

CSEIP SIMULATED EVALUATION EXERCISE:
INSTRUCTION GUIDE

by

Marvin C. Alkin, Mary M. Bentzen,
J. Eugene Grigsby III, Stuart Johnson and Rita Johnson

The research and development reported herein was performed pursuant to a contract with the United States Department of Health, Education, and Welfare, Office of Education under the provisions of the Cooperative Research Program.

CSEIP Field Series No. 1, June 1968
University of California, Los Angeles

Table of Contents

	Page
I. Introduction	1
II. Description of the Exercise	3
A. Sketch of Room Arrangement	3
B. Roles and Functions of Participants	4
1. Simulation Director	4
2. Media Technician	5
3. Information Bank	5
4. Coordinators	5
5. Team Leader	6
6. Teams	6
7. Typing Pool	7
C. Stages of the Exercise	8
1. Overview	8
2. Planning and Preliminary Design Stage	8
3. Intermediate Field Report Stage	9
4. Design Review Stage	9
5. Summary Discussion	10
III. Procedures at Each Stage of the Exercise	11
A. Space and equipment requirements	11
B. Formation of teams	14
C. Chart of the Stages of the Exercise	15
D. Suggested Schedule for the Exercise	16
E. Instructions to participants	17
F. Planning and Preliminary Design Stage	19

	Page
G. Intermediate Field Report Stage	27
H. Design Review Stage	29
I. Summary Discussion	31
IV. Evaluation of the Exercise	33

I. INTRODUCTION

Purpose of exercise

The general goal of this exercise is to increase the flexibility of evaluators as they respond to constraints encountered in actual field conditions.

To accomplish this goal, the exercise provides the opportunity for teams of participants to construct and subsequently modify evaluation designs in light of information received during a simulated evaluation project.

Data are gathered from three reports submitted by the participants during the exercise. As difficulties arise, such as lack of communication and loss of data, it is expected that each team shall:

1. persist in the evaluation effort
2. indicate concern over emerging limitations of the original design, and
3. modify the original design in light of these limitations

Specific objectives for each stage of the exercise, including scoring procedures for determining the extent to which each objective has been achieved, are discussed in the final "Evaluation" section of this manual. (p. 32)

Description of exercise

In this exercise a simulated evaluation agency, CSEIP, has contracted to evaluate a specially funded junior high school

mathematics project over a period of one year. Participants in the exercise are asked to carry out the evaluation of this project.

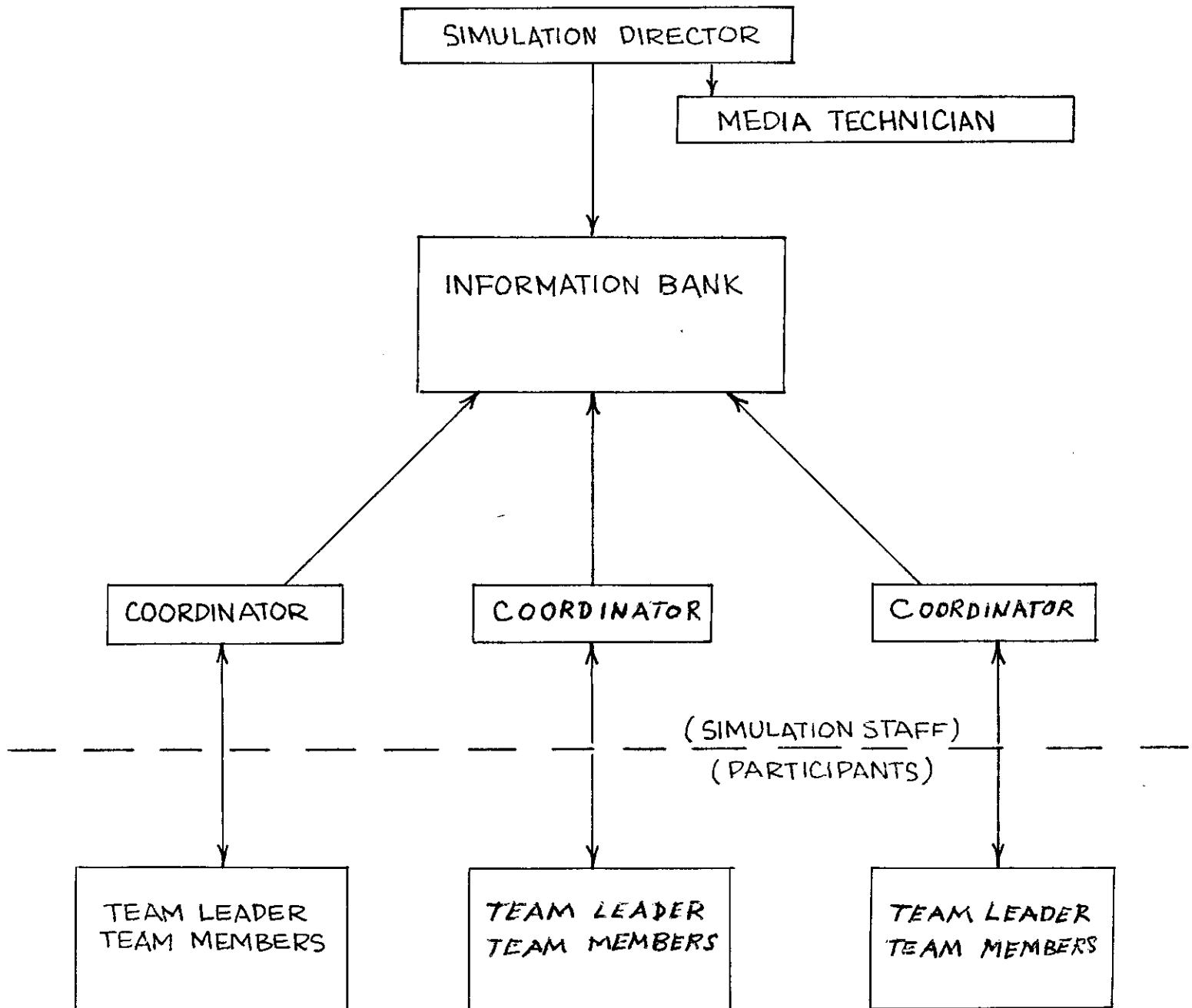
As the teams of participants move through the exercise, frequent opportunities are provided for them to:

1. receive inputs of data by way of slides, tapes, and written materials,
2. participate in work or activity sessions,
3. submit requests for desired information,
4. submit written reports to the district or home office (CSEIP), and
5. receive written communication back from the district and home office.

The final design submitted by each team of participants is expected to be the result of modifications in response to the data inputs received. At the close of the exercise, opportunity is provided for participants to discuss and evaluate their experience.

II DESCRIPTION OF EXERCISE

A. SKETCH OF ROOM ARRANGEMENT



B. ROLES AND FUNCTIONS OF PARTICIPANTS

There are two major groups of participants involved in this simulation exercise: 1) the simulation staff, composed of the simulation director, media specialist, and coordinators; and 2) the players, who are divided into individual teams, each with a team leader. (A typing pool is also needed, but does not participate in the exercise.)

It is the responsibility of the simulation staff to oversee and to run the exercise. The teams of players have no responsibility for any procedural aspects of the exercise. As stated in the introduction, this exercise is designed to improve ability to design and carry out evaluation projects. It is for this reason that teams are established. Individuals are placed in a situation where they are required to work with other team members in order to get the work done (in this case, the successful completion of the exercise).

The Sketch of the Room Arrangement (page 3) shows the relationships among all individuals involved in the game.

Simulation Staff

1. The Simulation Director

The simulation director is the one person responsible for all final decisions which are to be made during the exercise. It is the simulation director's job to assign team leaders and coordinators to each team. He also indicates to the media specialist

which tapes, slides, or films will be presented at any given time. The simulation director also acts as moderator throughout the entire game, including the Summary Discussion Stage.

2. Media Specialist

The media specialist's sole responsibility is to run all audio visual equipment. He takes his cues from the simulation director. (See pages 75-82 for a list of audiovisual equipment required).

3. Information Bank

A table will be designated as the information bank. On this table will be the written material available for transmission to the various teams. The only persons allowed to approach this table will be the coordinators and the simulation director.

4. Coordinators

The number of coordinators will be entirely determined by the number of teams there are in the game. That is, one coordinator is assigned to each team. The number of teams will be dependent upon the number of participants in the game.

It is the coordinator's job to transmit materials to and from his team. The materials at the information bank must be set up so that any piece of material can be quickly obtained by the coordinators. In the event that a coordinator has any question about what material to give to his team, he must consult with the simulation director who will make the final decision.

Each team must communicate only with its team coordinator. This is done to prevent confusion and allow the exercise to proceed more efficiently.

The Players

5. Team Leader

A team leader is assigned to each team by the simulation director. It is the team leader's responsibility to sign all forms which are presented to the team coordinator. The team leader also acts as the leader in team discussions.

6. Teams

The teams are made up of the individuals for whom the simulation exercise is being run. From our experience, we have found that the best team size is from five to ten members. The size of the groups is to a large extent dependent upon the diversity of participants. If all participants have about the same training and experience, then smaller groups seem more advantageous. If participants have a variety of experience and training, however, then perhaps larger groups are more desirable.

This exercise is designed for a maximum of one hundred participants. If you wish to involve more people than this, we suggest that you select a few teams to actually go through the exercise, while the remainder of the people watch the process.

The teams are the mainstay of the exercise, for all activities are performed by them. Team members should quickly realize that some division of labor is important and that the more efficient the team can be, the more productive it will become.

A description of reports is given.

Team members will be allowed to communicate only with their fellow team members, the team leader and their team coordinator. Only in the summary discussion at the conclusion of the exercise

will the teams be allowed to interact freely among themselves.

7. Typing Pool

At the conclusion of the Planning and Preliminary Design Stage of the exercise, each team submits to its coordinator a written proposal for an evaluation design. These designs are taken by the coordinators to the typing pool where they are to be typed and reproduced so that each participant can have a copy available prior to the next stage of the exercise.

C. STAGES OF THE EXERCISE

1. Overview

The exercise has been arranged in three stages--each stage requiring 1½ to 3 hours. Other time blocks might be feasible, but are left to the discretion of the user. The Chart of the Stages of the Exercise (page 15) shows each of the three stages with its component materials and tasks. Each stage provides the same four activities in the following sequence:

a. Input. Each stage begins by providing the participant teams with data through various media, i. e., written information, taped interviews, pictorial material.

b. Work Session. A work session gives the participants an opportunity to interact as they consider the input data.

c. Reports. Toward the end of each stage, the participant teams prepare reports which allow teams to focus attention upon any aspects of the exercise which they feel deserves reporting. In addition, the reports give the simulation staff the opportunity of judging the success of each team in meeting the simulation objectives.

d. Feedback. Following the submission of reports, the teams receive responses to their reports.

The three stages of the exercise differ in important ways. These differences are described in the following sections.

2. Planning and Preliminary Design Stage

After preliminary introductory activities (such as setting up

the teams and stating ground rules), the exercise formally begins with the presentation of background materials regarding the schools in which the evaluation will be carried out. A unique aspect of this stage is the use of "Request for Information" forms, whereby teams may acquire various kinds of optional information, and find that other information is not available.

When the teams have considered the information obtained, they proceed to the task of developing a preliminary evaluation design which is submitted as the report ending the activities for the first stage. The simulation staff duplicates and distributes all preliminary designs to all participants as additional resource materials for team use.

3. Intermediate Field Report Stage

The second stage begins by informing teams of certain difficulties, which are appearing as the mathematics project gets underway in the school district. These difficulties include a lack of expected materials and some communication problems among teachers, district supervisors, and the evaluation team. The work session culminates with the preparation of two reports. One report is a progress report on any emerging limitations in the preliminary design. The second report is prepared in the form of a letter to school district personnel, in which a team may elect to try to overcome those difficulties which are perceived.

4. Design Review Stage

During this stage, the teams are informed of additional difficulties, involving loss of students and teachers from the program as well as further breakdown of communication. This stage

terminates when the teams are asked to formally review their preliminary designs, and indicate what inferences can be drawn in light of the difficulties which have been encountered.

5. Summary Discussion

The summary discussion constitutes a post-exercise session, in which the simulation director can respond to the final design review reports, and provide the participants with the over-all objectives of the exercise. In addition, the summary discussion provides opportunity for the team participants to indicate their reactions to problems encountered during the exercise, as well as to critique the entire process.

III. PROCEDURES

A. SPACE AND EQUIPMENT REQUIREMENTS

The space in which the exercise is carried out should be large enough and flexible enough to allow for two major types of activities.

1. Total group meetings. At the start of the exercise, general instructions must be given to the whole group of participants. At the end of the exercise, the whole group meets for a summary discussion. These group meetings could take place in the same room as the exercise or in a different room.

2. Team meetings. Throughout the exercise, the participants will work in small groups (approximately 5 to 10 people in each group). It is necessary that these groups be placed in one room for the following reasons. First, the coordinator attached to each group must have quick access to the information bank and to the simulation director. Second, tapes and films will be presented to all teams at the same time. The arrangement of groups in the room must therefore allow each team to work alone, but also be able to see or hear a film or tape which is presented to all participants in the room.

Equipment and materials required for the exercise are the following:

1. All the forms in the Materials Supplement must be duplicated for distribution to the teams. With the exception of the two forms noted in (2) below, we suggest that the number

of copies needed be figured on a basis of one copy for two people. Two or three copies of each form can then be given to each team. This allows for quicker, easier reading by participants.

2. Teams will need to make carbon copies when using Form No. 8 and Form No. 9 (see Materials Supplement). These forms should be prepared in packets of two each with a carbon inserted. Enough copies of each forms should be made so that each team can have about 12 packets of each form.

3. A copy of the Index of Materials (p.) must be made for each coordinator. Coordinators will refer to the Index sheet to find the appropriate materials at the information bank during the exercise.

4. An audiotape recorder, a slide projector, a 16 mm. projector and a screen must be situated so that all tapes and films can be seen and heard by all participants at once.

5. A work table and chairs for each team must be provided.

6. Paper and pencils for each team should be supplied.

7. A chalk board should be placed in view of all participants. The appropriate month of the simulated school year will be written on the board from time to time during the exercise.

8. A public address system, if the room requires it, should be used so that the simulation director can give information to all teams at once when necessary during the exercise.

9. Enough typewriters and duplicating machines are needed to produce copies of each team's preliminary design within the space of 2 to 3 hours at the end of the first day's sessions.

10. It is suggested that coffee be provided in the room where the exercise is being carried out so that participants can get to it as they wish.

