision-Maker is going to provide a list of decision-makers. Perhaps this should be broken down into two steps, one in which individual members produce lists of decision-makers, and another in which their lists are combined.

13. Step 5.2.5. Another criterion by which decision-makers could be eliminated is "those who will not make time available to work with the evaluator." It is important that clearly uncooperative decision-makers be eliminated at the outset so that resources are not wasted.

14. Step 5.4. The procedures here are insufficient. Procedures developed to replace these should be incorporated. (Note: in the revised procedures which were developed and used in the field-test, there is a gap. In step 5.4.2., the number of columns is not sufficient for contracting groups with more than eight members. This needs to be corrected.)

15. Step 5.4.6.1. The evaluator must erase the blackboard, yet save the records of group priorities for each criterion.

16. Step 5.5. Based on this field-test, it might be wise to have the Contract Decision-Maker try to identify others who might be able to influence or change their priorities for decision-makers, and have them act as tests of completeness on the acceptability of the priorities.

17. Step 5.5.2. is not specific enough. Before the "others" can judge the acceptability, it would be useful to have them add to, delete from, and prioritize the list themselves.

18. Step 5.5.4. There is need to stress that if the Contract Decision-Maker is not careful in choices made here, resources will be wasted.

19. The methodology does not currently provide rules or suggestions for how much time should be spent on "The Negotiation of the Contract Phase." In this field-test, considerable time was spent, both because limits were not prescribed, and because it was useful for purposes of research; however, the methodology should provide a recommended limit on the time spent in this phase.

Post Field-Test Methodological Development

The process of methodological development, which includes the creation of a methodology, research, and further development, is one of the concerns of this investigator. At this relatively early stage of the research, the elements of this process were:

1. Pre-field-test development based on others' research, on the investigator's logical analysis, and his experience using "The Negotiation of the Contract Phase" of the methodology.
2. Formal field-test.
3. Consideration of results of the field-test and recommendations for further development.
4. Further development based on recommendations.

The results of the fourth step above are contained in "Phase I of the Fortune/Hutchinson Evaluation Methodology: Rosen Draft II: February 1974" which follows:

THE NEGOTIATION OF THE CONTRACT

Phase I of the Fortune/Hutchinson Evaluation Methodology

Rosen Draft II February 1974

ORIENTATION ELEMENT

0.0 Identification of the contractor

- 0.1 The evaluator (EV) determines who holds the resources for evaluation. (This may be a person who has contacted the evaluator or been contacted by the evaluator to do an evaluation, but may also be someone else.)
- 0.2 The EV asks the holder(s) of evaluation resources to identify a contractor (CON), a person or group who will develop the scope of work for the evaluation. The EV says, "Could you tell me who you would like to develop the scope of work for the evaluation with me? Consider a person or persons who might be best able to do this, most likely to be interested in doing this, and who might have several hours to give to this activity. You might like to include yourself."
 - 0.2.1 If there is more than one holder of evaluation resources, the EV asks each holder. If the holders do not agree upon who should be contractor, inform them of the disagreement and ask them to meet and come to agreement so that the negotiation of the contract can proceed.
- 0.3 If one person is identified as contractor, use Case I.
- 0.4 If more than one person is identified as contractor, use Case II.
- 0.5 If no one is identified as contractor, do not proceed until a contractor has been identified.

THE NEGOTIATION OF THE CONTRACT: CASE II

Where the contractor is two or more people who act as a single decision-making body.

Purpose: To develop the scope of work for the evaluation.

Note: Hereafter, the agent with whom the evaluator (EV) negotiates is called the contractor (CON.)

Steps preceded by an asterisk (*) require some preparation in advance.

Steps preceded by a double asterisk (**) require that the evaluator interrupt the negotiation process to do an outside test of completeness.

- 1.0 Explication of the evaluation methodology, determination of whether or not it satisfies the needs of the CON, and setting up a time schedule for negotiating the contract.
- 1.1 The EV informs the CON that throughout this process when decisions are to be made the CON are to use their usual decision-making procedures.
- 1.2 The EV gives the CON the purpose of the evaluation, "to provide data (or information) for decision-making."
- 1.3 The EV provides the CON with a broad outline of the methodology. (The EV uses "Broad Outline of F/H Evaluation Methodology.")
- 1.4 The EV provides the CON with definitions of specialized terms used in the methodology. (The EV uses the "Lexicon.")
- 1.5 The EV discusses with the CON implications of the purpose. (The EV uses "Implications of the Purpose 'to provide data for decision-making'.")
- 1.6 The EV asks the CON if the purpose is acceptable. If no, the EV goes to 1.7; if yes, the EV goes to 1.9.

- 1.7 If the answer given by any individual in the CON is no, then the EV asks what concept of evaluation the person(s) has.
 - 1.8 The EV determines if there is a real conflict and if the person's concept can still fit within the broad definition of the evaluation purpose. If this isn't possible, the EV suggests that this evaluation methodology may not be suitable, and asks the CON to decide on its acceptability. If they decide it is not acceptable, the EV does not proceed further. If they decide that it is acceptable, the EV goes to 1.9.
 - 1.9 The EV asks the CON if they have any other purposes for doing the evaluation. If not, the EV goes to step 1.10. If yes, the EV asks for the other purposes and discusses with the CON the likelihood of each of these purposes being achieved through using the F/H Evaluation Methodology. After this discussion, the EV asks the CON if they think the methodology will meet these purposes well enough to warrant proceeding with the evaluation. If not, the EV does not proceed further. If yes, the EV goes to 1.10.
 - 1.10 The EV sets up a time schedule for negotiating the contract.
 - 1.10.1 The EV asks the CON for a commitment of a minimum amount of time that they would be willing to spend on this task.
 - 1.10.2 The EV asks the CON for an estimate of additional time beyond the minimum, which could become available if needed.
 - 1.10.3 The EV asks the CON for other resources: space to meet, typing, and duplicating.
 - 1.10.4 The EV allocated these resources to the remaining steps of the negotiation of the contract phase so that there is enough time to finish. The EV does this by dividing the minimum time available by the number of major remaining steps. This is the amount of time to assign to each of the remaining major steps.
- 2.0 Identification of the enterprise for evaluation.

- *2.1 The EV asks the CON to provide a written description (or if unavailable, an oral description) of the enterprise. This is used later for the document test of completeness. (Note: if the description is oral, the EV records it and writes it down.)
- 2.2 The EV asks the CON "Is all of (Enterprise for Evaluation) to be evaluated, or only parts of it?" to determine the extent of the enterprise to be evaluated. (The EV substitutes the enterprise's name for "enterprise.")
- 2.3 The EV asks the CON if the enterprise they want evaluated should actually be larger, if it should include for example... (the EV gives examples of possible parts which expand the CON's concept of the enterprise.)
- 2.4 The EV asks the CON if the enterprise they want evaluated should actually be smaller, if it now includes more parts than they really want evaluated.
- 2.5 The EV adds or subtracts parts of the enterprise as the CON suggests changes. Changes may establish a new enterprise. The EV re-names as necessary.
- 3.0 Elimination of misunderstanding (test of completeness)
- 3.1 The EV provides the CON with feedback on the information gathered thus far in completing steps 1.0 and 2.0 to assure that mutual understanding is being maintained, and to make revisions if necessary.
- 4.0 Identification of resources for the evaluation.
- 4.1 The EV asks the CON "What do you have or what can you get hold of as resources for (enterprise)? List the resources without making judgements concerning the reality of the choices."
 - 4.1.1 The EV encourages the CON to produce as many resources as possible, to build on each others' suggestions, to reach for the unusual, but not to comment critically on others' suggestions.
 - 4.1.2 The EV assists them in determining resources if assistance is needed, by asking:
 - 4.1.2.1 "What can you get me if I have to do a lot of writing?"

- 4.1.2.2 "What can you get me if I need to duplicate and distribute written materials?"
 - 4.1.2.3 "What can you provide as a place for me to work?"
 - 4.1.2.4 "What can you provide if I need a place to stay overnight?"
 - 4.1.2.5 "What audio-visual equipment can you provide for doing observation? A tape recorder? A videotape recorder?"
 - 4.1.2.6 "Can you provide people to do observation?"
 - 4.1.2.7 "What can you provide if I need to do data analysis? Computer time? Analysts?"
 - 4.1.2.8 "What can you provide that might help me contact people associated with (enterprise)?"
- 4.2 The EV asks the CON to indicate which of the resources listed are actually available and could be used for evaluation.
- 4.2.1. The EV advises the CON of the danger in committing so many resources that the ability of the enterprise to achieve its goals is jeopardized.
- 4.3 Test of completeness using others' lists of resources.
- 4.3.1 The EV asks the CON to identify others who could prepare lists of resources, preferably people who might have a very different perspective from that of the CON.
 - ** 4.3.2. The EV asks as many of the others as resources allow to list their resources for (enterprise).
 - * 4.3.3 The EV combines these lists, eliminating redundancies, and offers them to the CON to consider as possible additions to the list of resources from 4.2. The EV does not eliminate a resource which seems redundant but actually

refers to different sources of the resource, e.g. typing from the school secretary and typing from the university secretary.)

- 4.4 Test of completeness using evaluator's list of resources.
 - * 4.4.1 The EV has prepared a list of resources she feels will be necessary or useful.
 - 4.4.2 The EV offers this list to the CON to consider for possible additions to the list.
- 4.5 Test of completeness using a resource list from a previous evaluation.
 - * 4.5.1 The EV secures a list of resources generated during the evaluation of another but similar enterprise.
 - 4.5.2 The EV offers this list to the CON for them to consider possible additions to their list of resources.
- 4.6 The CON inspects the final list, makes revisions if necessary, and judges whether or not the list is complete.
- 4.7 Committing resources.
 - * 4.7.1 The EV prioritizes the list of resources according to the criterion "important for the evaluation to succeed."
 - 4.7.1.1 The EV begins with the most important resource and determines a minimum amount of that resource needed for the evaluation to succeed. She proceeds through the prioritized list of resources until she reaches resources on the list that are in her judgement not important enough to require committing a minimum amount.
 - 4.7.2. Beginning with the most important resource first, the EV asks the group to indicate how much of that resource it can commit itself to providing, and proceeds through the list until all resources which require minimum amounts have been reached.

- 4.7.2.1 If the group is unable to commit the minimum amount of a resource because the amount available is unknown (e.g. if the amount of decision-maker time is unknown because only the actual decision-maker can determine this and make this commitment) then the EV asks the group to indicate a "reasonable expectation" of the amount available. If they cannot do this, then the EV indicates that the resource's amount is unknown by placing a question mark next to it; the EV asks the group to try to ascertain the amount of the resource available before the completion of the contract.
- 4.7.2.2 Whenever the minimum amount suggested by the group is below the amount the EV believes is necessary, she should indicate that to them and ask them to reconsider.
- * 4.7.2.3 Whenever the group asks the EV how much of a resource she believes is the minimum needed, she should be prepared to give an estimate.
- 4.7.3. The EV gives the group the whole list of resources to look at and to point out to the EV any resources which they feel are important but which the EV has not prioritized.
- 4.7.3.1 For each such resource, recycle to 4.7.2.
- 4.7.4 The complete list of resources, prioritized by "importance to the evaluation's success", with minimum amounts committed, expected, or indicated as unknown, is provided for the EV's and the CON's review. Any changes which need to be made can be made now.
- 4.7.5 The CON and the EV approve the list or recycle to 4.7.4 until the list can be approved by both the CON and the EV.

5.0 Identification of decision-makers.

- 5.1 The EV asks each individual of the CON to provide a list of all decision-makers associated with the enterprise, without making judgements concerning the reality of his choices.
 - 5.1.1 The EV combines the individual lists, eliminating redundancies, and makes this combined list available to all members of the group.
- 5.2 "Others" test of completeness
 - 5.2.1 The EV asks the CON to "Identify others who can develop lists of possible decision-makers. These should be people who are likely to have a very different perspective from yours, yet with a perspective you would value."
 - ** 5.2.2 The EV gets lists of possible decision-makers from as many of the "others" as possible.
 - * 5.2.3 The EV combines these lists, eliminating redundancies.
 - 5.2.4 The EV asks the CON to inspect the list from 5.2.3 and consider whether or not they want to add any decision-makers to their list from 5.1.1.
 - 5.2.5 The EV asks the CON to inspect their list and revise it if necessary, eliminating those whose decision-making is extremely remote or indirect, those who will not make time available to work with the EV, and those for whom the CON does not want information gathered.
- 5.3 The EV advises the CON of the consequences of identifying a list of decision-makers too large for the available resources, and gives them an opportunity to revise their list.
- *5.4 The EV prepares a final list of possible decision-makers.
- 5.5 The EV gives this list to the CON and asks them to approve it.
- 5.6 Group prioritizing process

- 5.6.1 Every person in the group has the same list of decision-makers for prioritizing.
- 5.6.2 This list is also put on a blackboard or large piece of newsprint. To the right of the decision-makers the EV draws in columns equal in number to the number of group members plus two.
- 5.6.3 Determining what criteria will be used for prioritizing
 - 5.6.3.1 The EV asks the CON members if there are any criteria they would like to use to prioritize decision-makers.
 - 5.6.3.2 The EV suggests the following criteria as a test of completeness:
 1. Importance of a decision-maker's decisions to (the enterprise.)
 2. Decision-maker's degree of involvement in (the enterprise.)
 3. Risk to (the enterprise) if the decision-maker doesn't get data for decision-making.
 4. Amount of time a decision-maker could make available to the evaluator.
 5. Decision-maker's need for data.
 - 5.6.3.3 The CON decides what criteri(on) (a) they will use.
- 5.6.4 If only one criterion is to be used, the EV goes to 5.6.4.1. If two or more criteria are to be used, the EV goes to 5.6.5.
 - 5.6.4.1 The EV asks each member to prioritize individually using the agreed-upon criterion. If there is a list of decision-makers longer than ten, the EV only has them prioritize the top ten.
 - 5.6.4.1.1 Alternative 1: The EV asks each member to find the high-

est priority decision-maker on the list and give it a "1." Then the EV asks her to find the next highest priority and give it a "2" and to proceed through the list until she has prioritized ten decision-makers.

5.6.4.1.2 Alternative 2: The EV asks each member to find the highest priority decision-maker on the list and give it a "10." Then the EV asks her to find the next highest priority decision-maker and give it a "9" and to proceed through the list until she has prioritized ten items.

5.6.4.1.3 If a member wishes to give two or more decision-makers the same priority, the EV asks him to:

1. assign a sequence of priority numbers to all the decision-makers he wishes to give equal priority (e.g. "3,4" for two decision-makers of equal priority, but lower in priority than the two highest priority decision-makers, or "5,6,7" for three decision-makers of equal priority but lower than the four highest priority decision-makers.)
2. find the median of the series (e.g. first series: 3.5, second series: 6.)
3. assign each of the decision-makers in the sequence the median number (e.g.

first series: 1, 2, 3.5,
3.5..., second series:
1, 2, 3, 4, 6, 6, 6, ...)

4. give the next highest priority decision-maker on the list a number which is one higher (lower) than the last number in the sequence assigned in step one (e.g. first series: 1, 2, 3.5, 3.5, 5, 6, ..., second series: 1, 2, 3, 4, 6, 6, 8, 9,)

5.6.4.2 The EV goes to the blackboard or newsprint with the list of decision-makers, and asks each member to give her highest priority decision-maker. He puts a "1" (alternative 1) or a "10" (alternative 2) next to each decision-maker which was given the highest priority. Then he asks for each member's next highest priority decision-maker and puts a "2" (alternative 1) or an "9" (alternative 2) next to each decision-maker which was given the second highest priority. He proceeds in this way until each member's ten highest priorities have been listed.

5.6.4.3 Summing

5.6.4.3.1 If the EV has used alternative 1, he gives every blank space in every column the number "11," then sums across the decision-makers and records the sum for each decision-maker in the next-to-last column.

5.6.4.3.2 If the EV has used alternative 2, he sums across the decision-makers and records the sum for each decision-maker in the next-to-last column.

5.6.4.4 Reordering

5.6.4.4.1 If the EV has used alternative 1, he finds the lowest sum. This is the highest priority. He records this in the last column as a "1." Then he finds the next lowest sum and records this in the last column as a "2," and proceeds through the sums until he has listed the ten highest priorities.

5.6.4.4.2 If the EV has used alternative 2, he finds the highest sum. This is the highest priority. He records this in the last column as a "1." Then he finds the next highest sum and records this in the last column as a "2," and proceeds through the sums until he has listed the ten highest priorities.

5.6.4.5 Considering/Approving

The EV offers the CON the opportunity to consider and discuss whether or not the priorities listed in the last column reflect the order of priority of decision-makers they as a group actually want. If so, they approve the list. If not, they revise it and then approve it. Then the EV goes to 5.7.

5.6.5 If more than one criterion is to be used, the EV determines whether or not the CON wishes to order the criteria by priority. If the criteria are ordered by priority, the EV goes to 5.6.7. If they are not, the EV goes to 5.6.6.

5.6.6 If the criteria are not ordered by priority, the EV does 5.6.4.1 - 5.6.4.4 for each of the criteria, in any order. The EV needs a great deal of blackboard space or several large sheets of newsprint. When 5.6.4.4 has been finished for all the criteria, the EV goes to 5.6.6.1.

- * 5.6.6.1 The EV erases previous columns on the blackboard, keeping a record of the group priorities of decision-makers according to each criterion.
- 5.6.6.2 Then the EV draws lines after the list of decision-makers on the blackboard or newsprint so that there are a number of columns equal to the number of criteria plus two.
- 5.6.6.3 Above each of the columns except the last two the EV writes in a criterion, and fills in the priority order of the list of decision-makers according to that criterion.
- 5.6.6.4 Summing and Reordering, Considering/ Approving

The EV does 5.6.4.3 - 5.6.4.5. Then the EV goes to 5.5.
- 5.6.7 If the criteria are prioritized, the EV does 5.6.4.1 - 5.6.4.4 for each of the criteria in order of priority. The EV needs a great deal of blackboard space or several large sheets of newsprint. When 5.6.4.4 has been finished for all the criteria, the EV goes to 5.6.7.1.
- * 5.6.7.1 The EV erases previous columns on the blackboard, keeping a record of the group priorities of decision-makers according to each criterion.
- 5.6.7.2 Then the EV draws lines after the list of decision-makers on the blackboard or newsprint so that there are a number of columns equal to the number of criteria plus two.
- 5.6.7.3 Above each of the columns except the last two the EV writes in a criterion, in order of priority of criteria, and fills in the priority order of the list of decision-makers according to that criterion.
- 5.6.7.4 The EV offers the CON two ways to combine the criteria: 1. the "shuttle"

method, or 2. a simple weighting method. The EV asks them to choose one method, then combines the criteria using it.

5.6.7.4.1 For information on how to use the "shuttle" method, see "Instructional Alternative on Prioritization of the Fortune/Hutchinson Evaluation Methodology."

5.6.7.4.2 Simple weighting method

1. Using alternative 1, the EV adds x (e.g. 2) to every number in the second highest priority criterion column. Then he adds $x + y$ (e.g. $2 + 3 = 5$) to every number in the third highest priority criterion column, $x + y + z$ (e.g. $2 + 3 + 2 = 7$) to every number in the fourth highest priority column, etc.
2. Using alternative 2, the EV adds x to every number in the second lowest priority column. Then he adds $x + y$ to every number in the third lowest priority criterion column, $x + y + z$ to every number in the fourth lowest priority column, etc.
3. The EV sums across the columns.
4. The EV reorders.

5.6.7.5 Considering/Approving

The EV offers the CON the opportunity to consider and discuss whether or not

the priorities listed in the last column reflect the actual order of priority of decision-makers they as a group want. If so, they approve the list. If not, they revise and then approve the list. Then the EV goes to 5.7.

5.7 Performing a test of completeness on the acceptability of the order of decision-makers

5.7.1 The EV asks the CON to identify others who might judge the acceptability of their order of decision-makers.

5.7.1.1 The EV asks them to consider identifying a person(s) or group(s) who might be able to influence or change their prioritization later.

5.7.1.2 The EV asks them to consider identifying a person(s) or group(s) which has a perspective very different from their own and which they would value.

** 5.7.2 The EV provides each of the "others" with a final list of decision-makers (unprioritized) and asks them to review the list.

5.7.2.1 The EV asks them to add any decision-makers they feel are missing from the list.

5.7.2.2 The EV asks them to cross off any decision-makers they feel should not be on the list.

5.7.2.3. The EV asks them to prioritize the list.

5.7.2.4 The EV shows them the list prioritized by the CON and asks them if it is acceptable. If it is acceptable, he records that. If it is not acceptable, he asks them to make changes (additions, deletions, or re-prioritizations) which will make it acceptable.

5.7.3. The EV shows the results of the test of completeness to the CON and asks them to consider if revisions are necessary, and if they are, to make them.

5.7.4 The EV asks the CON to finally approve the list of decision-makers, pointing out the consequences--possible wasted resources--of making careless decisions about the list. If the list is approved, the EV goes to 6.0. If it is not approved, the EV makes the changes the CON desires or re-cycles to 5.1

6.0 Gross matching of decision-makers and resources to determine what percentages of EV time for decision-makers will be allotted to each decision-maker.

6.1 The EV takes the prioritized list of decision-makers and assigns each a number, beginning with the lowest = 1, the next lowest = 2, etc.

6.2 For each Case I decision-maker the EV adds a "0" weighting.

6.3 For each Case IIa decision-maker the EV adds a "1" weighting.

6.4 For each Case IIb decision-maker the EV adds a "2" weighting.

6.5 For each Case III decision-maker the EV adds a "5" weighting.

6.6 For each decision-maker the EV adds the number assigned and the weighting. This results in the numerator of the fraction of resources for that decision-maker.

6.7 The EV adds the numerators. This results in the denominator of each fraction of resources.

6.8 The EV shows the list of fractions of resources (possibly changed to decimals or percentages) to the CON. She asks if any changes need to be made, and if so, makes them. After changes the sum of the numerators is still equal to the denominator.

6.9 The EV asks the CON to approve the final gross matching.

7.0 Preparation of the contract

- 7.1 Using the prepared outline "Letter of Agreement" of other contract form, the EV fills in the details gathered in steps 1 - 5 above.
- 7.2 The EV provides the CON with a copy of the contract for a test of completeness and for their revision.
- 7.3 The EV explains the procedures for amending the contract.
- 7.4 The EV secures final approval from the CON, and if different from the CON, the holder(s) of resources for evaluation. The EV presents each with copies of the contract.

BROAD OUTLINE OF F/H EVALUATION METHODOLOGY (from Benedict,
A.E.R.A. February, 1973)

1.0 Negotiation of the Contract

- 1.1 Explication of the evaluation methodology, determination of whether it satisfies the needs of the temporary decision maker (contractor)
- 1.2 Identification of enterprise
- 1.3 Elimination of misunderstanding
- 1.4 Identification of resources for evaluation
- 1.5 Identification of decision-makers
- 1.6 Preparation of the contract

DESIGN OF THE EVALUATION

- 2.0 Identification of goals for each decision-maker
- 3.0 Identification of parts of the enterprise from the perspective of each decision-maker
- 4.0 Matching goals and parts for each decision-maker
- 5.0 Operationalizing fuzzy goals for each decision-maker
- 6.0 Development of observational techniques

IMPLEMENTATION OF DESIGN

Measurement/Observation

Reporting data to each decision-maker

Evaluation of the evaluation

REDESIGN

Redesign of evaluation for each decision-maker for whom redesign is necessary.

Lexicon

- Data = Observable or measurable
Behaviors or states
- Decision - Maker = A person(s) identified by the contractor
as someone entitled to have data
collected and reported to him.
- Goals = intents of particular decision makers
- Operationalize = to define (e.g. a concept or goal) in
observable or measurable terms, as
completely as possible
- Methodology = A systematic, standardized, operationalized
set of procedures for accomplishing a definable
purpose.
- Prioritize = order in a list (e.g. goals, parts etc.) by
priority -- from first to last in terms of a
criterion (e.g. importance, risk, time, etc.)
- Test of Completeness = a set of procedures for expanding
one's initial list of ideas (e.g.
goals, d-makers, parts, etc.)
- Enterprise = That which is to be evaluated
- Contractor = Person(s) in control of resources for
evaluation, able to "contract" for the
evaluation
- Temporary Decision-Maker = (Also called contractor) person
who has control of the evaluation
resources, who negotiates the
contract with the evaluator
- Evaluation = The process through which information for
decision making is determined, collected and
reported to selected decision makers for
their decision making

Implications of the Purpose "To Provide Data For Decision-Making"

1. If data are to be provided for decision-making, they must be provided to real decision-makers who are identified in advance.
2. This list of decision-makers must be as complete as possible,
3. and ordered by priority.
4. The data must be data these decision-makers want,
5. that they will be able to use, hence,
6. data on their goals,
7. particularly their most important goals.
8. These goals must be described by the decision-makers in operational terms, i.e. in observable or measurable terms,
9. and the description should be as complete as possible.
10. The goals should be observed in the parts of the enterprise which are most important to the decision-maker, and
11. in as many of these parts as possible.
12. When the data are collected, it should be with instruments or techniques which the decision-maker feels are valid,
13. and which are technically valid and reliable.
14. The data should be collected in time to be useful for the decision-maker's decision-making needs,
15. and should be reported to the decision-maker in terms of his goals and his components of those goals.

LETTER OF AGREEMENT

This letter shall constitute agreement by _____ Evaluator
and _____ Contract Decision-Maker to carry out the
evaluation of _____ Enterprise using the Fortune/
Hutchinson Evaluation Methodology.

The evaluation shall be conducted beginning _____
and ending _____.

For performance of the tasks outlined below _____ Evaluator
will be paid a total of _____ over a period of
_____.

Under the terms and conditions of the agreement, the
following tasks must be performed:

A. Scope of Work

In accordance with the agreements reached during
the Negotiation of the Contract Phase of the methodology,
the evaluator will:

- 1. have access to the use of the following resources:

- 2. provide information for decision-making to the
following decision-makers at such time as they request it:

3. perform the tasks outlined in the Fortune/
Hutchinson Evaluation Methodology.

B. Reporting Guidelines

Progress reports to be submitted monthly to the contract decision-maker, with a final report to be presented by _____
date

C. General Provisions, accounting and reporting procedures

D. Special Conditions

This agreement may be amended by agreement of both parties (the evaluator, and the Contract decision-maker) at any time that such amendments or re-negotiation shall be necessary. The agreement may be terminated by notice in writing by either party, with or without cause, at any time. In such event the evaluator shall be entitled to compensation for all services performed under the terms of the agreement up to the data of termination. In the event of any such termination the evaluator shall refund to _____ any amount received by the Enterprise evaluator representing services, costs or expenses to be rendered after such date of termination.

To signify your approval of the foregoing and acceptance of the terms and conditions of this contract, please sign and return the original of this document to the evaluator. A copy is enclosed for your files.

By _____ Date _____
Contract Decision-Maker

Evaluator Date _____

D-M #1	7	8	9	8	9	8	3	9	8	2	9	80	8th
D-M #2	8	5	6	7	8	9	8	8	9	8	7	83	9th
D-M #3	9	4	5	6	2	3	1	4	2	3	2	41	2nd
D-M #4	4	7	3	3	1	4	2	5	6	9	3	47	5th
D-M #5	5	6	7	1	6	2	4	3	4	6	1	45	4th
D-M #6	3	3	4	2	4	5	7	7	5	1	6	47	5th
D-M #7	2	1	2	4	5	1	6	2	1	4	5	33	1st
D-M #8	6	9	8	9	3	7	9	6	7	5	8	77	7th
D-M #9	1	2	1	5	7	6	5	1	3	7	4	42	3rd
	A	B	C	D	E	F	G	H	I	J	K	SUM	ORDER

Members of Contracting Group

Results of Contracting Group's Prioritization
of Decision-Makers Using Alternative 1 and
nine Decision-Makers

FIGURE B

D-M #1	6	11	10	6	11	9	4	2	1	3	11	74	8th
D-M #2	11	7	1	4	11	11	5	1	2	2	1	56	3rd
D-M #3	4	1	2	1	3	7	9	3	4	8	3	45	2nd
D-M #4	3	4	5	5	5	4	6	11	6	9	2	60	4th
D-M #5	5	2	3	2	1	2	1	4	3	1	5	29	1st
D-M #6	11	3	4	11	4	3	7	7	5	7	10	72	6th
D-M #7	2	9	6	3	2	1	8	6	7	5	11	60	4th
D-M #8	11	5	7	7	6	5	3	5	11	6	6	72	6th
D-M #9	8	10	9	8	7	6	2	8	9	4	7	78	9th
D-M #10	7	6	8	9	9	8	10	9	8	11	11	96	10th
D-M #11	10	11	11	11	11	11	11	10	11	11	8	116	--
D-M #12	9	8	11	11	10	11	11	11	10	11	4	107	--
D-M #13	1	11	11	10	8	10	11	11	11	10	9	103	--
	A	B	C	D	E	F	G	H	I	J	K	SUM	ORDER

Members of Contracting Group

Results of Contracting Group's Prioritization of Decision-Makers Using Alternative 1 and thirteen Decision-Makers.

C H A P T E R V I

FIELD-TEST OF THE CONTRACT DECISION-MAKER REPORTING PROCESS

General Description of the Field-test

The field-test of "The Contract Decision-Maker Reporting Process" of the Fortune/Hutchinson Evaluation Methodology was carried out from September 21, 1973, after the Letter of Agreement had been signed by the Evaluation Task Force, through April 20, 1974, when the last monthly report was submitted. The last part of this process, implementing the long-term reporting process, was not field-tested as part of this study as the report was presented to the Contract Decision-Maker after this research had been completed. This investigator felt that the process most appropriately should occur after the "Negotiation of the Contract Phase." In a recent draft of the methodology, however, it is included as part of that phase.

