

DOCUMENT RESUME

ED 104 919

TM 004 375

AUTHOR
TITLE

Kester, Donald L.
The State of the Art and Science of Educational
Program Evaluation Services (K-14) in Los Angeles
County as Experienced by One Los Angeles County
Consultant.

PUB DATE
NOTE

Nov 74
39p.; Paper presented at the Annual Conference of the
California Educational Research Association (San
Francisco, Calif., November 1974). Not available in
hard copy due to marginal legibility of original
document

EDRS PRICE
DESCRIPTORS

MF-\$0.76 HC Not Available from EDRS..PLUS POSTAGE
Behavioral Objectives; *Consultants; Curriculum
Evaluation; Educational Assessment; Educational
Objectives; Educational Planning; Educational
Programs; Elementary Secondary Education; Evaluation
Criteria; Formative Evaluation; Junior Colleges;
*Models; *Professional Services; *Program Evaluation;
Program Planning

IDENTIFIERS

Los Angeles County

ABSTRACT

The Division of Program Evaluation and Research of the Los Angeles County Superintendent's Office provides program evaluation consultation services to all local educational agencies (grades K-14) in Los Angeles County. The three program evaluation services that are described are: (1) Educational Program Evaluation Planning Assistance, (2) Educational Program Audit Assistance, and (3) Direct Evaluator Assistance. (One section of the paper presents an introduction to the audit process through the use of a question-and-answer format). The program evaluation services have recently been provided to more than 40 elementary, secondary, and community college agencies. In addition, the progress or results of evaluations of: Early Childhood, Compensatory Education, Mentally Gifted Minors, Educationally Handicapped, Ransom Reading, Career Awareness, Community College Veterans' Recruitment, and Community College Children's Centers will be described. The assertion will be made that behavioral objectives as used in program evaluations are essentially research hypotheses and that data analysis and interpretations should recognize this through the employment of statistically derived confidence intervals. Another assertion that will be made is that three criteria should be used in judging program evaluation: (1) standards of behavioral science research; (2) utility; and (3) cost-benefit considerations. Finally, two program evaluation models will be compared to the one that has evolved in the County Office. (Author)

ED104919

THE STATE OF THE ART & SCIENCE OF EDUCATIONAL PROGRAM
EVALUATION SERVICES (K-14) IN LOS ANGELES COUNTY AS
EXPERIENCED BY ONE LOS ANGELES COUNTY CONSULTANT

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

BY:

DONALD L. KESTER, PH.D.
CONSULTANT

EDUCATIONAL PROGRAM AUDIT AND EVALUATION
LOS ANGELES COUNTY SUPERINTENDENT OF SCHOOLS OFFICE
9300 EAST IMPERIAL HIGHWAY
DOWNEY, CALIFORNIA

BEST COPY AVAILABLE

PRESENTED AT THE
1974 ANNUAL CALIFORNIA
EDUCATIONAL RESEARCH ASSOCIATION
CONFERENCE IN SAN FRANCISCO

NOVEMBER, 1974

TABLE OF CONTENTS

	<u>Page</u>
Abstract.....	11
Section 1: Introduction and Acknowledgements.....	1
Section 2: Definition and Role of the Three Program Evaluation Services now Offered by the Los Angeles County	2
Section 3: A comparison of the UCLA Evaluation Model, the CIPP Evaluation Model, and the Evolving Los Angeles County Evaluation Services Model.....	4
Section 4: Progress or Results of Los Angeles County Evaluation Services for Selected LEA Programs.....	8
Section 5: Program Evaluation Performance Objectives are Essentially Research Hypotheses.....	21
Section 6: Some Questions and Answers Regarding the Educational Program Audit Process.....	23
Section 7: Conclusion.....	27
Bibliography.....	29
Appendix A: UCLA Center for the Study of Evaluation, Evaluation Model...	30
Appendix B: Local Educational Agencies in Los Angeles County.....	31
Appendix C: Administrative Officers of the Los Angeles County Superintendent of Schools Office.....	32
Appendix D: Programs for which Services have been Provided by Consultants in Educational Program Evaluation and Educational Program Audit.....	33
Appendix E: Alphabetical Listing of Los Angeles County Evaluation Consultants.....	34