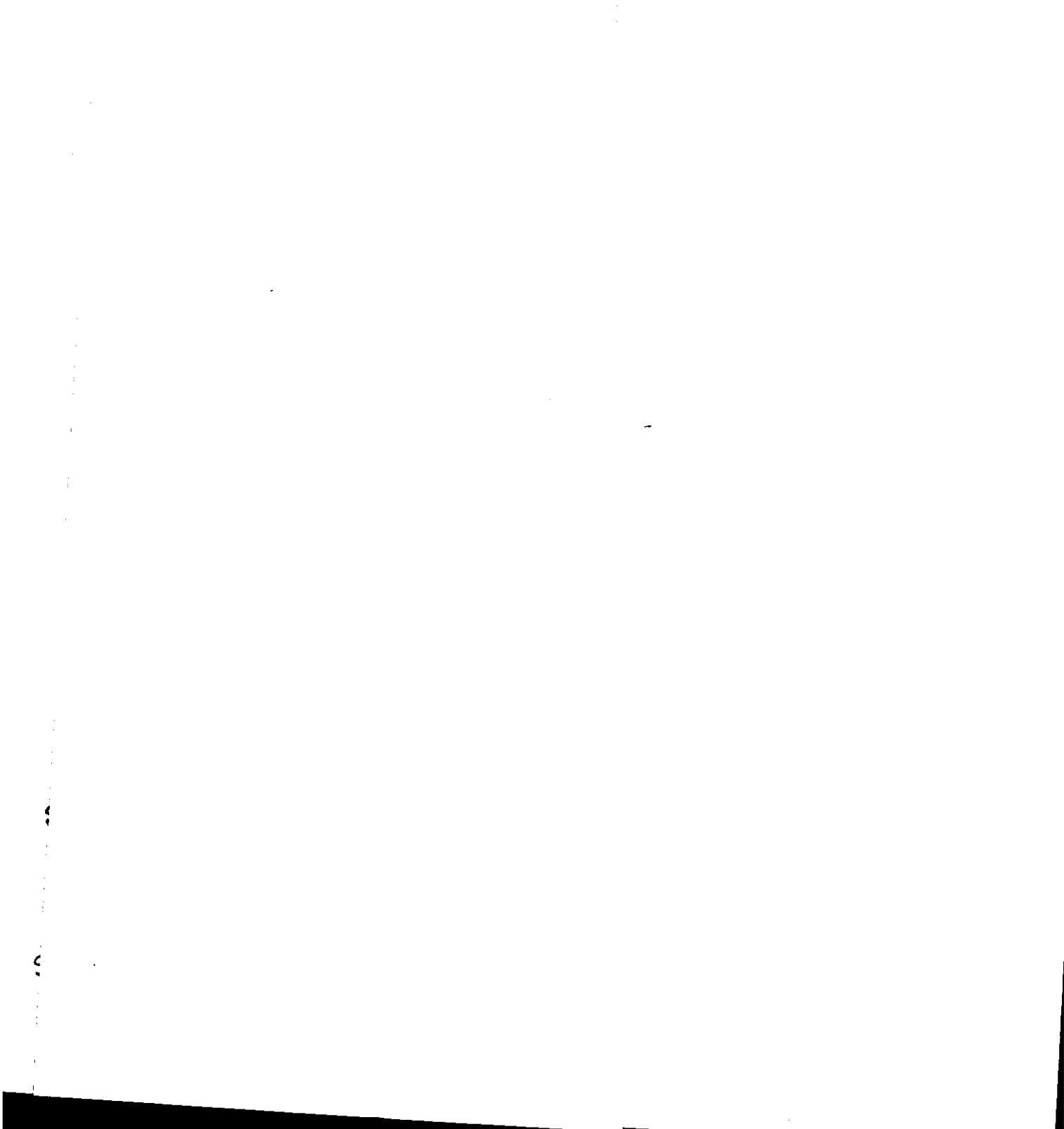
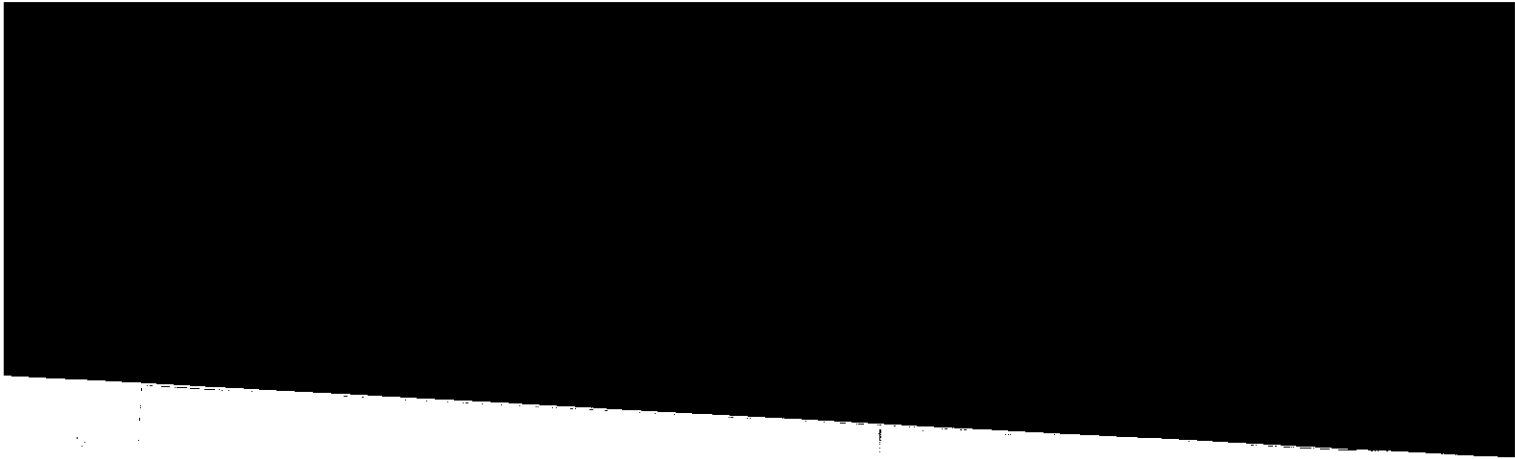
11. If possible, a room with light-dimming facilities should be used, so that lights can be dimmed but not turned off during showings of film and playing of tapes. If lights must be shut off, we suggest that they be turned off during tape plays as well as film projections.

B. FORMATION OF TEAMS OF PARTICIPANTS

Participants must be divided into teams of about 5 each, and a leader must be appointed for each team.

It is preferable that assignment to teams and selection of team leaders be worked out by the simulation staff before the exercise begins, so that participants can simply be informed at the outset where they are to work. If, however, the simulation staff does not know ahead of time who the participants will be, the breakdown into teams and the selection of team leaders will have to be accomplished during the introductory phase of the exercise.

Teams may be designated by number, letter or other symbols. We suggest that teams be named by cities, i.e., the Seattle team, the Chicago team, the Pittsburgh team, etc. This supports the illusion that CSEIP is a nation-wide evaluation agency with branches in many cities.



D. SUGGESTED SCHEDULE FOR THE EXERCISE

FIRST DAY

Introduction	9-9:30
--------------	--------

Planning and Preliminary Design Stage

Background Information	9:30-10:45
Optional Information	10:45-11:45
LUNCH	11:45-1:00
Preparation of preliminary design	1-2:15
DUPLICATING REPORTS	2-4:30
Pick up reports	4:30-5:30
Read reports	Evening

SECOND DAY

Intermediate Field Report Stage

Field Information	9-9:45
Preparation of field report	9:45-10:30

Design Review Stage

Field information	10:30-11:45
LUNCH	11:45-1:00
Preparation of design review	1-2:00
BREAK	2-2:15

<u>Summary discussion</u>	2:15-4:00
---------------------------	-----------

E. INSTRUCTIONS TO PARTICIPANTS

The following information should be given to the total group of participants before the exercise begins: .

1. You are about to engage in a simulation exercise. During this exercise you are to consider yourself as a staff member of the CSEIP evaluation agency. In the exercise you will be called upon to do a job for CSEIP. You will evaluate a program during one school year.

2. This exercise is intended to familiarize you with some of the experiences encountered by evaluators working in real school situations. All of the situations and all of the information which will be given to you throughout the exercise have been drawn from an actual evaluation carried out in a school setting.

3. The purpose of this exercise is not to collect data for someone's study. It is designed to be a learning experience for you.

4. The exercise is not a competition among participants or teams. Rather it is hoped that all individual participants and teams can profit from the experience.

5. There will be times when procedures and/or information presented might seem contradictory. This is all a normal part of the exercise.

We are going to divide you into ____ teams of ____ members in each team. Each team will have a leader who will be responsible for all communication to and from the team during the exercise.

7. Each team will have a simulation coordinator. Your coordinator is the person who will get information to your team and who will answer any questions you may have.

8. The exercise will proceed in several stages. Each stage takes place at a different time during the simulated school year in which you are supposed to be working. The month of the simulated year will be written here on this board at each stage of the exercise.

At each stage three things will happen. 1) You will receive a variety of information. 2) Team members will discuss this information. 3) Your team will submit a written report based on the information you have received up till that time.

9. These are your assignment to teams. The teams will work in the following areas. (read off the members and leaders of each team and assign them to places in the room. Give each team its name. If teams have not been formed prior to this time, it will be necessary to form them at this point. You may choose to use voluntary groupings or count off members of teams. Leaders may be selected in some arbitrary fashion or teams may choose their own leaders.)

10. A coordinator will be seated by each team. Your coordinator will introduce himself to you.

11. Go to your team station and we will start the exercise. From here on, each team will work on its own and will communicate only with its coordinator.

THE SIMULATION DIRECTOR AND THE COORDINATORS SHOULD BE THOROUGHLY FAMILIAR WITH ALL THE MATERIALS* TO BE USED BEFORE THE EXERCISE IS BEGUN.

F. PLANNING AND PRELIMINARY DESIGN STAGE

These instructions (Sections F through H) should be read with continual reference to the Material Supplement.

Background information

"January" is written on the board to represent simulated time.

All teams receive all background information. Materials are given in the following sequence.

1) Initial statement of over-all task is given to each team by team coordinators.(1)** Allow 2-3 minutes for participants to read and discuss this statement.

2) Packet of written materials is given to each team by team coordinators. The packet includes:

Mathematics Demonstration Centers (2)

Description of Math Project Organization (3)

Size of District (4)

CSEIP Organization (5)

Description of Project Schools (6)

Coordinators tell the teams to keep these and all subsequent materials for reference. Teams are allowed approximately 30 minutes to read and discuss these materials.

*Materials may be found in the Materials Supplement of the Handbook of Instruction.

**Numbers in parentheses refer to Form numbers in the Materials Supplement

3) Participants are informed by the simulation director that they are going to hear a taped interview with Dr. Gerhard, the school district director of specially-funded projects. Participants are reminded that they may want to take notes on this and succeeding information. The tape of the interview with Dr. Gerhard (AV-1) is then played for all participants to hear. Allow 2 minutes for teams to discuss tape.

4) The slides of the three project schools (AV-2) are shown to all participants. Allow 4 minutes for teams to interact.

5) Tape of First Interview with Mrs. Jones (AV-3) is played for all participants.

Teams are allowed about 15 minutes for discussion.

Optional information

"April" is written on the board to show simulated time.

1) The Information for Planning statement (7) is given to each team by the coordinators.

At the same time each team is given about 12 packets each of Request for Information (RFI) forms (8) and District Approval Request (DAR) forms (9). Each coordinator must make sure that his team understands that they are to make carbon copies when using those forms. One copy of each will be given to the coordinator; the team will keep the other copy.

2) Teams will spend the next 40-50 minutes submitting RFI and DAR forms and receiving answers to their requests. Only the coordinators and the simulation director move about the room during this portion of the exercise. The coordinators take forms submitted by the teams to the Information Bank, get the appropriate responses and deliver them back to the teams. If a coordinator has a question as to how a request should be answered, he consults the simulation director.

Each coordinator must make sure that each request from his team is numbered and marked with the team name. He must then do two things. 1) He puts the request number on the response form which he gives back to the team. 2) He puts the response form number on the copy of the request which he keeps. Thus each team knows what response it received for each request, and each coordinator keeps a record of how each request was answered. The simulation staff may use these records later to evaluate the game.

There are four categories of responses for RFI and DAR forms. It is imperative that the simulation director and the coordinators be thoroughly familiar before the exercise is attempted, with these responses and the ways they may be used. A listing of the types of responses is given below, along with several examples of ways in which they may be combined. Ultimately, however, each coordinator must determine the best use of these responses in light of the specific requests he receives from his team and the objectives of this stage of the exercise.

The four categories of responses are:

Information (Forms 10-I through 27-I)

Approvals and Denials (Forms 28-AD through 32-AD)

Delay by Mrs. Jones (Forms 33-DJ through 39-DJ)

Delay and Response by Dr. Gerhard (Forms 40-DG
through 45-DG)

Following is one sequence of responses which can be used.

1. Response to a team's first request is an immediate answer. The appropriate answer is selected from the Information forms or from the Approval and Denial forms.

Examples:

If the request is for information on testing, the response might be chosen from Forms 15-I through 18-I, depending on the specific nature of the request.

If the request is for permission to observe in classrooms, the approval response would be Form 28-AD. If the request is for permission to rearrange experimental and comparison classes, the denial response would be Form 29-AD. We suggest that the use of

the responses of District Approval and District Denial be guided by the general rule that all requests to modify the experimental program in any way (e.g., changing class size, number of groups or kinds of programs) be denied, while requests for permission to gather various types of data be approved.

If the request is for information which is not available on any response form, the answer is Form 30-AD.

If the request has to do with mechanics of carrying out the evaluation or making evaluation reports, the response is Form 31-AD.

If the request is for information which has already been given in the background information materials, the response is Form 32-AD.

2. After its first request, a team is delayed from time to time in receiving answers to requests. A delay is accomplished by using responses on Forms 33-D5 through 39-D5 and Forms 40-DG through 45-DG.

Examples:

a) Delay by Mrs. Jones

To carry out a short delay, a request is first answered by one of Forms 33-DJ - 36-DJ. Only after the request is restated by the team, is the appropriate information given.

It is also possible to make a team experience a continuing delay. The continuing delay tactic is probably best used in cases where the request is for information which is not available on any response form. The request is first answered by Form 34-DJ, 35-DJ or 36-DJ, whichever is most appropriate. When the team re-submits

the request, it receives the response on Form 37-DJ. If the team persists in re-submitting the request, it receives Form 38-DJ, then Form 39-DJ. Any re-statement of the request after Form 39-DJ would lead into the "Delay by Dr. Gerhard" series of forms.

b) Delay by Dr. Gerhard

This kind of delay is used in two cases: first, as noted above, when a team persists in submitting a request through the whole series of continuing delay by Mrs. Jones; second, at any point when a team specifically requests information from Dr. Gerhard.