The initial procedures for determining what reporting format would be used consumed twenty minutes of evaluator and Contract Decision-Maker time, and was held away from Shanti, in the offices of the Capitol Region Education Council in Windsor, Conn. Blackboards were available during the session and were a useful resource.

The purposes of this section of the methodology are to:

1. plan a process for reporting to the Contract Decision-

- Maker formative and summative data on the progress and products of the evaluation,
2. implement this plan,
 3. give the Contract Decision-Maker an overview of the evaluation,
 4. give the Contract Decision-Maker data for decision-making on the progress of the evaluation, and
 5. give the Contract Decision-Maker data on the level of decision-maker cooperation.

Detailed Results of the Field-Test

Contract Decision Maker Reporting Process

- 1.0 Explain purpose of reporting to contract decision makers.
- 1.1 Outline purpose
 - 1.1.1 Say reports will provide an overview of the evaluation.
 - 1.1.2 Say reports will provide systematic feedback as to the progress of the evaluation.
 - 1.1.3 Say reports will indirectly provide contract decision maker with data for decision making.
 - 1.1.4 Say reports will keep contract decision maker informed on a regular basis, of level of decision maker cooperation.

Results: The purpose was outlined to the Contract Decision-Maker exactly as described above. There were no

questions or any other indications of misunderstanding at that point or subsequently.

1.2 Explain that resources allocated to this process will divert resources from other evaluation activities.

Results: This was stated. There were no questions or any other indications of misunderstanding. Because there was no basis for estimating how many resources this activity might consume, it was not possible to inform the Contract Decision-Maker how critical this might be. Since, as a result of this field test, there is information on how many evaluator resources this activity has consumed in this case (See Figure 5), it might be useful to include it at this point in the negotiations for the reporting process.

1.3 Explain that data produced during the evaluation is designed to be used by the specific decision-maker for whom it is produced.

Results: The Contract Decision-Maker said that they already knew this, although this wasn't specifically described in any of the previous steps. Perhaps they assumed this from the description of the implications of the purpose "to provide data for decision-

Figure 5: Evaluator Resources Consumed by Contract Decision-Maker Monthly Reports.

Report #1:	September	3 hours
Report #2	October	7.5 hours
Report #3	November	2 hours
Report #4	December	2 hours
Report #5	January	3 hours
Report #6	February	4 hours
Report #7	March	3.5 hours

$$\bar{X} = 3.6$$

There was no report for April. The information which ordinarily would have been contained in this report was included in the terminal report.

making" or perhaps they read this in literature given them on the F/H methodology.

- 2.0 Describe, in summary, the two standardized reporting procedures.
- 2.1 Describe the two components of the Monthly Reporting Process.
 - 2.1.1 Show contract decision maker Figure A and explain it is a list of activities completed for each decision maker during the monthly reporting period.
 - 2.1.2 Show contract decision maker Figure B and explain that it provides for the presentation of the materials developed as a result of the study during the monthly reporting period.

Results: Figure A. was put on the blackboard, and it was explained that it was an example of a standardized reporting procedure, a list of activities completed for each decision-maker during the monthly reporting period. The Contract Decision-Maker indicated that they understood this procedure. Figure B. was also put on the blackboard, and it was explained that this was another standardized reporting procedure, which provides for the presentation of materials developed as a result of the study during the monthly reporting period. The Contract Decision-Maker indicated that they understood this procedure. (Although Figures A and B are at the end of the

Contract Decision Maker Reporting Process, they are shown here for the reader's convenience.)

Figure A.

During the reporting period 20 month A, to 20 month B, the following activities were performed for each decision maker.

Decision Maker X - Operationalization Process was continued. Design of observational techniques process was started.

Decision Maker Y - The Goals Process was completed when the activities test of completeness was finished. The Parts Process was begun.

Decision Maker Z - The Operationalization Process was continued. The design of observational techniques process was started and the implementation of measurement process was started.

Figure B.

During the reporting period 20 month A to 20 month B, the following attached materials were developed.

1. Modified operationalization booklet used with Decision Maker X.
2. Measurement device used with Decision Maker Z.
3. Open ended parts question used with Decision Maker Y.

2.2 Describe End of Contract Period Reporting Process.

- 2.2.1 Say report will contain all data collected as a result of implementation of measurement
- 2.2.2 Say report will contain a copy of methodology used.
- 2.2.3 Say report will contain materials produced as a result of the implementation of the methodology design.

- 2.2.3.1 Say report will contain materials produced in goals process.
- 2.2.3.2 Say report will contain materials produced in parts process.
- 2.2.3.3 Say report will contain materials produced in goals/parts interface process.
- 2.2.3.4 Say report will contain materials produced in activities test of completeness process.
- 2.2.3.5 Say report will contain materials produced during operationalization process.
- 2.2.3.6 Say report will contain materials produced during design of observational techniques process.
- 2.2.3.7 Say report will contain materials produced during evaluation of the evaluation process.
- 2.2.3.8 Say report will contain materials produced during redesign of evaluation process.

Results: The information contained in step 2.2 was put on the blackboard and it was explained that the final report would contain all of the above information, with the exception of materials produced during the redesign of the evaluation process, since it was not anticipated that there would be a formal redesign of the evaluation. There was no indication that the information presented was not understood.

- 3.0 Determine if the contract decision maker would like to use Monthly Reporting Process described in Step 2.1.
- 3.1 Determine resources required to implement standardized Monthly Reporting Process.
- 3.2 Explain that to develop novel reporting procedures might require extra resources.
- 3.3 Ask question "would you like to have a periodic report on evaluation activities?"
- 3.4 If no, go to Step 4.0. If yes, go to Step 3.5.

Results: It was not possible to determine the resources required to implement the standardized monthly reporting process since to the evaluator's knowledge, no one had previously used this process, so this step was not done. It was explained that novel reporting procedures might require extra resources, but it was not indicated how many extra resources or whether or not this would be a significant amount. The question of Step 3.3 was asked and the Contract Decision-Maker's response was "yes." The next step which was followed was Step 3.5.

- 3.5 Ask question "Would you like to have data reported in the standardized Monthly Reporting Process format?"
- 3.6 If no, go to Step 3.7. If yes, go to Step 4.0.

Results: The question of Step 3.5 was asked, and it was explained that this included both formats A and B. The Contract Decision-Maker said that they would like to use the standardized format for two months, to have the resources used recorded, and then to examine what resulted and consider whether or not to continue using this format. Because their response was "yes," the next step followed was Step 4.0.

- 4.0 Determine if the contract decision maker would like to use previously developed End of Contract Reporting Process.
- 4.1 Determine resources required to implement this process.
- 4.2 Explain that to develop novel reporting procedures will require extra resources.
- 4.3 Ask question, "Would you like to use the End of Contract Period Reporting Process described earlier?"
- 4.4 If contract decision maker answers yes, go to step 5.0. If contract decision maker answers no, go to Step 4.5.

Results: Since the evaluator did not have previous experience using the "End of Contract Reporting Process," it was estimated that it would take a minimum of ten hours of evaluator time and twenty hours of typing to complete the report. It was explained

that to develop novel reporting procedures would require extra resources. In response to the question in step 4.3., the Contract Decision-Maker answered "yes." The next step which was followed was Step 5.0.

5.0 Implement Periodic Reporting Process

5.1 If novel reporting device was developed, implement this as per result of step 4.8.

5.2 If Monthly Reporting Process is used, go to step 5.2.1.

5.2.1 Determine the day of the month the contract decision maker desires to have the report.

5.2.1.1 All materials should be collected and assembled 10 days previous to this time to allow for typing, xeroxing, mailing, etc. Thus, if the reports are due on the first of each month, the reporting period would extend from 20 month A, to 20 month B. (see Figure A)

5.2.2 List activities performed for each decision maker (see example in Figure A.)

5.2.3 Assemble all materials developed during the reporting period as a result of implementation of design.

5.2.4 Combine these.

5.2.5 Make two copies of package for each contract decision maker, 3 copies for the evaluator.

5.2.6 Present these 2 packages to contract decision maker.

5.2.7 Enter time required for this task in R.A.C.

Results: Since a novel reporting device was not used, Step 5.1 was not applicable. The Contract Decision-Maker said that they would like to have the report by the tenth of each month (Step 5.2.1.) At this point there appeared to be gaps in the methodology. There was no step for determining whether or not the report was to be made in writing. Also there was no step to determine, from the Contract Decision-Maker's point of view, who should get the report. The Contract Decision-Maker was asked "Do you want this report made orally or in writing?" They answered "in writing." They were asked, "To whom do you want this report sent?" They answered "to the Evaluation Task Force." It was suggested that it would also be possible to send it to John Allison and Philip Saif at C.R.E.C., to Tom Wolf at N.A.S.P. and to William Gorth (holders of resources and the person responsible for the evaluation contract with the University of Massachusetts.) They agreed that this would be all right.

At this point Steps 5.2.1.1. - 6.2 were not followed. Instead, Step 6.2.1, which is logically and chronologically the next step, was

followed. The methodology should be rearranged so that this step appears next.

- 6.0 Implement "Long Term" Reporting Process.
- 6.1 If novel reporting device was developed, implement this as per result of Step 4.8.
- 6.2 If End of Contract Period Reporting Process was chosen, go to Step 6.2.1.
 - 6.2.1. Determine when contract decision maker would like the end of contract period report.

Results: Following Step 6.2.1., the Contract Decision-Maker was asked when they would like the end-of-contract period report, and their response was "by May 30, earlier if possible."

Following Steps 5.2.1.1.-5.2.7., when the monthly periodic reporting process was implemented all materials were collected and assembled on the first of the month to allow for typing and photoduplication. This was often not enough time, however, especially when a part of the report had to be typed first in Hartford, and then photoduplicated at the University of Massachusetts in Amherst. The solution was to submit late reports. The Contract Decision-Maker and the holders of resources did not object.

The activities performed for each decision-maker were listed in these reports. All materials developed were assembled, combined, and included in the reports. Most decision-makers' operationalizations of goals and the instruments designed for collecting data on them were not included in the monthly reports as this would have consumed too many resources.

Copies of the monthly reports were made for the Contract Decision-Maker, John Allison, Philip Saif, William Gorth, and Tom Wolf; three extra copies were made for the evaluator. The time consumed in preparing each report was recorded and reported in the subsequent monthly report.

Because the Contract Decision-Maker did not request that the format of the reports be changed after the second month, it was assumed by the evaluator that the format was satisfactory. After the fourth monthly report, however, the Contract Decision-Maker suggested that reports were consuming too many of the school's typing resources, and that they should be kept as brief as possible. Responding to this request, descriptions of activities performed for each decision-maker were abbreviated. This was satisfactory.

- 6.2.2 Assemble all data collected as a result of the implementation of measurement.
- 6.2.3 Assemble a copy of the methodology used during the evaluation.
- 6.2.4 Assemble materials produced as a result of implementation of design.
 - 6.2.4.1 Materials produced in goals process.
 - 6.2.4.2. Materials produced in parts process.
 - 6.2.4.3 Materials produced in goals/parts interface process.
 - 6.2.4.4 Materials produced in activities test of completeness process.
 - 6.2.4.5 Materials produced during operationalization process.
 - 6.2.4.6 Materials produced during design of observational techniques process.
 - 6.2.4.7 Materials produced during design of observational techniques process.
 - 6.2.4.8 Materials produced during redesign of evaluation process.
- 6.2.5 Assemble copies of all periodic reports.
- 6.2.6 Present assemblage resulting from implementation of Steps 6.2.2 to 6.2.5 under a face sheet similar to that in Figure C to contract decision maker.

Results: These Steps were not performed as a part of this study. It will be noted however, that step 6.2.4.7 contains a typographical error and should read "Materials produced during the process of carrying out observations and measurement."

Summary of Results

This process on the whole was successful. The preparation of the reports, however, consumed more evaluator and typing resources than had been anticipated. Unfortunately no record was kept of the resources consumed by typing and duplication, but these were significant. Duplication is particularly expensive if photoduplication is used, as it was in part in this evaluation. Fifteen hours a month typing resources was quite inadequate for an evaluation of this magnitude.

Recommendations

The following are recommended modifications of this process of the evaluation methodology:

1. Figure 5, the record of resources consumed by the monthly reports, should be added to Step 3.1 as one example of such resources consumed in one evaluation.
2. A step should be added for determining whether the report is to be made orally or in writing.
3. A step should be added for determining who should get the monthly reports. Another step should be added in which the evaluator offers a test of completeness of this list for the Contract Decision-Maker's consideration. This test of completeness should consist of a list of all the holders of evaluation resources.

4. Step 6.2.1 should follow Step 5.2.7.
5. More than ten days should be allowed between the time of gathering materials and submitting the report. It is suggested that a minimum of ten days and maximum of twenty days should be sufficient.

CHAPTER VII

FIELD-TEST OF THE ALLOCATION OF RESOURCES SECTION

General Description of Field Test

The "Allocation of Resources" section was tested separately with each of four decision-makers, and the results are reported for each decision-maker. This section of the methodology actually contains two sub-sections, the first to be performed by the evaluator with the decision-maker and the second to be performed by the evaluator alone. The second section can be done for each decision-maker as soon as the first section has been completed for that decision-maker or it can be delayed until the first section has been completed for several or all the decision-makers. In this field-test, after the first section meetings were held with the first two decision-makers, the second section was completed for them. After a first section meeting with the third decision-maker, and again after a first section meeting with the fourth decision-maker, the second section was completed for each of them. In each case the first section took under thirty minutes; the second section varied from thirty to forty five minutes. The first application of the second section took longer as there were extra calculations involved.

The director, staff, and Administration and Budget Task

Force each met separately with the evaluator in a quiet conference room of the Hartford Design Group, located directly above Shanti, and occasionally used by Shanti for tutorial meetings. The Shanti community met with the evaluator around the stage, in the main hall of Shanti. While it was difficult to hear in this lofty arena, there was no evidence of confusion or misunderstanding, and the group responded clearly to all questions asked. The community was not asked to keep a Decision and Data Log as too few resources were made available for this activity to be completed.

Detailed Results of Field-Test

- 1.0 Secure cooperation of each decision-maker.
- 1.1 In priority order, request a meeting with each decision-maker.
 - 1.1.1 Schedule the meeting as soon as possible.
 - 1.1.2 If the decision-maker refuses to meet with the evaluator inform the temporary decision-maker.
 - 1.1.2.1 Ask the TDM if he wishes to secure the decision-maker's cooperation himself or to remove that decision-maker from the contract.
 - 1.1.2.2 If remove, then return to the negotiation of the contract section.
 - 1.1.2.3 Ask the TDM to arrange a meeting between the Dm of the Eval and the TDM.

- 1.1.3 If the decision-maker is not available ask the TDM to say when the Dm will just be available, last available before the contract ends, and any known periods of unavailability.

Results: Appointments were made with the highest priority decision-makers in order of priority: 1. Shanti staff, 2. Administration and Budget Task Force, 3. Evaluation Task Force, 4. Shanti Director, and 5. Home Group Leaders. Meetings had been held with both the staff and the Administration and Budget Task Force, when on October 8 the Evaluation Task Force, as Contract Decision-Maker, changed the order of decision-makers to:

1. The Shanti Community, 2. Staff, 3. Administration and Budget Task Force, 4. Home Group Leaders, and 5. Director.

This list was re-prioritized once more by the Evaluation Task Force at a meeting on November 9. The director was given fourth priority, and the Home Group Leaders were given fifth. Also at this meeting resources were re-allocated so that only the top four decision-makers would get data for their decision-making. The other six would, however, have the opportunity to participate in the goals process.

Each of the top four decision-makers agreed to meet with the evaluator, so steps 1.1.2 - 1.1.2.3 did not apply. Step 1.1.2.2, however, needs further specification. It is not clear where exactly one should begin the re-negotiation of the contract. Also, step 1.1.2.3 is not clear. What exactly is the purpose of the meeting which is to be arranged? Is this step necessarily to follow step 1.1.2.2, or is this step one of two alternatives following step 1.1.2.1? The decision-makers were all available, fortunately, because step 1.1.3 is quite confusing. Presumably it should read "first available" and not "just available", but one wonders why the TDM is asked to determine the first, last, and unavailable times of the decision-maker. Can the TDM always do this? Shouldn't the decision-maker in question be asked to do this? If this decision-maker is never available, shouldn't he be removed from the list of decision-makers by the TDM?

1.2 Explain the evaluation to the Dm.

1.2.1 Define evaluation.

1.2.2 Tell the Dm about his role in the evaluation.

Results: With each of the four decision-makers, evaluation was defined as an extensive series of activities whose purpose was to provide data for decision-making. It was further explained that data would be provided to decision-makers chosen by the Evaluation Task Force, and each decision-maker was told who all the identified decision-makers were. Each decision-maker was told that data would be provided on his/her/their goals which would be defined in detail by him/her/them, that the goals would be observed or measured in parts of (the enterprise) which were defined by the decision-maker, with instruments that would be approved by him/her/them, and that the data would be reported directly to the decision-maker as soon as it was collected. This then was a summary of the most important implications of the purpose of the evaluation methodology.

With decision-makers who had not been involved in the negotiation of the contract and who therefore had no acquaintance with the methodology there was initial confusion. There was the problem of both trying to introduce some complex concepts to people who were not familiar with them, and at the same time not wasting the time

of those who were already quite familiar with the concepts. This was made even more difficult when some decision-makers were Shanti students, for whom the terminology was particularly obscure, and for whom considerable definition was required. A great deal of time must be allocated for this introduction of the evaluation to a decision-maker who has no familiarity with the methodology.

With each decision-maker the process which had led up to his/her/their selection by the Evaluation Task Force was carefully explained. With the Shanti Community this was no problem, and with the director this was already clear, as he had participated in the selection process. With the staff and the Administration and Budget Task Force, however, there were some minor problems which had to do with the legitimacy and appropriateness of the Evaluation Task Force's decisions.

Some Administration and Budget Task Force members objected that the choice of decision-makers was never brought before the Shanti Community. There were also objections to the priority of the decision-makers. This was a reaction to the list prior to October eight. The opinion was voiced that the Shanti Community, not the staff, ought to

be the highest priority decision-maker. The opinion was also voiced by Staff members and some members of the Administration and Budget Task Force that the staff ought not to have been identified as a group because this was a departure from Shanti's usual decision-making procedures.

Neither of these problems was a problem with the evaluation methodology, but rather with the Evaluation Task Force's particular decisions. All four potential decision-makers agreed at the initial meetings to be a decision-maker for the evaluation.

- 1.2.3 Ask the Dm to tell you a minimum guaranteed amount of his time that he will spend on the evaluation tasks.
- 1.2.3.1 Explain that this can be raised later if he wishes.
 - 1.2.3.2 Explain that a decrease in the time that he specifies would result in serious waste.
 - 1.2.3.3 Ask the Dm when he will be last available before the end of the contract, and for the dates of any known periods of unavailability.

Results: It was explained to each decision-maker that a minimum guaranteed amount of time which the decision-maker would agree to spend on evaluation tasks

was required if the evaluation were to be successful. It was recommended that two hours a week would be a useful minimum amount. It was also explained that this time could be raised later if the decision-maker wished, and that a decrease in this time would result in serious waste. Each decision-maker gave a minimum specified amount of time. The director and staff members each gave two hours a week. The Administration and Budget Task Force gave one hour a week. The community agreed upon two community meetings, and additional time as needed, from volunteers of the community who would carry out the rest of the process of the evaluation, subject to community approval. The staff suggested that additional time might be available during January Project Month.

Each decision-maker was asked for the date he/she/they would last be available before the end of the contract, and for dates of any known periods of unavailability. It was easy to determine the last date of availability, but it was not easy to determine known dates of unavailability because the school calendar was not available. Each decision-maker agreed to be available until the end of

April, when it was suggested to them that they would not need to be available after that date.

A problem that occurred quite late in the evaluation was that some decision-makers, particularly the director and one member of the staff, spent a great many more hours than their minimum commitments in the early stages of the evaluation, generating many goals and parts and many levels in the operationalization process. These decision-makers felt exhausted by the evaluation, and the director in particular was unhappy that he had spent so much of his time on it. Perhaps it would be useful to have a step at this point warning of the possible danger of over-committing resources, particularly in the early stages of the methodology.

In addition to the above steps of the methodology, two more steps were performed: each decision-maker was asked to notify the evaluator well in advance, if possible, of any scheduled meeting which would not be held, particularly as there was considerable travel involved for the evaluator to attend these meetings. (In the case of the community, this was asked at the meetings held with small groups of community volunteers, but

was not asked at the large community meetings.) Each decision-maker was also informed of the importance of retaining his/her/their usual decision-making processes in these meetings. Decision-making groups were asked what their decision-making process was, and were specifically asked if a quorum were necessary to make a decision, and if so, what that quorum was. It was pointed out to these groups that unless a quorum were present, decisions could not be made concerning the evaluation design for them.

- 1.3 Ask the Dm to begin keeping a Decision and Data Log (D/D log).
 - 1.3.1 Give the Dm a book containing pages as in Figure A.
 - 1.3.2 Ask the Dm to record in the book the most recent decision he has made.
 - 1.3.2.1 Answer any questions the Dm may have.
 - 1.3.2.2 Check the entries to see if the Dm has misunderstood any part.
 - 1.3.3 Ask the Dm to record his decisions from now until the evaluation contract ends.

Results: With the exception of the community, each decision-maker was asked to begin keeping a D/D Log. The decision-maker was given the pages as in

"Figure A," (See Figure 6) and was asked to record a recent decision. Questions were answered and the decision-maker was asked to record decisions from then until the end of the evaluation contract.

Questions were asked about what a decision is. Decision-makers were particularly concerned with whether or not all decisions should be recorded or only important ones. They were instructed to log in as many of the decisions as they reasonably had time to record, and to be sure to include the important ones.

Decision-makers varied in their keeping of the log. One decision-maker, the director, kept his log devotedly for several months. Other decision-makers ignored the task altogether. The purpose of keeping the log seemed hardly worth the effort required to do it conscientiously, especially as data from the evaluation weren't returned until February, and any decisions made before then would have no evaluation data to support them. Keeping the Decision and Data Log was a great source of unhappiness for the one decision-maker who kept it.

There is a gap in the methodology at this

point. It does not provide clear procedures to help the decision-maker decide which decisions to record in the D/D Log.

2.0 Produce a chart in blank as in Figure B. This is called the Resource Allocation Chart (RAC).

Results: (See Figure 7)

3.0 Record on the RAC information from the evaluation contract.

3.1 Decision Makers

3.1.1 Enter the names of the decision-makers, in priority order, in the place provided on the RAC.

Results: The RAC which was produced contained columns for the ten decision-makers identified by the contracting group. The names were entered in the priority order specified in the contract.

3.1.2 For each decision maker enter his priority in the box to the right of the decision-maker's name.

Results: The priority was recorded for each decision-maker, above the decision-maker's name, as space did not allow it to be placed to the right. This step is

ambiguous, however; it could be interpreted either as "put the priority in the same box as the decision-maker, to the right," or as "put the priority in the box which is on the right of the box with the decision-maker." This is a source of possible confusion.

- 3.2 Enter the total resources for each decision maker.
 - 3.2.1 Enter the amount of evaluation time for the decision maker.
 - 3.2.2 Decision maker time.
 - 3.2.3 Enter the amount of time the decision maker has agreed to make available.
 - 3.2.4 Other Resources
 - 3.2.3.1 The Eval. selects from the contrast the two other resources that will be most important to the success of the evaluation.
 - 3.2.3.2 The Eval. enters the names of these resources on the RAC in each section just below the line for decision maker time.
 - 3.2.3.3 Enter the actual total amount of these resources allocated for each Dm.

Results: It wasn't clear what was meant by the "total resources for each decision-maker," whether it was intended that a fraction or an actual amount be recorded. The fraction of resources to be

allocated to each decision-maker was recorded in the space marked "total" beneath each decision-maker's name. Following step 3.2.1, the amount of evaluator time (not evaluation time) was entered for each decision-maker.

However, there is a gap in the methodology at this point. The evaluator needs a way of determining the total number of evaluator hours (s)he will spend on the evaluation. Then the evaluator needs to determine a fraction of this amount which is available for each decision-maker. This is the amount which should be recorded in the spaces marked "evaluator time."

The procedures which were followed were as follows:

1. Determine the total number of weeks of evaluator work.
2. Determine the number of hours of evaluator work per week.
3. Find the product of 1. and 2. This is the total number of evaluator hours.
4. Multiply this total by the fraction of resources allocated to each decision-maker. This is the evaluator time for the decision-maker.

The direction in step 3.2.2 was not clear.

As a result, nothing was done for this step. Following the directions in step 3.2.3, the amount of time a decision-maker agreed to make available was entered wherever this was known. By this point there had been meetings with only three decision-makers. Consequently, several decision-makers' resources were left unrecorded.

No other resources were entered in the RAC. In retrospect it may have been a good idea to allocate typing resources by the fractions specified for each decision-maker. There are typographical errors in this section. 3.2.3.1, 2, and 3 should read 3.2.4.1, 2, and 3, and "contrast" should read "contract".

- 4.0 For each Dm allocate the Dm's total resources among the parts of the methodology.
- 4.1 Allocate the time of the decision maker among the parts of the methodology using the percentages given in Figure C for decision maker time.
- 4.2 Allocate the time of the Eval. among the parts of the methodology using the percentages given in Figure C for Evaluator Time.
- 4.3 Allocate the other resources using the same percentages as for Evaluator Time.

Results: The time of the decision-maker was allocated among

the parts of the methodology using the percentages given in "Figure C" (See Figures 8 and 9). The time of the evaluator was also allocated among the parts using percentages given in "Figure C." Other resources were not allocated. The percentages given in "Figure C" were also recorded on the R.A.C.

Soon after resources were allocated, the Contract Decision-Maker changed the priority of the decision-makers, requiring re-allocation of resources. This was done. Shortly after that, the Contract Decision-Maker changed the priority again. Resources were not re-allocated immediately after this change as further changes seemed possible, and re-allocating resources itself consumed resources. It soon became evident that the highest priority decision-maker, the community, which was allocated the greatest number of resources, would not be able at the outset to use these resources. Consequently, resources were re-allocated, week by week, on an ad hoc basis, so that the twenty hours/week of evaluator time would not be wasted, but could be profitably used by other decision-makers who were prepared to use it.

Figure 8: Filled In Resource Allocation Chart

Resource Allocation Chart		Names of Decision-makers			
		1	2	3	4
		Dm	Dm	Dm	Dm
Parts of F/II		Staff	Admin	Eval	Director
			T-F	T-F	
Total		8/19			
Evaluator time		of 85%	4/19	3/19	2/19
Decision-maker time		146	73	55	36
		58	29	-	58
Goals					
Evaluator time		5%	8	4	2
Decision-maker time		10%	6	3	6
Parts					
Evaluator time		3%	4	2	1
Decision-maker time		6%	3	1 1/2	3
Goals/Parts					
Evaluator time		2%	3	1 1/2	1
Decision-maker time		5%	3	1 1/2	3
Operationalization					
Evaluator time		10%	14 1/2	7 1/4	3 1/2
Decision-maker time		30%	18	9	18
Devel. Obs. Tech.					
Evaluator time		15%	22	11	5 1/2
Decision-maker time		5%	3	1 1/2	3
Impl. of Meas.					
Evaluator time		40%	58	29	14
Decision-maker time		5%	3	1 1/2	3
Reporting					
Evaluator time		15%	22	11	5 1/2
Decision-maker time		15%	9	4 1/2	9
Eval. of Eval.					
Evaluator time		10%	14 1/2	7 1/4	3 1/2
Decision-maker time		24%	13	6 1/2	13

Figure 8: Filled In Resource Allocation Chart (cont'd)

Resource Allocation Chart		Names of Decision-makers					
Parts of F/H Evaluation Methodology	5 Dm HMGP Leaders	6 Dm Shanti Board	7 Dm Shanti Communi- ty	8 Dm Intern teachers	9 Dm CREC direc- tor	10 Dm students on Task Forces	
Total	2/19	3%	3%	3%	3%	3%	
Evaluator time	36	10	10	100	10	10	
Decision-maker time	-	-	-	-	-	-	
Goals							
Evaluator time							
Decision-maker time							
Parts							
Evaluator time							
Decision-maker time							
Goals/Parts							
Evaluator time							
Decision-maker time							
Operation- alization							
Evaluator time							
Decision-maker time							
Devel. Obs. Tech.							
Evaluator time							
Decision-maker time							
Impl. of Meas.							
Evaluator time							
Decision-maker time							
Reporting							
Evaluator time							
Decision-maker time							
Eval. of Eval.							
Evaluator time							
Decision-maker time							

Figure 9: "FIGURE C"

Percentage Recommended Allocations
of Resources Among the Parts of Evaluation Methodology

PARTS OF EVALUA- TION METHODOLOGY	TIME OF THE EVALUATOR	TIME OF THE DECISION MAKER
Goals	5%	10%
Parts	3%	6%
Goals/Parts	2%	5%
Operationalization	10%	30%
Development of Observational Tech.	15%	5%
Implementation of Measurement	40%	5%
Reporting	15%	15%
Evaluation of the Evaluation	5%	14%
Redesign	5%	10%

The steps of this section of the methodology do not have serious gaps if their purpose is only to allocate resources. However, it is not clear what the evaluator should do when it is necessary to re-allocate resources, and it is not clear how to handle the problem of allocated resources not being used. Perhaps there needs to be another section of the methodology to treat these problems. A further problem, which might also be solved by a new section of the methodology is that it is not certain what section of the methodology is to follow this. Is the evaluator to go on to the goals process? Should the evaluator have begun the goals process after step 1.3.3 (as was done in this evaluation)? Are there several possible next steps? This problem occurs at the end of several of the phases and sections of the methodology, and clearly needs attention.