ABSTRACT

The Division of Program Evaluation and Research of the Los Angeles County Superintendent's Office provides program evaluation consultation services to all local educational agencies (grades K-14) in Los Angeles County. Since this county is the most populous one in the State (it has more than 45% of the State's school age young people), program evaluation services have been provided for a great many different kinds of educational programs with a variety of outcomes. The three program evaluation services that are described are: (1) Educational Program Evaluation Planning Assistance, (2) Educational Program Audit Assistance, and (3) Direct Evaluator Assistance. (One section of the paper presents an introduction to the audit process through the use of a question-and-answer format.) The program evaluation services have recently been provided to more than 40 elementary, secondary, and community college agencies. In addition, the progress or results of evaluations of: Early Childhood, Compensatory Education, Mentally Gifted Minors, Educationally Handicapped, Ransom Reading, Career Awareness, Community College Veterans' Recruitment, and Community College Children's Centers will be described. The assertion will be made that behavioral objectives as used in program evaluations are essentially research hypotheses and that data analysis and interpretations should recognize this through the employment of statistically derived confidence intervals. Another assertion that will be made is that three criteria should be used in judging program evaluation: (1) standards of behavioral science research; (2) utility; and (3) cost-benefit considerations. Finally, two program evaluation models will be compared to the one that has evolved in the County Office.

THE STATE OF THE ART & SCIENCE OF EDUCATIONAL PROGRAM
EVALUATION SERVICES (K-14) IN LOS ANGELES COUNTY AS
EXPERIENCED BY ONE LOS ANGELES COUNTY CONSULTANT

Section 1: Introduction and Acknowledgements

The purpose of this presentation is to give you one person's view of the State of the Art and Science of Educational Program Evaluation Services provided by the Los Angeles County Superintendent of Schools Office to the 82 school districts and 20 community colleges in Los Angeles County. You may be interested to hear that these Educational Program Evaluation Services are provided upon their request and are free of charge to these 102 local educational agencies.

There are three different kinds of Program Evaluation Services that are provided. These three are called: (1) Educational Program Evaluation Planning Assistance, (2) Educational Program Audit Assistance, and (3) Direct Evaluator Assistance. At present the Los Angeles County Office has twelve full-time consultants who provide these three kinds of Program Evaluation Assistance.

The County Office has not always provided this kind of evaluation assistance. In fact, this 3-way delivery of evaluation assistance is quite recent. After the idea of offering Educational Program Audits to requesting LEA's evolved, there was initially a period of pilot testing that took place. Within Dr. Maylon Drake's Administrative Service Area, Dr. Jean Wiener, Dr. Ruth Cohen, and Dr. Bill Turner undertook an "in-house audit" of an educational program that was being directed by other consultants who worked at the Los Angeles County Office. While "in-house audits" are not strongly recommended, the experience gained was valuable. After the "in-house audit" the Educational Program Audit Service was offered to six selected districts. Since that time requests for audits increased to 18 for last year (1973-74) and 30 for this year (1974-75).

Those who helped bring about the evolution of these services should be acknowledged. These "change agents", or "prime movers", include Dr. Richard Clowes, Superintendent; Dr. Maylon Drake, Assistant Superintendent for Educational Programs and Services; Dr. Gordon Footman, Director, and Dr. Warren Newman, Assistant Director, of the Division of Program Evaluation, Research, and Pupil Services; Drs. Jean Wiener; Ruth Cohen; and Bill Turner. The members of the Los Angeles County Board were also supportive of this effort; they are: Dr. Daniel L. Towler, President; Vincent H. Simpson, Vice President; Robert M. Bock, Member; Mrs. Pauline Chace, Member; Mrs. Lucille M. Fields, Member; Dr. E. V. Pullias, Member; and Mrs. Kathryn Vanderhook, Member.

Needless to say, without the efforts of all these people the three-way Evaluation Services Delivery System would not have come into being.

While a more detailed description of the evolution of the Three Evaluation Services might be interesting to some, it suffices to say here that the three distinct services previously mentioned: (1) Evaluation Planning, (2) Program Audit, and (3) Direct Evaluator Assistance are the three services that are now being provided. Of course, like all organizations, the Los Angeles County Office is in a period of transition, but for the time being and for the foreseeable future these three services seem to have achieved a measure of stability.