Delay by Dr. Gerhard begins with the use of Form 40-DG or 41-DG to answer the request. When the request is re-submitted, it is then either denied by Form 42-DG or 43-DG, whichever is appropriate, or granted by Form 44-DG or by attaching Form 45-DG to the relevant information form.

3. A pattern of delays to be used may be determined by the simulation staff before the exercise begins, or the number and spacing of delays may be left entirely to the discretion of the coordinators. In any event, it is essential to remember that two things should be accomplished during this part of the exercise. First, teams must have the opportunity to get addition information. Second, teams must have the opportunity to experience difficulty in communication and decision-making, particularly with respect to a bottleneck in a key position, as represented by Mrs. Jones. Within the limits of these objectives and the amount of time available for this stage of exercise, many sequences of responses are possible.

Preparation of preliminary design

At the end of the time allotted for obtaining optional information, "July" is written on the board to show simulated time.

1) Each team receives from its coordinator the Preliminary Design forms (46 and 46a). These forms may be distributed right before the participants break for lunch so that they will have time to do some planning, if they wish, during the break. Or, the form may be distributed right after the lunch break.

2) After lunch each team may submit as many as three more RFI or DAR forms. Coordinators will handle these forms in the same way as they have handled the other optional information. It is suggested, however, that, in the interest of time, teams not be delayed at this point in receiving answers to their requests. About 15-20 minutes is allowed for this activity.

3) Teams are informed that they will be allowed 50-60 minutes to write their preliminary design statements and give them to the coordinators.

4) Participants are also informed by the simulation director that their preliminary design statements will be typed and duplicated during the rest of the afternoon, and that copies of all the statements will be available to all participants. Information is given as to time and place where the copies of the design statements may be picked up.

It should be suggested to the participants that they may treat the statements from other teams as "consultant" help. That is, they may study designs from other teams and think more about their own designs before coming together again the following day.

5) Coordinators collect design statements from the teams and turn them in to the typing pool. Reports are typed and duplicated and deposited at the place where participants are to pick them up. One set of reports should be made for each participant.

G. INTERMEDIATE FIELD REPORT STAGE

Field information

"November" is written on the board to show simulated time. All field information is given to all teams. The information is presented in the following sequence.

1) Participants are told by the simulation director that the project has now been operating for several months and that they will get some information on how it is going.

2) The Second Interview with Mrs. Jones (AV-4) is played for all participants. Allow 4 minutes for discussion.

3) Each team receives characteristics of East Center Teachers (47) from the coordinators. Allow 3 minutes for teams to look at this.

4) Participants are told that they will see a film of typical teaching by the East Center teachers. They are told that the teachers, in order of appearance, will be James Wilcox, Gerald Forbes and Henry Webster. The Film of East Center Teachers (AV-5) is then projected for all participants. Allow 2 minutes for discussion.

5) Each team receives Field Report Sheet No. 1 (48) from the coordinators.

Teams are allowed 15 minutes to discuss this material.

Preparation of field report

1) At the end of the discussion period, each team receives from its coordinator the District Request for Information (49 and

and 49a) and the Progress Report to CSEIP Evaluation Project Director (50 and 50a).

2) Teams are told by the simulation director that they will be allowed 30-40 minutes to prepare the reports for the District and the CSEIP Project Director. When reports are completed, they are to be given to the coordinators.

3) The coordinators take the reports to the simulation director, and return to each team the Feedback from Dr. Gerhard (51) and the Feedback from CSEIP Project Director (52).

4) The coordinators inform the simulation director when all teams have received the two feedback forms (step (3) above), so that the simulation director can move to the next stage of the exercise.

H. DESIGN REVIEW STAGE

Field information

"February" is written on the board to show simulated time. All field information is presented to all teams in the following order.

1) The tape of the Third Interview with Mrs. Jones (AV-6) is played for all participants. Allow 5 minutes for discussion.

2) The tape of the Interview with Mr. Wine (AV-7) is played for all participants. Allow 10 minutes for discussion.

3) Each team receives Field Report #2 (53) from the coordinators. About 5 minutes is allowed for participants to read this.

4) The tape of the Interview with the Teacher (AV-8) is played for all participants.

Teams are allowed 20-25 minutes to discuss the information they have received before breaking for lunch.

Preparation of Design Review report

1) The Design Review Task forms (54 and 54a) may be distributed to the teams right after the discussion of the field information and before the lunch break. Or, the forms may be distributed when the participants return from lunch.

2) Teams are told by the simulation director that they will be allowed 45 minutes to an hour to write their Design Review reports and turn them in to the coordinators.

Participants are allowed a 15-minute break before coming together in one group for the Summary Discussion Session. The time and place for this session is written on the board at the end of the work period on the Design Review report.

I. SUMMARY DISCUSSION

The summary discussion is led by the simulation director and might take many forms. We recommend that it be tailored to meet your own needs and those of the participants. For example, some groups might use this discussion to provide support and positive feedback for having participated in the exercise. Others might need a more highly structured discussion which provides everyone with a sense of closure.

In all cases we suggest you give the total group some positive reactions (such as appreciation for their flexibility and willingness to participate in the face of obstacles). They should also now be told the overall purposes and strategy of the exercise.

Here are some further possibilities:

<u>Purposes of Discussion</u>	<u>Types of Eliciting Questions</u>
1. Self-evaluation of the process	"Are there any reactions or comments? How did you feel? What problems did you face? At what points were you distressed? Why did you persist? How did working in a team affect your design?"
2. Participant evaluation of the exercise	"What did you learn? How will this experience be of help to you later? Was the game realistic?"
3. Self-evaluation of designs	"What modifications in design did you make? At what points?

Purposes of DiscussionTypes of Eliciting Questions

- *4. Instructor evaluation
of performance
(For scoring procedures
see section on "Evaluation
of the Exercise,"
p. 33)

To account for what variables?
When did you limit your inferences? What designs do you think are most appropriate?
How do you feel about your modified plan?"

"In light of the scores you've just received on your designs, what reactions do you have?"

- * This alternative would not be possible if the time schedule suggested on page 16 were followed, since that schedule does not allow enough time for scoring the Design Review reports before beginning the Summary Discussion. If you wish to score the Design Review reports before holding the Summary Discussion, it will be necessary to schedule the Summary Discussion for the evening of the second day or extend the exercise into a third day.

IV. EVALUATION OF THE EXERCISE

As indicated earlier, the exercise has been subdivided into three major stages, each of which terminates with the preparation of at least one report. These written responses from the participants are the means by which the exercise may be evaluated. The reports can be assessed in terms of the objectives for each stage of the exercise. Suggestions as to how this may be accomplished are given in the following discussion.

1. Planning and Preliminary Design Stage

At the end of the first, or planning stage, each team submits a Preliminary Design Report.

Objectives for Preliminary Design Report

It is expected that:

- a) each team will submit a report;
- b) each team will include a general statement of procedures to be employed;
- c) each team report will state the instruments and measures to be used.

The specific items of this report are to be scored on a "yes" or "no" basis. Only minimal criteria are applied at this point, since the Preliminary Design represents an initial plan in which successive modifications will be made. An example of a score sheet for this report is given on the following page.

PRELIMINARY DESIGN SCORE SHEET

Team _____

Date _____

1) Did the team submit a report?

YesNo2) Did the report include
procedures to be followed?YesNo3) Did the report include the
instruments to be used?YesNo

PRELIMINARY DESIGN REPORT -- TEAM TOTAL:
(Number of "Yes" scores)Yes

2. Intermediate Field Report Stage

Two reports are requested from the teams at the termination of the second or Intermediate Field Stage. One report is addressed to the CSEIP Project Director, and one is addressed to the School District.

Objectives for Progress Report to CSEIP

It is expected that:

- a) each team will comment upon emerging limitations of the original evaluation plan;
- b) each team will comment on need for additional data.

Objectives for Report to District

It is expected that:

- a) each team will suggest solutions to emerging problems;
- b) each team will communicate inability to make defensible inferences about the effectiveness of instructional practices or program materials.

Examples of two score sheets are given on the following two pages. One is for the CSEIP Report and the other is for District Report. One or more raters should arbitrarily assign weights to each item on these score sheets. Additional items may be added at the discretion of the raters. After assigning weights and scoring each item, the total scores should be recorded in spaces provided on the score sheets.

CSEIP PROGRESS REPORT SCORE SHEET

Date _____ Weights Assigned: Points
(Determined by Achieved:
raters) (Determined
by raters)

Team _____

1) Are emerging limitations
noted in report?

a) Mrs. Jones is obstructing
the program.

(5 pts) _____

b) District decision-making
not clear-cut

(3 pts) _____

c) Equipment not available
in the schools

(4 pts) _____

d) _____

e) _____

f) _____

SUB-TOTAL:

Possible _____

Achvd _____

2) Is need for additional data
noted in report?

a) Need for clearer defini-
tion of program objectives. (5 pts) _____

b) Need copies of materials
being developed by
teachers.

(3 pts) _____

c) _____

d) _____

SUB-TOTAL:

Possible _____

Achvd _____

CSEIP REPORT -- TEAM TOTAL:

Possible _____

Achvd _____

REPORT TO DISTRICT SCORE SHEET

Date _____

Team _____

Weights
Assigned:Points
Achieved:1) Are solutions suggested for
emerging problems?a) Need to improve communi-
cation

(5 pts)

b) Need to get equipment
to teachers

(3 pts)

c) Teachers should ad-
dress themselves to
program objectives

(3 pts)

d) _____

SUB-TOTAL:

Possible

Achvd

2) Are inabilities to evaluate
instructional practices or
materials noted:a) Insufficient opportunity
to observe teachers

(1 pt)

b) Lack of opportunity to
examine materials in use

(1 pt)

c) _____

d) _____

SUB-TOTAL:

Possible

Achvd

DISTRICT REPORT -- TEAM TOTAL:

Possible

Achvd

3. Design Review Stage

A final report, the Design Review, is requested of each team at the conclusion of the last stage.

Objectives for Design Review Report

It is expected that:

- a) each team will specify modifications to be made in the original procedure;
- b) each team will note modifications to be made in the instruments or measures that were originally selected;
- c) each team will note existing limitations of inference.

As with the reports from the Intermediate Field Stage, raters should assign weights to each of the above items and score the Design Review report on the extent to which the items have been successfully included. After recording the total score for this report, the rater should total the points received by each team on all four reports. Examples of a score sheet for the Design Review Report and a final tabulation sheet are given on the next two pages.

DESIGN REVIEW REPORT SCORE SHEET

Date _____	Weights Assigned:	Points Achieved:
Team _____		
1) Are modifications in the original plan specified?		
a) Changes in procedures	<u>(5 pts)</u>	_____
b) Changes in group size	<u>(3 pts)</u>	_____
c) Changes in number of teachers	<u>(3 pts)</u>	_____
d) _____	_____	_____
SUB-TOTAL	<u>Possible</u>	<u>Achvd.</u>
2) Are modification in original instruments specified?		
a) Instruments added	<u>(1 pt)</u>	_____
b) Instruments dropped	<u>(1 pt)</u>	_____
c) Instruments modified	<u>(1 pt)</u>	_____
d) _____	_____	_____
SUB-TOTAL:	<u>Possible</u>	<u>Achvd.</u>
3) Are existing limitations of inference noted?		
a) Contamination of treatment and comparison groups	<u>(4 pts)</u>	_____
b) Inadequate randomization procedures	<u>(4 pts)</u>	_____
c) Loss of data due to loss of teachers or students	<u>(4 pts)</u>	_____
d) Lack of control over differences in teacher behavior	<u>(2 pts)</u>	_____
e) _____	_____	_____
SUB-TOTAL:	<u>Possible</u>	<u>Achvd.</u>
<hr/>		
DESIGN REVIEW -- TEAM TOTAL:	<u>Possible</u>	<u>Achvd.</u>

TEAM TABULATION SHEET

Date _____

Sub-
Totals:Score Sheet
Totals

Team _____

Preliminary Design

Intermediate Field Stage Reports

CSEIP Report

1) Limitations of situation

2) Need for additional data

Total:

District Report

1) Suggestions for solution of problems

2) Materials and instruction evaluation

Total:

Design Review

1) Modification of procedures

2) Modification of instruments

3) Limitations of inference

Total:

GRAND TOTAL:

=====

CSEIP SIMULATED EVALUATION EXERCISE:
MATERIALS SUPPLEMENT

by

Marvin C. Alkin, Mary M. Bentzen,
J. Eugene Grigsby III, Stuart Johnson and Rita Johnson

The research and development reported herein was performed pursuant to a contract with the United States Department of Health, Education, and Welfare, Office of Education under the provisions of the Cooperative Research Program.

CSEIP Field Series No. 1, June 1968
University of California, Los Angeles

Table of Contents

	Page
I. Forms to be distributed to teams.	
Index to forms	1-4
Forms: Number 1 through 54a	5-74
II. Summaries of audiovisual materials	
AV-1 Taped interview with Dr. Gerhard	75
AV-2 Slides of schools	76
AV-3 First taped interview with Mrs. Jones	77
AV-4 Second taped interview with Mrs. Jones	78
AV-5 Film of teachers at East School	79
AV-6 Third taped interview with Mrs. Jones	80
AV-7 Taped interview with counselor, Mr. Wine	81
AV-8 Taped interview with a teacher	82

Index to Forms to Be Distributed to Participants

<u>Form</u>	<u>Content</u>
<u>Background information</u>	
1	Initial statement of overall task
2	Description of experimental program
3	Math project organization
4	Size of school district
5	CSEIP organization
6	Description of 3 project schools
<u>Requests for information</u>	
7	Instructions for information for planning
8	Request for Information (RFI)
9	District Approval Request (DAR)
<u>Responses to requests - Information Forms</u>	
10-I	Selection of experimental and comparison groups
11-I	Selection of experimental teachers
12-I	Selection of comparison teachers
13-I	Qualifications for experimental teachers
14-I	Criteria for selection of schools
15-I	Memo on testing

<u>Form</u>	<u>Content</u>
16-I	Math test information
17-I	Prior test data
18-I	Additional school data
19-I	Cumulative folder information on pupils
20-I	Information on pupil self-concept
21-I	Guidance and counseling
22-I	District anticipation of evaluation function
23-I	Vita for Dr. Gerhard
24-I	Objectives for summer workshop
25-I	Objectives for each school center
26-I	District budget for math program
27-I	Evaluation budget

Responses to requests--Approval and Denial Forms

28-AD	District approval
29-AD	District denial
30-AD	Do not have information
31-AD	Evaluation team may make decision
32-AD	Information already provided

Responses to requests--Delay by Mrs. Jones Forms

33-DJ	Misplaced file
34-DJ	Do not have information; will compile
35-DJ	Trying to get information
36-DJ	Must make policy decision

<u>Form</u>	<u>Content</u>
37-DJ	Continuing to work on information
38-DJ	Still do not have information
39-DJ	Have referred matter to Dr. Gerhard

Responses to requests--Delay by Dr. Gerhard Forms

40-DG	Gerhard out of town
41-DG	Gerhard breaks appointment
42-DG	Gerhard denies request
43-DG	Gerhard does not have information
44-DG	Gerhard approves request
45-DG	Mrs. Jones forwards information at request of Gerhard

Preliminary design

46	Request for preliminary design
46a	Design report form

Field reports

47	Characteristics of East Center teachers
48	Field report summary No. 1

Intermediate reports

49	District request for information
49a	District report form
50	Request for CSEIP progress report
50a	Progress report form
51	Feedback from Dr. Gerhard
52	Feedback from CSEIP director

FormContentField reports

53

Field report summary No. 2

Design review

54

Design review task

54a

Design review report form

FORM 1

Initial Statement of the Over-all Task

January

Your organization, the CSEIP evaluation agency, has just signed a contract with a large metropolitan school district to conduct an evaluation of a demonstration mathematics program for the coming school year. The district has received special funds from the state to conduct this program during this next year.