Summary of Results

The "Allocation of Resources" section has shown itself, with the exception of the minor gaps documented here, capable of accomplishing the purpose of allocating evaluation resources for decision-makers among the various parts of the methodology. One problem encountered was with the Decision and Data Log steps. They are vague about the meaning of "decision," and the number and type of decisions one is expected to record. Also, for the one decision-maker

who kept the log, it was time-consuming far beyond its value in assessing the effectiveness of the evaluation design.

This was the least successful field-test in this study. To assess the effectiveness of this section in apportioning resources, an evaluator would need to use the data provided by it to allocate resources to each decision-maker for each part of the methodology. This was not done here because the changing priority of decision-makers and the most important decision-maker's inability to use resources given to it made a detailed allocation of resources process unfeasible. Instead, percentages of resources for each decision-maker, and the schedule for performing the parts of the evaluation which was included in the evaluation contract were used as rough guides. This was satisfactory in that contract deadlines were met and all processes of the evaluation were performed for each of the four decision-makers.

Recommendations

The following are specific recommendations for redesign of this section, based on the results of the field-test.

1. Step 1.1.2.2. This step needs further specification as to where exactly one should begin the re-negotiation of the contract.

2. Step 1.1.2.3. The purpose of the meeting should be

made clear. It should be made clear whether or not it is necessarily to follow step 1.1.2.2 or if it is one of two alternatives.

3. Step 1.1.3 should be revised. The evaluator needs to know when the decision-maker will be available, to meet with him/her/them, but does not need to know from the Contract Decision-Maker when the decision-maker will last be available or when there will be periods of unavailability.

4. Step 1.2.1 should specify that the evaluation should be defined in terms of the implications of its purpose.

5. Step 1.2.2 should specify that the evaluator needs to explain how the decision-maker came to be chosen.

6. There needs to be a step added after 1.2.3.2 cautioning the decision-maker about the danger of over-committing resources, particularly in the early stages of the methodology.

7. A step should be added in which the evaluator develops with the decision-maker procedures for notifying each other in advance when meetings must be cancelled.

8. A step should be added emphasizing the importance for groups which decide as a group to retain their usual decision-making processes as they make decisions about the evaluation. They should be asked to state their decision-making process to the evaluator.

9. Step 1.3. This step needs revision. As keeping a

Decision and Data Log is time-consuming, the decision-maker should be asked to determine how much time he/she/they would like to devote to keeping the log. Unless resources are large, the log should not be begun until evaluation data begin to be returned. Then the decision-maker should only spend the resources allocated for this activity, perhaps as so many minutes per week. Procedures also need to be developed to specify how the evaluator is to deal with the questions "What is a decision?" and "Which decisions should be recorded, all my decisions or just the important ones?"

10. Step 3.1.2 should be revised to eliminate ambiguity.

11. Step 3.2 should be rewritten to make clear whether "total resources for each decision-maker" intends that the evaluator record a fraction or an actual amount.

12. Step 3.2.1 should be revised to read "evaluator time."

13. Steps need to be developed, perhaps based on the procedures used in this field-test, for the evaluator to determine the total number of evaluator hours (s)he will spend on the evaluation, then the fraction of this amount which is available for each decision-maker.

14. Step 3.2.2 needs to be revised or eliminated.

15. Typographical errors should be corrected. 3.2.3.1,

2, and 3 should read 3.2.4.1, 2, and 3, and "contrast" should read "contract."

16. Steps need to be developed to instruct the evaluator how to re-allocate resources if the Contract Decision-Maker changes the priority of the decision-makers.

17. Steps need to be developed to instruct the evaluator how to re-allocate unused resources.

18. There is no connecting link between this section and the next section(s), and it is not clear what the evaluator is to do next.

C H A P T E R V I I I
GOALS/PARTS INTEGRATION PROCESS FIELD-TEST

Methodological and Metamethodological Development

The relationship between a given methodology and Metamethodology has been alluded to earlier in Chapter Three. The importance and complexity of that relationship will now be seen more clearly. Fully developed, Metamethodology would offer an operational set of design procedures for drafting the parts of a new methodology, for assembling the parts logically, and for operationalizing fuzzy parts. It would offer a set of operational procedures for testing the methodology in both rough and more polished stages of development, and it would offer another set of operational procedures for determining the methodology's effectiveness and generalizability. Metamethodology plays an important developmental role. By re-cycling from a part of a methodology to a part of Metamethodology and back, imperfect parts of a methodology, (and indirectly, of Metamethodology), may be discovered, redesigned, and tested until they prove successful.

This research on "The Goals/Parts Integration Process" provides an example of the interwoven relationship of a methodology and Metamethodology. It is more sophisticated and complex than studies of parts of the evaluation methodology described in earlier chapters. This is because

as the study progressed, the investigator's desire grew for more sophisticated methodological research, and the need became apparent for more detailed field-testing procedures.⁴ This is also because, at this point, both the evaluation methodology and Metamethodology were being studied.

Metamethodological development was the first task undertaken as this part of the research unfolded. Procedures of Metamethodology needed to be developed for designing and carrying out a field-test on a methodology or on a part of a methodology.

The second task was to field-test the new procedures of Metamethodology by using them to design a field-test to be used on part of a methodology, in this case, on "The Goals/Parts Integration Process" of the F/H Evaluation Methodology. Doing the actual design of the field-test had two purposes:

1. To produce a field-test design for carrying out a field-test on "The Goals/Parts Integration Process" and
2. To test out (i.e. provide data for decision-making on) the new field-test design procedures of Metamethodology.

⁴Field-test procedures on Metamethodology had been developed by Thomann as part of his dissertation by this time (Thomann 1973), and were used in developing procedures described here. They will be found in Step VII of Metamethodology, Draft VII in Appendix B.

The third task was to use the field-test design to actually carry out the field-test. This again had two purposes:

1. To provide data for decision-making on the effectiveness of the new procedures of Metamethodology, and
2. To provide data for decision-making on the effectiveness of a part of the evaluation methodology, "The Goals/Parts Integration Process."

The last task was to consider the possible need for redesign of the field-tested part of the evaluation methodology, and of the new field-test procedures of Metamethodology, and if resources could be made available, to do metamethodological development work on them.

Pre-field-test metamethodological development. The first methodological development problem, as posed by this investigator, was to determine what broad context field-testing might logically occupy in Metamethodology. It was clearly part of a cycle of design, testing and redesign. Next, the problem was posed of what other kinds of testing might occur at the same level as field-testing. Both logical testing and logical critiquing occurred to this investigator. Consequently, field-testing by an individual or by a group, and critiquing by an individual or by a group were set forth as four separate cases of what were called "Pre-Redesign Procedures." As only one case was

of immediate concern, that of an individual wishing to field-test a methodology (Case IIa), this was the only one which was developed at this time.

Procedures for methodological design are specified in Metamethodology, Step VI, and these procedures were used to develop the Pre-Redesign Procedures, Case IIa.

General description of Pre-Redesign Procedures field-test. The investigator, working alone, systematically followed the procedures of Draft I (Case IIa) of the Pre-Redesign Procedures. Although no exact record was kept of the time spent, at least ten hours and as many as fifteen hours may have been consumed in field-testing the Pre-Redesign Procedures.

Results of Pre-Redesign Procedures Field-Test

Case IIa of the Pre-Redesign Procedures, that of an individual who wishes to field-test a methodology or part(s) for the purpose of redesign, was field-tested when it was used to design "The Goals/Parts Integration Process" field-test. The original steps of the Pre-Redesign Procedures, (in single-line boxes), are followed by the results of performing that step (or those steps). Discussion of gaps discovered and filled while using the procedures, the new steps created to fill the gaps (in double-line boxes), and results of having performed the redesigned steps will also be found in this section.

PRE-REDESIGN PROCEDURES ORIENTATION ELEMENT DRAFT I

- Case Ia An individual who wishes to critique a methodology or part(s) for the purpose of redesigning it.
- Case Ib A group who wish to critique a methodology or part(s) for the purpose of redesigning it.
- Case IIa An individual who wishes to field-test a methodology or part(s) for the purpose of redesigning it.
- Case IIb A group who wish to field-test a methodology or part(s) for the purpose of redesigning it.

Results:

The procedures of Case IIa were followed.

PRE-REDESIGN PROCEDURES DRAFT I NOVEMBER, 1973

- CASE IIa An individual who wishes to field-test a methodology or part(s) for the purpose of redesigning it.
- 1.0 Decide if the field-test is to be carried out to meet the highest priority needs of the methodology for field-testing, or if it is to meet the highest priority goals of the investigator.
 - 1.1 Determine your goals for the field-test. If this is not easy to do, use the Goals Process of the Fortune/Hutchinson Evaluation Methodology.
 - 1.2 Determine the highest priority needs of the methodology for field-testing.
 - 1.2.1 If none of the methodology has been field-tested, field-test the whole methodology. If this has already

been done, determine the first (next) major part which is most in need of further field-testing.

1.2.2 Determine the first (next) subpart of that part which is most in need of being field-tested.

1.2.3 Determine the simplest field-test of the first (next) part or subpart which has not had further field-testing.

1.3 Where the highest priority needs of the methodology (determined in step 1.2) differ from your goals/needs/interests for doing the field-test, choose either your priorities or the priorities of the methodology.

Results: No new information was gained from doing steps 1.1 -1.3. As the decision had already been made, there was no need to go through those steps, although they may be useful to some researchers. To correct this problem, more should be added to step 1.0 to enable researchers who have already thought through their goals/needs/interests to pass by unnecessary steps. It was also found that after generating just this investigator's goals for field-testing there were still important considerations that had not been put down on paper, e.g., the need/interest to field-test early parts of the methodology to facilitate finishing the dissertation by May, and an interest in working with some parts of the methodology

more than others. Consequently, "needs/interests" has been added to "goals" in 1.0.

Following step 1.1, specific goals for a field-test of "The Goals/Parts Integration Process" were produced. This was not what was desired. The wording should be changed to suggest that the task is to generate one's goals/needs/interests for doing (a) field-test(s) in general.

The specific results of following the original step 1.1 were as follows:

1. To examine whether or not the G.A.P. workbook and matrix are able to accomplish their purpose--to relate goals and parts.
2. To examine whether or not participants in this field-test can do the workbook.
3. To examine whether or not participants in this field-test can do the workbook in less than one hour.
4. To examine whether or not participants in this field-test can do the workbook without frustration.
5. To have the field-test recognized as an important contribution to research on the F/H Evaluation Methodology.
6. To have participants in the field-test say that this part of the methodology is

worthwhile doing.

The following goals were produced in a test of completeness and the goals followed by (x) were added to the goals list.

7. To find out if it works for the evaluation. (x)
8. To find out if it works for the decision-makers. (x)
9. To find out if the decision-makers perceive it as having a function. (x)
10. To find out if there are any gaps. (x)
11. To find out how well linkages work between preceeding and succeeding steps. (x)

It was found that goals 1-11 did not clearly indicate a need to field-test some parts and not others. As a result of discovering this gap, new steps (1.2 and 1.2.1) were created.

As methodologies don't have needs themselves, the wording of step 1.2 was inappropriate, and was consequently changed in the revised step (1.3). The revised step also spells out more clearly how to determine a "methodology's needs." Step 1.2.1 is quite fuzzy and needs further procedures to enable a person to determine the major part or sub-part most in need of further field-testing. New steps, 1.3.1.1, 1.3.1.2, 1.3.1.3,

1.3.1.4, and 1.3.2. were created for this purpose.

PRE-REDESIGN PROCEDURES

DRAFT II

CASE IIa An individual who wishes to field-test a methodology or part(s) for the purpose of redesigning it.

- 1.0 Decide if the field-test is to be carried out to meet the highest priority needs of the methodology for field-testing, or if it is to meet the highest priority goals/needs/interests of the investigator. If this is easy to do, go to 1.4. If this is not easy to do, go to 1.1.

Results: Although it was already known that the field-test would be carried out to meet the investigator's highest priority goals/needs/interests, for the sake of field-testing these steps, step 1.1 was followed next.

1.1 Determine your goals/needs/interests for doing (a) field-test(s)

1.1.1 If this is not easy to do, use "The Goals Process" of the Fortune/Hutchinson Evaluation Methodology.

1.1.2 Ask yourself, "What are my needs/interests for doing (a) field-test(s)?" and write down your answer(s).

Results: The results of step 1.1.1 were:

1. To provide data for decision-making on part of the methodology.

2. To have the field-test recognized as an important contribution to research on the methodology.
3. To fulfill the requirements for the doctoral degree by doing research on the methodology.
4. To find out if the field-tested part or sub-part works for the evaluation.
5. To find out if the field-tested part or sub-part works for the decision-makers.
6. To find out if there are any gaps.
7. To find out how well linkages work between preceding and succeeding steps.

The results of step 1.1.2 were:

8. To fulfill the requirements for the doctoral degree by May, 1974.
9. To improve the evaluation methodology.
10. To have the field-test(s) be a worthwhile experience for others.

1.2 Look at your goals/needs/interests and ask yourself, "Do any of these imply field-testing certain parts or sub-parts of the methodology rather than others?"
If you have then answered yes, list the parts. If no, go to 1.3.

1.2.1 Order the parts by priority using the criterion "importance to you."

Results: The following were the results of performing step 1.2. They are implications that certain parts and sub-parts ought to be field-tested rather than others.

1. The beginning phases of the methodology will need to be tested to finish by May, 1974: "The Negotiation of the Contract," "The Allocation of Resources Section," "The Goals Process," "The Parts Process," "The Goals/Parts Integration Process," "The Goal Analysis Procedures of The Goals Process," "The Contract Decision-Maker Reporting Process."

2. To make an important contribution implies field-testing parts which haven't been field-tested at all, or very little: "The Parts Process," "The Goals/Parts Integration Process," "Designing Observational Techniques Process," "Implementation of Measurement," "The Reporting Procedures," and "The Redesign Process."

The results of step 1.2.1 were as follows:

1. "The Parts Process," 2. "The Negotiation of the Contract Phase," 3. "The Goals/Parts Integration Process," 4. "The Allocation of Resources Section," 5. "The Contract Decision-Maker Reporting Process."

1.3 Determine what you and others see as the highest priority needs of the methodology for field-testing.

1.3.1 If none of the methodology has been field-tested, field-test the whole methodology. If this has already been done, determine the first (next) major part or sub-part which is most in need of (further) field-testing and is not currently being field-tested.

1.3.1.1 Ask yourself "what parts or sub-parts from your research or your experience suggest themselves as most in need of (further) field-testing?" List them and order them by priority using the criterion "most in need of (further) field-testing."

Results: The results of step 1.3.1.1 were as follows:

1. "The Parts Process,"
2. "Observational Techniques Design,"
3. "Allocation of Resources,"
4. "The Goals/Parts Integration Process,"
5. "Operationalization of Fuzzy Goals."

1.3.1.2 Look at the results and recommendations of previous researchers on the methodology. Ask yourself, "What parts or sub-parts are most in need of (further) field-testing?" List them, and if possible, list them by previous researchers' priorities.

Results: The results of step 1.3.1.2 were as follows:

Gordon: "The Parts Process," "Operationalization of Fuzzy Goals," "Design of Observational Techniques," "Data Collection Procedures (Implementation of Measurement.)"; Benedict: "Goal Analysis Techniques."

1.3.1.3 Ask other methodologists "What parts or sub-parts of the methodology are most in need of (further) field-testing? Order them by priority using the criterion 'most in need of (further) field-testing'."

Results: Dr. Hutchinson was asked the question in 1.3.1.3 and his "off-the-top-of-his-head" response was "1. The current version of The Evaluation of the Evaluation phase," 2. 'Re-design,' 3. the parts of 'The Goals Process' not yet field-tested, 4. 'The Reporting Process,' and 5. The Goal Analysis workbook."

1.3.1.4 Look at the results from 1.3.1.1 - 1.3.1.3 and determine the order of priority of the parts or sub-parts for field-testing. If this is not easy to do, use Instructional Alternative on Prioritization from the Fortune/Hutchinson Evaluation Methodology.

Results: "The Goals/Parts Integration Process" was the highest priority part, so this step was not done..

1.3.2 For each of the parts (not sub-parts) on the list from 1.3.1.4 recycle to 1.3.1.1 - 1.3.1.3 to determine the order of priority of sub-parts for field-testing.

Results: This step was not done.

1.3.3 Determine the simplest field-test of the first (next) part or sub-part which has not had (further) field-testing.

Results: The simplest field-test for "The Goals/Parts Integration Process" would be to give the workbook to one decision-maker, an individual who decides as an individual (Case I), and closely observe what he does, as well as the results of what he does.

1.4 Where the highest priority needs of the methodology (determined in step 1.3.1 - 1.3.3) differ from your goals/needs/interests for doing the field-test, choose either your priorities or the priorities of the methodology.

Results: This step needed further steps to make it clear.

The following were developed:

- 1.4.1 If the order of priority of parts or sub-parts from 1.3.1.4 is not the same as the priority of parts from 1.2.1, then choose either your personal priorities or the "methodology's priorities."
- 1.4.2 If the simplest field-test of the first (next) part or sub-part is not consistent with your goals/interests/needs, then choose either yours or "the methodology's."

Results: As the order of priority of parts and sub-parts from 1.3.1.4 was not the same as the investigator's personal priorities, the investigator's were chosen. As it was both convenient and no more expensive to do the field-test with five decision-makers, (individuals in a group who decide as individuals), the simplest field-test was not chosen. Rather, one was designed which required minimal additional instructions to the decision-makers, and involved more than one decision-maker.

- 2.0 Write out the purpose of the methodology, part, or sub-part to be field-tested.

Results: "The purpose of 'The Goals/Parts Integration Process' is to relate (integrate) goals from a goals list, and parts from a parts list of a decision-maker so that the evaluator will know which goals operate in which parts, at a first level breakdown. Another purpose, although secondary, is to test goals and parts for completeness."

As this part of the methodology has more than one purpose, this step should be changed to include this possibility. Also, the step needs to account for the situation where a researcher is doing more than one field-test. Below is the same step modified to account for these situations:

2.0 Write out the purpose(s) of the methodology or first (next) part or sub-part to be field-tested.

3.0 Operationally define the purpose if this has not already been done and write out the operational implications which results from the operationalization.

3.1 Use the straight analysis technique.

3.1.1 Identify the fuzzy concept in the purpose.

3.1.2 Directly operationalize each fuzzy concept.

3.1.3 Directly operationalize the interaction among fuzzy concepts.

3.1.4 Test the criteria for completeness in a manner of your choosing and revise them if necessary.

3.1.5 Review the final set of operational components of the purpose. If you are unsatisfied go to 3.2. Otherwise, commit yourself to the set of components and go to step 4.0.

Results: Using the straight analysis technique, the follow-

ing was produced: "The fuzzy concepts are 'relate' and 'operate'. In almost operational terms 'relate' means:

1. to mark on a matrix inrwhich parts each goal operates.
2. to mark on a matrix for each part, which goals operate in it.
3. to do 1. without error.
4. to do 2. without error.
5. for goals which operate in no parts, to consider whether or not they are real goals. (still quite fuzzy)
6. for parts which have no goals operating in them, to consider whether or not they are real parts. (still quite fuzzy)

'Operate' means to have one or more on-going activities helping to accomplish or intended to help accomplish the goal."

It did not make sense to do step 3.1.3. Perhaps this is because "interaction" was not clear, but more likely it is just that it doesn't always make sense to analyze the interaction of fuzzy concepts.

For step 3.1.4, the following were looked at as a test of completeness:

the workbook, the instructions to the evaluator, and "The Goals/Parts Integration Process."

The question was asked, "Are there any other implications of the purpose?" The following implications were produced as a result of doing this step:

- "1. The workbook is designed so that the decision-maker can complete the steps without needing the evaluator present.
2. All materials and instructions needed are in the workbook or in the other prepared materials.
3. As a test of completeness, the workbook should help the decision-maker to add parts and goals.
4. As a test of reality, the workbook should help the decision-maker to eliminate rhetorical parts and goals. (fuzzy)"

For step 3.1.5, the criteria were reviewed, but this was not satisfactory because additional criteria had been generated by applying the goals process in an earlier step. There should be a step which specifically provides for doing this at this point. Also, other minor changes need to be made in the wording of these steps to make them clearer.

- 3.2 Revise the components. If you are still unsatisfied go to 3.3. Otherwise commit yourself to the revised set of components and go to step 4.0.

Results: The investigator was still unsatisfied.

- 3.3 Use Hutchinson's "Operationalization of Fuzzy Concepts" process to fully operationalize the purpose.

Results: The investigator was still unsatisfied because there were criteria which had been generated by using "The Goals Process," so these steps were revised to include "The Goals Process" as a way of generating criteria. The revised steps are below.

- 3.2 Review the criteria. If you are still unsatisfied go to 3.3. Otherwise go to 3.5.
- 3.3 Use Hutchinson's "Operationalization of Fuzzy Concepts" process to fully operationalize the purpose or go to step 3.4 or do both.
- 3.4 Use "The Goals Process" from the Fortune/Hutchinson Evaluation Methodology to generate your goals for doing this particular field-test. If you did this in 1.1, use the output from that.
- 3.4.1 For each goal generated, consider whether or not it implies criteria for the success of the methodology, part, or sub-part being field-tested. If it does, add these to your list of criteria, and then go to 3.5.

- 3.5 Review the final set of criteria. If they are fully operational, commit yourself to this list. If they are not fully operational, operationalize them, then commit yourself to that list.

Results: Step 3.3 was skipped and step 3.4 was followed. As goals had already been generated for this particular field-test, this output was used. The results of step 3.4.1 are below:

1. The workbook and matrix are able to accomplish their purpose--to relate goals and parts.
2. Participants in the field-test can do the workbook.
3. Participants in the field-test can do the workbook in less than one hour.
4. Participants in the field-test can do the workbook without frustration.
5. Participants will say that this part of the methodology is worthwhile doing.
6. This workbook will meet the needs of the evaluation for providing data on which goals operate in which parts.
7. Participants will perceive the workbook as having a function.
8. There will be no gaps.
9. Preceding linkage steps are clear.

10. Succeeding linkage steps are clear.
11. Preceding linkage steps don't provide problems.
12. Succeeding linkage steps don't provide problems.

The results of Step 3.5 follow. The criteria are set forth in terms of goals for this section of the methodology, and operational (or in some cases, partially operational) dimensions or components of the goals, where the goal itself is not observable. The goals are listed first, and the operational (or almost operational) dimensions are indicated for each goal. Following the goals is a list of dimensions, and each dimension is followed by an indication of the goals for which it is a component, and the observational technique used to observe it.

Although a careful attempt was made to describe the criteria in fully operational terms, this has not always been achieved. For example, in dimension one, it can be observed directly whether or not the "participant will put marks on a matrix" but it cannot be observed directly that these marks "indicate in which of the parts listed on the matrix each of the goals listed on

the matrix operates." This was an oversight in designing this field-test, however not a serious one. Future researchers on this section of the methodology would do well to examine the extent to which each dimension is fully operational.

Criteria for Goals/Parts Integration Process Field-Test

Goals

A. The Workbook, matrix, and additional materials will be able to accomplish their purpose, to enable a decision-maker (participant) to relate goals and parts.

Dimensions: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 18

B. The workbook, matrix, and additional materials will act as a test of completeness of goals and parts.

Dimensions: 7, 11, 19, 20

C. The workbook, matrix, and additional materials will act as a test of reality of goals and parts.

Dimensions: 1, 2, 5, 7, 9, 11, 13, 14.

D. Participants will be able to do the workbook

Dimensions: 15, 18

E. The workbook will consume relatively little of the decision-maker's (participant's) time.

Dimension: 21

F. Doing the workbook will not be a frustrating experience for the participant.

Dimension: 22

G. The participant will feel that "The Goals/Parts Integration Process" is worthwhile doing.

Dimension: 23

H. The participant will perceive the task ((s)he has performed as having a function.

Dimensions: 24, 25

I. The workbook will meet the needs of the evaluation for having data on which goals operate in which parts.

Dimensions: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 18

(This goal operationally is the same as Goal A)

J. There will be no gaps in the workbook.

Dimensions: 15, 18,

K. Preceding linkage steps will be clear to the evaluator.

Dimension: 26

- L. Succeeding linkage steps will be clear to the evaluator.
Dimension: 27
- M. Preceding linkage steps will not provide problems.
Dimension: 28
- N. Succeeding linkage steps will not provide problems.
Dimension: 29
- O. The workbook and other prepared materials are complete
No other materials or help are needed.
Dimension: 16, 17, 18.
- P. Participants will finish the workbook.
Dimension: 15

Dimensions

1. Each participant will put marks on a matrix which indicate in which of the parts listed on the matrix each of the goals listed on the matrix operates.
Goal: A,C.
Observational Technique: Direct Observation Record #2
2. Each participant will put marks on a matrix which indicate for each part listed on the matrix, which goals listed on the matrix operate in it.
Goal: A,C
Observational Technique: Direct Observation Record #2
3. Each participant will put marks on a matrix which indicate in which of the parts listed on the matrix, each of the goals listed on the matrix operates, and will do so without error.

Goal: A.

Observational Technique: During Operationalization of goals, look for errors in the integration of goals and parts and record any that the decision-maker says were made during "The Goals/Parts Integration Process."

4. Each participant will put marks on a matrix which indicate for each part listed on the matrix, which goals listed on the matrix operate in it, and will do so without error.

Goal: A.

Observational Technique: Same as in 3 above.

5. For each part row/column without goal marks, the participant who has more than 20 goals for Shanti, will look at his/her complete goals list to see if there are any goals which operate in that part.

Goal: A,C.

Observational Technique: Post-Workbook Interview Q. 5.3

6. If there is/are goal(s) which operate(s) in the part being considered, the participant will write the number(s) of the goal(s) in the part row/column.

Goal: A.

Observational Technique: Post-Workbook Interview Q. 5.3.2
Direct Observation Record #2

7. For each part row/column without goal marks, the participant with 20 or fewer goals will consider whether or not (s)he has any goals not on his/her list that this part accomplishes, or that operate in this part.

Goal: A,B.

Observational Technique: Post-Workbook Interview Q. 5.4

8. If there is/are goal(s) which operate(s) in the part being considered, (s)he will write it/them down on a separate sheet of paper, along with the part it is/they are for and its/their priority/ies among the other goals.

Goal: A.

Observational Technique: Direct Observation Record #2
Post-Workbook Interview Q. 5.4.2

9. For each goal row/column without parts, the participant with more than 10 parts will look at his/her complete parts list to see if there are any parts which accomplish that goal or which that goal operates in.

Goal: A.

Observational Technique: Post-Workbook Interview Q. 6.3

10. If there is a/are part(s) in which that goal operates or which accomplish/es that goal, the participant will write the number(s) of the part(s) in the goal row/column for each such goal.

Goal: A.

Observational Technique: Direct Observation Record #2
Post-Workbook Interview Q. 6.3.2

11. For each goal row/column without parts marks, the participant with 10 or fewer parts will consider whether or not there is/are any part(s) of Shanti not on the list that accomplish(es) this goal or in which this goal operates.

Goal: A.

Observational Techniques: Post-Workbook Interview Q. 6.4

12. If there is a/are part(s) which accomplish(es) this goal or which this goal operates in, the participant will write it/them down on a separate sheet of paper, along with the goal it/they is/are for, and its/their priority among the other parts.

Goal: A.

Observational Technique: Post-Workbook Interview Q. 6.4.2
Direct Observation Record #2

13. If there is/are then (after 5 or 7) a part(s) without any goals, the participant will delete it/them.

Goal: C

Observational Technique: Direct Observation Record #2
Post-Workbook Interview Q.5.3.4

14. If there is/are then (after 9 or 11) a goal(s) without any parts, the participant will delete it/them.

Goal: C

Observational Techniques: Direct Observation Record #2
Post-Workbook Interview Q. 6.3.4

15. Each participant will do all of the appropriate steps of the workbook.

Goal: D, J, P.

Observational Technique: Participants are asked before beginning workbook to check off the steps they do, as they do them. Post-Workbook Interview item 4.

16. The evaluator's help is not asked for.

Goal: O.

Observational Technique: Direct Observation Record #1.

17. The participant does not ask for others' help.

Goal: O.

Observational Technique: Direct Observational Record #1.
Post-Workbook Interview Q. 1.1

18. All materials and instruction needed by the participant are in the workbook or in the other prepared materials.

Goal: A,D,J,O.

Observational Technique: Post-Workbook Interview Q. 1
Direct Observation Record #1.

19. (As a test of completeness) the participant will add parts on his sheet of changes.

Goal: B.

Observational Technique: Post-Workbook Interview Q. 6.4.2
Direct Observation Record #2

20. (As a test of completeness) the participant will add goals on his sheet of changes.

Goal: B.

Observational Technique: Post-Workbook Interview Q. 5.4.2
Direct Observational Record #2.

21. The participant finishes the workbook in less than one hour.

Goal: E.

Observational Technique: Participants are asked to note the time they begin, and time they finish the workbook.

Post-workbook Interview Item 3.

22. When asked "Was this task frustrating?" On a scale from 1-4 where 1 = Very Frustrating, 2 = Frustrating, 3 = Not Frustrating, 4 = Not Frustrating at All, the participant will put him/her self at 3 or 4.