Section 2: Definition and Role of the Three Program Evaluation Services

The Three Evaluation Services are: (1) Educational Program Evaluation Planning Assistance, (2) Educational Program Audit Assistance, and (3) Direct Evaluator Assistance. These three services are defined as follows:

I. Educational Program Evaluation Planning Assistance

Local educational agencies may elect to receive Educational Program Evaluation Assistance prior to having an audit of a program. Educational Program Evaluation Assistance is a service which is

intended to strengthen the internal process of evaluation in a local educational agency. In collaboration with a county consultant, the local evaluator designs an effective evaluation system with appropriate statistical procedures which includes development of performance objectives, process objectives, evaluation specifications, the evaluation design, and related documents.

II. Educational Program Audit Assistance

Local educational agencies may elect to have an educational program audit. The educational program audit is a performance control process based upon external reviews conducted by qualified outside consultants. It is designed to verify the results of the evaluation of an educational program and to assess the appropriateness of evaluation procedures used for determining the effectiveness of the operation and management of the program.

III. Direct Evaluator Assistance

An evaluator at a local educational agency may elect to receive direct evaluator assistance in the development of an evaluation management plan, statistical data analysis, data synthesis, and evaluation report writing and interpretation.

In chemistry it is known that a set of reactants can be made to produce different products. The products that are produced depend on the catalyst used and the experimental condition chosen. For example, carbon monoxide and hydrogen can produce either methane (CH_4) or methanol, depending on the catalyst used.

An analogy exists between a chemical catalyst and the role of County Office Evaluation Consultants. It is intended and expected that these three services act somewhat like a catalyst to help improve evaluation skills in Los Angeles County.

Section 3: A Comparison of the U.C.L.A. Evaluation Model, the C.I.P.P. Evaluation Model, and the Evolving Los Angeles County Evaluation Services Model

The Program Evaluation Services Model that has evolved at the Los Angeles County was developed out of a face-to-face relationship with the LEA personnel and does not exactly and completely conform to either the U.C.L.A. Evaluation Model or the C.I.P.P. Evaluation Model. However, there are strong similarities between them.

The U.C.L.A. Center for the Study of Evaluation has defined evaluation and listed five evaluation phases. The Center defines evaluation as "...The process of determining the kinds of decisions that have to be made and selecting, collecting, and interpreting the information needed in making these decisions." The five evaluation phases are: Needs Assessment, Program Planning, Implementation Evaluation, Progress Evaluation, and Outcome Evaluation. The definition of each of these five phases is shown in Table 1. (Center for the Study of Evaluation, Evaluation Workshop I, 1971.)

TABLE I - U.C.L.A. Center for the Study of Evaluation Definitions of the Five Phases of Evaluation

- Phase 1: Needs Assessment involves stating the objectives to be met and determining how well an existing program is meeting these objectives. This information is used to identify school or program needs.
- Phase 2: In Program Planning, the evaluator provides the project director with tools to help make planning decisions. He also builds into the program the procedures that will be needed for assessing whether or not it is operating as planned and how well it is achieving its objectives.
- Phase 3: Implementation Evaluation is a monitoring process to determine the extent to which the specified elements of the program have been implemented as planned.
- Phase 4: Progress Evaluation provides information about the progress of the program's objectives. This information is used to modify the program where necessary.
- Phase 5: Outcome Evaluation provides information about the success of the entire program. This information can support a decision to maintain, modify, expand, or discontinue the program.