It is now January and you are faced with the task of planning for the evaluation which will commence with the school year in September. What over-all issues must be considered? Think about what you need to know about the total situation before you can begin to plan your evaluation?

Your first scheduled meetings with officials from the school district will begin very shortly. Good luck.

FORM 2

Information distributed by the school district to describe the program.

MATHEMATICS DEMONSTRATION CENTERS

There will be three Mathematics Demonstration Centers designed to encourage creative, innovative, and unique approaches in curricula and methodology in the teaching of mathematics. Those techniques which achieve greatest success ultimately will be used as a basis for the development of programs which will improve substantially the educational achievement of disadvantaged children of normal capabilities who are now achieving at one grade level or more below average in mathematics.

The particular strength of the program is that it brings together under the coordination of a central administrative unit a variety of innovative techniques and materials. The subsequent evaluation of the relative effectiveness of the several techniques and materials of instruction employed will be especially meaningful.

The Demonstration Centers in mathematics will incorporate a number of innovative features designed to break the cycle of failure. Educational innovation is provided through availability and use of the newest teaching methods, with programmed materials customized to the individual needs of pupils and combined with close, personal, and individual attention by the

teacher. In-service education is designed to develop and strengthen attitudes, skills, and understandings of teachers, counselors, and other school personnel. Multi-cultural sensitivity and development of an instructional technology is stressed in each Center.

An instructional media service, located at each Center, will provide pupils with materials appropriate to their needs. Teachers are provided with artistic, technical, and clerical assistance in the development of materials. Qualified personnel coordinate the use of the specialized equipment and supplies.

The target population will be potentially able junior high school pupils (7th grade) who are performing one year or more below grade level in mathematics. Approximately 250 students in each school will be involved in the program.

OBJECTIVES

To improve mathematical skills and understandings of mathematical concepts.

To improve the pupil's self-image.

To identify specific assets and limitations relating to the learning process.

To develop and use special instructional materials and programs and to assess their values.

To select and use appropriate commercially developed equipment, instructional materials and programs and to assess their values.

FORM 3

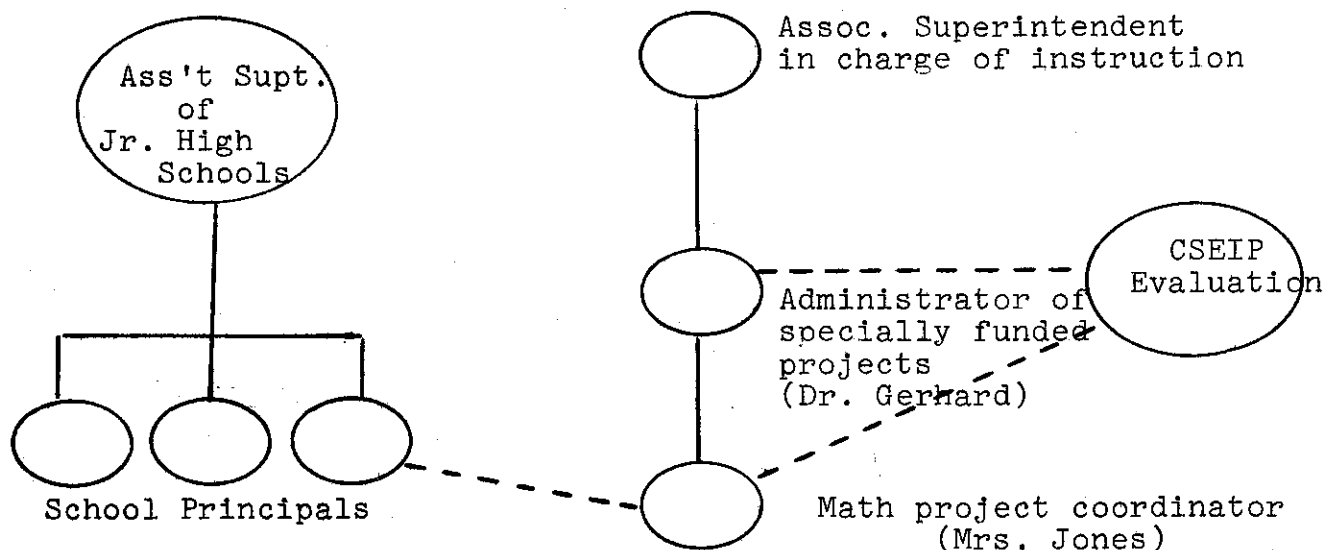
Description of Mathematics Project Organization

A. Personnel

1. Each School Center
 - a. three teachers
 - b. one clerk-typist
 - c. one illustrator
 - d. one instructional media technician
2. Central Project Office, serving all Centers
 - a. one project coordinator
 - b. one curriculum consultant
 - c. one counselor consultant
 - d. one audio-visual consultant
 - e. two clerk-typists

B. District Administration

1. Math project is assigned to the district office which administers all specially funded programs.
2. Chart of administrative lines of authority.



3. The project coordinator is responsible for administration of the program and for making all arrangements which are required in order to carry out the evaluation.

C. Teacher Responsibilities

1. Attend summer workshop prior to teaching classes
2. Teach two classes per day (total of six classes per school)
3. Create new materials for use in the program
4. Responsible to school principal for conduct of classes.
Responsible to project coordinator for development of special math program.

D. CSEIP Evaluation Responsibilities

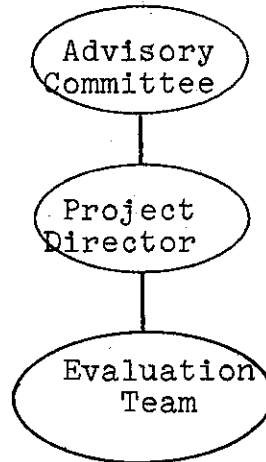
1. Evaluate program in terms of its stated objectives
2. Deliver final report to the administrator of specially funded projects
3. Work directly with the project coordinator in carrying out the evaluation
4. Evaluation team has the option to make intermediate reports and to provide information in addition to that required in (1) above

FORM 4

Size of School District

1. Total number of schools is 300, including 71 junior high schools
2. Total number of teachers is over 12,000
3. Total number of students is over 375,000
4. Total geographic area covered is approximately 423 square miles

FORM 5

CSEIP Organization

- 1) Project director is a professional researcher. He has no formal ties with the school district.
- 2) Advisory Committee is composed of professional educators and researchers
- 3) Evaluation team is composed of field researchers, statisticians, and research assistants. You are the evaluation team.

FORM 6

Description of Project Schools

Math Demo Centers will be established at Alva, East and Valley Junior High Schools.

Communication among the centers may be handicapped by the distance between schools. While Alva and East are only 10 miles apart, Valley is more than 20 miles from either one. Frequent meetings will therefore be inconvenient for the teachers, and communication on such important matters as project goals may be limited.

Sociological conditions are very different at each school, and the center teachers may therefore have to face very different problems.

East is located in a lower middle-class Mexican-American community. The community is extremely stable and most of the students have lived there all of their lives. Many have parents and even grandparents who were enrolled in the same school. As little English is spoken outside the classroom, language is a major problem in the development of material.

The population at Alva is highly transient. With a total school enrollment of 1600 or 1700, the annual turnover is about 800. Many of the students are in and out of the school two, three, and even four times a year. Alva is located in what might be termed a Negro ghetto. The students come from large families and overcrowded houses. A number of parents are on welfare and it is not uncommon to find families with a working mother and no father. Reading disabilities and the use of nonstandard English make language a principal problem at Alva as well as at East.

Valley is located in a lower middle-class residential area. The population of the school is mixed racially with a large proportion of Caucasians. The transiency rate lies somewhere between the stability of East and the instability of Alva.

FORM 7

Information for Planning

April

What additional information do you need to know in order to determine the bounds and opportunities for evaluation in this situation? That is, what other information do you need before you begin, this summer, to plan the design for this evaluation?

You now have the opportunity to request information or ask for specific action to be taken. All requests for information should be submitted on an RFI (Request for Information) form to be signed by the team leader. All requests for action to be taken are to be submitted on a DAR (District Approval Request) form also to be signed by the team leader.

These forms are to be submitted to your team coordinator and only one form may be submitted at a time.

Your team coordinator will return information to you.

FORM 8

R F I

(Request for Information)

Request # _____

Team: _____

Request for Information:_____
Team Leader

FORM 9

D. A. R

(District Approval Request)

Request # _____

Team: _____

District Approval Requested for:_____
Team Leader

All questions should be stated in such a form that a yes or
no answer can be given.

FORM 10-I

Selection of Experimental and Comparison Groups

Eligible students were identified by the Head Counselor at each school in cooperation with the Project Counselor. Selection was made on the basis of student scores on the California Achievement Test (CAT) and the California Test of Mental Maturity (CTMM). Potentially able students, those falling in a normal range on the CTMM (85-115) with achievement scores one or more years below grade level formed the pool of eligible pupils. From this population a sufficient number of students was randomly selected and assigned to comparison and experimental groups.

Approved by

Mrs. Jones

FORM 11-I

Selection of Experimental Teachers

In selecting teachers for this project, individual schools were notified that we were looking for outstanding and creative teachers in the field of mathematics. With the encouragement of principals, certain teachers throughout the district were urged to submit applications. These applications were carefully screened by the proper administrators who made the final selection, based on the teachers' outstanding qualifications and promise of creativity.

After teachers had been selected, they were assigned to the experimental schools. Only one experimental teacher remained in his home school. This occurred at Valley School where the principal insisted on having his existing math department chairman as the coordinator of the experimental team in that school.

Form 12-I

Selection of Comparison Teachers

The selection of comparison teachers was not based on the same selection criteria as the experimental teachers. In each center, the comparison group teachers were randomly selected from the regular mathematics staff.

FORM 13-I

Qualifications for Experimental Teachers

- 1) Minimum of three years in mathematics teaching at the junior high level
- 2) Master's degree in mathematics or equivalent
- 3) Mathematics teacher for the past two years prior to entering the project
- 4) Willingness to be flexible and creative (principal's judgment)
- 5) Three letters of recommendation stating general ability to get along well with both students and staff

FORM 14-I

Criteria for Selection of Schools

Selection of the three schools and of programs for each school was done by the district prior to the signing of our contract with them. The district assures us that schools were selected from "disadvantaged areas" as required by the funding organization. Programs for the schools were determined by district administration.

Further details are not available.

FORM 15-I

Memo on Testing

I am sure that we will be able to provide an adequate amount of time in order for you to obtain the information required for the evaluation. I should think that about three or four days in the beginning of the school year and three or four days at the end of the school year should be sufficient. Testing will necessarily be limited to the students' mathematics class hour. Our school calendar of events is generally scheduled far in advance of the opening of school, but I feel reasonably sure that what you request can be arranged. We will also be able to provide an adequate room and the necessary facilities for the individual tests.

The school ~~district~~ feels that a certain responsibility is owed to the parents in our community to insure that children's time is being used for educational purposes. Moreover, it is our direct responsibility to insure the privacy of family life and not to unduly intrude into these personal affairs. Please be advised that any nonstandard tests must be approved by the district office.

Approved by

Dr. Gerhard

FORM 16-I

Math Test Information

The school district has on file all major standardized tests of mathematical achievement. The file of these is available in the school district testing office. We are allowing the evaluation team complete authority to select the appropriate test for use in this evaluation. If the evaluation team decides to prepare any special measuring instrument, this, of course, would be subject to district approval.

Approved by

Theodore Wine, Counselor

FORM 17-I

Prior Test Data

Results of intelligence and achievement tests administered during the sixth grade are available in each student's cumulative record folder and access to these data will be provided by the district.

Approved by

Theodore Wine, Counselor

FORM 18-I

Additional School Data

ALVA

N=355

Median IQ - CTMM	
Verbal	85.8
Non-verbal	89.1
Total	87.5

VALLEY

N=473

Median IQ - CTMM	
Verbal	98.8
Non-verbal	99.2
Total	98.9

EAST

N=421

Median IQ - CTMM	
Verbal	95.2
Non-verbal	92.5
Total	94.0

Tests Taken by Individual Pupils

1. IQ test results
 - a. Binet
 - b. WISC
 - c. Kuhlmann-Anderson
 - d. Detroit
 - e. Public School Primary
2. Achievement Test
3. Ten Week Math Grade and Citizenship Report
(last ten weeks of the school year)

ALVA

Median IQ - Arithmetic
Reasoning 18.5
Fundamentals 29.7

VALLEY

Median IQ - Arithmetic
Reasoning 28.3
Fundamentals 40.3

EAST

Median IQ - Arithmetic
Reasoning 20.0
Fundamentals 34.8

Number of Feeder Schools

ALVA 9

EAST 6

VALLEY 9

Median IQ - CTMM of Feeder Schools

v 90.3 nv 90.7

v 92.2 nv 84.4

v 96.8 nv 97.5

Mean Achievement Scores

By Stanines:

EAST

VALLEY

ALVA

7.0 - 9.0

2.0%

11.6%

7.0%

5.0 - 6.9

24.2

39.7

32.6

3.0 - 4.9

35.5

35.9

46.5

1.0 - 2.9

38.3

12.8

13.9

Educational Aspirations of Schools

I wish to:	EAST	VALLEY	ALVA
Quit school	2.0%	6.4%	9.3%
Finish high school	32.3	21.8	30.2
Go to school after high school	57.4	69.2	55.8
Don't know	8.3	2.6	4.7

Recorded Grades in Math

Last year's grades	EAST	VALLEY	ALVA
A	8.4%	13.7%	5.6%
B	19.0	22.7	18.8
C	45.3	37.4	39.7
D	27.3	21.6	30.0
F	3.6	4.6	5.7

FORM 19-I

Cumulative Folder Information on Pupils

The following type of information is available on each pupil's cumulative card.

name
age
sex
schools attended
number of brothers and sisters
birthplace of parents
languages spoken
special achievement (based on group and achievement tests)
educational achievement
pupil's interests (based on inventory and aptitude tests)
family and home relationships
activities of the child in and out of school
educational and vocational plans
types of agencies the child might have had contact with,
 such as, law enforcement, accelerated programs, etc.
semester grades
attendance record

The accuracy and completeness of these cards is solely dependent upon the school counselor. Therefore, some of this information might be missing.