Goal: F.

Observational Technique: Post-Workbook Interview Q. 4.

Direct Observation Record 1.

23. When asked "Do you think doing this workbook was worthwhile?" On a scale from 1-5 where 1 = Worthless, 2 = Not Very Worthwhile, 3 = I Don't Know, 4 = Worthwhile and 5 = Very Worthwhile, the participant will put him/her self at 4 or 5.

Goal: G.

Observational Technique: Post-Workbook Interview Q. 3.

24. When asked "Do you think doing this task has a function?" the participant will respond "yes."

Goal: H.

Observational Technique: Post-Workbook Interview Q. 2.

25. When asked "What is the function?" the participant will respond with (an) answer(s) which the evaluator judges to be a function of this workbook.

Goal: H.

Observational Technique: Post-Workbook Interview Q. 2.1.

26. When asked if the preceding linkage steps are clear, the evaluator will say "yes."

Goal: K.

Observational Technique: Obvious.

27. When asked if the succeeding linkage steps are clear, the evaluator will say "yes."

Goal: L.

Observational Technique: Obvious.

28. When asked if the preceding linkage steps provided problems, the evaluator will say "no."

Goal: M.

Observational Technique: Obvious.

29. When asked if the succeeding linkage steps provided problems the evaluator will say "no."

Goal: N.

Observational Technique: Obvious.

- 4.0 Determine the setting where the field-test will take place, and secure the co-operation of decision-makers and others whose resources you will need.

Results: The setting determined was a meeting of the Shanti staff members, a group of individuals who decide as individuals.

The staff had already finished both "The Goals Process" and "The Parts Process," and had learned how to operationalize fuzzy goals, and were therefore ready to do "The Goals/Parts Integration Process." The decision-makers' cooperation was assured and they agreed to give up to two hours for this part of the methodology if this much time was needed.

- 5.0 Determine what resources are available for field-testing, e.g. investigator time, decision-maker time, money, space, staff, etc.

Results: The resources were as follows: 2 hours of decision-maker time, with the possibility of additional time if necessary; space to meet at the Hartford Design Group; typing and duplication, materials for the field-test (workbooks, matrices, instructions to evaluator, etc.); evaluator time of at least 10 hours and additional time available if necessary.

6.0 Determine whether or not these resources are adequate to allow a field-test of the scope you are considering, e.g. if you are planning to field-test the whole methodology are the resources sufficient, or if you are planning to field-test two parts of a methodology are the resources sufficient?

Results: The resources seemed sufficient.

6.1 If resources are not adequate, see if more resources can be made available, or consider reducing the scope of the field-test problem. If you cannot get more resources or reduce the scope of the problem, do not do the field-test.

Results: Not applicable to this situation, so this sub-step was not field-tested.

7.0 Assign the resources--investigator time, decision-maker time, money, staff, secretarial help, etc.--to the parts of the methodology to be field-tested.

Results: It seemed that the only resource that could possibly be insufficient was decision-maker time. Up to one hour was to be allowed for decision-makers to do the workbook, leaving one hour, if needed, to do any post-workbook interviewing. Up to thirty hours of investigator time was allowed to be sure that the field-test was done properly.

- 8.0 Re-examine the allocation of resources to make sure that resources are sufficient. If not, go to 6.1.

Results: Resources were sufficient, especially considering that decision-makers would be willing, if necessary, to give more than two hours.

- 9.0 Decide if measurement or observational techniques (other than direct observation by the investigator, and the investigator journal) need to be designed.
- 9.1 Look at your goals for the field-test. Consider whether or not you need to design observational or measurement techniques (other than direct observation and the journal) to accomplish those goals.
- 9.2 Look at your operationalization of the purpose of the methodology, part, or sub-part you are field-testing. Consider whether or not you need to design observational or measurement techniques (other than direct observation and the journal) to determine if the purpose and its operational implications have been met.
- 9.3 If there is already evidence that a part or sub-part of the methodology you are field-testing either does not work or does not work reliably, consider whether or not you want to design observational or measurement techniques capable of providing data on the specific problems.
- 9.4 If as a result of 9.1, 9.2, or 9.3 there are other observational techniques desired, design those techniques.
- 9.4.1 Determine what resources are available for this activity.
- 9.4.2 If resources are limited, determine the priority of the techniques to be designed and design the first technique first, and so on until all the resources are consumed.

9.4.3 If it is not easy to design these techniques, use the observational technique or measurement design processes from the F/H Evaluation Methodology.

Results: The operational criteria produced were examined and it was decided (9.1) that observational techniques did not need to be designed to measure/observe these. In 9.2 it was found that this had already been done in 9.1, so these steps could be combined. In step 9.3. there was no evidence that "The Goals/Parts Integration Process" either did not work or that it worked unreliably. In 9.4 there were techniques which needed to be designed. They were: 1. The Post-Field-Test Interview, 2. The Pre-Field-Test Procedures, 3. Observation Record #1 (to be used during the field-test) and 4. Observation Record #2 (to be used after the field-test). There were a maximum of 20 hours available for designing those techniques, (9.4.1) and the priority of the techniques were as listed above. The resources were sufficient to design all the techniques, and they were easy to design, so that using the observational technique or measurement design processes from the F/H Evaluation Methodology was unnecessary. The observation techniques which were developed are below.

Observational Techniques

Pre-field test instructions to participants. The instructions below were read out loud to the participants before they began.

- "1. Please do the field-test carefully.
2. Write down the time you begin the workbook and the time you finish it. If you take any breaks in between, note the time you stopped and the time you started again.
3. For every step that you do (numbered steps and lettered steps), please put a check mark next to it.
4. When you have finished the workbook, give it to me along with the matrix and other prepared materials, and schedule an interview with me.
5. Pick a quiet, comfortable place to do this where you won't be disturbed.
6. The parts listed are in priority order of staff as a group, not necessarily your priority. They should all be parts which you hold."

Direct observation during field-test. "Direct Observation Record #1," which follows, was carried out during the field-test. The results are recorded on the record. The dimensions, which appear in the furthest column to the left, were observed for the participants whose names appear above.

Direct Observation Record #1
 (For Dimensions 16, 17, 18, and 22)

DIMENSION	GEOFF	GENE	NICK	GREGG	J.
Asked for help from Ev. (Dim. #16)	Needed clarification of wording for step 2.	NO	NO	NO	NO
Asked for others' help (Dim. #17)	NO	NO	NO	NO	NO
Asked for addtn'l materials (Dim. #18)	NO	NO	NO	NO	NO
Asked for addtn'l instruction (Dim. #18)	NO	<p>Asked for clarification on step 7.2. "Do you really want me to do that step?" Ans: "No."</p> <p>In step 4, confusion about whether to go to complete parts list, if this matrix was to reflect <u>all</u> the parts for a given goal. (Perhaps this was because Gene had an earlier experience</p>	<p>"What if you don't agree with some of the parts listed?" Ans: "Cross them out." (Nick had done "The Parts Process" somewhat hastily.)</p>	NO	NO

Direct Observation Record #1
(cont'd)

DIMENSION	GEOFF	GENE	NICK	GREGG	J.
Communicated frustration verbally or non-verbally	NO	using the matrix where all parts were checked.) NO	NO	DIDN'T SEE	DIDN'T SEE

Post-field-test observational techniques: "Post-Workbook Interview," and "Direct Observation Record #2." The "Post-Workbook Interview" which follows was carried out after the participants had finished the workbook. The information requested and questions asked were presented by the evaluator orally to the participants one at a time.

1. Record name of participant.
2. Record data.
3. Record time participant started workbook, and time workbook was completed. (Dimension #21)
4. Record any steps omitted by participant. (Dimension #15)
5. Ask participant the following questions:
 1. 'Did the workbook and other prepared materials contain all the A) materials and B) instruction that you needed?' Yes/No. 'If No, what else was needed?' (Dimension #18)
 - 1.1 'Did you ask for anyone's help?' Yes/No. 'If Yes, for which steps?' Record steps and problems. (Dimension #17)
 2. 'Do you think doing this task has a function?' Yes/No. If No, go to question 3. If Yes, go to question 2.1. (Dimension #24)
 - 2.1 'What is the function?' Record the answer. (Dimension #25)
 3. 'Do you think doing this workbook was worthwhile? On a scale from 1 to 5, where 1 = worthless, 2 =

- not very worthwhile, 3 = I don't know, 4 = worthwhile, and 5 = very worthwhile, where would you put yourself?' 1/2/3/4/5 (Dimension #23)
4. 'Was this task frustrating? On a scale from 1 to 4, where 1 = Very Frustrating, 2 = Frustrating, 3 = Not frustrating, 4 = Not frustrating at all, where would you put yourself?' 1/2/3/4 (Dimension #22)
5. 'After you finished step 3 in the workbook (and began to work on step 4) were there any parts which had no goals operating in them?' Yes/No. If Yes, go to question 5.1. If No, go to question 6.
- 5.1 'Which parts? List them.'
- 5.2 'Did you have more than 20 goals for Shanti?' Yes/No. If Yes, go to 5.3. If No, go to 5.4.
- 5.3 For each part from 5.1., 'Did you look at your complete goals list to see if there were any goals which are operating in this part?' Yes/No. If Yes, go to question 5.3.1. If No, go to question 5.3.3. (Dimension #5)
- 5.3.1 'Were there any goals on your complete goals list which you saw as operating in this part?' Yes/No. If Yes, go to question 5.3.2. If No, go to question 5.3.3.
- 5.3.2 'Did you write (the number(s) of) the

- goal(s) in the part row/column?' Yes/No.
Recycle to 5.3 for each part, then go
to 6.0. (Dimension #6)
- 5.3.3 'Were there any goals at all that you
saw as operating in this part?' Yes/No.
If Yes, go to 5.3.2. If No, go to 5.3.4.
- 5.3.4 'Did you delete the part(s) from the
matrix?' Yes/No. Go to 6.0. (Dimension
#13)
- 5.4 For each part from 5.1., 'Did you consider
whether or not you had any goals not on your
list which operate in this part or which this
part accomplishes?' Yes/No. If Yes, go to
question 6.0. (Dimension #7)
- 5.4.1 'Were there any goals not on your list
which you saw as operating in this part
or which you saw this part accomplishing?'
Yes/No. If Yes, go to question 5.4.2.
If No, go to question 5.3.4
- 5.4.2 'Did you write down the goal(s) along with
the part it/they is/are for, and its/their
priority among the other goals, on a
separate sheet of paper?' Yes/No.
Recycle to 5.4 for each part, then go to
6.0. (Dimension #8, 20)

- 6.0 'After you finished step 3 in the workbook (and began to work on step 5) were there any goals which didn't operate in any parts? Yes/No. If Yes, go to question 6.1. If No, c'est finis!
- 6.1 'Which goals?' List them.
- 6.2 'Did you have more than ten parts for Shanti?' Yes/No. If Yes, go to question 6.3. If No, go to question 6.4.
- 6.3 For each goal from 6.1, 'Did you look at your complete parts list to see if there were any parts in which this goal operates?' Yes/No. If Yes, go to question 6.3.1. If No, go to question 6.3.3. (Dimension #9)
- 6.3.1 'Were there any parts on your complete parts list in which you saw this goal operating?' Yes/No. If Yes, go to 6.3.2. If No, go to 6.3.3.
- 6.3.2 'Did you write the (number(s) of) the part(s) in which this goal operates, in the goal row/column?' Yes/No. Recycle to 6.3 for each goal, then c'est finis! (Dimension #10)
- 6.3.3 'Were there any parts at all in which you saw this goal operating?' Yes/No. If Yes, go to question 6.3.2. If No, go to 6.3.4.

- 6.3.4 'Did you delete the goal(s)?' Yes/No.
C'est Finis. (Dimension #14)
- 6.4 For each goal from 6.1., 'Did you consider whether or not there was/were any part(s) of Shanti, not on your list, which accomplish this goal or in which this goal operates?' Yes/No. If Yes, go to question 6.4.1. If No, C'est finis. (Dimension #11)
- 6.4.1 'Were there any parts of Shanti in which this goal operates or which accomplish this goal?' Yes/No.
If Yes, go to question 6.4.2. If No, go to question 6.3.4.
- 6.4.2 'Did you write down the part(s) along with the goal it/they is/are for and its/their priority among other parts, on a separate piece of paper?' Yes/No. Recycle to 6.4 for each goal, then c'est finis.
(Dimensions #12, 19)"

Comments made during the field-test.

"The Matrix is too small to abbreviate the goals."

"Why 20 goals and 10 parts?"

"The workbook could include the two purposes."

Direct Observation Record #2

(For Dimensions 1, 2, 6, 8, 10, 12, 13, 14, 19, and 20)

Participant	Goal	Dim.	Observation
GENE	A,C	1	done
	A,C,	2	done
	A	6	doesn't apply
	A	8	doesn't apply
	A	10	doesn't apply
	A	12	doesn't apply
	C	13	doesn't apply
	C	14	doesn't apply
	B	19	yes and no. Gene brought out three parts and five goals from complete lists and put them on the matrix. These were <u>not new</u> parts.
	B	20	
GEOFF	A,C	1	done
	A,C	2	done
	A	6	doesn't apply
	A	8	doesn't apply
	A	10	doesn't apply
	A	12	doesn't apply
	C	13	doesn't apply
	C	14	doesn't apply
	B	19	No. Added none
	B	20	No. Added none

Direct Observation Record #2

(cont'd)

Participant	Goal	Dim.	Observation
NICK	A,C	1	done
	A,C	2	done
	A	6	doesn't apply
	A	8	doesn't apply
	A	10	doesn't apply
	A	12	doesn't apply
	C	13	doesn't apply
	C	14	doesn't apply
	B	19	Yes. added a part
	B	20	No.
J.	A,C	1	done
	A,C	2	done
	A	6	doesn't apply
	A	8	doesn't apply
	A	10	doesn't apply
	A	12	doesn't apply
	C	13	doesn't apply
	C	14	doesn't apply
	B	19	Yes and No. J. eliminated some parts. She hadn't personally done "The Parts Process", and later added one from the list. She didn't add any goals.
	B	20	

Direct Observation Record #2

(cont'd)

Participant	Goal	Dim.	Observation
GREGG	A,C,	1	done
	A,C,	2	done
	A	6	doesn't apply
	A	8	doesn't apply
	A	10	doesn't apply
	A	12	doesn't apply
	C	13	doesn't apply
	C	14	doesn't apply
	B	19	Yes and No. Gregg brought
	B	20	one part off the complete list to put on the matrix.

10.0 Do the field-test of the methodology, part or sub-part and carry out the measurements or observations.

10.1 Begin with the first step to be tested and continue through all the steps and sub-steps in the order specified until all the steps have been completed.

10.2 Carry out any observational techniques or measurement techniques you have designed.

Results (and General Description of Field-Test): The

field-test of "The Goals/Parts Integration Process" was carried out for five of six members of a group of decision-makers who decide as individuals,

the staff of Shanti. (One member decided at this point not to be a decision-maker in the evaluation.) The field-test occurred on two separate occasions, as two of the five individuals were not able to be present at the first occasion. Both times the "Pre-Field-Test Instructions" were read to the participants. Then each was given a workbook, ("Workbook for Goals/Parts Integration of the Fortune/Hutchinson Evaluation Methodology," included in Appendix D) a matrix, (included in Appendix D), a complete list of his/her goals as a staff member in order of priority, a complete list of the parts of staff members as a group in order of priority, and where the participant had actually participated in "The Parts Process," a complete list of the parts of Shanti in order of priority from his/her individual perspective. (Four of the five participants had finished "The Parts Process," and had generated lists of parts of Shanti from their individual perspectives. These lists had been combined, the frequency of the occurrence of each part had been tabulated, frequency and priority weightings for each part had been combined, and a priority ranking had been assigned to each part, representing the combined perspective of the group.

This was the list of the parts of Shanti mentioned above.) Finally, the participants were asked to follow all the appropriate steps of the workbook.

On both occasions, after the participants had finished the workbook, the "Post-Workbook Interview" was held with each participant individually, although within hearing of the other participants. During the first occasion, where the participants were doing the workbook in the same room with the evaluator, the "Direct Observation Record #1" was kept, and data were recorded for all items. During the second occasion, where participants worked away from the evaluator, only parts of this observational technique could be used.

After each occasion, the "Direct Observation Record #2" was implemented, and the workbook and matrix which each participant used were directly observed.

10.3 Keep a journal wherein you record everything you do, including the steps you perform, the problems you encounter, and the results of the steps. Make a journal entry immediately after every time that you carry out steps as a part of the field-test. In particular note the following kinds of results:

- 10.3.1 Note whether or not the part, step, or sub-step accomplishes its stated or implied purpose. If it partially succeeds, explain in detail.
- 10.3.2 Note whether or not the part, step, or sub-step accomplishes stated or implied intended results. If it partially succeeds, explain in detail.
- 10.3.3 Note whether or not the part, step, or sub-step is practical in its consumption of resources in this application.
- 10.3.4 Note whether or not the part, step, or sub-step results in a change in a product being produced.

Results: A journal was not kept because the observational techniques which were designed included all the data suggested in steps 10.3.1 - 10.3.4 and because after asking "Is there anything you did, or was there anything which occurred during the field-test which needs to be recorded?" the answer was "no." The steps were not varied from, there were no problems encountered, and the results of the steps were well observed by the designed techniques.

11.0 When the field-test, journal, and designed observational or measurement techniques have been completed for the first (next) priority part or sub-part, analyze the journal and other results to see if any of the findings suggest redesign and then go to step VI, or if there are still resources left for field-testing, go to 1.0.

Results: There were no more resources for field-testing.

Detailed Results of the Field-Test

The following results of the field-test are reported in terms of the goals for the field-test, and the specific components of each goal which were observed.

Goal A

The workbook, matrix, and additional materials will be able to accomplish their purpose-- to enable a decision-maker (participant) to relate goals and parts.

Dimension 1

Each participant will put marks on a matrix which indicate in which of the parts listed on the matrix each of the goals listed on the matrix operates.

Results:

This was fully accomplished by all five participants.

Dimension 2

Each participant will put marks on a matrix which indicate for each part listed on the matrix which goals listed on the matrix operate in it.

Results:

This was fully accomplished by all five participants.

Dimension 3

Each participant will put marks on a matrix which indicate in which of the parts listed on the matrix each of the goals listed on the matrix operates, and will do so without error.

Results:

During operationalization of goals, no errors were observed in the integration of goals and parts.

Dimension 4

Each participant will put marks on a matrix which indicate for each part listed on the matrix which goals listed on the matrix operate in it, and will do so without error.

Results:

During operationalization of goals, no errors were observed in the integration of goals and parts.

Dimension 5

For each part row/column without goal marks, the participant who has more than twenty goals for Shanti will look at his/her complete

goals list to see if there are any goals which operate in that part.

Results:

This dimension was not observed because none of the participants had part rows without goal marks. (The one participant who had not done "The Parts Process" did have empty rows for some parts listed on her matrix. Because she did not hold them as major parts, however, she had crossed them off as soon as she saw them.)

Dimension 6

If there is/are goal(s) which operate(s) in the part being considered, the participant will write the number(s) of the goal(s) in the part row/column.

Results:

This dimension was not observed because none of the participants had part rows without goal marks.

Dimension 7

For each part row/column without goal marks, the participant with twenty or fewer goals will consider whether or not (s)he has any goals not on his/her list that this goal accomplishes, or that operate in this part.

Results:

This dimension was not observed because none of the participants had part rows without goal marks.

Dimension 8

If there is/are goal(s) which operate(s) in the part being considered, (s)he will write it/them down on a separate sheet of paper, along with the part it is/they are for and its/their priority/ies among the other goals.

Results:

This dimension was not observed. (See Results of dimension 7.)

Dimension 9

For each goal row/column without parts, the participant with more than ten parts will look at his/her completed parts list to see if there are any parts which accomplish that goal or which that goal operates in.

Results:

This dimension was not observed because none of the participants had goal columns without part marks.

Dimension 10

If there is/are part(s) in which that goal operates or which accomplish(es) that goal,

the participants will write the number(s) of the part(s) in the goal row/column for each such goal.

Results:

This dimension was not observed. (See Results of dimension 9.)

Dimension 11

For each goal row/column without parts marks, the participant with ten or fewer parts will consider whether or not there is/are any part(s) of Shanti not on the list that accomplish(es) this goal, or in which this goal operates.

Results:

This dimension was not observed. (See Results of dimension 9.)

Dimension 12

If there is/are part(s) which accomplish(es) this goal or which this goal operates in, the participant will write it/them down on a separate sheet of paper, along with the goal it/they is/are for, and its/their priority among other parts.

Results:

This dimension was not observed. (See Results of dimension 9.)

Dimension 18

All materials and instruction needed by the participant are in the workbook or in the other prepared materials.

Results:

All five participants said that the workbook and other prepared materials called for by the workbook contained all the materials and instruction they needed.

Goal B

The workbook, matrix, and additional materials will act as a test of completeness of goals and parts.

Dimension 7

(See Dimension 7, Goal A, p.248)

Dimension 11

(See Dimension 11, Goal A, p.250)

Dimension 19

As a test of completeness, the participant will add parts on his/her sheet of changes.

Results:

None of the participants got to this step in the workbook because none had goals without any parts. Some participants did add parts from their complete lists of parts to the matrix. This was not, strictly speaking, a test of

completeness, but rather a re-prioritizing of parts.

Dimension 20

As a test of completeness, the participant will add goals on his/her sheet of changes.

Results:

None of the participants got to this step in the workbook because none had parts without any goals operating in them.

Goal C

The workbook, matrix, and additional materials will act as a test of reality of goals and parts.

Dimension 1

(See Dimension 1, Goal A, p. 246)

Dimension 2

(See Dimension 2, Goal A, p. 246)

Dimension 5

(See Dimension 5, Goal A, p. 247)

Dimension 7

(See Dimension 7, Goal A, p. 248)

Dimension 9

(See Dimension 9, Goal A, p. 249)

Dimension 11

(See Dimension 11, Goal A, p. 250)

Dimension 13

If there is/are then (after dimension 5 or 7) a part(s) without any goals, the participant will delete it/them.

Results:

This dimension was not observed because none of the participants had parts without goals operating in them.

Dimension 14

If there is/are then (after dimension 9 or 11) a goal(s) without any parts the participant will delete it/them.

Results:

This dimension was not observed because none of the participants had goals without parts they operated in.

Goal D

Participants will be able to do the workbook.

Dimension 15

Each participant will do all of the appropriate steps of the workbook.

Results:

All five participants read all of the steps and all five did all of the appropriate steps.

Dimension 18

(See Dimension 18, Goal A, p.251)

Goal E

The workbook will consume relatively little of the decision-maker's (participant's) time.

Dimension 21

The participant finishes the workbook in less than one hour.

Results:

The times which the five participants took to finish the workbook are as follows: 10, 12, 20, 22, and 12 minutes. These do not include the time spent in receiving pre-workbook instructions, which took less than five minutes for each occasion.

Goal F

Doing the workbook will not be a frustrating experience for the participant.

Dimension 22

When asked, "Was this task frustrating? On a scale from 1 to 4, where 1 = Very frustrating, 2 = Frustrating, 3 = Not frustrating, and 4 = Not frustrating at all, "the participant will put him/herself at 3 or 4.

Results:

On the scale above, participants' choices were as follows: 4, 4, 4, 2.5, and 4. Comments:

"This is one of the best things we've been given to do. It's concrete." "It's difficult to decide. If there were thirty to forty-five items it would be frustrating." In addition, during the first occasion, where it was possible to observe two of the participants throughout the field-test, there was no indication at all of frustration.

Goal G

The participant will feel that the goals/parts integration part of the methodology is worthwhile doing.

Dimension 23

When asked, "Do you think this workbook was worthwhile? On a scale from 1 to 5, where 1 = Worthless, 2 = Not Very Worthwhile, 3 = I don't know, 4 = Worthwhile, and 5 = Very Worthwhile," the participant will put him/herself at 4 or 5.

Results:

On the scale above, participants' choices were as follows: 3.5, 4, 4, 4, 4.

Goal H

The participant will perceive the task he/she has performed as having a function.

Dimension 24

When asked, "Do you think doing this task has a function?" the participant will respond "yes."

Results:

Participants' answers to the above question were as follows: "I don't know," (This was followed with a guess at the function, "delimiting parts in goals that I hold.") "yes," "yes," "yes," and "yes, but..." Although there were no specific references to purposes or functions in the workbook, accompanying materials, or pre-workbook instructions, this part of the methodology had been referred to before, and the function "to relate goals and parts so that the observers will know where to go and observe whether or not a goal is being accomplished" had been mentioned.

Dimension 25

When asked, "What is the function?" the participant will respond with (an) answer(s) which the evaluator judges to be a function of this workbook.

Results:

The following were participants' responses to the above question: "delimiting parts in

goals that I hold." "helps me make sure that goals I wish to operationalize are described in terms of those parts of the school I think are important." "to integrate the ideal and the real, the shadow and the substance." "conflicting things in a way...because of a trouble I had with it. The fuzziness of the goals in being able to determine whether one of the parts was actually a part...the concept of parts is difficult...'students' and 'counseling' are such different kinds of parts...they are hard to fit with a goal... to clarify where goals and parts come together... I feel that two matrices should have been used." "so that I had a sense of where my goals were operating so that when I operationalize I know in which parts the goals take place It's also useful as a graphic illustration of the interrelationship of all the goals and parts." All of the answers were judged by the evaluator as acceptable. Some were better than others. One was Platonic.

Goal I

The workbook will meet the needs of the evaluation for having data on which goals operate in which parts.

Dimensions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 18

See Goal A, pps. 246-51 Operationally, this goal is the same as Goal A.

Goal J

There will be no gaps in the workbook.

Dimension 15

See Goal D, p. 253.

Dimension 18

See Goal A, p. 251.

Goal K

Preceding steps will be clear to the evaluator.

Dimension 26

When asked if the preceding linkage steps are clear, the evaluator will say yes.

Results:

These are clear.

Goal L

Succeeding linkage steps will be clear to the evaluator.

Dimension 27

When asked if the succeeding linkage steps are clear, the evaluator will say yes.

Results:

These are not clear. There are no steps describing how the evaluator and a decision-

maker get from the end of this process to operationalizing the first goal.

Goal M

Preceding linkage steps will not provide problems.

Dimension 28

When asked if the preceding linkage steps have provided problems, the evaluator will say "no."

Results:

There were no problems.

Goal N

Succeeding linkage steps will not provide problems.

Goal O

The workbook and other prepared materials are complete. No other materials or help are needed.

Dimension 16

The evaluator's help is not asked for.

Results:

One participant asked for clarification of the wording in the workbook step 2. Another participant indicated confusion in step 4 about whether to go to his complete parts list or not. He wanted to know if this

matrix was to reflect all the parts he had for each goal. He also wanted to know if step 7.2 was appropriate for this situation and if he was really to do this step. It wasn't. This was because the parts were not necessarily in priority order, but rather in order of priority to the staff as a group of individuals.

Another participant asked "What if you don't agree with some of the parts on the matrix?" It was explained that he should cross them out. Although these three participants asked the evaluator for help (or clarification) there is no reason to believe that this help was essential, that they couldn't have completed the workbook without it.

Dimension 17

The participant does not ask for others' help.

Results:

With the exception of help asked for from the evaluator (see Dimension 16, p.259) no help was asked for from others, by any of the participants.

Dimension 18

See Goal A, p.251.

Goal P

Participants will finish the workbook.

Dimension 15

See Goal D, p. 253.

Additional Information:

1. Three participants expressed relative pleasure in this part of the evaluation, particularly the finiteness of the task.
2. As goals and parts were listed on the matrices, it occurred to the investigator that it was not clear why there were twenty goals and ten parts recommended as the maximum for listing on the matrix.
3. The matrix is quite small if goals are to be abbreviated in the space provided. If numbers alone are to be used to refer to the goals, there would be ample space. However, this might be confusing to some decision-makers, particularly if numbers are also used to refer to parts on the matrix.
4. Including the purpose for doing the workbook briefly at the beginning might enable decision-makers to make better decisions about whether or not a goal "operates in" a part, or whether or not a part "accomplishes" a goal.

Summary of Results of the Pre-Redesign Procedures Field-Test

The Pre-Redesign Procedures were found, on the whole, to successfully accomplish their purpose. Where there were gaps, and where steps were redesigned, these new steps were found successful. These procedures consume more time than a casual investigator would probably have to spend, but for thorough methodological research they are wholeheartedly recommended for use.

Redesigned steps, both those which were subsequently field-tested and minor revisions, will be found in the second draft, which follows on the next page. Recommendations have been incorporated in this revision.

Summary of Results of Field-Test of Goals/Parts Integration Process

The results clearly indicate that in this field-test, this process accomplished its stated purpose and implied intended results, that it was very practical in its consumption of resources, and that it did result in a change in the product being produced, i.e. the matrix.

Recommendations for Redesign of Goals/Parts Integration Process

As this process worked extraordinarily well, there is but a single recommendation, based on a comment of a participant and of a similar feeling of the evaluator. The

matrix could be enlarged so that there is more space for writing the abbreviations of the goals.

Draft II David J. Rosen

21, December 1973

PRE-REDESIGN PROCEDURES FOR METAMETHODOLOGY

Orientation Element

Case IA An individual who wishes to critique a methodology, part(s) or sub-part(s) for the purpose of redesigning it.

Case IB A group who wish to critique a methodology, part(s) or sub-part(s) for the purpose of redesigning it.