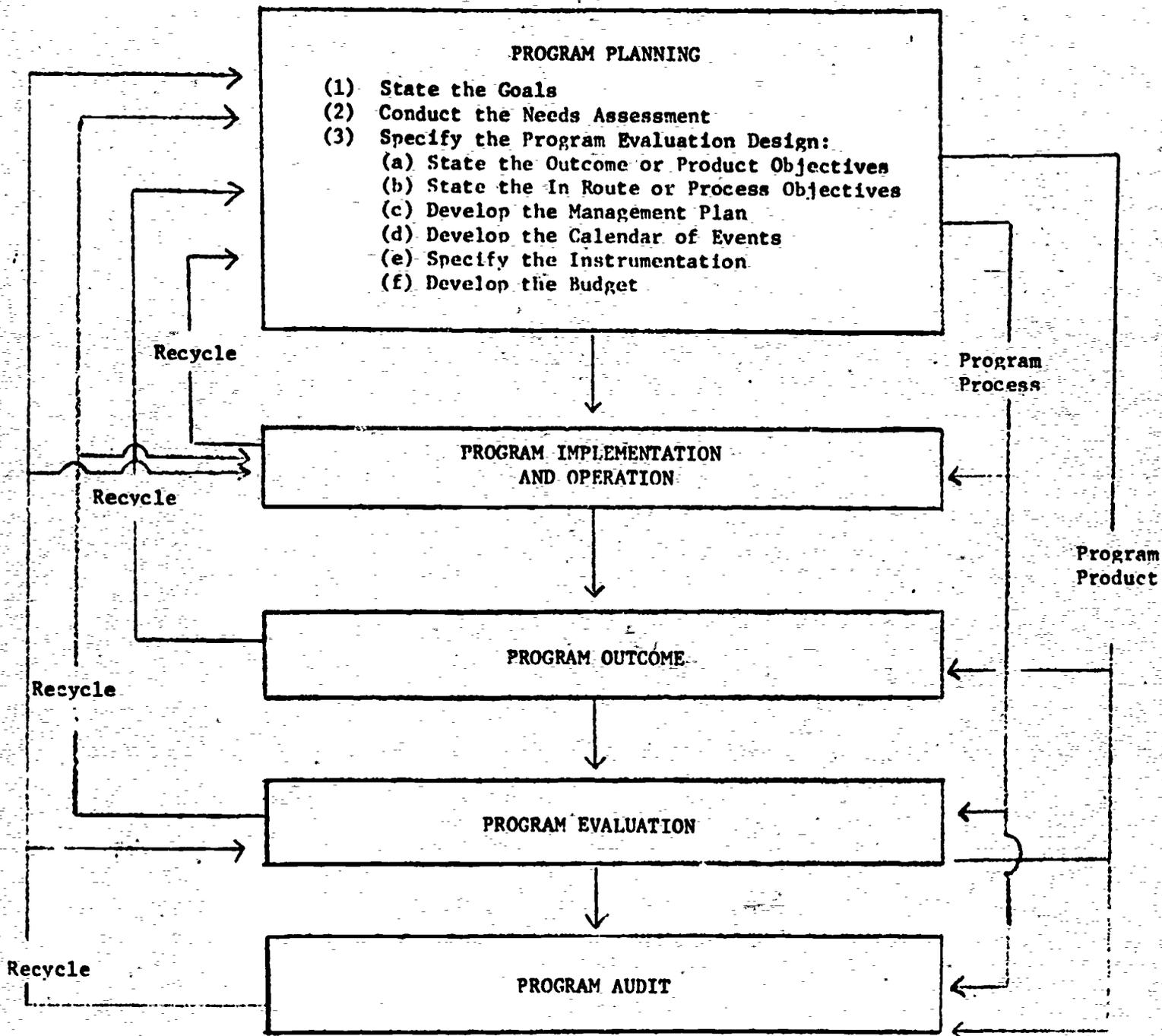
Stufflebeam, the Director of the Western Michigan University Evaluation Center, has defined evaluation as ". . . the process of ascertaining the relative values of competing alternatives . . . (it is the process) . . . of supplying information for decision makers." According to Stufflebeam's C.I.P.P. Model of Evaluation there are four kinds of evaluation that are concerned with four classes of evaluation decisions and they focus concern on four different areas. These are shown in Table 2 (Stufflebeam, Daniel. "Use of Experimental Designs in Educational Evaluation," 1971).

TABLE 2 - Kinds of Evaluation, Classes of Evaluation Decisions, and Focus of Concern of the C.I.P.P. Evaluation Model

The 4 kinds of Evaluation	The 4 classes of Evaluation Decisions	Focus of Concern
Context	Planning	Identifying unmet needs, selecting program objectives
Input	Structuring	Projecting and analyzing alternative procedural designs to achieve the stated objectives
Process	Implementing	Operationalizing and executing the program design, monitoring program operations
Product	Recycling	Judging and reacting to program results. Ascertaining the degree to which objectives have been attained

A tentative program Evaluation Services Model has been developed by Los Angeles County staff. This Flowchart Model is shown below in Display 1.