Tests on File

CAT
CTMM
Iowa
Stanford
Lorge-Thorndike
MMPI

WISC
Kuhlmann-Anderson
Detroit
Public School Primary

Approved by

Theodore Wine, Counselor

FORM 20-I

Information on Pupil Self-Concept
Summary of Data on Experimental Classes

I FEEL THAT I AM AT LEAST AS GOOD AS OTHERS I KNOW.

	<u>East</u>	<u>Alva</u>	<u>Valley</u>
Strongly Agree	18%	33%	16%
Agree	56	48	66
Disagree	23	16	15
Strongly Disagree	3	3	3
Total	100% (210)	100% (170)	100% (258)

IN GENERAL, PEOPLE CAN BE TRUSTED.

	<u>East</u>	<u>Alva</u>	<u>Valley</u>
Strongly Agree	11%	15%	7%
Agree	44	34	56
Disagree	38	38	33
Strongly Agree	7	13	4
Total	100% (210)	100% (169)	100% (257)

PEOPLE SHOULD NOT EXPECT TOO MUCH OUT OF LIFE SO THEY WON'T
BE DISAPPOINTED.

	<u>East</u>	<u>Alva</u>	<u>Valley</u>
Strongly Agree	30%	36%	20%
Agree	56	44	52
Disagree	11	17	22
Strongly Disagree	3	3	6
Total	100% (209)	100% (168)	100% (257)

IF I COULD, I'D RATHER BE SOMEONE DIFFERENT FROM MYSELF.

	<u>East</u>	<u>Alva</u>	<u>Valley</u>
Strongly Agree	17%	7%	11%
Agree	27	22	16
Disagree	35	34	41
Strongly Disagree	21	37	32
Total	100% (208)	100% (169)	100% (257)

THERE ARE TIMES WHEN I THINK I AM NO GOOD AT ALL.

	<u>East</u>	<u>Alva</u>	<u>Valley</u>
Strongly Agree	22%	12%	17%
Agree	56	52	59
Disagree	17	22	16
Strongly Disagree	5	14	8
Total	100% (209)	100% (169)	100% (258)

ON THE WHOLE, I'M PRETTY WELL SATISFIED WITH MYSELF.

	<u>East</u>	<u>Alva</u>	<u>Valley</u>
Strongly Agree	20%	33%	14%
Agree	58	58	68
Disagree	19	8	15
Strongly Disagree	3	1	3
Total	100% (209)	100% (169)	100% (256)

THERE ISN'T MUCH PEOPLE CAN DO ABOUT THE WAY THINGS ARE
GOING TO TURN OUT IN LIFE.

	<u>East</u>	<u>Alva</u>	<u>Valley</u>
Strongly Agree	16%	26%	12%
Agree	40	42	42
Disagree	29	18	32
Strongly Disagree	15	14	14
Total	100% (210)	100% (168)	100% (257)

FORM 21-I

Guidance and Counseling

The counseling consultant assigned to the Project will aid the principal and school counselor in the selection of pupils for the program. He will also assess the special needs of the pupils enrolled in the experimental classes. Through the use of standardized tests, prior grades, and consultation, the project counselor will work with the project teachers in determining the learning needs of individual pupils.

FORM 22-I

District Anticipation of Evaluation Function

Evaluation will be guided by the general and specific objectives of the project. It will assist in orientation of the project staff to its purposes and needs by reporting on a regular basis to those individuals in a position to best act on such reports.

In addition, the district expects the evaluation team to submit a final report at the conclusion of the school year. This report along with recommendations from the project staff will be used in helping the district decide whether or not to continue this project.

Approved by

Dr. Gerhard

FORM 23-I

Gerhard, Calvin

Age 55

Education

- 1) B. A. Wabash State - 1933
- 2) M. A. Wabash State - 1938
- 3) Ed. D. Wabash State - 1960

Experience

- 1) 1933 - 1938 - Social Studies Teacher, Jonesville, Indiana
1938 - 1942 - Vice Principal, Smithtown, Indiana
1942 - 1944 - Principal, Smithtown, Indiana
- 2) 1944 - 1946 - U. S. Army
- 3) 1946 - 1960 - Director Experimental Elementary School
Programs, Smithtown, Indiana
- 4) 1960 - 1965 - Coordinator of Secondary School Project,
City District, California
- 5) 1965 - Present - Administrator of Specially Funded Projects,
City District, California

FORM 24-I

Objectives for Summer Workshop

1. Provide teachers with information about
 - a. The cultural background of students in the experimental program,
 - b. Typical school behavior of these students.
2. Increase teachers' understanding of the relation between reading ability and achievement in mathematics.
3. Increase teachers' ability to use discovery methods in teaching mathematics.
4. Provide opportunities for teachers to become familiar with a wide range of commercially available materials for use in the teaching of mathematics.
5. Provide opportunities for teachers to begin work on the development of new materials for use in the experimental classes.
6. Increase teachers' understanding of themselves and of one another through sensitivity training sessions.

FORM 25-I

Program and ObjectivesProgrammed Learning: Alva Junior High

The objectives of this Center are the selection, study, and use of commercially developed programmed materials and the development of programmed materials which will be successful with disadvantaged students.

Programmed materials designed for use in automated equipment will receive attention. The quantity of such materials developed in the last 5 or 6 years will require a refined selection criteria. The teachers will, therefore, screen existing materials and select the most appropriate. For the area in which existing materials are scarce, the teachers will develop and refine programs. They will also determine which topics are best taught through programmed materials exclusively and which are best taught through programmed materials in conjunction with other media.

Closed Circuit Television Retrieval Center:

Valley Junior High

The primary objective of this Center is to individualize instruction to accomodate the wide disparity of abilities among individuals. It will seek answers to such questions as "In what ways can materials be provided at the learning level of each individual?"

The Center will measure changes in student and teacher behavior due to the use of a retrieval system, and train teachers to effectively utilize such systems. It will produce appropriate lessons on video-tape not available commercially.

The Center will provide individual students, groups, and classes the opportunity to view and listen to instruction on film, tapes, and slides. It will provide students with programs at the best time suited to their learning needs. The system will bring to the students educational materials not usually available through the school's own resources. The project will provide a prototype video-audio distribution system which will utilize a variety of new media in various learning situations.

Mathematics Laboratory: East Junior High

The literature attests to the lack of manipulative and sensory experiences of disadvantaged children. The result is a scarcity of quantitative concepts. The mathematics laboratory will provide compensatory experimental background to meet these needs.

The main objective of this Center is the development of materials and methodology appropriate for use in a multi-media, multi-sensory environment. This environment will contain materials for the construction of objects by pupils, math tools and equipment, books, units, guides, programs, mathematically oriented games, and instructional equipment such as recorders and projectors.

This approach will encourage the discovery of key mathematical principles through raising problems, asking questions, and using a variety of tools and instruments for use in counting and measuring physical objects. This will facilitate the translation of the concrete to the abstract.

FORM 26-I

District Budget

Equipment and materials per Center:

Alva	\$90,000
East	90,000
Valley	<u>96,000</u>
	<u>\$276,000</u>
Administrative Salaries	<u>84,000</u>
Total	\$360,000

Approved by

Dr. Gerhard

FORM 27-I

Evaluation Budget

Salaries	\$40,000
Consultants	10,000
Test administration	6,000
Development of additional tests	3,000
Data processing	6,000
Rental of office space	<u>10,000</u>
	\$75,000

FORM 28-AD

District Approval

Response to request # _____ Team: _____

We are pleased to approve your request. We will be happy to cooperate.

Approved by

Mrs. Jones

Project Coordinator

FORM 29-AD

District Denial

Response to request # _____ Team: _____

Your request is contrary to district policy on this matter,
and must be denied.

Approved by

Mrs. Jones

Project Coordinator

FORM 30-AD

Response to request # _____ Team: _____

We regret that we do not have the information you requested.
It is not likely that we would be able to obtain it in time
for you to make use of it.

Approved by

Mrs. Jones

Project Coordinator

FORM 31-AD

Response to request # _____ Team: _____

The district feels that decisions of this type are a normal operational part of the evaluation function; it is assumed that your evaluation team will make the appropriate decision.

Approved by

Mrs. Jones

Project Coordinator

FORM 32-AD

Response to request # _____ Team: _____

It is our impression that this information was provided in a prior report to you. If you are unable to locate it please let us know. Re-compiling the information will require some time.

Approved by

Mrs. Jones

Project Coordinator

FORM 33-DJ

Response to request # _____ Team: _____

It appears that we have misplaced your file. We shall continue to look for it. If you restate the request we shall give it our immediate attention.

Approved by

Mrs. Jones

Project Coordinator

FORM 34-DJ

Response to request # _____ Team: _____

At this moment we regret to inform you that the information is not available, however, we also recognize the importance of having this information. Consequently, we are in the process of compiling the materials that you have requested. Please resubmit your request.

Approved by

Mrs. Jones

Project Coordinator

FORM 35-DJ

Response to request # _____ Team: _____

The teachers are now in the process of trying to reformulate these ideas. There seems to be no agreement at the moment, but we are confident that a satisfactory solution will be arrived at soon. Please submit your request again.

Approved by

Mrs. Jones

Project Coordinator

FORM 36-DJ

Response to request # _____ Team: _____

Because of our obligation to the community, district policy will not permit delegation of responsibility in this matter. If you will restate your request, we shall inform you of our decision as soon as possible.

Approved by

Mrs. Jones

Project Coordinator

FORM 37-DJ

Response to request # _____ Team: _____

We have been working on this problem since we received your original request. Unfortunately, we have not yet finished, but hope to soon.

Approved by

Mrs. Jones

Project Coordinator

FORM 38-DJ

Response to request # _____ Team: _____

We regret delaying you again. We are still working on the problem, but I must admit we have had considerable difficulties. We haven't given up, however.

Approved by

Mrs. Jones

Project Coordinator

FORM 39-DJ

Response to request # _____ Team: _____

District policy is unclear in this matter. We have referred the question to Dr. Gerhard's office.

Approved by

Mrs. Jones

Project Coordinator

FORM 40-DG

Response to request # _____ Team: _____

Dr. Gerhard is out of town at present. Can we call you when he returns? Please submit your request again if you wish to meet with Dr. Gerhard.

Miss Hawkins

Secretary to Dr. Gerhard

FORM 41-DG

Response to request # _____ Team: _____

Through an oversight, the Administrator of Specially Funded Projects has two appointments scheduled for this hour and cannot meet with you. Would you care to make another appointment at a later date? Please submit your request again if you wish to meet with Dr. Gerhard.

Miss Hawkins

Secretary to Dr. Gerhard

FORM 42-DG

Response to request # _____ Team: _____

Summary of meeting with Dr. Gerhard

Our district personnel are deeply appreciative of your efforts and recognize your desire for the information requested. However, it is the opinion of our administrative staff that your request cannot be approved since district policy appears to be in direct conflict. We regret the delay in responding; several officials had to be consulted for a decision.

FORM 43-DG

Response to request # _____ Team: _____

Summary of meeting with Dr. Gerhard

We are sorry to inform you that we do not have this information on file. We will be happy to cooperate, however, in making it possible for you to gather the information yourselves.

FORM 44-DG

Response to request # _____ Team: _____

Summary of meeting with Dr. Gerhard

After consultation with several district administrative officers,
I am happy to tell you that we have approved your request. Please
let me know whenever I can be of service to you.

FORM 45-DG

Response to request # _____ Team: _____

Dr. Gerhard has asked that I forward the attached information to you.

Mrs. Jones

Project Coordinator

FORM 46

Preliminary Design

As a result of your questions, you have now obtained a number of clarifications of the program.

1. What information do you now propose to collect, from whom, about what, at what times, and by what means in order to have what you will need to prepare an evaluation of this program?
2. Indicate the steps you plan to take now to assure yourself that you will get the kind of information you need.

Write these statements and give them to the team coordinator.

At this time you may wish to submit additional RFI or DAR forms.

You may submit no more than three of these forms.

Your statement will represent your preliminary design report to the CSEIP Evaluation Project Director.

FORM 46a

PRELIMINARY DESIGN REPORT

Team _____

Date _____

Characteristics of East Center Teachers

TO : CSEIP STAFF

FROM: Staff Interviewers

SUBJECT: Summary of Interview with East School Principal
(You may assume that the differences among the East Center teachers are typical of differences found in the other two Centers.)

This is a summary of an interview with the principal at East School. The teachers at this Center were characterized in the following ways:

1. Name: Mr. James Wilcox

Mr. Wilcox is a successful teacher of long standing in the district. He is creative, able to explore new materials, and imaginative in the activities he selects for his pupils. He tends to involve the students in much decision-making and allows them to move out of their seats quite a bit. He has a reputation in the district for having a somewhat noisy, active, unruly classroom. He has been informed frequently of the need to maintain a more uncluttered, well-organized room environment. He is bright, eager to learn and most anxious to please. He is ready to accept nearly all suggestions and profit by them.

2. Name: Mr. Gerald Forbes

Mr. Forbes is a well-mannered, orderly individual who is able to maintain a quiet room. He is always careful to see that each student knows the fundamentals of mathematics before moving on to complex material. He enjoys his students and interacts warmly with them. At the same time that he covers the material, he is a strong leader among his students with solid convictions about the need for good discipline and firm control. He has a good reputation with his district superiors and is seen as efficient and competent in carrying out any task he undertakes.

3. Name: Mr. Henry Webster

Mr. Webster is unusually bright and imaginative in his selection of materials and methods. He has been doing demonstrations in the district for many years and is enthusiastic about new ideas. He has published sets of materials for use by other teachers and has led a number of workshops and inservice classes in mathematics. His peers respect and like him, and he is often characterized as their spokesman. He does tend to think for himself and make decisions without consulting others. He has also been warned of spreading himself too thin in that he is consistently involved with educational courses and conferences which take him off the premises. In spite of this, however, Mr. Webster does produce considerably.

FORM 48

Field Report Summary Sheet No. 1 - November

The program has now been in progress for several months. You have had observers in the classrooms of the three schools. Following is a summary of some of their observations:

VALLEY

1. To date no television equipment has arrived. Delivery date is uncertain.
2. The first clerk left the job and has not been replaced yet. This makes it difficult to produce teaching materials.
3. Pupils in comparison classes seem to be more capable in mathematics than the experimental classes (Better check selection process).
4. A personality conflict has caused a split in Center personnel--team meetings of teachers have been discontinued.
5. Morale of teachers is becoming shaky.