Case IIA An individual who wishes to field-test a methodology, part(s) or sub-part(s) for the purpose of redesigning it.

Case IIB A group who wish to field-test a methodology, part(s) or sub-part(s) for the purpose of redesigning it.

Pre-redesign Procedures

Case IIA An individual who wishes to field-test a methodology, part(s), or sub-part(s) for the purpose of redesigning it.

- 1.0 Decide if the field-test is to be carried out to meet the highest priority needs of the methodology for field-testing or if it is to meet the highest priority goals/needs/interests of the investigator. If this is easy to do, go to 2.0. If this is not easy to do, go to 1.1.
- 1.1 Determine your goals/needs/interests for doing (a) field-test(s).
 - 1.1.1 If this is not easy to do, use the Goals Process of the Fortune/Hutchinson Evaluation Methodology.
 - 1.1.2 Ask yourself, "What are my needs/interests for doing (a) field-test(s)?" and write down your answer(s).
- 1.2 Look at your goals/needs/interests and ask yourself, "Do any of these imply field-testing certain parts or sub-parts of the methodology rather than others?" If you have answered yes, list the parts. If no, go to 1.3.
 - 1.2.1 Order the parts by priority using the criterion "importance to you."
- 1.3 Determine what you and others see as the highest priority needs of the methodology for field-testing.
 - 1.3.1 If none of the methodology has been field-tested, field-test the whole methodology. If this has already been done, determine the first (next) major part or sub-part which is most in need of (further) field-testing and is not currently being field-tested.

- 1.3.1.1 Ask yourself, "What parts or sub-parts from my research or my experience suggest themselves as most in need of (further) field-testing?" List them and order them by priority using the criterion "Most in need of (further) field-testing."
- 1.3.1.2 Look at the results and recommendations of previous investigators of the methodology. Ask yourself, "What parts or sub-parts are most in need of (further) field-testing?" List them, and if possible, list them by previous investigators' priorities.
- 1.3.1.3 Ask other methodologists, "What parts or sub-parts of the methodology are most in need of (further) field-testing? Order them by priority using the criterion 'most in need of (further) field-testing.'"
- 1.3.1.4 Look at the results from 1.3.1.1 - 1.3.1.3 and determine the order of priority of the parts or sub-parts for field-testing. If this is not easy to do use the Instructional Alternative on Prioritization from the Fortune/Hutchinson Evaluation Methodology.
- 1.3.2 For each of the parts (not sub-parts) on the list from 1.3.1.4 recycle to 1.3.1.1 - 1.3.1.3 to determine the order of priority of sub-parts for field-testing.
- 1.3.3 Determine the simplest field-test of the first (next) part or sub-part which has not had (further) field-testing.
- 1.4 Where the highest priority needs of the methodology (determined in steps 1.3.1 - 1.3.3) differ from your goals/needs interests for doing the field-test, choose either your priorities or the priorities of the methodology.

- 1.4.1 If the order of priority of parts or sub-parts from 1.3.1.4 is not the same as the priority of parts from 1.2.1, then choose either your personal priorities or the "methodology's priorities."
 - 1.4.2 If the simplest field-test of the first (next) part or sub-part is not consistent with your goals/interests/needs, then choose either yours or "the methodology's."
- 2.0 Write out the purpose(s) of the methodology or first (next) part or sub-part to be field-tested.
 - 3.0 Operationally defined the purpose(s) if this has not already been done, and write out the operational implications which result from the operationalization. (These are the operational criteria for success of the methodology, part, or sub-part being field-tested.)
 - 3.1 Use the straight analysis technique.
 - 3.1.1 Identify the fuzzy concepts in the purpose(s).
 - 3.1.2 Directly operationalize each fuzzy concept.
 - 3.1.3 Directly operationalize the interaction among fuzzy concepts. This step is not always possible. If it is not possible, go to 3.1.4.
 - 3.1.4 Test the criteria (the results from 3.1.1 - 3.1.3) for completeness in a manner of your choosing, and revise them if necessary.
 - 3.1.5 Review the final set of operational criteria. If you are unsatisfied, go to 3.2. Otherwise, go to step 3.5.
 - 3.2 Revise the criteria. If you are still unsatisfied, go to 3.3. Otherwise go to 3.5.
 - 3.3 Use Hutchinson's "Operationalization of Fuzzy Concepts" to fully operationalize the purpose, or go to 3.4, or do both.
 - 3.4 Use "The Goals Process" from the Fortune/Hutchinson Evaluation Methodology to generate your goals for doing this particular field-test. If you did this in 1.1, use the output from that.

- 3.4.1 For each goal generated, consider whether or not it implies criteria for the success of the methodology, part, or sub-part being field-tested. If it does, add these to your list of criteria, and then go to 3.5.
- 3.5 Review the final set of criteria. If they are fully operational, commit yourself to this list. If they are not fully operational, operationalize them, then commit yourself to that list.
- 4.0 Determine the setting where the field-test will take place, and secure the co-operation of decision-makers and others whose resources you will need.
- 5.0 Determine what resources are available for field-testing, e.g. investigator time, decision-maker time, money, space, staff, etc.
- 6.0 Determine whether or not these resources are adequate to allow a field-test of the scope you are considering, e.g. if you are planning to field-test the whole methodology, are the resources sufficient? Or if you are planning to field-test two parts of a methodology, are the resources sufficient?
 - 6.1 If resources are not adequate, see if more resources can be made available, or consider reducing the scope of the field-test problem. If you cannot get more resources or reduce the scope of the problem, do not do the field-test.
- 7.0 Assign the resources--investigator time, decision-maker time, money, staff, secretarial help, etc.--to the parts of the methodology to be field-tested.
- 8.0 Re-examine the allocation of resources to make sure that resources are sufficient. If not, go to 6.1.
- 9.0 Decide if measurement or observational techniques (other than direct observation by the investigator, and the investigator journal) need to be designed.
 - 9.1 Look at your operational criteria. Consider whether or not your need to design observational or measurement techniques (other than direct observation by the investigator, and the investigator journal) to observe or measure these.
 - 9.2 If there is already evidence that a part or sub-part of the methodology you are field-testing either does not work or does not work reliably,

consider whether or not you want to design observational techniques or measurement techniques capable of providing data on the specific problems.

- 9.3 If as a result of 9.1 or 9.2 there are other observational or measurement techniques desired, design them.
 - 9.3.1 Determine the amount of resources available for this activity.
 - 9.3.2 If resources are limited, determine the priority of the techniques to be designed, and design the first technique first and so on, until all the resources are used up or until you have finished designing techniques.
 - 9.3.3 If it is not easy to design these techniques use the observational techniques design process from the Fortune/Hutchinson Evaluation Methodology.
- 10.0 Do the field-test of the methodology, part, or sub-part and carry out the measurements or observations.
 - 10.1 Begin with the first step to be tested and continue through all the steps and sub-steps in the order specified until all the steps have been completed.
 - 10.2 Carry out any observational or measurement techniques you have designed.
 - 10.3 Keep a journal wherein you record everything you do, including steps you perform, the problems you encounter, and the results of the steps. Make a journal entry immediately after every time that you carry out steps as a part of the field-test. In particular, note the following kinds of results:
 - 10.3.1 Note whether or not the part, step or sub-step accomplishes its stated or implied purpose. If it partially succeeds, explain in detail.
 - 10.3.2 Note whether or not the part, step, or sub-step accomplishes stated or implied intended results. If it partially

succeeds, explain in detail.

10.3.3 Note whether or not the part, step, or sub-step is practical in its consumption of resources in this application.

10.3.4 Note whether or not the part, step, or sub-step results in a change in a product being produced.

11.0 When the field-test, journal, and designed observational techniques have been completed for the first (next) priority part or sub-part, analyze the journal and other results to see if any of the findings suggest redesign and then go to step VI, or if there are still resources left for field-testing, go to 1.0.

CHAPTER IX

RESULTS OF THE EVALUATION OF THE EVALUATION

A part of the Fortune/Hutchinson Evaluation Methodology is called "The Evaluation of the Evaluation Phase." Currently documented, it provides for three different cases, where it is initiated at the request of a Contract Decision-Maker or decision-maker, where it is initiated by the evaluator as a regular part of a long-term evaluation, and where it is initiated by the evaluator for purposes of methodological research. Only this third case is sufficiently developed to be used as a part of an evaluation.

The purpose for doing the evaluation of the evaluation in this case was for methodological research, specifically to address purposes which were stated as a part of the problem for this investigation: to examine the feasibility of using the methodology to evaluate a public alternative school, to examine whether or not decision-makers would cooperate, to examine whether or not the methodology could, in this application, accomplish its purpose, and to examine whether or not it would interfere with the school's accomplishing its goals.

Although "The Evaluation of the Evaluation" was the basis for this part of the research, it was not itself being subjected to a field-test. There was no attempt made here

to provide data for decision-making on "The Evaluation of the Evaluation Phase." Rather, this part of the methodology was used in order to carry out the methodological research.

In "Some Overlooked Implications of the Purpose: To Provide Data for Decision Making," an unpublished paper written by Hutchinson in 1972, he argues that an evaluation which has the above purpose ought to be evaluated in terms of three criteria for success, "...the percent of data that was actually used in the decision making process by the persons for whom the data was developed...(efficiency),...the percent of decisions made (with or) without data...(completeness/incompleteness), (and)...data (should be) provided for the decision maker's more important decisions and not provided for the least important decisions." (Focus) In the same paper, Hutchinson also suggests as a criterion by which to evaluate an evaluation methodology what he describes as "decision maker validity....the methodology should ensure at every step that decision maker validity is preserved in the evaluation design....If decision maker validity is to be preserved the data collected for a particular decision maker must be perceived by that decision maker to be relevant to his intents or goals for that enterprise." (Hutchinson, 1972)

In generating the goals for the evaluation, which would be examined through the evaluation of the evaluation, these

criteria were taken into account. Also, a previous evaluation of an evaluation performed by this investigator in 1972-1973 was used as a test of completeness of goals. The goals, dimensions of those goals (which are in most cases operational), and the results of administering observational techniques to measure the accomplishment of those goals are contained in the section which follows. The instruments, which are not included here, were interviews which contained questions for each of the decision-makers. The questions are included verbatim in the dimensions contained here. For some of these interviews, decision-makers were supplied with lists of parts of the evaluation (See Figure 12) and a record of data returned--by dimension--with space to write whether or not the data had been used (See Appendix E for a sample record). At the beginning of each interview the decision-maker was asked to give honest, frank answers. Each decision-maker was also encouraged to see, as (s)he answered the questions, that a decision is a "choice between or among alternatives, and that a choice not to do anything, not to take any action, to leave well enough alone, is a decision, too."

There are three problems which an interpreter of the results should be aware of, as they may influence how the data are understood. First, the "Shanti Community" which was interviewed, the six members of the over one-hundred-

Figure 12: PARTS OF THE EVALUATION

PART	PROFESSIONAL	PERSONAL
NEGOTIATION OF THE CONTRACT		
THE GOALS PROCESS		
THE PARTS PROCESS		
THE GOALS/PARTS INTEGRATION (MATRIX)		
OPERATIONALIZING FUZZY GOALS		
APPROVAL OF OBSERVATIONAL TECHNIQUES		
BEING INTERVIEWED, FILLING OUT QUESTIONNAIRES		
RECEIVING DATA FOR DECISION- MAKING		
EVALUATING THE EVALUATION		

member Shanti Community are not representative. None of them had in fact participated to any extent in the evaluation. Each, however, had experienced at least one part of the evaluation. The second problem is that while much of the data had been returned to decision-makers by the time of the evaluation of the evaluation, some remained yet to be collected and returned. This would certainly bias the point of view of at least one staff member, community members, and the Administration and Budget Task Force, who had yet to receive all the data on goals they had operationalized. The third problem was that the same person, as a member of different decision-making groups, may have expressed the same opinion several times, making his/her view appear to be more prevalent. This was not a serious problem as these people attempted to respond to the interview questions each time from the perspective of their different roles.

Goals, Dimensions, and Detailed Results

Goal #1: The Evaluation will show that it is feasible to use the Fortune/Hutchinson Evaluation Methodology, in its current state of development, to evaluate a public alternative school.

Dimension A: The evaluator will say that each part of the evaluation methodology, with the exception of the redesign phase, will

have been completed for each decision-maker for whom data were to be collected.

Results:

See Figure 13: Parts of the Methodology Completed by Decision-Makers.

Dimension B: When asked, "Based on your experience of the evaluation of Shanti using the Fortune/Hutchinson Evaluation Methodology, do you feel that it is feasible to use this methodology to evaluate a public alternative school, that is, do you believe it can be done?" decision-makers will respond affirmatively, i.e. will say "yes," will nod affirmatively, or will in some way which the evaluator recognizes as a clear, affirmative response, indicate that they feel that it is feasible.

Results:

Four of the five staff members said "yes," although two of these qualified their answers by saying "yes, in that anything can be done." One staff member said "no." The A & B Task Force answered "Yes, but it's impractical," and the director responded "yes, because everything is workable, but on a scale between 1-10,

Figure 13: Parts of the Methodology Completed
by Decision-Makers

Part	D-M #1 Community	D-M #2: Indiv. Gregg J. Nick	Staff Members Linda Gene	D-M #3 Geoff A. & B. T. F.	D-M #4 Director
Goals Process	X	X	X	X	X
Parts Process	1, 4	X	X	X	X
Goals/Parts Process	- , 4	X	-	X	X
Operationalization	/, , 4	/	- , 1	- , 1	/ , 2
Obsv. Tech. Design	/	/	-	-	/
Obsv. Tech. Approval	- , 4	/	- , 1	- , 1	/ , 2
Obsv./Meas.	/	/	-	-	/
Data Return	/, +, 4	/	- , 1	- , 1	+ /
Eval./Eval.	X , 4	X	X	- , 1	X X

Key to symbols: X = completed
/ = partially completed
- = not done
+ = yet to be done

1. = ...did not make available the time...
2. = ...did not make time available according to schedule
3. = ...did not allow planned activities ...to take place
4. = ...did not make available sufficient time originally...

where 1 = 'use it just the way it is' and 10='shelve it or burn it' I give the methodology an 8." The community was not asked this question, as no community member, as a community member, had direct experience with all or most of the parts of the evaluation.

Dimension C: The Contract Decision-Maker, when asked "Based on your experience of the evaluation...(See Dimension B)" will respond affirmatively, i.e.... (See Dimension B.)

Results: All five members of the Evaluation Task Force (The Contract Decision-Maker) answered "yes."

Goal #2: There will be sufficient cooperation from decision-makers to complete all parts of the methodology for each decision-maker.

Dimension A: (See Results of Dimension A on p.275)

Dimension D: If one or more parts of the methodology have not been completed for a decision-maker, the evaluator when asked if this was because:

1. the decision-maker did not make available the time (s)he/they agreed

- to make available,
2. the decision-maker did not make available the time (s)he/they agreed to make available according to the schedule which was agreed upon,
 3. the decision-maker did not allow the planned activities prescribed in the methodology to take place, or
 4. the decision-maker did not make available sufficient time originally to complete all parts of the methodology,
- for each of the above, will say "no."

Results: See Figure 13: Parts of the Methodology Completed by Decision-Makers.

Goal #3: The evaluation will accomplish its purpose--to provide data for decision-making--in an alternative school setting.

Dimension E: Data are actually used for decision-making by decision-makers and by others at Shanti.

Sub-dimension 1: (a) Each decision-maker will be provided with data return sheets as a result of the design for him/her/them.

(b) Each decision-maker will be provided with all other data return sheets.

Each decision-maker, when asked "Have you used any of these data (from (a)) in making decisions?" will respond affirmatively.

Results: The six members of the community all said that they had not used the data for decision-making. Only two had seen the data return. The one member of the staff who received data said he did use it for decision-making. The A.&B. Task Force said they did not use the data returned to them for decision-making, with the exception of the data from "The Goals Process." They also said that most of them had not seen the data returns, which the one member of the Task Force who had accepted responsibility for sharing the data returns, admitted was his oversight. The director said he had used the data returned to him for decision-making.

Sub-dimension 2: Each decision-maker, when asked "Have you used any of these data (from (b)) in

making decisions?" will respond affirmatively.

Results: One member of the Community said he had used some of the data collected for the A. & B. Task Force for his decision-making. Two staff members said they had used some data collected for other decision-makers as staff members, although both indicated that this was a very small amount. The A. & B. Task Force indicated that as a task force it had not used any other decision-maker's data. The director said he had not used any other decision-maker's data, and that he hadn't seen any other decision-maker's data, with the exception of the data from the Community Goals Survey.

Sub-dimension 3: Each decision-maker, when asked, "Do you know of anyone else, decision-makers or others, who have used evaluation data for making decisions? If you do, please give me (or list) their names" will respond affirmatively and give a list of names to the evaluator.

Results: The Community members did not know of anyone else. Staff members suggested others who were decision-makers. The A. & B. Task Force suggested others who were decision-makers, as did the director.

Sub-dimension 4: The Contract Decision-Maker, when asked "Do you know of anyone..." (See Sub-dimension 3).

Results: The Contract Decision-Maker said yes and offered the names of decision-makers.

Sub-dimension 5: Each person listed from (3) and (4) above when asked, "Have you used any data from the evaluation in making decisions?" will respond affirmatively.

Results: The purpose of this dimension was to learn if people other than decision-makers had used data for decision-making. Since none were listed by the decision-makers and Contract Decision-Maker, this was not observed.

Dimension F: Evaluation designs are efficient: all data collected for each decision-maker are used by that decision-maker for making decisions.

Sub-dimension 1: Each decision-maker, when asked

"which data returned to you from (a), if any, did you not use in making decisions?" will indicate that there are no data which have not been used. An answer will be recorded for each data return and the evaluation will be at least 75% efficient, i.e. at least 75% of the data returned will have been used for decision-making by each decision-maker.

Results: Community: 0% efficiency; Staff (Gregg Sinner was the only staff member at this time to have data returned to him): (by component, i.e. by dimension or sub-dimension) 72% efficiency; A. & B. Task Force: 0% efficiency; Director: (by component) 44% efficiency. It is possible that the efficiency of data return may actually be higher for the Director and for Gregg Sinner, as they both indicated for some components that they may yet use them for decision-making. If the director uses all the data he says he expects to use, the efficiency of data return for him will be 100%.

Dimension G: As many as possible/all decisions made will have been made with the help of data

from the evaluation.

Sub-dimension 1: Each decision-maker, when asked to "estimate the percent of decisions you have made about Shanti for which you have had data provided from the evaluation to use in decision-making" will indicate that at least 25% of the decisions (s)he/they/has/have made since September have been with the help of data from the evaluation. Decision-makers who have kept a Decision and Data Log will be asked to use the log in estimating the percent.

Results: The Community and A. & B. Task Force were not asked this question as they indicated that no data at all were used for decision-making. Of the six staff members, the one who received data for decision-making did not keep a Decision and Data Log, but did estimate that 20-25% of the decisions he made this year were influenced by data from the evaluation. The Director did keep a Decision and Data Log but only until February, before any data had been returned to him. When

offered the opportunity to briefly list important decisions since February, he listed ten decisions. Of these, data from the evaluation had been used in making one. This suggests an estimated 10% completeness of data for decisions made, after data had begun to be returned. The director commented, however, that doing the Decision and Data Log, itself, helped him in making decisions.

Dimension H: Each decision maker's most important decisions will have had data provided for them.

Sub-dimension 1: Each decision-maker, when asked to "estimate the percent of important decisions you have made about Shanti for which you have had data from the evaluation to use in decision-making" will indicate that at least 75% have had data provided for them. Decision-makers who have kept a Decision and Data Log will be asked to use the log in estimating the percent.

Results: Gregg Sinner estimated that between 0-50%

of his important decisions were made with the help of data from the evaluation. He did not make a Decision and Data Log and estimate the percent from the log. The Director had listed ten important decisions; (10% completeness was estimated) of these, the five most important decisions did not have data provided for them. The Community and A. & B. Task Force were not asked this question as they did not use any of the data returned to them.

Dimension I: Each decision-maker's least important decisions should not have had data provided on them, unless the evaluation is "complete."

Sub-dimension 1: Each decision-maker, when asked to "estimate the percent of unimportant decisions you have made with the help of data provided by the evaluation" will say "none, providing the data are incomplete."

Results: This question was not asked specifically of Gregg Sinner or of the Director because they did not have Decision and Data Logs to use in estimating this.

Dimension J: The evaluation methodology should maximize decision-maker validity in the data produced.

Sub-dimension 1: Each decision-maker, when asked "Were any of the data returned to

you not valid, that is, were any of them

- a) not technically valid,
- b) not related to what you meant by a goal, or
- c) not in time to be used in making the decisions for which they were collected?"

will respond negatively to each question.

Results: The members of the Community said that none of the data, as far as they knew, were invalid. One Community member said that it was not useful to him. Gregg Sinner (Staff) said that none of the data returned to him were invalid. Geoff Thale (A. & B. Task Force) suggested that the first data return made him realize that the goal had not been well thought out by him in the operationalizing stage, and the data therefore were not valid. The Director said that none of the data returned to him were invalid.

Dimension K: The evaluation methodology should maximize decision-maker validity in each decision-maker's evaluation design.

Sub-dimension 1: Each decision-maker, when asked "Were any results of any part of the methodology, for example your goals, your description of the parts of Shanti, your Goals/Parts matrix, the operational definition of your goals, the observational techniques used to observe your goals, not valid for you? That is, at any point did your meaning for a goal of yours get lost or misinterpreted?" will respond negatively.

Results: The Community was not asked this question as no person had, as a Community member, direct experience with most of the parts of the evaluation in sequence. Four staff members, when asked, indicated that no part was responsible for a loss of meaning of a goal of theirs. One staff member said she did not go far enough in the process, i.e. did not do enough of the parts, to be able to answer the question. The A. & B. Task Force and the Director also responded indicating that no part was responsible for a loss of mean-

ing of a goal of theirs.

Dimension L: Each decision-maker's highest priority goals will have had data provided on them, and the lowest will not have had data provided on them.

Sub-dimension 1: The evaluator will say that the highest priority goals will have had data provided on them and the lowest will not have had data provided on them.

Results: The highest priority goals have had data provided on them, and the lowest have not had data provided on them.

Goal #4: The evaluation methodology will not interfere with the accomplishment of the school's goals.

Dimension M: The Contract Decision-Maker, when asked "Has the evaluation methodology interfered with the accomplishment of the school's goals?" will respond negatively.

Results: Four of the five members of the Evaluation Task Force said they thought that the evaluation methodology had not interfered with the accomplishment of the school's goals. One said that the methodology had interfered with accomplishing the school's goals in that it

consumed resources which could have been used for accomplishing school goals.

Dimension N: Each decision-maker when asked...(See Dimension M).

Results: The six Community members asked said the methodology had not interfered. Five staff members said that the evaluation methodology had interfered with the accomplishment of school goals. They all agreed that they meant that by consuming human resources it took away resources which could have been devoted to accomplishing school goals. One staff member said that it interfered because it had not resulted in a yield of data sufficient to justify the resources spent, and other staff members agreed with this interpretation. The A. & B. Task Force and Director both answered "yes" meaning the methodology had interfered, because it interfered with the use of resources for accomplishing goals, that it consumed too many resources in terms of the value of the data returned and processes experienced.

Goal # 5: The evaluation activities performed by the evaluator and others will not interfere with the

accomplishment of the school's goals.

Dimension O: The Contract Decision-Maker, when asked "Have any evaluation activities performed by the evaluator or others interfered with the accomplishment of the school's goals?" will respond negatively.

Results: All five of the members of the Evaluation Task Force (Contract Decision-Maker) answered "no." When they asked for clarification of this question, it was explained that this meant any activity performed by the evaluator or another person connected with the evaluation which was not specifically prescribed by the methodology.

Dimension P: Each decision-maker, when asked... (See Dimension O).

Results: Four staff members answered that no evaluation activities performed by David Rosen or others had interfered with the accomplishment of the school's goals. One staff member said that she felt that the clerical activities in behalf of the evaluation, whether prescribed by the methodology or not, had interfered with the accomplishing of the school's goals because they used resources which could have

been used for accomplishing school goals. The Community, the A. & B. Task Force, and the Director said that activities for the evaluation performed by David Rosen or others had not interfered with the accomplishment of the school's goals. When these decision-makers asked for clarification on this question, they were told that the question referred to any activity performed by the evaluator or another person connected with the evaluation which was not specifically prescribed by the methodology.

Goal #6: Decision-makers and the Contract Decision-Maker will feel that the evaluation has helped Shanti achieve its goals.

Dimension Q: The decision-makers, when asked "Do you feel that the evaluation has helped to achieve your goals for Shanti?" will respond affirmatively.

Results: The members of the Community who were asked all responded that the evaluation had not helped to achieve their goals for Shanti. Two staff members said "no." Two said "yes" One said "I don't know." One of those who said "yes" added "Yes, initially because of

goal definition, no after that." The A. & B. Task Force responded "no." The Director responded "Yes, a little, in the sense that everything helps."

Dimension R: The Contract Decision-Maker, when asked "Do you feel that the evaluation has helped to achieve decision-makers' goals for Shanti?" will respond affirmatively.

Results: One member of the Evaluation Task Force (Contract Decision-Maker) said "Yes, there is useful information for them, but not enough opportunity yet to act on it." The other four responded by saying "there is no evidence yet, and it's too early to tell."

Dimension S: The decision-makers, when asked "Do you feel that the evaluation has helped to achieve other decision-makers' goals for Shanti?" will respond affirmatively.

Results: The Community members responded as follows: "Yes,": 2, "Yes, a little": 2, "I Don't know": 1.

Four staff members said "yes." One staff member said he didn't know. One of the staff members who answered "yes" added "but I don't know to what extent." The A. & B.

Task Force responded "no." The Director responded "yes."

Goal #7: Decision-makers and the Contract Decision-Maker will regard the evaluation and each of its parts as useful and worthwhile for Shanti.

Dimension T: The Contract Decision-Maker, when asked "Do you feel that the evaluation was (1) useful and (2) worthwhile for Shanti?" will respond affirmatively to each.

Results: Four members of the Evaluation Task Force (the Contract Decision-Maker) felt that the evaluation was useful and worthwhile for Shanti. One member said that it was useful, but that he wasn't sure that it was worthwhile. It was useful he said, in that it provided an opportunity for thinking about things, but it was possible that Shanti put more resources into it than it was worth.

Dimension U: The decision-makers, when asked... (See dimension T).

Results: Two Community members responded "yes," one responded "yes, a little," and two responded "I don't know." One did not answer. Four staff members responded by saying that portions

were useful but that there was no evidence that it was worthwhile. One staff member said that he felt it was not useful, and not worthwhile. The A. & B. Task Force said that it was somewhat useful and the Director said it was somewhat useful.

Dimension V: The Contract Decision-Maker, when asked, "Do you feel that all the parts (any of the parts) of the evaluation were (1) useful or (2) worthwhile for Shanti?" and when given a list of parts to examine, will say that each part was useful and worthwhile.

Results: See Figure 14: Usefulness and Worthwhileness of Parts of the Evaluation from the Perspective of the Contract Decision-Maker.

Dimension W: The decision-makers, when asked... (See dimension V).

Results: See Figure 15: Usefulness and Worthwhileness of Parts of the Evaluation from Decision-Makers' Points of Views. The A. & B. Task Force found only one part of the evaluation useful or worthwhile for Shanti, "The Goals Process." The Director found all the parts useful and worthwhile for Shanti.

The Community members were not asked this question.

Comments by Decision-Makers During the Evaluation of the Evaluation. The following comments were made by decision-makers and by the Contract Decision-Maker in response to the evaluator's question "Is there anything else you would like to say about the evaluation that you haven't said so far?" or were made during other parts of the evaluation of the evaluation.

Contract Decision-Maker Comments:

1. "I didn't understand what was happening (in the evaluation) until the (Operationalization) workshop. The methodology is very complex. At the workshop I understood." This comment was made by an Evaluation Task Force member who had participated in a community operationalization workshop.
2. "The questionnaires were too high-powered intellectually. The 'Do You Keep Commitments' questionnaire was vague, hard to answer." This comment was made by an Evaluation Task Force member who had participated in a data gathering interview designed to investigate whether or not students cancelled commitments they knew they would be unable to keep.
3. "The delay between the beginning and the actual return of data to decision-makers is too long. Too

many resources are used in generating and operationalizing goals. The risk of missing an important goal by an exhaustive goals generation process does not justify the amount of resources we consumed. The methodology should be modified so that the evaluator should be permitted to advise decision-makers when the decision-maker loses his/her perspective in the process of the evaluation. For example, at one point I was asking the evaluator to collect data that I already had, which was foolish, and a waste of resources."

Staff Comments:

1. "The complexity of the process, the capacity to reach to all levels of the Shanti community in a variety of ways wasn't there. Unless a person is willing to contribute a maximum amount of effort toward the end product then there is no benefit available to that person."
2. "These were the greatest benefits of the methodology: It was useful in getting the community to look at its own priorities in terms of its goals. The methodology has brought Rosen to the school. It has given individuals, mostly adults, and students who went to (operationalization) workshops, a method

for clarifying their thinking about their priorities in school-related stuff and non-school-related stuff. The methodology seems to be an ideal theoretical limit toward which all evaluations ought to strive, but when there's an attempt to put it into operation, it's a mistake to try to do it in its pure form. If it's to be useful, it will have to be modified to make it more efficient, to get more data vis-a-vis resources consumed, to accomplish its purpose. The risks of taking shortcuts are worth taking, particularly where there are varying levels of commitment at the outset. People in the middle, in terms of their commitment, (i.e. people who did not make great commitments or small commitments of their time to the evaluation) tended to get more out. Some over-committed, and those with little commitment got nothing out of it. I don't know how much more I know about Shanti now than when we started. My expectation is that I will know a little more, but not a lot."