EDUCATIONAL PROGRAM EVALUATION
AND
EDUCATIONAL PROGRAM AUDIT



From the descriptions of both the U.C.L.A. and C.I.P.P. Models and the descriptions of the three Los Angeles County Services, it seems clear that the six Los Angeles County Educational Program Evaluation Planning Consultants work with LEA personnel in Phase 1 (Needs Assessment) and Phase 2 (Program Planning) of the U.C.L.A. Evaluation Model as well as with the Context and Input areas of the C.I.P.P. Evaluation Model. It further seems clear that the four Los Angeles County Educational Program Audit Consultants work with LEA personnel in Phase 3 (Implementation Evaluation), Phase 4 (Progress Evaluation) and Phase 5 (Outcome Evaluation) of the U.C.L.A. Evaluation Model, along with Process and Product areas of the C.I.P.P. Evaluation Model. In the past, the two Los Angeles County Direct Evaluator Consultants have probably worked more in Phase 5 (Outcome Evaluation) of the U.C.L.A. Evaluation Model and area 4 (Product Evaluation) of the C.I.P.P. Model. But, with the recent development of the Planning and Audit Services, a real effort has been made to involve the Direct Evaluator Consultants earlier; that is, in Phase 3 (Implementation Evaluation), Phase 4 (Progress Evaluation), and Phase 5 (Outcome Evaluation) of the U.C.L.A. Evaluation Model and the areas of Process and Product of the C.I.P.P. Evaluation Model.

Section 4 - Progress or Results of Los Angeles County Evaluation Services for Selected LEA Programs *

During the 1973-74 school year, audits were conducted for eighteen LEA programs. Among those were audits of: Early Childhood Educational Programs, Title I Programs, A Mentally Gifted Minor Program, a Career Awareness Program, and a Ransom Reading Program. Some of the objectives of these programs are shown in Displays 2 through 6. (The credit for the format of the audit plans goes to Dr. Jean Wiener, Dr. Ruth Cohen, and Dr. Bill Turner.)

*To preserve confidentiality, the local educational agencies are not named.

DISPLAY 2 - PORTION OF THE AUDIT PLAN FOR THE EARLY CHILDHOOD EDUCATION PROGRAM
(THIS ECE PROGRAM RANKED NEAR THE "TOP" BY THE STATE TEAMS)

PROJECT PERSONNEL RESPONSIBILITIES

TARGET	TASK	MEASURE	DATE	AUDIT SAMPLE	DATE	ANALYSIS	REPORT	DATE
--------	------	---------	------	--------------	------	----------	--------	------

1.0	<u>Reading</u> K-3 students (each grade separately)	5 th shift from below Q1 to above Q1 10 th shift from second quarter of test score distribution to above Q2	CTBS Reading pre-post (based on national norms)	11-15-73 5-31-74 6-31-74	20 tests x 4 grades	11-15-73 5-31-74	Computation of shifts Report agreement	First Interim Final	12-5-73 7-30-74
1.1	K-3 students (each grade separately) <u>Staff Development</u>	Mean gain of 7 months	CTBS Reading pre-post	5-31-74	20 tests x 4 grades	5-31-74	Compute means Report agreement	Final	7-30-74
1.0	K-3 classroom teachers Associate Teachers Miller-Unruh teachers (after 42 hours of inservice) <u>Parent Involvement</u>	Record code symbols of teacher and pupil behavior on a grid in sequence	BASICS Interaction Record	11-13-73 3-28-74	2 classes per grade	11-13-73 3-28-74	Observation of grids	First Interim Second Interim Final	12-5-73 4-11-74 7-30-74
	A parent of 75% of K-3 students	Attend one of the following: a. workshop b. local or district advisory meeting c. local school program	Attendance records	3-28-74		3-28-74 5-31-74	Report agreement	Second Interim Final	4-11-74 7-30-74

DISPLAY 3 - PORTION OF THE AUDIT PLAN FOR THE TITLE I PROGRAM

TARGET	TASK	MEASURE	DATE	AUDIT SAMPLE	DATE	ANALYSIS	REPORT	DATE
1.1 - 1.6	First through sixth grade students, each grade taken separately	CTBS	pre Oct. 29 1973 post May 20 1974	Rescore 20 tests. Compute sample mean.	11-28-73 6-21-74	Report agreement	First Interim Report Final Report	12-22-73 7-19-74
2.0	25% of pupils in kindergarten P.E.P. program	CTBS	pre Oct. 31 1973 post May 20 1974	Rescore 20 tests. Compute sample percentile.	11-28-73 6-21-74	Report agreement	First Interim Report Final Report	12-22-73 7-19-74
8.0	75% of project participants in Title I P.E.P.	Educational Progress Inventories.	end of school year.	Compute sample percentiles.	6-21-74	Report agreement	Final Report	7-19-74
10.0 A.	80% of Title I P.E.P. students	Self-Appraisal Inventory (U.C.L.A. 10X)	pre Oct. 29 1973 post May 20 1974	Rescore 10 tests at each grade level. <i>all the students of 10</i> <i>for year 10</i>	11-28-73 6-21-74	Report agreement	First Interim Report Final Report	12-22-73 7-19-74