EAST

1. Math lab approach is working smoothly.
2. Pupils come in at lunch hour and after school to work in the math lab.
3. Factory equipment for math lab was late in arriving. Teachers made their own equipment.
4. Classrooms too close together--noise level is extremely high.
5. First four weeks of materials seem original and creative, but these materials have not been put in finished form.
6. The teachers work on materials as a team. Group spirit is high but so is group disappointment with project administration.
7. One teacher is talking of transferring out of the project at mid-year.

ALVA

1. Pupils seem to have great difficulty with the procedures used in programmed instruction.
2. Class size averages five to six pupils below original plan of 20 pupils per class.
3. While waiting for much of the equipment for programmed instruction to arrive, the teachers are using several commercial textbooks.
4. The school administration requires teachers to assume many supervisory tasks, which interferes with the time they have to design and create new materials.
5. Teachers test materials they have created in each others' classrooms--they work together on working out the "bugs."
6. The classrooms experience constant interruptions from announcements on the school public address system.

General Comments

1. The illustrators and the math consultant are spending more time in the Central Office on "other duties" than in the three Centers. As a result no new materials which teachers have created have been put in finished form. No procedure has yet been set up to field test new materials within the three Centers or in other schools.
2. The project counselor has been promoted and is no longer with the project. His position has not been filled yet.
3. The project has suffered a cut in the budget, eliminating the audio-visual consultant and one instructional media technician. The three centers will share the remaining two technicians.
4. Observations indicate that in general the project teachers are really trying to individualize instruction. Experimental classes appear to be much more flexibly organized than the comparison classes.

FORM 49

District Request for Information -- December

Mrs. Jones has relayed a request from Dr. Gerhard regarding some interest that has arisen among District personnel.

The specific questions are:

1. The teachers have indicated an interest in "how they are doing" with respect to the math program?
2. With respect to the materials that have been developed, which seem to be most effective in the math program?

Please address your responses to Dr. Gerhard and file them with the simulation coordinator.

FORM 49a

INTERMEDIATE REPORT TO DISTRICT

Team _____

Date _____

FORM 50

Progress Report to CSEIP Evaluation Project Director

-- December

You have now had some introduction to initial aspects of the math program in the field stage.

What is your current thinking with regard to the evaluation project thus far? Please write up any impressions which you want to report to the CSEIP project director.

Your comments may simply consist of a brief listing or enumeration of your observations to date. When finished, submit them to the coordinator.

FORM 50a

PROGRESS REPORT TO CSEIP

Team _____

Date _____

FORM 51

January

To Team: _____

From : Dr. Gerhard

Re : Your report of December

Mrs. Jones has relayed to me your report concerning teachers and materials in this project. Let me thank you for your efforts thus far.

Further reports have come to me indicating that my principals are pleased with the program. We shall all continue to cooperate in every way to make this project successful.

FORM 52

January

To Team: _____ (each team)

From : Director; Evaluation Project--CSEIP

Re : Your report of December

We received your field report with much interest. I reviewed your original preliminary design report and hope you will continue to keep me posted on progress.

FORM 53

Field Report Summary Sheet No. 2 - February

1. The Project has lost two teachers. John Snow at Alva has been promoted to Vice-Principal and has been assigned to another school. Henry Webster at East, due to a dispute with Central Office, decided to leave the project. These teachers will be replaced immediately.

2. In the middle of the first semester, Bill Sinclair at Valley was transferred to the Central Office. For the second semester, he will be sent back to Valley, while Howard Smith from Valley will be sent to the Central Office to work on materials created in all 3 centers. This means that there are only two teachers at Valley. They will cover all the classes originally assigned to three teachers. This leaves them less time to work on new materials.

3. Another problem is the rapid pupil turnover at Alva. The Project there has lost one-third of its students. Of the original 250 pupils, we estimate that about 80-100 will still be there in June.

4. One television camera has been delivered to the Valley School Center. The rest of the equipment is not expected until May.

5. Observations continue to indicate that most experimental teachers use a variety of teaching materials and techniques and have established good working relationships with most pupils. Experimental classes still appear to be more flexibly organized than comparison classes.

6. A new counselor has been assigned to the project.

7. Two units of new materials from Alva have been finished and will be tested in a few other schools.

FORM 54

Design Review Task

In view of the field research reports which have been presented to you, what are your feelings as to what you can now do with the data you plan to collect in the design previously submitted? Do these effects destroy the evaluation, alter its characteristics, or what? What kinds of things do you now think that you will be able to tell the districts now or at the conclusion of the evaluation? Please file a report with your coordinator.

FORM 54a

DESIGN REVIEW REPORT

Team _____ Date _____

Summaries of
Audio-Visual Materials

FOR USE BY
SIMULATION STAFF ONLY
NOT FOR DISTRIBUTION
TO PARTICIPANTS

Summary of Taped Interview with Dr. Gerhard

AV-1

- 1) 8½ minutes long
- 2) Gerhard in a very wordy manner demonstrates his willingness to "cooperate in any way possible" with the program
- 3) Discusses the importance of an evaluation
- 4) Sets certain conditions on data collection
 - a. Instruments to be approved before being used
 - b. No personal questionnaires about the children's families
 - c. No women data collectors in the schools with short skirts; no beards on the men data collectors
- 5) Concludes by again expressing his willingness to cooperate

AV-2

Summary of Slides

- 1) Classrooms and playgrounds at the three schools are shown (Alva, East, Valley).
- 2) The three communities surrounding schools are shown.
- 3) Alva is mostly Negro, located in what might be called a ghetto.
- 4) East is mostly Mexican-American, located in a heavily Mexican-American area.
- 5) Valley is mostly white, located in the suburbs.

Summary of Taped First Interview with Mrs. Jones

AV-3

- 1) 7½ minutes long
- 2) Mrs. Jones expresses her interest in the program
- 3) Describes changes in the administrative structure
- 4) Mrs. Jones reveals that she could perhaps be a very difficult person to deal with
- 5) Mention is made of problems with equipment and materials
- 6) Teachers are supposed to turn in weekly reports to Mrs. Jones
- 7) First indication that there is no clear access to decision-making personnel
- 8) Concludes with Mrs. Jones expressing the desire to cooperate with the program

Summary of Second Taped Interview with Mrs. Jones

AV-4

- 1) 1½ minutes long
- 2) Second mention of the fact that problems are arising with materials and equipment
- 3) Indication that teachers in individual centers are going to use commercial materials instead of developing their own
- 4) Mrs. Jones criticizes teachers for not turning their weekly reports in on time

Summary of Film of Teachers at East School Center

AV-5

Seven minutes long

The film shows each teacher with one of his classes

The first teacher (James Wilcox) is having his pupils work with a small computer. There is much informal interaction between teacher and pupils and much movement around the room.

The second teacher (Gerald Forbes) has pupils working while seated at their desks. The only movement is when one pupil at a time comes up to the board.

The third teacher has several activities going on at once. Some pupils are using geometrical blocks to work out puzzles. The teacher plays dominoes with another group.

Summary of Third Taped Interview with Mrs. Jones

AV-6

- 1) 5 minutes long
- 2) Mrs. Jones reveals that teachers were developing materials all along but she just wasn't sending the CSEIP staff copies of them. She gives some vague excuse for this.
- 3) Final indication that Mrs. Jones is one of the prime reasons that communications and decision-making are difficult within the district system.

Summary of Taped Interview with Mr. Wine, Counselor

- 1) 4½ minutes long
- 2) Mr. Wine reports that at Alva School there has been a 25% loss in pupils in the program.
- 3) The method of replacing the pupil loss is indicated. This is not done strictly according to an experimental design.
- 4) Classes at Alva are not left intact. Children have been shifted from one teacher to another, and some of the original experimental groups have been consolidated.
- 5) There has been loss of experimental teachers from all of the schools.
- 6) East school has had little change.
- 7) Sex ratio in classes at Valley gets altered because some of the teachers prefer classes of all boys or all girls.
- 8) There is a 40% loss in pupils in the comparison classes at Valley.
- 9) Traveling teachers have been set up to aid the central staff. One of these teachers came from Valley. His position was not filled. Instead the other experimental teachers there were required to teach extra classes.

Summary of Taped Interview with Teacher

AV-8

- 1) 8 minutes long
- 2) Teacher expresses concern over lack of communication with Mrs. Jones.
- 3) Mention is made of problems in acquiring needed equipment and consultant help.
- 4) Teacher reveals she has allowed other teacher to borrow materials for use in other classes.
- 5) She has also allowed other students to use the materials which were prepared for her own class.
- 6) Teacher complains of having especially heavy workload so that little time is left to produce needed materials.
- 7) She mentions that in-service training was inappropriate in preparing her to do the job.
- 8) She reminds listener that one teacher was transferred out of the program and concludes that this is not surprising in light of inability to solve the many problems faced by teachers in the program.

CSEIP SIMULATED EVALUATION EXERCISE:
INSTRUCTION GUIDE

Marvin C. Alkin, Mary M. Bentzen,
J. Eugene Grigsby III, Stuart Johnson and Rita Johnson

CSE Report No. 49
October, 1969

Center for the Study of Evaluation
UCLA Graduate School of Education
Los Angeles, California

Table of Contents

	Page
I. Introduction	1
II. Description of the Exercise	3
A. Sketch of Room Arrangement	3
B. Roles and Functions of Participants	4
1. Simulation Director	4
2. Media Technician	5
3. Information Bank	5
4. Coordinators	5
5. Team Leader	6
6. Teams	6
7. Typing Pool	7
C. Stages of the Exercise	8
1. Overview	8
2. Planning and Preliminary Design Stage	8
3. Intermediate Field Report Stage	9
4. Design Review Stage	9
5. Summary Discussion	10
III. Procedures at Each Stage of the Exercise	11
A. Space and equipment requirements	11
B. Formation of teams	14
C. Chart of the Stages of the Exercise	15
D. Suggested Schedule for the Exercise	16
E. Instructions to participants	17
F. Planning and Preliminary Design Stage	19

	Page
G. Intermediate Field Report Stage	27
H. Design Review Stage	29
I. Summary Discussion	31
IV. Evaluation of the Exercise	33

I. INTRODUCTION

Purpose of exercise

The general goal of this exercise is to increase the flexibility of evaluators as they respond to constraints encountered in actual field conditions.

To accomplish this goal, the exercise provides the opportunity for teams of participants to construct and subsequently modify evaluation designs in light of information received during a simulated evaluation project.

Data are gathered from three reports submitted by the participants during the exercise. As difficulties arise, such as lack of communication and loss of data, it is expected that each team shall:

1. persist in the evaluation effort
2. indicate concern over emerging limitations of the original design, and
3. modify the original design in light of these limitations

Specific objectives for each stage of the exercise, including scoring procedures for determining the extent to which each objective has been achieved, are discussed in the final "Evaluation" section of this manual. (p. 32)

Description of exercise

In this exercise a simulated evaluation agency, CSEIP, has contracted to evaluate a specially funded junior high school

mathematics project over a period of one year. Participants in the exercise are asked to carry out the evaluation of this project.

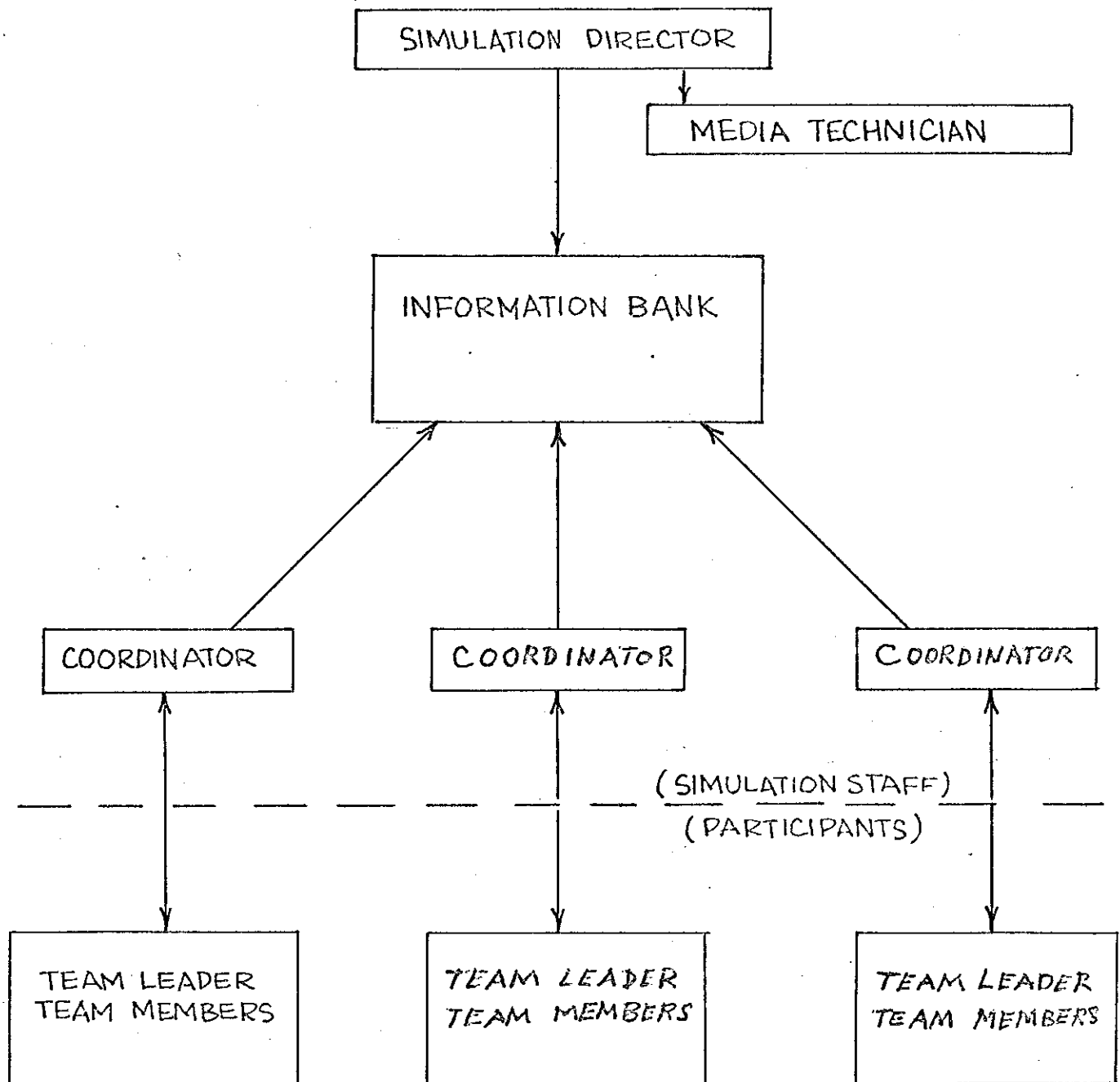
As the teams of participants move through the exercise, frequent opportunities are provided for them to:

1. receive inputs of data by way of slides, tapes, and written materials,
2. participate in work or activity sessions,
3. submit requests for desired information,
4. submit written reports to the district or home office (CSEIP), and
5. receive written communication back from the district and home office.