Administration and Budget Task Force Comments:

1. "One problem with the methodology has been that data has not been disseminated (i.e. that data designed for one decision-maker did not go to other decision-makers.)"

Director Comments:

1. "I would like to reiterate the feeling that the evaluation consumes too many resources. It's a splendid thing for a monestary. Unless shortcuts are found it tends to be burdensome. A thing I learned that was helpful was that I discovered that I have an extensive data collection capacity. I didn't need data. The evaluation allowed me to test that out and that was helpful.

The logic of the methodology was sound. The worst use of resources was Rosen. He could have been more helpful to Shanti (in another capacity). The next worst was J. (J. Sinner, who is a home group leader, a teacher, and the Administrative Assistant to the Director, and who was asked to do the typing for the evaluation.) Then me (i.e. the director's resources were used for the evaluation when they would have been better used for other Shanti-related activities.)."

Figure 14: Usefulness and Worthwhileness of Parts of the Evaluation from the Perspective of the Contract Decision-Maker.

Four members chose not to distinguish 1) useful and 2) worthwhile. The one member who did distinguish them defined "not worthwhile" as "results obtained do not justify resources consumed (or) figure out a more efficient way to do it..."

Part	Four Members	One Member
Negotiation of the Contract	Yes: 3, Not sure: 1	Useful, Worthwhile
The Goals Process	Yes: 4	Useful, Not Worthwhile
The Parts Process	Yes: 4	Useful, Worthwhile
The Goals/Parts Integration Process (Matrix)	Yes: 2, Not sure: 1 Blank: 1	Not Useful, Not Worthwhile
Operationalization Fuzzy Goals	Yes: 3 Not sure: 1	Useful, Not Worthwhile
Approval of Observational Techniques	Yes: 3, Not sure: 1	Useful, Worthwhile
Being interviewed, filling out Questionnaires	Yes: 3, Not sure: 1	Useful, Worthwhile
Receiving Data for Decision-Making	Yes: 3, No: 1	Useful, Worthwhile
Evaluating the Evaluation	Yes: 2, Not sure: 1 "I'll soon find out the answer"	Useful, Worthwhile

Figure 15: Usefulness and Worthwhileness of Parts of the Evaluation from Decision-Makers' Points of Views: Staff Members

PART	USEFUL	WORTHWHILE
Negotiation of the Contract	Yes: 3, No: 1 Blank: 1	Yes: 3, No:1 Blank: 1
The Goals Process	Yes: 5	Yes: 3, No:1 Blank: 1
The Parts Process	Yes: 4, No: 1	Yes: 2, No:2 Blank: 1
The Goals/Parts Integration Process (Matrix)	Yes: 1, No: 4	Yes: 0, No:4 Blank: 1
Operationalizing Fuzzy Goals	Yes: 4, No: 1	Yes: 2, No:2 Blank: 1
Approval of Observational Techniques	Yes: 2, No: 1 "Not Applicable":2	Yes: 1, No:2 "Not Applicable": 2
Being Interviewed, Filling Out Questionnaires	Yes: 3, No: 1 "Not Applicable":1	Yes: 2, No:2 "Not Applicable": 1
Receiving Data for Decision-Making	Yes: 2, No: 0 "Not Applicable":2 "No Basis": 1	Yes: 2, No:0 "Not Applicable": 2 "No Basis":1
Evaluating the Evaluation	Yes: 4, No: 1	Yes: 3, No:1 Blank: 1

Summary of the Results of the
Evaluation of the Evaluation

The following results are summarized in terms of the specific goal for the evaluation to which they relate.

Goal #1. It seems clear that it is feasible to use the Fortune/Hutchinson Evaluation Methodology in its current state of development to evaluate a public alternative school, if "feasible" is interpreted as meaning that it is possible, that it can be done. It may not be feasible, however, to use this methodology in its current state of development with every decision-maker one might identify. In this evaluation, for example, the evaluation design was not able to be completed for four of the staff members who were identified as decision-makers.

Goal #2. Decision-maker cooperation was not sufficient, for all of the decision-makers, to complete all parts of the methodology for them. This was the case for the Shanti Community (D-M #1) and for four staff members (D-M #2).

Goal #3. The evaluation accomplished its purpose--to provide data for decision-making--in this alternative school setting, at least to some extent.

Data were used for decision-making by some decision-makers, at least by the Director (D-M #4), and two members of the staff decision making-group (D-M #2). It is uncertain how many community members (D-M #1) used data for their

decision-making. At least one did. The Administration and Budget Task Force (D-M #3) and most staff members had not used any data for decision-making (with the exception of the task force's use of data from "The Goals Process") by the time of the evaluation of the evaluation.

The evaluation varied considerably from decision-maker to decision-maker in efficiency, i.e. in the extent to which data returned were actually used for making decisions. For the Shanti Community (D-M #1) there was no evidence that any data were used; however, this is uncertain. For the one staff member (D-M #2) for whom data were returned, the evaluation was 72% efficient, i.e. 72% of the data returned were used for decision-making. For the Administration and Budget Task Force (D-M #3), the evaluation was 0% efficient, and for the Director (D-M #4), the evaluation was 44% efficient. It is also possible that the efficiency may actually be higher for the one staff member and the Director, as they indicated that they may yet use some of the data which have been returned to them.

The evaluation also varied considerably from decision-maker to decision-maker in completeness, i.e. in the extent to which data were provided on decisions that the decision-maker actually made during the time of the evaluation. For the Shanti Community (D-M #1), and the Administration and Budget Task Force (D-M #3) it was totally incomplete,

i.e. no decisions were made with the help of data from the evaluation. For one Staff member (D-M #2), it may have been 20-25% complete, i.e. he estimated that data were provided for from between 20-25% of the decisions he made this year. For other Staff members, it was totally incomplete. For the Director (D-M #4), as he indicated, it may have been 10% complete.

It is not clear how focused the evaluation was in terms of decisions, i.e. the extent to which data were provided on the most important rather than the least important decisions, however, it was completely focused in terms of goals, i.e. the extent to which the highest and not the lowest priority goals had data provided on them.

With the exception of one Staff member, who felt that some data were invalid because his goal had not been well thought out, all other decision-makers agreed that the data returned were valid. All decision-makers who were asked (the Shanti Community was not asked), indicated that at no time was the meaning of their goals, components of goals, or parts lost. It therefore appears, that in this application of the methodology, the evaluation methodology maximizes decision-maker validity in the decision-makers' evaluation design and in the data returned.

Goals #4 and 5. The Contract Decision-Maker and several decision-makers felt that the evaluation methodology

had interfered with the accomplishment of the school's goals because resources were consumed for evaluation activities which could have, in their view, been better spent in accomplishing other school goals. All of these felt that this was the only way in which the methodology interfered with accomplishing the school's goals. An evaluation activity not directly prescribed by the methodology which one Staff member saw as interfering with accomplishing school goals, was clerical activities, particularly typing and duplicating, because they consumed resources which could have been better spent.

Goal #6. Decision-makers varied in whether or not they felt the evaluation helped Shanti achieve its goals. Two Staff members felt that the evaluation had helped to achieve their own goals for Shanti to some extent, and the director responded "Yes," a little, in the sense that everything helps."

Goal #7. The Contract Decision-Maker felt the evaluation was useful, and with the exception of one person, worthwhile. Decision-makers varied considerably in their feelings about the usefulness or worthwhileness of the evaluation.

Comments by decision-makers and by the Contract Decision-Maker re-emphasize what seemed to be felt generally, that the evaluation used too many resources for the little

data which decision-makers received, and that "short cuts" or briefer forms of the parts of the methodology should be used.

C H A P T E R X
SUMMARY AND RECOMMENDATIONS

Summary of Results of This Study

The purpose of this study of the Fortune/Hutchinson Evaluation Methodology was twofold, to generate data for decision-making about: 1) the methodology, and 2) its use in an alternative school setting. In the statement of the problem in Chapter IV, these were broken down into several sub-purposes. These appear below, followed in each case by a summary of the results of the investigation of each sub-purpose.

To field-test sections of the methodology which have not been formally tested: "The Allocation of Resources Element" of "The Negotiation of the Contract Phase," "The Contract Decision-Maker Reporting Process," and "The Goals/Parts Integration Process." Each of these sections was field-tested and found in this application capable of accomplishing its purpose. Minor gaps were discovered and documented while field-testing "The Allocation of Resources Element," and minor recommendations are made for its redesign. The field-test of this element, however, was not complete, as the changing priority of decision-makers, and the most important decision-maker's inability to use resources allocated to it, made the use of a detailed allocation of resources

process unfeasible. Another field-test of this element is needed, where allocated resources are able to be studied throughout the evaluation. Minor gaps were discovered and documented while field-testing. "The Contract Decision-Maker Reporting Process," and minor recommendations are made for its redesign. "The Goals/Parts Integration Process" was found to have one small gap. One minor recommendation for redesign was made.

To do methodological development on a part of the methodology for which gaps have been identified in previous studies, and to field-test this redesigned part: "The Negotiation of the Contract Phase." Methodological development of "The Negotiation of the Contract Phase" resulted in the "Rosen Draft I." This was field-tested, gaps were identified based on the results of the field-test, and steps were developed to fill these gaps. This resulted in "Rosen Draft II," which is recommended for field-testing.

To provide an additional field-test in a new evaluation setting for a part of the methodology found valid in one or two previous field-tests: "The Negotiation of the Contract." This was done, and as previously mentioned, this part was found to have accomplished its purpose in this field-test.

To examine the feasibility of using the methodology in a public alternative school setting. The results of this study suggest that it is feasible to use this methodology to

evaluate a public alternative school if by "feasible" it is meant that it is possible, that it can be done. This study suggests that it may not, however, be feasible to use the methodology in its current state of development for every decision-maker that one might identify.

To examine whether or not there will be sufficient cooperation from decision-makers to complete all parts of the methodology. In this application of the methodology there was not sufficient cooperation from all of the decision-makers identified. A possible reason, suggested by decision-maker comments during the evaluation of the evaluation, is that the evaluation consumed large amounts of decision-maker time but did not return enough data to decision-makers to justify the time they spent.

To examine whether or not the methodology can accomplish its purpose--to provide data for decision-making--in an alternative school setting. The evaluation accomplished this purpose to some extent, but not to the extent desired by all decision-makers. Data were used for decision-making. For some decision-makers the efficiency was quite high; for others it was very low. The completeness of the data was in all cases low, and the focus of data returned was not able to be determined with any confidence.⁵ The data which were returned were felt by decision-makers to be valid.

⁵For a discussion of "efficiency," "completeness," and "focus" see Chapter IX, pps.

To examine whether or not the evaluation methodology will interfere with the accomplishment of the school's goals. Some decision-makers felt that the evaluation had interfered with the accomplishment of the school's goals to the extent that it consumed resources which could have been better used in behalf of the school's other goals. This was, however, the only way in which the decision-makers saw the methodology as interfering in the accomplishment of the school's goals.

The unique contributions of this study are that it is the first comprehensive study of the Fortune/Hutchinson Evaluation Methodology in a public alternative school setting, that some of the parts studied had never been tested before, and that others had not been tested before in their current forms. In addition, the study also resulted in considerable development work on the methodology as well as on Meta-methodology. The greatest value of this study, however, will be seen if it is looked at as part of a continuous process of development, field-testing, further development, and conclusion-oriented research, a process of methodological development which should ultimately result in a well-designed, carefully tested, generalizable methodology capable of providing data for decision-making.

Recommendations for Further Development of the Evaluation Methodology

Specific recommendations for further development of parts of the methodology which were field-tested in this study will be found at the end of Chapters V, VI, VII, and VIII. Below are more general recommendations for further development of the methodology as a whole, for development of parts which do not currently exist, and for development of parts which were used during the evaluation of Shanti, but were not specifically field-tested.

1. A variety of forms of the methodology including:
the shortest form of the methodology, a short form, a longer form, and the longest form need to be documented. These will aid the evaluator in choosing parts, sections of parts, and steps to perform when evaluation resources are limited.
2. A variety of forms of different lengths for each part of the methodology need to be documented.
 - A. In order of priority, the shortest form of each part of the methodology needs to be documented first, then a short form, then a longer form, then the longest form.
 - B. The experience of the investigator during this evaluation has suggested in particular the need for a short form of "The Operational-

ization of Goals Process," especially if decision-makers hope to operationalize several goals which are very fuzzy. This was the part of the methodology which consumed the most decision-maker resources.

- (1) Collection of dimensions of goals which have already been fully defined, or defined to some extent, in previous or current evaluations is recommended. These would be especially useful in the form of a Goal Operationalization Bank upon which evaluators could draw. These dimensions could be used by evaluators in a short form of "The Operationalization of Goals Process." The evaluator could offer the decision-maker operational dimensions of a goal which is identical or similar to the decision-maker's to select those dimensions which (s)he felt were part of his/her goal.
3. Throughout the methodology, where steps require preparation in advance, these steps should be asterisked or in some other way identified so that the evaluator can easily recognize them, and do the preparation for them in advance of their being

- implemented. This will eliminate the possible problem of needing to interrupt a process unnecessarily.
4. For each decision-maker, after "The Allocation of Resources Section," and before a form of "The Goals Process," it is recommended that the shortest form of the entire methodology, including the shortest form of the evaluation of the evaluation be implemented, and that data be returned to the decision-maker within four weeks at the longest, and within two weeks if possible. It is recommended that this be included as a separate part of the evaluation methodology, and that it be called the micro-evaluation section.
 5. A set of procedures whose purpose is to help decision-makers use data returned to them for making decisions needs to be fully developed and incorporated into the methodology, to be used after data are reported to a decision-maker and before the evaluation of the evaluation.
 6. A decision identification process should be created and offered to a decision-maker as an alternative to the goals process for decision-makers who know they have specific, important decisions for which they need data. The purpose would not be to eliminate

"The Goals Process," but to offer an additional process for decision-makers who also wish to have data collected for a specific decision or decisions they will be making, or for decision-makers who would prefer to have data collected for their decisions rather than on how well they are achieving their goals.

7. A new part of the methodology needs to be created which will enable the evaluator to plan A) what steps of what phases, parts, or sections of the methodology will be implemented for each decision-maker, B) in what order, and C) with what minimum and maximum resources.. This part should also include steps for monitoring the plan, and for revising it if greater or fewer resources become available. It should make clear what sections or parts could be undertaken next after each section or part has been completed. Eventually, when the data are available, it should include references to all the forms of each part (shortest to longest) and the approximate time each may be expected to take with each decision-maker case.
8. In "The Goals Process" the purpose for prioritizing goals needs to be emphasized, that is, to determine which goals will be operationalized and to have data

- collected on them first.
9. At the end of "The Goals Process," or before the operationalization begins, the decision-maker should be asked to A) eliminate goals from the list for which (s)he doesn't wish to have data collected, B) indicate any goals for which (s)he needs data immediately, C) eliminate any goals from the list which won't have activities designed to accomplish them until after the evaluation is finished, e.g. eliminate or change "terminal behavior" goals which are not expected to be reached until after the period of observation, D) put dates on any goals for which data will not be useful after a certain time, and E) indicate goals involving change over time for which pre- and post-measurements are needed, so that the evaluator can do the pre-measurements immediately.
 10. In "The Operationalization of Goals Process," the decision-maker who has very fuzzy goals should be advised by the evaluator that these often take a long time to define, and that unless that decision-maker wishes to make many hours available, it is unlikely that (s)he will be able to get data on many goals, or much data on any given goal.
 11. A step needs to be included in "The Operationaliza-

tion of Goals Process" in which the evaluator asks the decision-maker if (s)he actually wants data on that goal, before each goal is operationalized. It is not sufficient to have the decision-maker remove goals from the list which (s)he doesn't want data for all at one time, at the end of "The Goals Process." In the time which may elapse between the generation of goals and the operationalization of a specific goal, the decision-maker may no longer need data on that goal.

12. Several parts of the methodology for which one case has been developed, need to be further developed for other cases: "The Goals/Parts Integration Process," "Operationalization of Goals Process," "Reporting Procedures," "Evaluation of the Evaluation Phase," and "Redesign."

Recommendations for Further Research on the Evaluation Methodology

The following are recommendations for further research, both decision-oriented and conclusion-oriented, which in the view of this investigator, needs to be done on the evaluation methodology.

1. Further study of each part or phase of the methodology needs to be done in a variety of different settings

for evaluation. This is particularly important for parts which have been field-tested in this study for the first time.

2. New, shortened forms of parts of the methodology, after they have been documented, need to be field-tested. Of particular concern is the problem of whether or not, in their shortened versions, they will still be able to accomplish their purposes.
3. New parts of the methodology which are developed as a result of the recommendations made in this study should also be field-tested.
4. Further study of the whole methodology, when the methodology is actually being used to accomplish the purpose of providing data for decision-making, needs to be made, particularly in terms of the criteria: efficiency, focus and completeness.
5. "The Goals/Parts Integration Process," Case I, is ready for conclusion-oriented research, having clearly shown in this study that there are no major gaps.
6. "The Contract Decision-Maker Reporting Process" is also ready for conclusion-oriented research.
7. "The Allocation of Resources Section" needs to be field-tested again, in a situation where the allocation of the resources can be studied throughout

- the evaluation.
8. The "Rosen Draft II of the Negotiation of the Contract Phase" is ready for field-testing.
 9. "The Pre-Redesign Procedures, Draft II," are ready to be field-tested.
 10. In Gene Gordon's dissertation he raised some important questions which were not directly addressed by this study, but which clearly need attention:
"
 - 1) Do decision makers want to put the kind of effort into evaluation that the methodology requires?
 - 2) How can utilization of data be improved?
 - 3) What is the average time required to complete the methodology if decision-makers cooperate?
 - 4) Do all goals require operationalization, or simply the first priority or perhaps the top five priority goals?" (Gordon 1972, p. 303)
 11. Future investigators should take note of the possible conflict between the roles of evaluator and researcher; the need to carry out an evaluation which accomplishes its purpose may conflict with the need to study the evaluation methodology or its part(s). In this study, where it was felt necessary to spend more time on a given part of the methodology because it was being studied, it was not necessarily in the

best interest of providing data for decision-making. Many resources were used on some of the earlier parts of the methodology, which were the ones being studied, and perhaps because of this, decision-makers did not want to cooperate as much later, in the operationalization process.

Recommendations for Use of the Evaluation Methodology in Public Alternative Schools

The following recommendations are based on the results of this study of a single application of the evaluation methodology in one public alternative school. They are not intended to be generalizable to all public alternative schools. Rather, they represent the experience of this particular evaluation, and may have relevance for other evaluations.

1. If possible, the early parts of the evaluation methodology should be done before the program or school year begins or during times when decision-makers have few other commitments.
2. In general, as few decision-maker resources as possible should be consumed.
3. A complete cycle-through of the parts of the evaluation, from "The Goals Process," to "The Evaluation of the Evaluation" using the shortest

- forms of each part, and reporting data within two to four weeks, is advised. Then, the decision-maker can be offered a variety of ways of expanding both the parts of the methodology, and his/her/their commitment of resources to the evaluation. A possible exception to this might be when this methodology is intended to provide data for planning decisions as well as evaluation data. Then resources should be used to a greater extent on the initial parts of the methodology, which provide useful data for planning.
4. With limited resources (under \$5,000 for the evaluator), limit the number of decision-makers for whom data are to be provided. For example, two or three Case I decision-makers, one Case I plus one Case II decision-maker, or one Case III decision-maker would be reasonable.
 5. Find or develop and use a bank of operational dimensions of goals in a short form of the Operationalization process. Have the decision-maker look at the operational dimensions of a goal in the bank which is similar or identical to the one (s)he is operationalizing, and have him/her select the dimensions which (s)he holds as part of his/her/goal.
 6. Consider undertaking evaluation efforts using both

this methodology and other processes which have other but similar purposes, for example collecting data about the school for a school description, helping teachers to evaluate their teaching, helping students to evaluate their work, etc. so that members of the school community who are not identified as decision-makers, or who do not want to contribute many resources as decision-makers, may still receive the benefit of the evaluator's presence.

REFERENCES

- Benedict, L. G., and Hutchinson, T. E. The Operationalization of Fuzzy Concepts. University of Massachusetts. Photoduplicated, 1970.
- Benedict, L. G., and McKay, K. Program Evaluation of the Mark's Meadow Early Childhood Program: Final Report for the Year 1970-71. Prepared and submitted to the Bureau of Curriculum Innovation, Massachusetts State Department of Education, Boston, June 1971.
- Benedict, L. G. The Goals Process in Educational Evaluation Methodology, A paper presented at the Graduate Colloquium, School of Education, University of Massachusetts. Photoduplicated, 11 April 1972.
- Benedict, L. G. The Goals Gap in Educational Evaluation: Identification and Development of Methodology. Unpublished doctoral dissertation, School of Education, University of Massachusetts, April, 1973.
- Benedict, ed. The Fortune/Hutchinson Evaluation Methodology, Version I, Draft I. Compiled by Larry G. Benedict, School of Education, Center for Educational Research, University of Massachusetts, September 1973.
- Benedict, L. G. A Practical Guide for Evaluation. Capitol Region Education Council, Windsor, Connecticut. 1974.
- Cronbach, Lee J. "Course Improvement Through Evaluation." Chapter two in Taylor, Peter A. and Cowley, Doris M. Readings in Curriculum Evaluation. Wm C. Brown Co. Dubuque, Iowa, 1972. Pps. 11-19. Originally published in 1963.
- Cronbach, Lee J. and Suppes, Patrick (eds.) Research for Tomorrow's Schools. Report of the Committee on Educational Research of the National Academy of Education. Macmillan Co. 1969. Pps. 174, 183-184.
- Gordon, G. M., Empirical Testing of an Evaluation Methodology: The Negotiation of the Contract. A paper presented at the Graduate Colloquium, School of Education, University of Massachusetts, Photoduplicated. April 11, 1972.
- Gordon, G. M., A Field Test of the Fortune/Hutchinson Evaluation Methodology as it Could Be Employed in

- the Evaluation of National Urban League Street Academies. Unpublished doctoral dissertation. School of Education, University of Massachusetts. December, 1972.
- Hurst, John. An Alternative School Evaluation Project. Unpublished proposal. Photoduplicated. 1970.
- Hutchinson, T. E., class lecture notes. 1971.
- Hutchinson, T. E., Some Overlooked Implications of the Purpose: To Provide Data for Decision-making. A paper delivered at the 1972 annual meeting of the American Educational Research Association, Chicago. Photoduplicated. April 5, 1972.
- Hutchinson, T. E., "Metamethodology" was first developed by Hutchinson in 1971. The most recent draft was developed by Hutchinson and Thomann in 1973. Photoduplicated.
- Jones, L. The Operationalization of Educational Objectives for the Evaluation of an On-going Program. Unpublished doctoral dissertation, University of Massachusetts, 1971.
- Nathan, Joe. "Ongoing Learning & Evaluation," in Changes Magazine, No. 22. December-January, 1972-73. Pps. 18-23.
- Rosen, D. J., "New Evaluation for New Schools," in Changing Schools, An Occasional Newsletter on Alternative Public Schools. Special Issue, Evaluation for Alternative Schools. Published by the Educational Alternatives Project, Indiana University. Bloomington, Indiana. May, 1973.
- Rosen, D. J., Pre-Redesign Procedures, Draft II. Photoduplicated. 1974.
- Scriven, Michael. "The Methodology of Evaluation" in Tyler, R. W., (ed.) Perspectives of Curriculum Evaluation, A.E.R.A. Curriculum Evaluation Monograph Series #1. Chicago: Rand McNally, 1967. p. 49.
- Steele, Sara M., Contemporary Approaches to Program Evaluation: Implications for Evaluating Programs for Disadvantaged Adults. ERIC Clearinghouse on Adult Education. Education Resources Division, Capitol Publications, Inc. Washington, D.C. May, 1973.

- Stufflebeam, Daniel L. Evaluation as Enlightenment for Decision-Making. In Beatty, W. (ed.) Improving Educational Assessment. A.S.C.D. Yearbook, 1969. Washington, D. C. p. 53.
- Stufflebeam, Daniel L., Foley, W. J., Gephart, W. J., Guba, E. G., Hammond, R. I., Merriman, H.O., & Provus, M. M. Educational Evaluation and Decision Making. Ithaca, Ill. F. E. Peacock Publishers, 1971.
- Thomann, James B. Metamethodology: The First Field Test. Unpublished doctoral dissertation. School of Education, University of Massachusetts, 1973.
- Tyler, R. W. The Functions of Measurement in Improving Instruction. In Lindquist, E. F. (ed.) Educational Measurement. Washington, D. C. American Council on Education. 1956. p. 48.
- Worthen, Blaine R. Impediments to the Practice of Educational Evaluation. A paper presented at the annual meeting of the American Educational Research Association, Chicago, April 1972. p. 3.

A P P E N D I X A

S H A N T I S C H O O L
I N F O R M A T I O N B R O C H U R E

SHANTI SCHOOL
AT THE RAILROAD STATION
480 ASYLUM STREET
HARTFORD, CONNECTICUT 06103

shanti

Gene Mulcahy, A.B., M.A.T., M.Ed., Ed.D.
Director
Instructor, Public Speech, Philosophy, Literature

Linda Woodard, B.A., M.Ed.
Assistant Director
Chair, Third World Studies
Communications Task Force
Home group leader

Nick Duke, B.A., M.Ed.
Chair, World Out There
Curriculum and Resources Task Force
Home group leader

Gregg Sinner, B.S., Ph.D., M.Ed.
Chair, Physical World
Evaluation Task Force
Home group leader

J Sinner, B.A.
Executive Assistant
Arts Task Force
Home group leader

Geoff Thale
Chair, Communicating Self
Internal Environment Task Force
Home group leader

Eileen Toomey, B.A.
Secretary
Instructor, Business Skills

SHANTI SCHOOL 1973-1974 INTERN AND CONSULTING STAFF

Nancy Aronie, B.A.
Faculty, University of Hartford
Home group leader

Justus S. Beach, B.S., M.Ed., Ed.D.
Faculty, Central Connecticut State College
Home group leader

David Dedrick, B.S.
Staff, Central Connecticut State College
Home group leader

Jack Heitner, B.A., M.A., Ph.D.
Faculty, Central Connecticut State College
Home group leader

Chet Sygiel, B.A.
Instructor, Mathematics

INTRODUCTION

awareness is a path towards understanding,
and to understand is to know shanti

This brochure will familiarize you with Greater Hartford's regional alternate high school, Shanti School. It is by no means complete, nor does it answer all questions about the school: its purpose is to introduce the program.

The name Shanti was decided upon in a community meeting in July, 1971 while the school's students and staff were together at a ten-day summer planning session. There were group discussions on several suggestions for a name. Suggestions were then voiced in a community gathering and the group finally decided upon Shanti, which is Hindu for "the peace that surpasseth all understanding."

The enclosed schedule for the school year is determined by the Administration and Budget Task Force and revised annually. The schedule includes Saturdays and some holidays. The schedule is divided into four seven-week cycles. Courses are not necessarily restricted to a seven-week cycle. January is Project Month: students are expected to design month-long projects. No regular classes are held during that month.

Students devise their own curricula subject to state requirements and their own interests and goals. For example, students planning on higher education or advanced technical training will design their programs accordingly. Curriculum areas are designated according to broad interdisciplinary personal goals. Programs are planned and evaluated through weekly staff-led home group sessions.

Our system of credits and points for courses is as follows: each traditional high school credit is divided into sixteen points (16 points=1 credit). Required credits and points are listed for each area (Communicating Self; World Out There; Physical World; Me the Creator and Craftsperson; Body Wonderful, Soul Complete). Some experiences may be worth one or two points, some a full sixteen points. The curriculum offers a number of approaches to learning basic skills, mastering subject content, and developing positive personal characteristics. We use the resources of the staff, of businesses, cultural institutions and community organizations to provide learning experiences.

HISTORY OF SHANTI SCHOOL

In 1969 the Hartford Board of Education expressed interest in the development of an alternate high school program for the city. A year earlier the Philadelphia, Pennsylvania Board of Education established the now famed Parkway Program which offered community-based secondary instruction to students of that school district.

In the summer of 1970 a group of parents and citizens in Hartford began forming the plans for the present Capitol Region alternate high school. John Bremer, director of the Philadelphia program, came to Hartford at the invitation of Trinity College to address educators, business leaders and interested citizens. So great was the community response in the city that the parent/citizen group requested that the Capitol Region Education Council adopt the proposed program in order to involve many school districts in the Greater Hartford region. The parent/citizen group believed that traditional education was not meeting the needs of many of its students.

In May of 1971 the Hartford Board of Education committed \$30,000 to the project to support thirty Hartford students. Other boards soon followed the commitment, securing twenty more positions in the school.

The design for the present program emerged after extensive consultation with parents, students, educators, boards of education, administrators, and the teachers and students of existing successful programs. Area colleges and universities, as well as region businesses and industries, have been especially helpful. The program has received local Chamber of Commerce endorsement. Shanti has offered assistance to programs beginning in Bridgeport, Cleveland, and other cities interested in regional alternative schools.

PHILOSOPHY AND OBJECTIVES

Shanti is a dynamic learning community. We equate humanness with individuality in community, with considering carefully all options, then deciding and standing courageously and firmly by what we know we believe. We believe it is courageous to challenge and rechallenge our assumptions, to admit and welcome growth and change, even when we must correct our error. To choose is to be free.