BEST COPY AVAILABLE



DISPLAY 4 - PORTION OF THE AUDIT PLAN FOR THE MENTALLY GIFTED MINOR PROGRAM

AUDITOR RESPONSIBILITIES

PROJECT PERSONNEL RESPONSIBILITIES

TARGET	TASK	MEASURE	DATE	AUDIT SAMPLE	DATE	ANALYSIS	REPORT	DATE
1.0	90% of students indicate that attention and respect were paid to their personal feelings and opinions about literature. Percentage includes upper 2 ranges on a scale of 3	Student Attitude Survey	5-31-74	5 surveys x 3 grades x 5 schools	6-13-74	Compute percentages Report agreement	Final Report	6-28-74
1.3	Experimental and control groups (30 MGH students per grade 4, 5, & 6 in Glendora Unified)	NCT/ETS "A" Look at Literature" Test	12-5-73 5-31-74	10 tests x 3 grades x 4 schools in control group. 10 tests x 3 grades x 5 schools in experimental group.	12-5-73 6-13-74	Rescore test Compute significance Report agreement	First Interim Report Final Report	1-22-74 6-28-74
1.4	MGH students in 6th grade	Post mean on CTBS Reading Test	5-31-74	25% sample in 5 schools	6-13-74	Compute means Report agreement	Final Report	6-28-74
1.6	90% of students Discuss books in at least 5 different types	Teacher Log Item III	12-5-73 3-14-74 5-31-74	5 students x 6 grades x 5 schools (3 and 2)	12-5-73 3-14-74 6-13-74	Report agreement	First Interim Report Second Interim Report Final Report	1-22-74 4-30-74 6-28-74
1.8	2 experts in field of literature	Label of outstanding	5-31-74	Products	6-13-74	Report agreement	Final Report	6-28-74

DISPLAY 5 - PORTION OF THE AUDIT PLAN FOR THE CAREER AWARENESS PROGRAM

PROJECT PERSONNEL RESPONSIBILITIES

AUDITOR RESPONSIBILITIES

TARGET	TASK	MEASURE	DATE	AUDIT SAMPLE	DATE	ANALYSIS	REPORT	DATE
1.0 90% or more of 7th grade students	Write in writing the profession of at least one of his parents	Written statement	1-74	60 written statements	3-12-74	Report agreement	Second Interim	3-26-74
2.0 7th grade students	Show a gain on total score from pre to post	Semantic differential measure of attitudes (Form H 2/73)	10-73 5-74	30 measures of attitudes	12-4-73 5-31-74	Report agreement	First Interim Final	1-8-74 6-27-74
3.0 85% of 1/3 random selection of 7th grade students	Demonstrate gain in number of occupations they can list	List of occupations pre and post	1-74 5-74	10% of random selection	3-12-74 5-31-74	Report agreement	Second Interim Final	3-26-74 6-27-74
4.0 8th grade students	Show a gain from pre to post	Semantic differential measure of attitudes (Form H 2/73)	10-73 5-74	30 measures of attitudes	12-4-73 5-31-74	Report agreement	First Interim Final	1-8-74 6-27-74
1.1 Evaluator	Data indicating that all students completed a list of five elements of his parents profession in each student progress file	Completed data	1-74 5-74	60 lists	3-12-74 5-31-74	Report agreement	Second Interim Final	3-26-74 6-27-74
3.3 Students (unless ill or absent)	Participate in at least one field trip	Log of students on field trips	12-4-73 3-12-74	Logs	12-4-73 3-12-74	Report agreement	First Interim Second Interim	1-8-74 3-26-74