The final design submitted by each team of participants is expected to be the result of modifications in response to the data inputs received. At the close of the exercise, opportunity is provided for participants to discuss and evaluate their experience.

II DESCRIPTION OF EXERCISE

A. SKETCH OF ROOM ARRANGEMENT



B. ROLES AND FUNCTIONS OF PARTICIPANTS

There are two major groups of participants involved in this simulation exercise: 1) the simulation staff, composed of the simulation director, media specialist, and coordinators; and 2) the players, who are divided into individual teams, each with a team leader. (A typing pool is also needed, but does not participate in the exercise.)

It is the responsibility of the simulation staff to oversee and to run the exercise. The teams of players have no responsibility for any procedural aspects of the exercise. As stated in the introduction, this exercise is designed to improve ability to design and carry out evaluation projects. It is for this reason that teams are established. Individuals are placed in a situation where they are required to work with other team members in order to get the work done (in this case, the successful completion of the exercise).

The Sketch of the Room Arrangement (page 3) shows the relationships among all individuals involved in the game.

Simulation Staff

1. The Simulation Director

The simulation director is the one person responsible for all final decisions which are to be made during the exercise. It is the simulation director's job to assign team leaders and coordinators to each team. He also indicates to the media specialist

which tapes, slides, or films will be presented at any given time. The simulation director also acts as moderator throughout the entire game, including the Summary Discussion Stage.

2. Media Specialist

The media specialist's sole responsibility is to run all audio visual equipment. He takes his cues from the simulation director. (See pages 75-82 for a list of audiovisual equipment required).

3. Information Bank

A table will be designated as the information bank. On this table will be the written material available for transmission to the various teams. The only persons allowed to approach this table will be the coordinators and the simulation director.

4. Coordinators

The number of coordinators will be entirely determined by the number of teams there are in the game. That is, one coordinator is assigned to each team. The number of teams will be dependent upon the number of participants in the game.

It is the coordinator's job to transmit materials to and from his team. The materials at the information bank must be set up so that any piece of material can be quickly obtained by the coordinators. In the event that a coordinator has any question about what material to give to his team, he must consult with the simulation director who will make the final decision.

Each team must communicate only with its team coordinator. This is done to prevent confusion and allow the exercise to proceed more efficiently.

The Players

5. Team Leader

A team leader is assigned to each team by the simulation director. It is the team leader's responsibility to sign all forms which are presented to the team coordinator. The team leader also acts as the leader in team discussions.

6. Teams

The teams are made up of the individuals for whom the simulation exercise is being run. From our experience, we have found that the best team size is from five to ten members. The size of the groups is to a large extent dependent upon the diversity of participants. If all participants have about the same training and experience, then smaller groups seem more advantageous. If participants have a variety of experience and training, however, then perhaps larger groups are more desirable.

This exercise is designed for a maximum of one hundred participants. If you wish to involve more people than this, we suggest that you select a few teams to actually go through the exercise, while the remainder of the people watch the process.

The teams are the mainstay of the exercise, for all activities are performed by them. Team members should quickly realize that some division of labor is important and that the more efficient the team can be, the more productive it will become.

A description of reports is given.

Team members will be allowed to communicate only with their fellow team members, the team leader and their team coordinator. Only in the summary discussion at the conclusion of the exercise

will the teams be allowed to interact freely among themselves.

7. Typing Pool

At the conclusion of the Planning and Preliminary Design Stage of the exercise, each team submits to its coordinator a written proposal for an evaluation design. These designs are taken by the coordinators to the typing pool where they are to be typed and reproduced so that each participant can have a copy available prior to the next stage of the exercise.

C. STAGES OF THE EXERCISE

1. Overview

The exercise has been arranged in three stages--each stage requiring 1½ to 3 hours. Other time blocks might be feasible, but are left to the discretion of the user. The Chart of the Stages of the Exercise (page 15) shows each of the three stages with its component materials and tasks. Each stage provides the same four activities in the following sequence:

a. Input. Each stage begins by providing the participant teams with data through various media, i. e., written information, taped interviews, pictorial material.

b. Work Session. A work session gives the participants an opportunity to interact as they consider the input data.

c. Reports. Toward the end of each stage, the participant teams prepare reports which allow teams to focus attention upon any aspects of the exercise which they feel deserves reporting. In addition, the reports give the simulation staff the opportunity of judging the success of each team in meeting the simulation objectives.

d. Feedback. Following the submission of reports, the teams receive responses to their reports.

The three stages of the exercise differ in important ways. These differences are described in the following sections.

2. Planning and Preliminary Design Stage

After preliminary introductory activities (such as setting up

the teams and stating ground rules), the exercise formally begins with the presentation of background materials regarding the schools in which the evaluation will be carried out. A unique aspect of this stage is the use of "Request for Information" forms, whereby teams may acquire various kinds of optional information, and find that other information is not available.

When the teams have considered the information obtained, they proceed to the task of developing a preliminary evaluation design which is submitted as the report ending the activities for the first stage. The simulation staff duplicates and distributes all preliminary designs to all participants as additional resource materials for team use.

3. Intermediate Field Report Stage

The second stage begins by informing teams of certain difficulties, which are appearing as the mathematics project gets underway in the school district. These difficulties include a lack of expected materials and some communication problems among teachers, district supervisors, and the evaluation team. The work session culminates with the preparation of two reports. One report is a progress report on any emerging limitations in the preliminary design. The second report is prepared in the form of a letter to school district personnel, in which a team may elect to try to overcome those difficulties which are perceived.

4. Design Review Stage

During this stage, the teams are informed of additional difficulties, involving loss of students and teachers from the program as well as further breakdown of communication. This stage

terminates when the teams are asked to formally review their preliminary designs, and indicate what inferences can be drawn in light of the difficulties which have been encountered.

5. Summary Discussion

The summary discussion constitutes a post-exercise session, in which the simulation director can respond to the final design review reports, and provide the participants with the over-all objectives of the exercise. In addition, the summary discussion provides opportunity for the team participants to indicate their reactions to problems encountered during the exercise, as well as to critique the entire process.

III. PROCEDURES

A. SPACE AND EQUIPMENT REQUIREMENTS

The space in which the exercise is carried out should be large enough and flexible enough to allow for two major types of activities.

1. Total group meetings. At the start of the exercise, general instructions must be given to the whole group of participants. At the end of the exercise, the whole group meets for a summary discussion. These group meetings could take place in the same room as the exercise or in a different room.

2. Team meetings. Throughout the exercise, the participants will work in small groups (approximately 5 to 10 people in each group). It is necessary that these groups be placed in one room for the following reasons. First, the coordinator attached to each group must have quick access to the information bank and to the simulation director. Second, tapes and films will be presented to all teams at the same time. The arrangement of groups in the room must therefore allow each team to work alone, but also be able to see or hear a film or tape which is presented to all participants in the room.

Equipment and materials required for the exercise are the following:

1. All the forms in the Materials Supplement must be duplicated for distribution to the teams. With the exception of the two forms noted in (2) below, we suggest that the number

of copies needed be figured on a basis of one copy for two people. Two or three copies of each form can then be given to each team. This allows for quicker, easier reading by participants.

2. Teams will need to make carbon copies when using Form No. 8 and Form No. 9 (see Materials Supplement). These forms should be prepared in packets of two each with a carbon inserted. Enough copies of each forms should be made so that each team can have about 12 packets of each form.

3. A copy of the Index of Materials (p.) must be made for each coordinator. Coordinators will refer to the Index sheet to find the appropriate materials at the information bank during the exercise.

4. An audiotape recorder, a slide projector, a 16 mm. projector and a screen must be situated so that all tapes and films can be seen and heard by all participants at once.

5. A work table and chairs for each team must be provided.

6. Paper and pencils for each team should be supplied.

7. A chalk board should be placed in view of all participants. The appropriate month of the simulated school year will be written on the board from time to time during the exercise.

8. A public address system, if the room requires it, should be used so that the simulation director can give information to all teams at once when necessary during the exercise.

9. Enough typewriters and duplicating machines are needed to produce copies of each team's preliminary design within the space of 2 to 3 hours at the end of the first day's sessions.

10. It is suggested that coffee be provided in the room where the exercise is being carried out so that participants can get to it as they wish.

11. If possible, a room with light-dimming facilities should be used, so that lights can be dimmed but not turned off during showings of film and playing of tapes. If lights must be shut off, we suggest that they be turned off during tape plays as well as film projections.

B. FORMATION OF TEAMS OF PARTICIPANTS

Participants must be divided into teams of about 5 each, and a leader must be appointed for each team.

It is preferable that assignment to teams and selection of team leaders be worked out by the simulation staff before the exercise begins, so that participants can simply be informed at the outset where they are to work. If, however, the simulation staff does not know ahead of time who the participants will be, the breakdown into teams and the selection of team leaders will have to be accomplished during the introductory phase of the exercise.

Teams may be designated by number, letter or other symbols. We suggest that teams be named by cities, i.e., the Seattle team, the Chicago team, the Pittsburgh team, etc. This supports the illusion that CSEIP is a nation-wide evaluation agency with branches in many cities.

D. SUGGESTED SCHEDULE FOR THE EXERCISE

FIRST DAY

Introduction	9-9:30
--------------	--------

Planning and Preliminary Design Stage

Background Information	9:30-10:45
------------------------	------------

Optional Information	10:45-11:45
----------------------	-------------

LUNCH	11:45-1:00
-------	------------

Preparation of preliminary design	1-2:15
--------------------------------------	--------

DUPLICATING REPORTS	2-4:30
---------------------	--------

Pick up reports	4:30-5:30
-----------------	-----------

Read reports	Evening
--------------	---------

SECOND DAY

Intermediate Field Report Stage

Field Information	9-9:45
-------------------	--------

Preparation of field report	9:45-10:30
--------------------------------	------------

Design Review Stage

Field information	10:30-11:45
-------------------	-------------

LUNCH	11:45-1:00
-------	------------

Preparation of design review	1-2:00
---------------------------------	--------

BREAK	2-2:15
-------	--------

<u>Summary discussion</u>	2:15-4:00
---------------------------	-----------

E. INSTRUCTIONS TO PARTICIPANTS

The following information should be given to the total group of participants before the exercise begins:

1. You are about to engage in a simulation exercise.

During this exercise you are to consider yourself as a staff member of the CSEIP evaluation agency. In the exercise you will be called upon to do a job for CSEIP. You will evaluate a program during one school year.

2. This exercise is intended to familiarize you with some of the experiences encountered by evaluators working in real school situations. All of the situations and all of the information which will be given to you throughout the exercise have been drawn from an actual evaluation carried out in a school setting.

3. The purpose of this exercise is not to collect data for someone's study. It is designed to be a learning experience for you.

4. The exercise is not a competition among participants or teams. Rather it is hoped that all individual participants and teams can profit from the experience.

5. There will be times when procedures and/or information presented might seem contradictory. This is all a normal part of the exercise.

We are going to divide you into ____ teams of ____ members in each team. Each team will have a leader who will be responsible for all communication to and from the team during the exercise.

7. Each team will have a simulation coordinator.

Your coordinator is the person who will get information to your team and who will answer any questions you may have.

8. The exercise will proceed in several stages. Each stage takes place at a different time during the simulated school year in which you are supposed to be working. The month of the simulated year will be written here on this board at each stage of the exercise.

At each stage three things will happen. 1) You will receive a variety of information. 2) Team members will discuss this information. 3) Your team will submit a written report based on the information you have received up till that time.

9. These are your assignment to teams. The teams will work in the following areas. (read off the members and leaders of each team and assign them to places in the room. Give each team its name. If teams have not been formed prior to this time, it will be necessary to form them at this point. You may choose to use voluntary groupings or count off members of teams. Leaders may be selected in some arbitrary fashion or teams may choose their own leaders.)

10. A coordinator will be seated by each team. Your coordinator will introduce himself to you.

11. Go to your team station and we will start the exercise. From here on, each team will work on its own and will communicate only with its coordinator.

THE SIMULATION DIRECTOR AND THE COORDINATORS SHOULD BE THOROUGHLY FAMILIAR WITH ALL THE MATERIALS* TO BE USED BEFORE THE EXERCISE IS BEGUN.

F. PLANNING AND PRELIMINARY DESIGN STAGE

These instructions (Sections F through H) should be read with continual reference to the Material Supplement.

Background information

"January" is written on the board to represent simulated time.

All teams receive all background information. Materials are given in the following sequence.

1) Initial statement of over-all task is given to each team by team coordinators.(1)** Allow 2-3 minutes for participants to read and discuss this statement.

2) Packet of written materials is given to each team by team coordinators. The packet includes:

Mathematics Demonstration Centers (2)

Description of Math Project Organization (3)

Size of District (4)

CSEIP Organization (5)

Description of Project Schools (6)

Coordinators tell the teams to keep these and all subsequent materials for reference. Teams are allowed approximately 30 minutes to read and discuss these materials.

*Materials may be found in the Materials Supplement of the Handbook of Instruction.

**Numbers in parentheses refer to Form numbers in the Materials Supplement

3) Participants are informed by the simulation director that they are going to hear a taped interview with Dr. Gerhard, the school district director of specially-funded projects. Participants are reminded that they may want to take notes on this and succeeding information.

The tape of the interview with Dr. Gerhard (AV-1) is then played for all participants to hear. Allow 2 minutes for teams to discuss tape.

4) The slides of the three project schools (AV-2) are shown to all participants. Allow 4 minutes for teams to interact.

5) Tape of First Interview with Mrs. Jones (AV-3) is played for all participants.

Teams are allowed about 15 minutes for discussion.

Optional information

"April" is written on the board to show simulated time.

1) The Information for Planning statement (7) is given to each team by the coordinators.

At the same time each team is given about 12 packets each of Request for Information (RFI) forms (8) and District Approval Request (DAR) forms (9). Each coordinator must make sure that his team understands that they are to make carbon copies when using those forms. One copy of each will be given to the coordinator; the team will keep the other copy.

2) Teams will spend the next 40-50 minutes submitting RFI and DAR forms and receiving answers to their requests. Only the coordinators and the simulation director move about the room during this portion of the exercise. The coordinators take forms submitted by the teams to the Information Bank, get the appropriate responses and deliver them back to the teams. If a coordinator has a question as to how a request should be answered, he consults the simulation director.

Each coordinator must make sure that each request from his team is numbered and marked with the team name. He must then do two things. 1) He puts the request number on the response form which he gives back to the team. 2) He puts the response form number on the copy of the request which he keeps. Thus each team knows what response it received for each request, and each coordinator keeps a record of how each request was answered. The simulation staff may use these records later to evaluate the game.