Shanti exists to provide for young people a framework within which they can engage in the process of self-definition, a process essentially dependent on the free decisions of each individual. Such a framework obliges students to call upon their own resources: whatever means they choose to utilize this open learning environment

SHANTI SCHOOL INFORMATION BROCHURE - Page 3

will be unique manifestations of their individual selves.

At Shanti we seek to learn the hard skills of survival for further learning and future effort. We learn them through choice, through following our own inclinations and enthusiasms to their natural ends or, if faltering, to change direction and change again if need be. We accept fully and personally the responsibility for our choices and our freedom.

The most obvious context in which we are engaged in this process of making choices is the curriculum. The Shanti curriculum is built of opportunities to learn: it is a vehicle for us to increase knowledge through commitment and action, to convert possibility into reality, to convert the people we wanted to be into the people we are. It allows students to pursue academic, vocational and intellectual efforts for their own sakes. This curriculum is developed, on the one hand, in response to identifiable student needs and interests or in anticipation of needs and interests based on prior experience. On the other hand, many curricular offerings arise out of staff interests, concerns and abilities.

We use the full resources of the Greater Hartford community as our learning tools because learning is everywhere, everything. In turn, we are committed to serve that community whenever and wherever we can. The community provides us with the substance of our learning; the energy and direction of that learning are our own.

We are a community. We recognize the right of the individual to establish his or her own place in that community. We are self-governed. We are composed of students and staff from different races and cultures. Staff and students are equal members. By virtue of greater experience, staff assumes some special community responsibilities. This frequently applies to areas of safety and survival. The staff should make clear to students options, opportunities, information: choice is the student's own.

We seek through model and action to change the world in which we live and the schools that support that world, for no person can be free when another is oppressed. The path to freedom for our sisters, our brothers and ourselves is through our own self-disciplined growth and sharing in the commitment to struggle toward a world of greater freedom, knowledge and love.

The Shanti School community believes that it is important to

- convert knowledge to commitment and action, and increase knowledge through commitment and action;
- relate and connect studies and actions with the realities of living, with emphasis on urban exploration;
- acquire skills in cooperation, problem solving and long-range planning;
- take advantage of opportunities for multicultural, multi-racial experiences;

- acquire the basic academic skills which are essential for taking control of one's own life, preparing for jobs and for further education;
- meet the unique needs of individual students;
- operate a viable alternative model to traditional high schools;
- educate the community regarding alternative educational techniques;
- involve parents in the educative process, both as teachers and as learners;
- provide students with the opportunity to engage in real self-government;
- engage in continuing self-evaluation; and
- actively and aggressively seek to fundamentally restructure public education. To the extent that the education system reflects society's values, we recognize and affirm that we are also committed to the fundamental restructuring of our society.

Thus, we have structured our school so as to provide members of our community with opportunities to do these things.

THE METHODS OF EVALUATION

Education suffers from its lack of evaluation, of subscription to the Socratic imperative of self-searching, self-knowledge. It is given to humans to become emotionally and earnestly consumed by projects of their design and implementation. Upon analysis and reflection, however, they may find their efforts of small value. Two dimensions of evaluation emerge, internal and external.

Internal evaluation of students: Students evaluate and are evaluated at the conclusion of each course through a form jointly completed by teacher and student. This form considers the goals which teacher and student initially put forth, their realistic application, and the student's achievement of them. These should be searching, detailed reports of strength and weakness.

Internal evaluation of courses and teachers: The same principles shall apply as in evaluation of students above.

Internal evaluation of the school: Students meet weekly in home groups which are led by a staff member or qualified consultant. These groups deal with such problems as attendance, behavior, adjustment, and overall evaluation of day-to-day and long term experiences. The home group evaluates itself and its members at the end of each cycle. Each home group appoints one member to the school-wide Evaluation Task Force.

External evaluation: A major evaluation of the program is under way by an external consultant. Funds have been made available for

this purpose. The design of the evaluation may vary, but its intent will be a careful periodic analysis of program strength and need for development.

COOPERATING SCHOOL DISTRICTS

The area of service, broadly defined, shall be central Connecticut. Because of our commitment to regional action and the resources of the core city, Hartford, the program will be located in Hartford but may draw its students from outlying areas. Fifty percent of the student body must be from the city of Hartford itself.

The towns which are participating, and the number of students from each, are as follows: Bloomfield, 3; Cheshire, 1; East Windsor, 4; Glastonbury, 4; Hartford, 48; Manchester, 2; Plainville, 1; Rocky Hill, 4; Simsbury, 5; Suffield, 1; Wethersfield, 2. Additionally, there are 13 non-publicly supported students.

THE SELECTION OF STUDENTS

Because Shanti School seeks a diverse student population, selection for the program is by lottery of those students who, with parental consent, apply. Each board of education makes annual budgetary commitments to the program. Thereafter a lottery is held to fill the positions offered in the contributing district. Students already enrolled have automatic preference for positions offered by their local boards.

SOURCES OF INCOME/BUDGET

Funding for the project will be from local boards of education participating in the program at the cost of \$1,000 per student per annum (197301974). This represents the total stable operating budget. Additional funding is available through local business, state and federal sources. This funding, however, is seen as supplementary and will be used for special projects only.

QUALIFICATION AND SELECTION OF STAFF

Staff members must possess a wide variety of skills. They are experienced teachers, well grounded in two or more subject areas. They have experience dealing with business, with the community. They should be student-centered, warm and energetic. They should possess group dynamic skills. The program calls for hours of extra

SHANTI SCHOOL INFORMATION BROCHURE - Page 6

work and devotion.

Selection of staff is by consensus of the following groups: students, parents, Shanti School Board, administrators and existing staff. Available positions will be nationally advertised. Applicants will be pre-screened by a committee representing the above groups, and finalists will be interviewed by all of the above groups. Final decision will be by consensus. The director shall then recommend candidates to the Shanti School Board and to the board of the Capitol Region Education Council.

PARTICIPATION IN PLANNING, POLICYMAKING AND SERVICE

The corporate body ultimately responsible for the school is the board of the Capitol Region Education Council. The role of C.R.E.C. is that of fiscal and personnel policymaker. Broad policymaking power lies in the hands of the Shanti School Board. This group is comprised of one appointed representative from each participating board of education, the executive director of C.R.E.C., six students, six parents, and six members of the community selected by the above.

The students and staff of the school, meeting together, determine directions of curriculum and day-to-day operation. The director is the responsible officer. Decisions within the Shanti community are made by task forces of students and staff. The task forces are Administration and Budget, Arts, Communications, Curriculum and Resources, Evaluation, and Internal Environment. Final policy within the school rests with the full community meeting which is held monthly.

C O U R S E S A N D L E A R N I N G E X P E R I E N C E S

The following courses and learning experiences have been offered at Shanti for one or more cycles during the 1971-1972 and 1972-1973 academic years.

COMMUNICATING SELF

American Literature	Greek Literature	Reading Skills
Black Drama	Hesse Novels	Science Fiction
Black Literature	Journalism Internship	Short Stories
Communicate in the Arts	Latin	Spanish 1, 2, 3
Contract Reading	Literature	Spanish Conversation
Creative English	Modern American	Spanish Internship
Creative Writing	Literature	Speed Reading
Workshop	Modern Poets	Television Production
Dance Studies	Mysticism in Literature	The Adolescent in
Drama	Mythology	Literature
Existentialism and	New Perspectives in	Tragedy in Literature
Literature	American Literature	Vonnegut Novels
Fantasy Literature	Nietzsche	Whitman, Thoreau and
French	Poetry	Emerson
German	Public Self	Women in Literature
Grammar	Radio Broadcasting	Writing a Term Paper

WORLD OUT THERE

Adolescent Development	History of China	Prison Reform
and Psychology	History of Ireland	Psychology
American History	History of Railroading	Radical Alternatives
American Imperialism	Home Group	to Society
American Indian Anthro-	Introduction to	Readings in Latin
pology Workshop	Sociology	American History
Art and Its Relation-	Labor History	Revolutionary Thought
ship to Man	Latin America: Third	and Process
Art History	World Issues	Sex Seminar
Black Experience	Law with A.C.L.U.	Social Problems
Black History	Legislative Internship	Social Psychology
Black Women	Marijuana and the	Technology and Society
Childcare	Fourth Amendment	Theater History
Child Psychology	Meditation and Role	Transportation History
Cities	Theory	Urban Geography
City Politics	Me, the Long Range	Urban Housing
Comparing Religions	Planner	U.S. Social History
Dangerous Visions	New Perspectives in	Women
Demography	American History	Women in American
Economic Survey	19th Century Europe	History
French Revolution	Occult Studies	Women's Liberation
History of Africa	Philosophy for the New	World Geography
History of Anarchism	Generation	World War II
in America	Political Campaigning	

COURSES AND LEARNING EXPERIENCES - ContinuedPHYSICAL WORLD

Algebra 1, 2	Operation	Life Science
Astronomy	Consumer and Basic Math	Marine Biology
Biology	Ecology Handbook	Medical Awareness
Biology Laboratory	Engineering Laboratory	Micro-Genetics
Botany	Fermentation Chemistry	Nutrition
Business Math	Field Trip to Vermont	Physics
Calculus	Environmental Center	Physiology
Chemistry	Geometry	Probability and
Chemistry Laboratory	Introduction to Field	Statistics
Chess	Ecology	Survival Math
Computer Theory and	Human Sexuality	Zoology

ME, THE CREATOR AND CRAFTSPERSON

Anatomical Drawing	Film Making	Old Tyme Bluegrass
Art Exploration	Flute	and Country Music
Art History	International Cooking	Appreciation
Auto Mechanics	Jewelry Making	Painting
Believing in Bluegrass	Leathercraft	Photography
Candle Making	Lunch Program	Pottery
Creative Theater Group	Macrame	Piano
Crocheting	Macrobiotic Cooking	Sewing
Culinary Arts	Model Building	Silkscreen
Dance	Modeling	Sketching
Drafting	Multimedia Circus	Stenography
Drama	Murals	Streetcar Restoration
Fashion Design and	Music	Theater Improvisations
Construction	Music Appreciation	Typing
Film and Writing	Music Theory	Wine Making

BODY WONDERFUL, SOUL COMPLETE

African Dance	Jogging	Short Walks in
Backpacking	Judo	Connecticut
Basketball	Modern Dance	Skiing
Bicycling	Mountain Climbing	Street Sports
Bowling	Personal Massage	Swimming
Camping	Pinball	Tennis
Handball/Paddleball	Sailing	Tumbling/Gymnastics
Hiking		Yoga

A P P E N D I X B

Metamethodology
Draft VII

October, 1973

I. Put methodologist in contact with problem using one of two methods:

- A. Simple method -- use interests of the methodologist
- B. Complex method -- use Coffing Client-Demand Methodology

[N.B. If at any time you find yourself reading any of the steps below and nothing is happening, try the following four steps:

- 1) Identify all the roles necessary in this use of Meta-methodology.
- 2) Define these roles.
- 3) Determine the sequence in which the roles should be taken on by the user.
- 4) Do each of these roles in the sequence determined above.]

II. State the purpose by analyzing the area and determining a purpose that will solve the problem.

A. Investigate the problem area.

- 1. Read the literature in the area.
- 2. Talk to people who work in the area.
- 3. Examine work being done in the area.
- 4. Brainstorm about the problem area.
- 5. Try out tools that already exist in problem area.

B. Narrow down area into manageable piece (focus).

- C. Investigate purposes within the chosen piece of the problem area.
1. Brainstorm purposes that will solve the chosen problem.
 2. Read the literature applicable to the chosen problem.
 3. Ask others for purposes they think will solve the chosen problem.
- D. If more than one purpose has resulted from the previous step, then choose the most appropriate one.
- E. Check chosen purpose against following two criteria:
1. Check purpose to see that it is not trivial.
 2. Check purpose to see if it really solves the problem you have in mind.
 3. If purpose fails to meet one of the above criteria, revise it until it meets them both.
- F. If resources warrant, show purpose to others for their critique based on the above two criteria.
- G. Write out purpose and commit yourself to it. (If you can say why you don't like it, then revise and recycle to E. If you can't say why you don't like it, then go on to Step III.)

III. Test the purpose by the following criteria:

A. Is purpose desirable?

1. Use one of the following methods -- where not obvious use Complex Method.

a) Simple Method

- i) Answer question yourself with rationale
- ii) Get diverse groups to answer question
- iii) Check notes from previous literature review and check any other literature on the area to see if purpose is desirable.

- b) Complex Method -- use Coffing Client-Demand Methodology
2. Revise the purpose if necessary.
- B. Is purpose operationalizable?
 1. Use "Operationalization of Fuzzy Concepts"

[N.B. It is not necessary to do a complete operationalization at this point. It is only necessary to find if the purpose can be operationalized.]
 2. Check A in light of operationalization and revise if necessary.
- C. Is purpose practicable?
 1. Answer question yourself in terms of
 - a) Is the development of a methodology practical given this purpose?
 - b) Is the methodology once developed a practical way to accomplish the purpose?
 2. Get diverse groups to answer question.
 - a) Methodologists answer question of C.1.a)
 - b) Methodologists and potential users answer question of C.1.b)
 3. Revise the purpose if necessary and recycle through A and B; otherwise go to D.
- D. Are existing methodologies insufficient?
 1. Test in following way:
 - a) Search area for existing methodologies.
 - b) Take found methodologies and test them against definition of methodology. If they all fail go to Step IV.
 - c) Are they designed to accomplish your purpose? If not go to Step IV.

- d) Does any one of them accomplish your purpose?
If not go to Step IV.
- e) Are these practical? (See if they are used.)
If not go to Step IV.
- f) Are they desirable? If all are not, go to Step IV.
- g) Is any one complete? (You may work on it if it is not.)

2. Revise the purpose and recycle through tests if necessary.

IV. Once all answers to III are yes, then analyze implications of the purpose for the development of methodology. (This is a way of identifying the attributes that the methodology must have.)

A. Use following method to analyze implications. (Hutchinson says "Problem implies its own solutions." In this case, the implications of the purpose supply first approximation of gross methodological elements.)

- 1. a) Imagine and write down in what ways you could fail to accomplish the purpose.
- b) Imagine and write down in what ways you can accomplish the purpose, avoiding all the problems.
- c) Imagine the purpose being accomplished; write down what is happening.
- d) i) For each element determined through b + c, determine all possible alternatives to accomplish the purpose.
- ii) Create one list from all the lists generated in the previous step. For those dimensions generated in a., change their statements so that they state a procedure or procedures to solve the problem they originally identified.
- iii) Test the completeness of the above list by using one or more of the following methods to generate alternative lists of dimensions. Then examine these new lists. For each dimension not on the list produced in d.ii) above that you want on that list, add it to

the list. Add any other dimensions to the list that you think of while doing this process which are not already on the list and which you want on the list.

- 1) Ask others to do steps a - c.
 - 2) Think up alternatives which have nothing to do with this purpose and consider whether they do or not.
 - 3) Go back to list generated in b and c, and consider again whether any of those should be on list and add any new ones.
 - 4) Ask yourself if your alternatives have any alternatives to them.
 - 5) Ask what bad alternatives exist that are not on this list and how they could be changed to good alternatives.
 - 6) Use the possible methodologies generated in Step III.D.
 - 7) Use any other tests of your own choosing.
2. Choose the initial set of major processes for the methodology.
- a) Look over the list of dimensions and choose those which you feel will accomplish the purpose.
 - b) Combine together any dimensions that appear to go together.
 - c) Write out a new list with any combined dimensions listed together.
- B. Organize the attributes into a rational order of steps.
1. Determine which implications are not necessary for the methodology (accomplishing purpose) and strike them from list.
 2. Determine which implications are contained in others and note that. Determine which implications can be combined to make one step, and give those a name.

- a) Combine any dimensions on the list which are related and define a single process when combined but are not logical substeps of each other.
 - b) Create a major step naming this process and list the combined dimensions as substeps of this.
3. Ask which implication you would have to accomplish first in order to accomplish the rest.
 4. Write it out as first step.
 5. Ask which implication would now be first, given that the first one is accomplished.
 6. Write it down as second step.
 7. Do this process until all major implications are accounted for.
 8. Order any substeps by cycling through 3 - 7.
 9. Check to see if order has logical flow to it.
 10. Check to make sure all implications are stated procedurally.
 11. Write out a revised list.
 12. Check completion of ordering by asking others (at least one) to give an ordering of implications with explanation of why, if possible, without showing them your ordering. This can be verbal or written, depending on the resources available.
 13. Do a revised ordering based on responses from 12.
 14. Give revised ordered list to others experienced in problem area for critique.
 - a) Write out purpose of methodology.
 - b) Write out following statement:

Please critique the list of steps designed to accomplish the above purpose and point out those steps that you do not understand, steps you feel should be left out, and any steps, concepts and/or ideas that you feel should be added.

- c) Present a copy of the above two statements along with a copy of the steps to each of the individuals who will critique these steps.

15. Do a final ordering and write it out.

- C. Add in any steps or functions that are implied by the existing steps at the same level of abstraction.
- D. Identify anchoring steps for methodology.
 - (1. Putting methodologist in contact with problem.
 - 2. Testing whether methodology has worked (then recycle).)
- E. Write out final list to be used throughout rest of methodology.

V. Operationalize the purpose.

- A. The straight analysis technique
 - 1. Identify the fuzzy concepts in the purpose.
 - 2. Directly operationalize each fuzzy concept.
 - 3. Directly operationalize the interaction among fuzzy concepts.
 - 4. Test the criteria for completeness in a manner of your choosing and revise them if necessary.
- B. Review the final set of components. If you are unsatisfied go to C; otherwise commit yourself to the set of components and go to Step VI.
- C. Revise the components. If you are still unsatisfied go to D; otherwise commit yourself to the revised set of components and go to Step VI.
- D. Use Hutchinson's "Operationalization of Fuzzy Concepts."

VI. Design Procedures

- [N.B. Design or redesign can be done at any level of breakdown, including the highest.)

- A. Identify the first (next) step to be designed (i.e., the first crucial step where it is not clear that the step would be easy to develop).
1. Examine each step of the initial draft of the methodology for gaps.
 2. When a gap is found, determine if it is crucial. Use the operationalization of the purpose as criteria to determine if the gap is crucial.
 3. If the gap is not crucial, go back to 1. and continue to examine; otherwise go to 4.
 4. Determine if gap is hard to develop.
 - a) Answer this question: When I read this step does it convey to me what must be done to accomplish it?
 - b) If the answer is no, go to B; otherwise go to 5.
 5. Cycle back to 1. If no gaps were found that fit both criteria then identify "crucial" gaps and develop those. If no "crucial" gaps were found then develop any gaps.
- B. Identify the step's subpurpose.
- C. Analyze implications of subpurpose in terms of main purpose.
- a. Use the following method to analyze implications of the subpurpose:
 1. a) Imagine and write down in what ways you could fail to accomplish the purpose.
 - b) Imagine and write down in what ways you can accomplish the purpose, avoiding all the problems.
 - c) Imagine the purpose being accomplished; write down what is happening.
 - d) 1) For each element determined through b + c, determine all possible alternatives to accomplish the purpose.

- ii) Create one list from all the lists generated in the previous step. For those dimensions generated in a., change their statements so that they state a procedure or procedures to solve the problems they originally identified.
 - iii) Test the completeness of the above list by using one or more of the following methods to generate alternative lists of dimensions. Then examine these new lists. For each dimension not on the list produced in d.ii) above that you want on that list, add it to the list. Add any other dimensions to the list that you think of while doing this process which are not already on the list and which you want on the list.
 - 1) Ask others to do steps a - c.
 - 2) Think up alternatives which have nothing to do with this purpose and consider whether they do or not.
 - 3) Go back to list generated in b and c, and consider again whether any of those should be on list and add any new ones.
 - 4) Ask yourself if your alternatives have any alternatives to them.
 - 5) Ask what bad alternatives exist that are not on this list and how they could be changed to good alternatives.
 - 6) Use the possible methodologies generated in Step III.D.
 - 7) Use any other tests of your own choosing.
2. Choose the initial set of major processes for the methodology.
- a) Look over the list of dimensions and choose those you feel will accomplish the purpose.
 - b) Combine together any dimensions that appear to go together.

c) Write out a new list with any combined dimensions listed together.

b. Organize the attributes into a rational order of steps.

1. Determine which implications are not necessary for the methodology (accomplishing purpose) and strike them from list.
2. Determine which implications are contained in others and note that. Determine which implications can be combined to make one step, and give those a name.
 - a) Combine any dimensions on the list which are related and define a single process when combined but are not logical substeps of each other.
 - b) Create a major step naming this process and list the combined dimensions as substeps of this.
3. Ask which implication you would have to accomplish first in order to accomplish the rest.
4. Write it out as first step.
5. Ask which implication would now be first, given the first one is accomplished.
6. Write it down as second step.
7. Do this process until all major implications are accounted for.
8. Order any substeps by cycling through 3 - 7.
9. Check to see if order has logical flow to it.
10. Check to make sure all implications are stated procedurally.
11. Check completion of ordering by asking others (at least one) to give an ordering of implications with explanation of why, if possible, without showing them your ordering. This can be verbal or written, depending on the resources available.
12. Do a revised ordering based on responses from 11.
13. Give revised ordered list to others experienced in problem area for critique.

- a) Write out purpose of step under development and methodology.
- b) Write out following statement:

Please critique the list of steps designed to accomplish the above purpose and point out those steps that you do not understand, steps you feel should be left out, and any steps, concepts and/or ideas that you feel should be added.

- c) Present a copy of the above two statements along with a copy of the processes of the step under development to each of the individuals who will critique these processes.

14. Do a final ordering and write it out.

- c. Add in any steps or functions that are implied by the existing steps at the same level of abstraction.
 - d. Identify the anchoring steps for the step under development at this time.
 - e. Write out final list to be used throughout rest of methodology.
- D. Determine the amount of completeness and test for it.
 - E. Examine the logic of the step under design in terms of subpurpose and main purpose.
 - F. Fill in the gaps that are found and then recycle to VI.E. If no gaps, go on to VI.G.
 - G. Examine the logic of entire methodology and its parts in terms of main purpose in light of the step under development.
 - H. Redesign step and/or methodology and recycle to VI.G. If no gaps, then go to VI.I.
 - I. Recycle to VI.A. until you feel that further applications of VI will not produce sufficient improvement to warrant spending of resources.
 - J. Before going to VII, write out a new draft of the methodology including all changes made to date as a result of VI.

[N.B. One may conduct a field test as well as running through VI by using the data obtained in the field test to help out in the development procedures.]

VII. Test and then revise the purpose and/or procedures if necessary.

A. Field test the methodology.

1. Determine what is to be field tested -- a part of the methodology or the entire methodology.
2. Determine the simplest field test not already done on the subject of the field test.
3. Write out the purpose (of the methodology or the part to be tested) and its operationalization.
4. Determine your goals for the field test. If this is not easy to do, use the Goals Process from the Fortune/Hutchinson Evaluation Methodology.
5. Develop the measures for the field test from the operationalization of the purpose and your goals. If this is not easy to do, use the Measuring Process from the Fortune/Hutchinson Evaluation Methodology.
6. Do the field test and carry through the observations.
7. Use the data to revise the methodology or the part by recycling to Step VI.

B. Conclusion-oriented research of methodology; if necessary, redesign (use Step VI).

A P P E N D I X C

EMPIRICAL TESTING OF AN EVALUATION METHODOLOGY -
THE NEGOTIATION OF THE CONTRACT

A Paper Presented at the Graduate Colloquium
University of Massachusetts
School of Education

April 11, 1972

Presented by

Gene M. Gordon - Doctoral Candidate

Dr. Thomas Hutchinson - Chairman

There appears to be widespread concern about the state of extant evaluation procedures and many students of the subject have addressed themselves to the issue. One central problem has been the need for an evaluation methodology or a systematic, standardized, operationalized set of rules and procedures designed to accomplish a defined purpose.

Faculty and students from the Center for Educational Research have been studying the development of just such a methodology referred to as the Fortune/Hutchinson Methodology. The methodology holds that the purpose of evaluation is to provide information for decision-making and some thirteen steps have been devised to accomplish that purpose. The thirteen steps, in addition, have been or are to be further operationalized and analyzed so that interstitial steps can be isolated. Step 1, The identification of the Enterprise; Step 2, The identification of the resources and Step 3, Identification of decision-makers have been placed in a step-wise combination to form "The Negotiation of the Contract." The purpose of this paper is to report on the field test of the negotiation of the contract.

Problem

Since the first three steps have met the methodological criteria for logic, operationalizability, desirability and practicality they remain only to be field tested to determine what revisions, if any,

are necessary on the basis of the decision--whether they do what they have been designed to do.

Procedures

The study was conducted at the Hartford Street Academy program known as Project Matthew. As the information was gathered, with respect to the methodology, two major questions were raised. First, does the methodology perform the task it is designed to accomplish? And second, can the necessary time be obtained from the temporary decision-maker and others? In order to arrive at the answers, the following procedures were implemented and a log maintained:

The Negotiation of the Contract

Purpose: To develop the scope of work for the evaluation with the temporary decision-maker.

Step 1.0 Application of the evaluation methodology and determination of whether it satisfies the needs of the temporary decision-maker.

- 1.1 Identify the temporary decision-maker or the person who has control of evaluation resources for the enterprise.
- 1.2 Give the purpose of evaluation, "to provide information for decision-making."
- 1.3 Provide the temporary decision-maker with a broad outline of the methodology, especially the definition of terms.
- 1.4 Ask the temporary decision-maker if the purpose is acceptable. If no, go to 1.5; If yes, go to 1.7.

1.5 If the answer given by the temporary decision-maker is no, ask what concept of evaluation the temporary decision-maker has.

1.6 Determine if there is a real conflict and if the temporary decision-maker's concept cannot still fit into the broad definition of the evaluation purpose. If this is not possible, suggest to the temporary decision-maker that this evaluation methodology would not be suitable.

1.7 If the answer given by the temporary decision-maker is yes--proceed.

Step 2.0 Identification of the Enterprise

2.1 Ask the temporary decision-maker to state the purpose of the enterprise starting by naming it and thereby substituting the name for the word 'enterprise' hereinafter.

2.2 Ask the temporary decision-maker to provide a description of the enterprise in narrative and written form.

2.3 Ask the temporary decision-maker if the total enterprise or only parts of it are to be evaluated in order to determine the extent of the enterprise.

2.31 If parts of the enterprise are to be evaluated, as opposed to the whole, ask the temporary decision-maker to identify which parts. This will establish a new enterprise. Rename as necessary.

Step 3.0 Elimination of Misunderstanding (Test of Completeness)

3.1 Provide the temporary decision-maker with feedback on the information gathered thus far in completing Step 1 and 2, in order to insure that a mutual understanding is being maintained and to make revisions if necessary.

Step 4.0 Identification of Resources For the Evaluation

4.1 Ask the temporary decision-maker to list the resources available to the enterprise without making judgments

- concerning the reality of the choices. (Ask, what do you have or can get hold of by way of resources for your enterprise?)
- 4.2 Ask the temporary decision-maker to indicate which resources are available from the first list and for evaluation.
- 4.21 Advise the temporary decision-maker of the danger in committing so many resources that the ability of the enterprise to deliver its objectives is jeopardized.
- 4.3 Test of completeness of 4.2.
- 4.31 The temporary decision-maker identifies 'others' who prepare lists of resources.
- 4.32 The evaluator adds the lists prepared by 'others' to the list prepared by the temporary decision-maker, eliminating redundant or overlapping items.
- 4.33 The temporary decision-maker inspects the final list, makes revisions if necessary and indicates if the list is complete with respect to the best estimate.

Step 5.0 Identification of Decision-Makers

- 5.1 Ask the temporary decision-maker to provide a list of all decision-makers associated with the enterprise without making judgements concerning the reality of the choices.
- 5.2 Perform a test of completeness for 5.1.
- 5.21 Ask the temporary decision-maker to identify 'others' who can develop lists of decision-makers.
- 5.22 The temporary decision-maker inspects the total list and revises, eliminating those who do not desire to be included, whose decision-making is extremely remote or indirect or those for whom the temporary decision-maker does not want information gathered.

- 5.3 Advise the temporary decision-maker of the consequences of identifying a list of decision-makers too large to be reasonable in relation to the available resources.
- 5.31 Evaluator prepares final list of decision-makers and clears with temporary decision-maker.
- 5.4 Prioritize decision-makers with assistance of temporary decision-maker using some agreed upon criteria such as enterprise, degree of involvement, importance to the can make available to the evaluator and the like. Two separate criteria may be used to develop two lists from which a final list is drawn.
- 5.5 Perform a test of completeness for the prioritization of decision-makers.
- 5.51 Provide 'others' with the final prioritized list and ask them if it is acceptable.
- 5.52 Clear list with temporary decision-maker.
- 5.6 Provide a gross matching of decision-makers and resources to determine for how many information may be gathered.
- 5.61 Determine estimate of resources needed by each decision-maker starting with the decision-maker with the highest priority descending to the second highest and so on until all resources have been exhausted.
- 5.62 With the assistance of the temporary decision-maker determine if the matching process is realistic.

Step 6.0 Preparation of the Contract

- 6.1 Using the prepared outline "Letter of Agreement" (below) or other contract form, fill in the details gathered in Steps 1 through 5.
- 6.2 Provide the temporary decision-maker with a copy of the contract for a test of completeness and revision.
- 6.3 Secure the final approval and signature of the temporary decision-maker and present two copies of the contract.