DISPLAY 6 - PORTION OF THE AUDIT PLAN FOR THE RANSON READING PROGRAM

AUDITOR RESPONSIBILITIES

PROJECT PERSONNEL RESPONSIBILITIES

TARGET	TASK	MEASURE	DATE	AUDIT SAMPLE	DATE	ANALYSIS	REPORT	DATE
3.2.1.1	80% of grade 1 students in each Phase 1 school participating in Ranson Reading Program from time of initial placement testing and with 115 or more days of attendance	mastery tests	6-19-74	20 tests x 3 schools	6-19-74	Report agreement	Final	7-11-74
3.2.2.3	Grade 3 students in each Phase 1 school participating in Ranson Reading Program from time of initial placement testing and with 115 or more days of attendance	Cooperative Primary Reading Test pre and post	11-7-73 6-19-74	20 tests x 3 schools	11-7-73 6-19-74	Compute means Report agreement	First Interim Final	1-10-74 7-11-74
3.2.2.6	20% random sample of grade three students in Ranson Reading Program from time of initial placement testing and with 115 or more days of attendance	Closson Oral Reading Test pre, post	11-7-73 6-19-74	10% of sample	11-7-73 6-19-74	Compute means Report agreement	First Interim Final	1-10-74 7-11-74

DISPLAY 6 (CONT.) - PORTION OF THE AUDIT PLAN FOR THE RANSON READING PROGRAM

AUDITOR RESPONSIBILITIES

PROJECT PERSONNEL RESPONSIBILITIES

TARGET	TASK	MEASURE	DATE	AUDIT SAMPLE	ANALYSIS	REPORT	DATE
3.1.7 Resource Teachers	Have equipment and materials necessary for filling 80% or more of teacher requests in Phase I schools by Oct. 31	Resource Teacher evaluation questionnaire in Nov. and May	12-6-73	Questionnaire	Report agreement	First Interim Final	1-10-74 7-11-74
3.1.8 Resource Teachers	Have equipment and materials necessary for filling 80% or more of teacher requests in Phase II schools by Dec. 31	Resource Teacher evaluation questionnaire in Jan. and May	4-3-74	Questionnaire	Report agreement	Second Interim Final	5-9-74 7-11-74
3.1.10 Classrooms in Phase I and Phase II schools	On-going records of pupil skill needs and mastery recorded on profiles present in classroom	School principal observations in Nov., Jan. and March	12-6-73 4-3-74	Observation Questionnaires 2 classes x 3 grades x 7 schools	Report agreement	First Interim Second Interim Final	1-10-74 5-9-74 7-11-74

During the 1974-75 school year, an Educationally Handicapped Program and a Community College Veterans' Recruitment Program are being audited. Also during this year a Community College Children's Center Program is receiving Program Evaluation Planning Assistance. Most of the objectives of the Community College Children's Center Program have been developed. Some of the objectives of these programs are shown in Displays 7 through 10.

DISPLAY 7 - PORTION OF THE AUDIT PLAN FOR THE EDUCATIONALLY HANDICAPPED PROGRAM

AUDITOR RESPONSIBILITIES

PROJECT PERSONNEL RESPONSIBILITIES

TARGET	TASK	MEASURE	DATE	AUDIT SAMPLE	DATE	ANALYSIS	REPORT	DATE
Product Objectives								
3.1 All EH students in the special day classes for EH students taken together as one group (Exclude 4 students who scored highest on the pretest)	will have a posttest standard score mean that is statistically significantly different (p<.10) from the pretest standard score mean	Metropolitan Achievement Test (Test 1)	Sept. 30, 1974	Sample of Metropolitan Achievement Tests (Test 1) plus summary sheets of test results per student & for the total group.	Nov. 25, 1974	Compute audit sample means and mean gain	First Interim	Jan. 1975
			May 30, 1975		May, June 1975		Final	June, July 1975
4.0 All EH students in the special day classes for EH students taken together as one group (K-6)	will have a pre to posttest raw score mean gain of at least 0.5 levels	Locally Constructed Social Adequacy Scale	Sept. 24, 1974	Sample of Social Adequacy Scales	Nov. 25, 1974	Compute audit sample means and mean gain	First Interim	Jan. 1975
			May 30, 1975		May, June 1974		Final	June, July 1975

DISPLAY (CONT.) - PORTION OF THE AUDIT PLAN FOR THE EDUCATIONALLY HANDICAPPED PROGRAM

PROJECT PERSONNEL RESPONSIBILITIES

TARGET	TASK	MEASURE	DATE	AUDIT SAMPLE	DATE	ANALYSIS	REPORT	DATE
--------	------	---------	------	--------------	------	----------	--------	------

Process or Activity Objectives

3.0 Within 90 school days of being placed in the special day class, the EH teacher will have developed for EH students placed after Jan. 1973 an educational plan including specific measurable instructional objectives in his areas of disabilities.