There are four categories of responses for RFI and DAR forms. It is imperative that the simulation director and the coordinators be thoroughly familiar before the exercise is attempted, with these responses and the ways they may be used. A listing of the types of responses is given below, along with several examples of ways in which they may be combined. Ultimately, however, each coordinator must determine the best use of these responses in light of the specific requests he receives from his team and the objectives of this stage of the exercise.

The four categories of responses are:

Information (Forms 10-I through 27-I)

Approvals and Denials (Forms 28-AD through 32-AD)

Delay by Mrs. Jones (Forms 33-DJ through 39-DJ)

Delay and Response by Dr. Gerhard (Forms 40-DG through 45-DG)

Following is one sequence of responses which can be used.

1. Response to a team's first request is an immediate answer. The appropriate answer is selected from the Information forms or from the Approval and Denial forms.

Examples:

If the request is for information on testing, the response might be chosen from Forms 15-I through 18-I, depending on the specific nature of the request.

If the request is for permission to observe in classrooms, the approval response would be Form 28-AD. If the request is for permission to rearrange experimental and comparison classes, the denial response would be Form 29-AD. We suggest that the use of

the responses of District Approval and District Denial be guided by the general rule that all requests to modify the experimental program in any way (e.g., changing class size, number of groups or kinds of programs) be denied, while requests for permission to gather various types of data be approved.

If the request is for information which is not available on any response form, the answer is Form 30-AD.

If the request has to do with mechanics of carrying out the evaluation or making evaluation reports, the response is Form 31-AD.

If the request is for information which has already been given in the background information materials, the response is Form 32-AD.

2. After its first request, a team is delayed from time to time in receiving answers to requests. A delay is accomplished by using responses on Forms 33-D5 through 39-D5 and Forms 40-DG through 45-DG.

Examples:

a) Delay by Mrs. Jones

To carry out a short delay, a request is first answered by one of Forms 33-DJ - 36-DJ. Only after the request is restated by the team, is the appropriate information given.

It is also possible to make a team experience a continuing delay. The continuing delay tactic is probably best used in cases where the request is for information which is not available on any response form. The request is first answered by Form 34-DJ, 35-DJ or 36-DJ, whichever is most appropriate. When the team re-submits

the request, it receives the response on Form 37-DJ. If the team persists in re-submitting the request, it receives Form 38-DJ, then Form 39-DJ. Any re-statement of the request after Form 39-DJ would lead into the "Delay by Dr. Gerhard" series of forms.

b) Delay by Dr. Gerhard

This kind of delay is used in two cases: first, as noted above, when a team persists in submitting a request through the whole series of continuing delay by Mrs. Jones; second, at any point when a team specifically requests information from Dr. Gerhard.

Delay by Dr. Gerhard begins with the use of Form 40-DG or 41-DG to answer the request. When the request is re-submitted, it is then either denied by Form 42-DG or 43-DG, whichever is appropriate, or granted by Form 44-DG or by attaching Form 45-DG to the relevant information form.

3. A pattern of delays to be used may be determined by the simulation staff before the exercise begins, or the number and spacing of delays may be left entirely to the discretion of the coordinators. In any event, it is essential to remember that two things should be accomplished during this part of the exercise. First, teams must have the opportunity to get addition information. Second, teams must have the opportunity to experience difficulty in communication and decision-making, particularly with respect to a bottleneck in a key position, as represented by Mrs. Jones. Within the limits of these objectives and the amount of time available for this stage of exercise, many sequences of responses are possible.

Preparation of preliminary design

At the end of the time allotted for obtaining optional information, "July" is written on the board to show simulated time.

1) Each team receives from its coordinator the Preliminary Design forms (46 and 46a). These forms may be distributed right before the participants break for lunch so that they will have time to do some planning, if they wish, during the break. Or, the form may be distributed right after the lunch break.

2) After lunch each team may submit as many as three more RFI or DAR forms. Coordinators will handle these forms in the same way as they have handled the other optional information. It is suggested, however, that, in the interest of time, teams not be delayed at this point in receiving answers to their requests. About 15-20 minutes is allowed for this activity.

3) Teams are informed that they will be allowed 50-60 minutes to write their preliminary design statements and give them to the coordinators.

4) Participants are also informed by the simulation director that their preliminary design statements will be typed and duplicated during the rest of the afternoon, and that copies of all the statements will be available to all participants. Information is given as to time and place where the copies of the design statements may be picked up.

It should be suggested to the participants that they may treat the statements from other teams as "consultant" help. That is, they may study designs from other teams and think more about their own designs before coming together again the following day.

5) Coordinators collect design statements from the teams and turn them in to the typing pool. Reports are typed and duplicated and deposited at the place where participants are to pick them up. One set of reports should be made for each participant.

G. INTERMEDIATE FIELD REPORT STAGE

Field information

"November" is written on the board to show simulated time.

All field information is given to all teams. The information is presented in the following sequence.

1) Participants are told by the simulation director that the project has now been operating for several months and that they will get some information on how it is going.

2) The Second Interview with Mrs. Jones (AV-4) is played for all participants. Allow 4 minutes for discussion.

3) Each team receives characteristics of East Center Teachers (47) from the coordinators. Allow 3 minutes for teams to look at this.

4) Participants are told that they will see a film of typical teaching by the East Center teachers. They are told that the teachers, in order of appearance, will be James Wilcox, Gerald Forbes and Henry Webster. The Film of East Center Teachers (AV-5) is then projected for all participants. Allow 2 minutes for discussion.

5) Each team receives Field Report Sheet No. 1 (48) from the coordinators.

Teams are allowed 15 minutes to discuss this material.

Preparation of field report

1) At the end of the discussion period, each team receives from its coordinator the District Request for Information (49 and

and 49a) and the Progress Report to CSEIP Evaluation Project Director (50 and 50a).

2) Teams are told by the simulation director that they will be allowed 30-40 minutes to prepare the reports for the District and the CSEIP Project Director. When reports are completed, they are to be given to the coordinators.

3) The coordinators take the reports to the simulation director, and return to each team the Feedback from Dr. Gerhard (51) and the Feedback from CSEIP Project Director (52).

4) The coordinators inform the simulation director when all teams have received the two feedback forms (step (3) above), so that the simulation director can move to the next stage of the exercise.

H. DESIGN REVIEW STAGE

Field information

"February" is written on the board to show simulated time.

All field information is presented to all teams in the following order.

1) The tape of the Third Interview with Mrs. Jones (AV-6) is played for all participants. Allow 5 minutes for discussion.

2) The tape of the Interview with Mr. Wine (AV-7) is played for all participants. Allow 10 minutes for discussion.

3) Each team receives Field Report #2 (53) from the coordinators. About 5 minutes is allowed for participants to read this.

4) The tape of the Interview with the Teacher (AV-8) is played for all participants.

Teams are allowed 20-25 minutes to discuss the information they have received before breaking for lunch.

Preparation of Design Review report

1) The Design Review Task forms (54 and 54a) may be distributed to the teams right after the discussion of the field information and before the lunch break. Or, the forms may be distributed when the participants return from lunch.

2) Teams are told by the simulation director that they will be allowed 45 minutes to an hour to write their Design Review reports and turn them in to the coordinators.

Participants are allowed a 15-minute break before coming together in one group for the Summary Discussion Session. The time and place for this session is written on the board at the end of the work period on the Design Review report.

I. SUMMARY DISCUSSION

The summary discussion is led by the simulation director and might take many forms. We recommend that it be tailored to meet your own needs and those of the participants. For example, some groups might use this discussion to provide support and positive feedback for having participated in the exercise. Others might need a more highly structured discussion which provides everyone with a sense of closure.

In all cases we suggest you give the total group some positive reactions (such as appreciation for their flexibility and willingness to participate in the face of obstacles). They should also now be told the overall purposes and strategy of the exercise.

Here are some further possibilities:

<u>Purposes of Discussion</u>	<u>Types of Eliciting Questions</u>
1. Self-evaluation of the process	"Are there any reactions or comments? How did you feel? What problems did you face? At what points were you distressed? Why did you persist? How did working in a team affect your design?"
2. Participant evaluation of the exercise	"What did you learn? How will this experience be of help to you later? Was the game realistic?"
3. Self-evaluation of designs	"What modifications in design did you make? At what points?

Purposes of Discussion

- *4. Instructor evaluation
of performance
(For scoring procedures
see section on "Evaluation
of the Exercise,"
p. 33)

Types of Eliciting Questions

To account for what variables?
When did you limit your inferences? What designs do you think are most appropriate?
How do you feel about your modified plan?"
"In light of the scores you've just received on your designs, what reactions do you have?"

* This alternative would not be possible if the time schedule suggested on page 16 were followed, since that schedule does not allow enough time for scoring the Design Review reports before beginning the Summary Discussion. If you wish to score the Design Review reports before holding the Summary Discussion, it will be necessary to schedule the Summary Discussion for the evening of the second day or extend the exercise into a third day.

IV. EVALUATION OF THE EXERCISE

As indicated earlier, the exercise has been subdivided into three major stages, each of which terminates with the preparation of at least one report. These written responses from the participants are the means by which the exercise may be evaluated. The reports can be assessed in terms of the objectives for each stage of the exercise. Suggestions as to how this may be accomplished are given in the following discussion.

1. Planning and Preliminary Design Stage

At the end of the first, or planning stage, each team submits a Preliminary Design Report.

Objectives for Preliminary Design Report

It is expected that:

- a) each team will submit a report;
- b) each team will include a general statement of procedures to be employed;
- c) each team report will state the instruments and measures to be used.

The specific items of this report are to be scored on a "yes" or "no" basis. Only minimal criteria are applied at this point, since the Preliminary Design represents an initial plan in which successive modifications will be made. An example of a score sheet for this report is given on the following page.

PRELIMINARY DESIGN SCORE SHEET

Team _____

Date _____

1) Did the team submit a report?

YesNo2) Did the report include
procedures to be followed?YesNo3) Did the report include the
instruments to be used?YesNo

PRELIMINARY DESIGN REPORT -- TEAM TOTAL:
(Number of "Yes" scores)Yes

2. Intermediate Field Report Stage

Two reports are requested from the teams at the termination of the second or Intermediate Field Stage. One report is addressed to the CSEIP Project Director, and one is addressed to the School District.

Objectives for Progress Report to CSEIP

It is expected that:

- a) each team will comment upon emerging limitations of the original evaluation plan;
- b) each team will comment on need for additional data.

Objectives for Report to District

It is expected that:

- a) each team will suggest solutions to emerging problems;
- b) each team will communicate inability to make defensible inferences about the effectiveness of instructional practices or program materials.

Examples of two score sheets are given on the following two pages. One is for the CSEIP Report and the other is for District Report. One or more raters should arbitrarily assign weights to each item on these score sheets. Additional items may be added at the discretion of the raters. After assigning weights and scoring each item, the total scores should be recorded in spaces provided on the score sheets.

CSEIP PROGRESS REPORT SCORE SHEET

Date _____

Weights Assigned:
(Determined by
raters)Points
Achieved:
(Determined
by raters)

Team _____

1) Are emerging limitations
noted in report?a) Mrs. Jones is obstructing
the program.

(5 pts)

b) District decision-making
not clear-cut

(3 pts)

c) Equipment not available
in the schools

(4 pts)

d) _____

e) _____

f) _____

SUB-TOTAL:

Possible

Achvd

2) Is need for additional data
noted in report?a) Need for clearer defini-
tion of program objectives. (5 pts)

(5 pts)

b) Need copies of materials
being developed by
teachers.

(3 pts)

c) _____

d) _____

SUB-TOTAL:

Possible

Achvd

CSEIP REPORT -- TEAM TOTAL:

Possible

Achvd

REPORT TO DISTRICT SCORE SHEET

Date _____

Team _____

Weights
Assigned:Points
Achieved:1) Are solutions suggested for
emerging problems?a) Need to improve communi-
cation(5 pts)

b) Need to get equipment
to teachers(3 pts)

c) Teachers should ad-
dress themselves to
program objectives(3 pts)

d) _____

SUB-TOTAL:

PossibleAchvd2) Are inabilities to evaluate
instructional practices or
materials noted:a) Insufficient opportunity
to observe teachers(1 pt)

b) Lack of opportunity to
examine materials in use(1 pt)

c) _____

d) _____

SUB-TOTAL:

PossibleAchvd

DISTRICT REPORT -- TEAM TOTAL:

PossibleAchvd

3. Design Review Stage

A final report, the Design Review, is requested of each team at the conclusion of the last stage.

Objectives for Design Review Report

It is expected that:

- a) each team will specify modifications to be made in the original procedure;
- b) each team will note modifications to be made in the instruments or measures that were originally selected;
- c) each team will note existing limitations of inference.

As with the reports from the Intermediate Field Stage, raters should assign weights to each of the above items and score the Design Review report on the extent to which the items have been successfully included. After recording the total score for this report, the rater should total the points received by each team on all four reports. Examples of a score sheet for the Design Review Report and a final tabulation sheet are given on the next two pages.

DESIGN REVIEW REPORT SCORE SHEET

Date _____

Weights
Assigned:Points
Achieved:

Team _____

1) Are modifications in the
original plan specified?

a) Changes in procedures

(5 pts)

b) Changes in group size

(3 pts)

c) Changes in number of
teachers

(3 pts)

d) _____

SUB-TOTAL

Possible

Achvd.

2) Are modification in original
instruments specified?

a) Instruments added

(1 pt)

b) Instruments dropped

(1 pt)

c) Instruments modified

(1 pt)

d) _____

SUB-TOTAL:

Possible

Achvd.

3) Are existing limitations of
inference noted?a) Contamination of treatment
and comparison groups

(4 pts)

b) Inadequate randomization
procedures

(4 pts)

c) Loss of data due to loss
of teachers or students

(4 pts)

d) Lack of control over
differences in teacher
behavior

(2 pts)

e) _____

SUB-TOTAL:

Possible

Achvd.

DESIGN REVIEW -- TEAM TOTAL:

Possible

Achvd.

TEAM TABULATION SHEET

Date _____

Sub-
Totals:Score Sheet
Totals

Team _____

Preliminary Design

Intermediate Field Stage Reports

CSEIP Report

1) Limitations of situation

2) Need for additional data

Total:

District Report

1) Suggestions for solution of problems

2) Materials and instruction evaluation

Total:

Design Review

1) Modification of procedures

2) Modification of instruments

3) Limitations of inference

Total:

GRAND TOTAL:

=====

It is important to note that these score sheets are used to measure team flexibility. The assumption is that the original design submitted needs to be considerably modified in the face of problems encountered during the game. Therefore, as successive modifications are made, the team's score appreciably increases. It is conceivable, however, that a team might submit a flexible preliminary design which would not need to be modified. Though this situation is probably rare, in such a case, the team would receive an inappropriately low score.