Results

1. In the test of Step 1.1, the Temporary Decision-Maker was identified as the Director of Project Matthew, Ann Warren.
2. Step 2.1 identified the enterprise as the Hartford Urban League Street Academy (Project Matthew). Further, the purpose of that enterprise was given as "An academic program geared to help students get a Connecticut State Equivalency Diploma and to help build an improved self-image."
3. Step 2.2 gave the following description of the Enterprise, "An informal alternative school offering tutoring and classes in academic subjects using teachers, field-trips, special interests and the like."
4. In Step 2.3 the total day program of the Street Academy was identified as the part of the enterprise to be evaluated.
5. The resources were listed and prioritized according to Step 4 and those prioritized resources are as follows:
 1. Building
 2. Volunteer teachers - 4 hrs/wk for 5 weeks
 3. Projector
 4. Duplicator
 5. Desk and Chair
 6. Typewriter (after 4:30 and whenever free)
 7. Secretary (when free)
 8. Paper
 9. Pencils
 10. Files
6. The decision-makers were listed and prioritized according to Step 5 and those prioritized decision-makers are as follows:

1. Director of Project Matthew
2. Funding source (Department of Community Affairs)
3. Staff
4. Students

The evaluator then incorporated the results into the letter of agreement which follows.

LETTER OF AGREEMENT

This letter shall constitute agreement by GENE M. GORDON
 Evaluator
 and ANN WARREN to carry out the evaluation
 Temporary decision-maker
 of HARTFORD STREET ACADEMY PROGRAM utilizing the
 Enterprise
 Fortune/Hutchinson Evaluation Methodology.

The evaluation shall be conducted starting MARCH 13, 1972
 and ending APRIL 7, 1972.

For performance of the tasks outlined below GENE M. GORDON
 Evaluator
 will be paid a total of ----- over a period of
-----.

Under the terms and conditions of the Agreement, the following
 tasks must be performed:

A. Scope of Work

In accordance with the agreements reached during the
 Negotiation of the Contract phase of the methodology, the
 evaluator will-

1. Obtain the use of the following resources:
1. Building
2. Volunteer teachers - 4hrs/wk for 5 weeks
3. Projector
4. Duplicator
5. Desk and chair
6. Typewriter (after 4:30 and whenever free)
7. Secretary (when free)
8. Paper
9. Pencils
10. Files

2. Provide information for decision-making to the following decision-makers at such time as they request it.
 1. Director of Project Matthew
 2. Funding Source (Department of Community Affairs)
 3. Staff
 4. Students

3. Perform the tasks outlined in the Fortune/Hutchinson Evaluation Methodology.

B. Reporting Guidelines

Progress reports to be submitted weekly to the Temporary Decision-Maker with a final report to be presented by April 24, 1972.

C. General provisions, accounting and reporting procedures.

NONE

D. Special Conditions

Evaluation is conducted without recompense to evaluator from Project Matthew since evaluator is on 'loan' from and on payroll of the National Urban League.

This Agreement may be terminated by notice in writing by either party, with or without cause, at anytime; but, in such event the evaluator shall be entitled to compensation for all services performed under the terms of the Agreement up to the date of termination. In the event of any such termination the evaluator shall refund to HARTFORD STREET ACADEMY _____ any amount received by the evaluator Enterprise

representing services, costs or expenses to be rendered after such date of termination.

To signify your approval of the foregoing and acceptance of the terms and conditions of this contract, please sign and return the original of this document to the evaluator. A copy is enclosed for your files.

By _____
Temporary Decision-Maker

DATE _____

Evaluator _____

Date _____

Discussion

Project Matthew is an informal inner-city program subject to a host of problems characteristic of the inner-city. During the first day of the Negotiation Process, time was virtually unavailable. The project had been robbed of several items of equipment and the day was spent in discussions with staff, police and insurance adjusters. The purpose of the project was confused with the description and the temporary decision-maker was more inclined to provide written rather than verbal responses.

It was difficult to determine resources as the really tangible resource--money--was not available. The Negotiation of the Contract was accomplished in one week utilizing a total of sixteen hours, ten with the temporary decision-maker and six with the staff. This arrangement (a little at a time) proved to be an energizing exercise for enterprise personnel. The concept of the evaluation was difficult for the staff to grasp because they had not previously thought in that context. Consequently much of the time spent with the staff was on an explication of the methodology. Some impatience was exhibited primarily because the staff expected the evaluator to get money for them. The staff and the temporary decision-maker, though much less the latter, found the processes difficult and often requested overnight 'thought' to answer the questions.

Essentially the Negotiation of the Contract part of the methodology

did do what it was intended to do. ^{Time} ~~Time~~ was available although the evaluator was forced to 'beg' for it in the face of constant disruptions and both non-programmatic and programmatic crises.

Suggestions for Improvement

- 1) The evaluator might take a more active role in making suggestions on what resources might be available and who might be a decision-maker.
- 2) The temporary decision-maker should be taken away from the enterprise for perhaps a day so that the interruptions are eliminated and the process less tedious.
- 3) More work needs to be done to ensure that the purpose is in fact acceptable to all and not merely given lip service to.

ORIENTATION ELEMENT

- 0.0 Identification of the contractor.
- 0.1 The evaluator asks the contact person or holder of evaluation resources to identify the contractor, the person or group who will develop the scope of work for the evaluation. The evaluator says "Could you tell me who you would like to develop the scope of work for the evaluation with me. Consider a person or persons likely to be interested in doing this and who might have several hours to devote to this activity. You might like to include yourself."
- 0.2 If one person is identified as contractor, use Case I.
- 0.3 If more than one person is identified as contractor, use Case II.
- 0.4 If no one is identified as contractor, do not proceed further until a contractor has been identified.

Where the contractor is two or more people who act as a single decision-making body.

Purpose: To develop the scope of work for the evaluation

- Step 1.0 Explication of the evaluation methodology and determination of whether or not it satisfies the needs of the contractor.
- 1.1 Give the contractor the purpose of the evaluation, "to provide data (or information) for decision-making."
 - 1.2 Provide the contractor with a broad outline of the methodology.
 - 1.3 Provide the contractor with definitions of specialized terms used in the methodology.
 - 1.4 Discuss with the contractor the implications of the purpose.
 - 1.5 Ask the contractor if the purpose is acceptable. If no, go to 1.6; if yes, go to 1.8.
 - 1.6 If the answer given by any individual in the contractor group is no, then ask what concept of evaluation that person or those persons have.
 - 1.7 Determine if there is a real conflict and if the person's concept cannot still fit into the broad definition of the evaluation purpose. If this isn't possible, suggest that this evaluation methodology may not be suitable, and ask the contractor group to decide on its acceptability. If they decide it is not acceptable, do not proceed further. If they decide that it is acceptable, go to 1.8
 - 1.8 Ask the contractor group if they have any other purposes for doing the evaluation. If not, go to step 1.9. If yes, ask for the other purposes, and discuss with the contractor the likelihood of each of those purposes being achieved through using the F/H Evaluation Methodology. After this discussion, ask the contractor group if they think the methodology will meet these purposes well enough to warrant proceeding with the evaluation. If no, do not proceed further. If yes, proceed to 1.9.
 - 1.9 Set up a time schedule for negotiating the contract.
 - 1.9.1 Ask the contractor for a commitment of a minimum amount of time they would be willing to spend.
 - 1.9.2 Ask the contractor for an estimate of additional time beyond the minimum which could become

available if needed.

359

1.9.3 Ask the contractor for other resources: space, typing, and duplicating.

1.9.4 Allocate these resources to the remaining steps of the negotiation of the contract phase so that there is enough time to finish. Do this by dividing the minimum time available by 5. This is the amount of time to assign to each of the remaining five steps.

2.0 Identification of the enterprise.

2.1 Ask the contractor to provide a written and oral description of the enterprise. (Use these for the document test of completeness later.)

2.2 Ask the contractor if the total enterprise or only parts of it are to be evaluated, in order to determine the extent of the enterprise. (Substitute the enterprise's name for "enterprise.")

2.3 Ask the contractor if the enterprise to be evaluated is actually larger, if it includes for example (give examples which expand the contractor's concept of the enterprise.)

2.4 Ask the contractor if the enterprise to be evaluated is actually smaller, if it now includes more parts than they really want evaluated.

2.5 Add or subtract parts of the enterprise, as the contractor suggests changes. Changes may establish a new enterprise. Rename as necessary.

3.0 Elimination of misunderstanding (Test of Completeness.)

3.1 Provide the contractor with feedback on the information gathered thus far in completing steps 1 and 2, in order to insure that a mutual understanding is being maintained and to make revisions if necessary.

4.0 Identification of resources for the evaluation

4.1 Ask the contractor, "What do you have or what can you get hold of as resources for your enterprise?" Have the contractor list the resources without making judgments concerning the reality of the choices.

4.1.1 Encourage the contract group members to produce as many resources as possible, to build on each others' suggestions, to reach for the unusual, but not to comment critically on others' suggestions.

- 4.1.2 Assist them in determining resources if assistance is needed, by asking:
 - 4.1.2.1 "What can you get me if I have to do a lot of writing?"
 - 4.1.2.2 "What can you get me if I need to duplicate written materials?"
 - 4.1.2.3 "What can you provide as a place for me to work?"
 - 4.1.2.4 "What can you provide if I need a place to stay overnight?"
 - 4.1.2.5 "What can you provide in the way of audio-visual equipment for observation? Tape recorder ? Vtr? "
 - 4.1.2.6 "What can you provide in the way of observers to do observation?"
 - 4.1.2.7 "What can you provide if I need to do data analysis? Computer time? Analysts? "
 - 4.1.2.8 "What can you provide that might help me contact people associated with the enterprise?"
- 4.2 Ask the contractor to indicate which of the resources listed are actually available and could be used for evaluation.
 - 4.2.1 Advise the contractor of the dangers in committing so many resources that the ability of the enterprise to achieve its objectives is jeopardized.
- 4.3 Test of completeness using others' lists of resources
 - 4.3.1 The contractor identifies "others" who could prepare lists of resources, preferably people who might have a very different perspective from the contractor.
 - 4.3.2 The evaluator asks as many of the others as resources allow to list their resources for the enterprise.
 - 4.3.3 The evaluator combines these lists, eliminating redundancies, and offers them to the contractor to consider as possible additions to the list of resources from 4.2.
- 4.4 Test of completeness using evaluator's list of resources.
 - 4.4.1 The evaluator prepares a list of resources he feels will be necessary or useful.
 - 4.4.2 The evaluator offers this list to the contractor to consider for possible additions to the list.

- 4.5 Test of completeness using a resource list from a previous evaluation
 - 4.5.1 The evaluator secures a list of resources generated during the evaluation of another but similar enterprise.
 - 4.5.2 The evaluator offers this list to the contractor to consider for possible additions to the list.
- 4.6 The contractor inspects the final list, makes revisions if necessary, and indicates if the list is complete with respect to the best estimate.
- 4.7 Committing resources
 - 4.7.1 For each resource on the list, ask the contractor to make a minimum commitment of resources.
- 5.0 Identification of decision-makers
 - 5.1 Ask the contractor to provide a list of all decision-makers associated with the enterprise, without making judgments concerning the reality of the choices.
 - 5.2 "Others" test of completeness
 - 5.2.1 Ask the contractor to identify "others" who can develop lists of possible decision-makers. These should be people who are likely to have a very different perspective from that of the contractor, and yet whose perspective would be valued.
 - 5.2.2 Get from as many as possible of the "others" lists of possible decision-makers.
 - 5.2.3 Combine these lists, eliminating redundancies.
 - 5.2.4 Have the contractor inspect the list from 5.2.3 and consider whether or not they want to add any decision-makers to their list.
 - 5.2.5 Have the contractor inspect the list and revise it if necessary, eliminating those whose decision-making is extremely remote or indirect, or those for whom the group does not want information gathered.
 - 5.3 Advise the contractor of the consequences of identifying a list of decision-makers too large for the available resources.
 - 5.3.1 The evaluator prepares a final list of possible decision-makers.
 - 5.3.2 The evaluator gives this list to the contractor and asks them to approve it.

- 5.4 Prioritize decision-makers with assistance of the contractor using some agreed upon criteria such as: when they need the information, the importance of their decisions to the enterprise, their degree of involvement in the enterprise, the amount of time they can make available to the evaluator, the risk to the enterprise if they don't get data, their need for data, etc.
- 5.5 Perform a test of completeness on the acceptability of the order of decision-makers.
 - 5.5.1 Ask the contractor to identify "others" with a different perspective who might judge the acceptability of their order of decision-makers.
 - 5.5.2 Provide the "others" with a final prioritized list and ask them if it is acceptable. If it is, record that. If not, record that and ask for additions, deletions, or re-ordering, so that the list will be acceptable.
 - 5.5.3 Show the results of the test of completeness to the contractor and have them make any revisions they feel necessary.
 - 5.5.4 Ask the contractor for final approval of the list of decision-makers. If it is approved, go to 5.6. If it is not approved, make the changes they desire to make, or re-cycle to 5.0.
- 5.6 Gross matching of decision-makers and resources to determine what percentage of evaluator time for decision-makers will be allotted to each decision-maker.
 - 5.6.1 Take the prioritized list of decision-makers and assign each a number, beginning with the lowest = 1, the next lowest = 2, etc.
 - 5.6.2 For each Case I decision-maker, add a "0" weighting.
 - 5.6.3 For each Case II A decision-maker add a "1" weighting.
 - 5.6.4 For each Case II B decision-maker add a "2" weighting.
 - 5.6.5 For each Case III decision-maker add a "5" weighting.
 - 5.6.6 For each decision-maker, add the number assigned and the weighting. This results in the numerator of the fraction of resources for that decision-maker.
 - 5.6.7 Add the numerators. This results in the denominator of each fraction of resources.
 - 5.6.8 Show the list of fractions of resources to the contractor. Ask if any changes need to be made, and if so, make them. Be sure that after changes, the sum of the numerators still equals the denominator.
 - 5.6.9 Ask the contractor to approve this final gross matching.

6.0 Preparation of the contract

363

- 6.1 Using the prepared outline "Letter of Agreement" or other contract form, fill in the details gathered in steps 1-5.
- 6.2 Provide the contractor with a copy of the contract for a test of completeness. and revision.
- 6.3 Explain the procedures for amending the contract or letter of agreement.
- 6.4 Secure the final approval of the contractor, and if different from the contractor, the holder of resources for the evaluation, and present each with copies of the contract.

LETTER OF AGREEMENTPreamble

The intent of this Letter of Agreement is to set forth the understanding reached between the University of Massachusetts, represented by David J. Rosen, and the Shanti' School, represented by members of the Evaluation Task Force about the scope of work, activities, and reporting procedures for the evaluation of the Shanti' School using the Fortune/Hutchinson Evaluation Methodology.

The evaluation shall be conducted beginning 30 September 1973 and ending 1 May 1974.

For performance of the tasks outlined below the University will be paid a total of \$1,700 by the Capitol Region Education Council (CREC). These funds will be paid over the period of 30 September 1973 to 30 May 1974. In addition CREC will provide up to \$300.00, on a reimbursable basis, for the evaluator's expenses including travel paid by CREC directly to the evaluator, David J. Rosen upon submission of proper information.

I. SCOPE OF WORK

In accordance with the agreements reached during the Negotiation of the Contract Phase of the methodology, the Evaluator-

- A. Will be able to obtain the use of the following resources from Shanti' to the degree or in the amount indicated:
1. Secretarial help - 15 hours a month.
 2. Mimeograph machine - access to at Shanti' as needed.
 3. Supplies (paper, stamps, stationary, envelopes) - \$25 from Shanti' supplies. Additional supplies may be available from the Center for Educational Research at the University of Massachusetts.
 4. Place to stay overnight, the Sinners' or Mulcahy's available with advance notice.

5. Space to work at Shanti': Gregg Sinner's desk as needed, the Shanti' library as needed.
6. Other space to work - The CREC conference room if not already scheduled, the Hartford Design Group conference room, available with notice, and a desk at the Hartford Design Group.
7. Telephone - access to at Shanti' for evaluation as needed, including long distance calls if necessary. Access to at UMass, including use of WATS line for long distance.
8. Shanti' staff time - two hours a week from each staff member.
9. Shanti' Board time - 1/3 of any board meeting, meetings with Board members individually two or three times.
10. Intern teachers' time - one hour a week as a group and expected additional one hour with each individually.
11. Evaluation Task Force time (as Contract decision-maker) - two hours a month after completion of Negotiation of Contract.
12. Shanti' Graduates' time - as a group two hours.
13. Typewriter - access to as needed: Sinner's, Mulcahy's, and the Shanti' typewriters.
14. Collater - access to at CREC as scheduled.
15. Lists of telephone numbers provided by staff and home group leaders. Telephone card file as needed.
16. Shanti' course catalogs.
17. Computer time - some available at UMass.
18. Time of Phil Saif at CREC - as would be mutually scheduled.

- B. Will provide written information for decision-making (including collecting goals, parts, and operational definition of goals) to the one or more highest priority decision-makers, and copies of this information to CREC.

Highest priority decision makers identified by Evaluation Task Force as of September 21, 1973:

1. Shanti' staff;
2. Administrative and Budget Task Force of Shanti';
3. Evaluation Task Force of Shanti';
4. Shanti' Director; and
5. Home Group Leaders of Shanti'.

- C. Will collect goals of the following decision-makers:

List of decision-makers whose goals are to be collected, as of September 21, 1973:

1. Shanti' Board;
2. Shanti' community;
3. Intern teachers of Shanti';
4. CREC Executive Director;
5. Shanti' students on Task Forces.

These decision makers will be provided only with lists of goals, no other data.

If a decision-maker does not wish to be a decision-maker in terms of the evaluation, or does not make time available to the evaluator sufficient to perform the tasks required by the evaluation methodology, the evaluator will report this to the contract-decision-maker (the Evaluation Task Force) and reallocation of the evaluator's efforts will be determined.

D. Will perform the tasks outlined in the Fortune/Hutchinson evaluation methodology during the approximate intervals indicated and producing products described below:

1. Negotiation of Contract (August-September 1973)

- a. To identify the contract decision-maker's approximation of the extent of the enterprise to be evaluated.
- b. To determine the extent of resources for evaluation (e.g., decision-maker time, staff and student time, secretarial services, duplication facilities, etc.).
- c. To identify decision-makers who will receive data on their goals.
- d. To match evaluator resources and decision-makers.

Results: Identification of the enterprise to be evaluated, and the resources for evaluation; the decision-makers prioritized; and a gross matching of decision-makers and resources.

2. The Goals Process (September-October 1973)

For each decision-maker (group or individual) identified during the Negotiation of the Contract, to have generated as complete a list as possible of real goals, ordered by priority to the decision-maker.

Results: For each decision-maker identified, a list of goals, real, as complete as possible, and in order of priority.

3. The Parts Process (October 1973)

For each decision-maker identified* to have generated as complete a list as possible of the parts of the enterprise for evaluation, in order of priority, from the decision-maker's perspective.

Results: For each decision-maker identified, a list of the parts of the enterprise to be evaluated, in order of priority.

*Throughout parts 3-9 "decision-maker" refers only to decision-makers who are to receive data for decision-making.

4. Goals and Parts Process (October 1973)

For each decision-maker identified to have a matching of goals with the parts in which they are to be measured.

Results: A matrix for each decision-maker, where goals are related to parts of the enterprise in which they are to be measured.

5. Operationalization of Goals (October 1973-January 1974)

Definition in operational (observable or measurable) terms by decision-makers of their highest priority goals.

Results: Operational definitions of highest priority goal or goals of decision-makers.

6. Design of Observational Techniques (November 1973-February 1974)

For each operationally defined goal to be measured in a defined part or parts of the enterprise, design by the evaluator and subsequent approval of the decision-maker of an observational technique or measuring instrument to collect data on that goal.

Results: A set of observational techniques for measuring or observing operationalized goals of decision-makers.

7. Collection of Data (November 1973-April 1974)

Results: Data, as a result of implementation of observational techniques, analyzed by the evaluator.

8. Reporting Data to Decision-Makers (November 1973-May 1974)

Written reporting of data to decision-makers in terms of their goals and in terms of the parts of the enterprise previously identified by them, where each goal was to be measured or observed, with copies to CREC.

Results: Individual sheets and/or booklets of data, indexed for specific decision-makers.

9. Evaluation of the Evaluation (April-May 1974)

Evaluation of the success of the evaluation in accomplishing its purpose, specifically, the completeness, efficiency, and focus with which it has provided data for decision-making.

Results: A report on the degree of success of the evaluation in terms of its purpose and the above criteria, for the contract decision-maker and available to others who desire it.

II. REPORTING THE EVALUATION

Progress reports will be submitted in writing monthly to the Evaluation Task Force of Shanti', to the Director of CREC, and to the Project Evaluation Director of CREC. A final report, including the evaluation of the evaluation will also be submitted in writing to the above by 1 June 1974.

APPENDIX D

Introduction

You are about to use a workbook designed to complete the Goals-Parts Integration Step of the Fortune/Hutchinson Evaluation Methodology. This workbook is designed so that you can complete all the necessary parts of this step at your earliest convenience without needing the evaluator present. All materials and instructions needed to complete the Step are in the workbook or in the other materials prepared and given to you along with the workbook by the evaluator. If you have any questions about what you are to do at any point, then you should get in touch with the evaluator to work them out. You may now proceed with the workbook.

Step 1:

You should check and see if you have all the materials you need to complete this step.

First you need a complete workbook -- check now and be sure your workbook includes all 7 steps. If you find that any step is missing all or in part then contact the evaluator and proceed when the workbook is finally complete.

Second, you need a G.A.P. matrix. This should be a separate sheet with your goals and parts listed as the rows and columns of the matrix. Check now and be sure you have it. If you don't then do not proceed with step 2 until after the evaluator gives you one.

Third, look at the Goals side of the G.A.P. matrix. The total number of goals that you have for the enterprise should be listed there. If that number is 21 or over then a separate list of all the goals 21 or above in your priority order should be part of the materials given to you. If this list is missing do not proceed with the next step until the evaluator provides the list.

Fourth, look at the Parts side of the G.A.P. matrix. The total number of Parts that you have for the enterprise should be listed there. If that number is 11 or above, then a separate list of all the parts 11 or above in their priority order should be included with the materials given to you. If not then do not proceed with the next step until the evaluator provides this list.

Step 2:

For each goal on your matrix put an "x" or "✓" in the box for each part that accomplishes that goal.

Example:

		Goals			
		A	B	C	D
1	X	X	X	X	X
2		X	X	X	X
3	X	X	X	X	X

Parts

Work Book for Goals - Parts
Integration Step of the
Fortune/Hutchinson Evaluation
Methodology

Draft I - Nov 25

by
James Thomann

W. Abernethy makes use of the G.A.P. Matrix developed by Fenske Steps. It is in the Fortune/Hutchinson Evaluation Methodology.

In this example it was determined that Goal A is accomplished by Parts 1, 2, 3; Goal B by Part 2; Goal C by Parts 2, 3; Goal D by Parts 1, 2, 3.

Note: It is possible that none of the Parts accomplishes a particular goal. Therefore do not worry about blank rows or columns.

Step 3:

For each Part determine which goals that part accomplishes and put a "x" or "✓" in the appropriate cell of your matrix if one is not already there.

Example: From the previous example you saw that Goal B is accomplished only by Part 2. But in looking at Part 1 you decide that it accomplishes Goal B so you also check this cell in the Matrix.

	Goals			
	A	B	C	D
1	X	X		X

Step 4:

Look at the first goal that is not accomplished by any of the parts -- i.e. the row or column for that goal has no "x"s or "✓"s in it. --[if none of the goals fit this description then go on to Step 5.] Consider again whether any of the Parts listed on the matrix accomplish that goal. If none then check to see if you have more than ten (10) parts for your enterprise. If there are 10 or less parts go to B, otherwise A.

A) Check the list of Parts 11 and above and see if any of those parts accomplish the goal. If any of those parts do accomplish the goal, then in the row or column of the matrix write out which parts accomplish the goal and then go on to C.

Example:

	Goals			
	1	2	3	4
1				
2				
3				

If none of these parts accomplish the goal go to B.

B) Consider whether there is any part of the enterprise not on the list that accomplishes this Goal. If there is then write it down on a sheet of paper along with the goal it is for, decide its priority among the parts you already have and note that on the paper too, then go on to C. If you

can not determine any part of the enterprise that accomplishes that goal then decide whether or not this is a goal of the enterprise. If it is go on to C; if it is not then delete it from the list by making a note of the deletion on the separate sheet of paper, then go on to C.

C) Carry out the above procedures for all goals that fit the criteria. When all are done go on to Step 5.

Step 5:

Look at the first Part that does not accomplish any goal -- ~~is~~. that is, the row or column for that Part has no "x"s or "✓"s in it. [If none of the parts fit this description go on to Step 6.] Consider again whether any goal on the matrix is accomplished by that Part. If none then check to see if you have more than twenty (20) goals for your enterprise. If there are 20 or less goals go to B, otherwise go to A.

A) Check the list of Goals 21 and above and see if any of those goals are accomplished by that Part. If any of these goals are accomplished by this Part, then in the row or column of the matrix for that Part note which goals from the list are accomplished by this part and then go on to C. If none of the goals on this list are accomplished by this part go to B.

B) Consider whether you have any goals not on the list that this part accomplishes. If there is then write it down on your separate sheet of paper along with the Part it is for, decide its priority among the other goals you already have and note that on the paper and go on to C. If you can not determine any goals of the enterprise that this part accomplishes, then decide whether it is a part of the enterprise or not. If it is go to C. If it is not then delete it from the list by noting that it should be deleted on your separate sheet of paper, then go to C.

C) Carry out all the above procedures for all Parts that fit the criteria. When all are done go to Step 6.

Step 6:

If any changes were made in Step 4 and Step 5 -- i.e. either you added goals and/or parts, and/or you deleted goals and/or parts and noted these on the separate sheet of paper -- then return all materials, including the sheet of changes to the evaluator. When you receive the materials back from the evaluator do Step 7.

If there were no changes then go to Step 7.

Step 7:

Look over the matrix and the attached lists to:

- 1) Make sure that these are your goals for the enterprise and they are in the correct priority order.
- 2) Make sure that these are your parts of the enterprise and they are in the correct priority order.

4.
3) Make sure that the matrix represents how you see the interaction of goals and parts.

If there are any changes then make them on the matrix or the sheets. When you have finished return all materials to the evaluator with a note that you have finished.

If a datum produced by the evaluation is used by a decision maker one can say that the datum has decision maker validity for that decision maker. If a decision maker does not use a datum presented to him then the datum lacks decision maker validity. Evaluation methodology should attempt to maximize decision maker validity in evaluation designs and the data produced.

Perfect (100%) efficiency in an evaluation design would exist where for every decision maker for whom data were provided every datum was used by that decision maker in his decision making. Zero efficiency would exist where no datum was used by any decision maker. Thus, if the use of data for decision making were observable the efficiency of an evaluation design could be quantified by observing the percentage of the data presented that was actually used by decision makers.

Development of Methodology

Given a defined purpose it becomes possible to develop systematic, standardized, operationalized rules and procedures for the accomplishment of the purpose. The definition of the purpose provides for the logical testing of alternative procedures. For example, if the evaluator provides data to a decision maker where the data are not relevant to the decision maker's intents for that enterprise, then the decision maker will consider the data irrelevant and he will not use the data in his decision making processes. The purpose of the evaluation will have failed and the resources spent on the evaluation will have been wasted.

Once rules and procedures for an evaluation methodology have been developed to the point where no logical flaws can be identified it becomes reasonable to perform research on the methodology. Methodological research is also made possible by the existence of defined criteria for success. The most parsimonious first methodological research is a decision oriented field test.

In a field test the methodology is implemented in a single situation.

A large grid of graph paper with 15 columns and 25 rows. The grid is composed of thin black lines forming a series of small squares. The grid is positioned on the right side of the page, with a margin of approximately 100 units on the left. The grid is empty, with no data or text entered.

A series of vertical lines at the bottom of the page, extending from the bottom edge of the grid area down to the bottom of the page. There are 15 vertical lines, corresponding to the 15 columns of the grid above. The lines are thin and black, and they are spaced evenly across the width of the page.

A P P E N D I X E

RECORD OF DATA USE: DECISION-MAKERS AT SHANTI 1973-1974

DECISION-MAKER: Gene Mulcahy / Director

DATA RETURN #	GOAL	DIMENSION	DATA USED FOR DECISION-MAKING? / COMMENTS
8	1	Shanti Curric. has stud.-initiated options.	Yes - the data ^{was} used in a change of our curriculum process in final cycle.
9	1	H.G. membs are aware of indiv. student goals.	expect to make a decision using these data
10	1	H.G. aware of indiv. student program	Same as Above
11	1	peers aware of student needs	Same as Above
13	1	(2) studs express felt needs	Yes -
15	1	Studs leave for clearly-defined reasons	Yes - The data suggest NO need to act
16	1	parents express that kids are meeting own goals	Yes - same as Above.
18	1	(1) student makes own choices	MAY use data

RECORD OF DATA USE: DECISION-MAKERS AT SHANTI 1973-1974

DECISION-MAKER: Gene Mulcahy / Director

DATA RETURN #	GOAL	DIMENSION	DATA USED FOR DECISION-MAKING? / COMMENTS
18	1	sub-dim (1) Student sees options	yes -
18	1	sub-sub dim (2) Students cancel commitment made	yes
18	1	sub-sub dim (6) Students say they cancel commitment not attended	yes
19	1	(1) student makes own choice	yes will probably use
19	1	sub-dim (1) Student sees options)
19	1	sub-sub dim (1))
19	1	sub-sub dim (2))
19	1	sub-dim (0))