A. Educational Plan will be on file in student record folder (Kept in the classroom)

Oct. 23, 1974

A. Educational Plan will be on file in student record folder (Kept in the classroom)

Nov. 25, 1974

Report degree of attainment or agreement

First Interim

Jan. 1975

B. Ninety School Day Placement Form showing each EH student's name, date of placement in the special day class, and the date of the educational plan.

Sept. 24, 1974

B. Ninety School Day Placement Form showing each EH student's name, date of placement in the special day class, and the date of the educational plan.

Report degree of attainment or agreement

Second Interim

April 1975

21

9.1 The EH Program Evaluator

Will prepare a first interim evaluation report and deliver it to auditor and all EH staff (including 3 EH teachers and Program Director)

First interim report received by all EH staff and auditor

Nov. 15, 1974

First interim report received by all EH staff and auditor

Nov. 25, 1974

Report degree of attainment or agreement

Jan. 1975

DISPLAY 8 - OUTCOME OBJECTIVES FOR THE VETERANS' OUTREACH PROGRAM

VETERANS

Total Program Product or Outcome Objectives:

- 1.0 Full-time benefit receiving veterans' enrollment (Full-time means taking 12 units each semester) --will increase 5% per year.
- 2.0 At least 3 veterans --will attend at least one Advisory Committee meeting by December, 1974.
- 3.0 At least 15 veterans without high school diplomas --will attend remedial sessions or classes at Harbor.
- 4.0 80% of veterans receiving benefits --will see veterans' office personnel at least twice per semester.
- 5.0 At least 500 veterans receiving benefits --will complete a minimum of 6 units in a given semester.

DISPLAY 9 - SELECTED PROCESS OBJECTIVES FOR THE VETERANS' OUTREACH PROGRAM

PROCESS OBJECTIVES

TARGET	TASK	MEASURE
7.0 Peer Counselors	Complete activity log once a week while school is in session. The activity log will include: (a) places visited; (b) amount of time worked; (c) nature of activity; and (d) a record of promotional information disseminated via leaflets, posters, bumper stickers, word of mouth, and (e) note approximate number of veterans contacted.	Activity log will be located on the back of the payroll report form (The veterans' secretary will keep this).
9.0 Peer Counselors	Transmit information that pertains to needs of vets to the outreach counselor at least once a month.	Need appraisal form (The veterans' secretary will keep this).
10.0 Veterans' Counselor	Will hold monthly advisory committee meeting.	Minutes of the meeting (The veterans' secretary will keep this).
11.0 Veterans' Counselor	Develop a preliminary budget for the following year.	Budget for following year (The veterans' secretary will keep this).
13.0 Veterans' Counselor	Conduct initial professional counseling interview with veteran and refer to appropriate counselor if judged necessary.	Referral form (The veterans' secretary will keep this).
15.0 Veterans' Counselor	Selection and placement of veterans to VCIP jobs.	Pay vouchers (The veterans' secretary will keep this).
17.0 Veterans' Counselor	Receive, review and supervise veterans' secretary's compilation of file of Activity Log Summary each month showing number of veterans contacted by peer counselors.	File of Activity Log Monthly Summaries (The veterans' secretary will keep this).

DISPLAY 10 - SELECTED OBJECTIVES FOR THE COMMUNITY COLLEGE CHILDREN'S CENTER PROGRAM

GOAL I To provide exemplary child development programs and services that foster the cognitive, social, emotional, and physical development for each child participant.

TARGET	TASK	MEASURE	DATE
1.0 The Director and staff	Will hold curriculum planning meetings	Minutes in Director's office.	Each week
2.0 The Director	Will keep at the center minutes of all staff meetings	Minutes in Director's office.	During semester
3.0 The Evaluator	Will examine meeting minutes	Evaluator's report in evaluator's office.	Within two weeks of end of semester
4.0 The Director and staff	Will provide interest centers	Coordinator's checklist in Coordinator's office.	Continuous during center operation
5.0 The Coordinator	Will visit the center	Coordinator's checklist in Coordinator's office.	Twice each semester
6.0 The Evaluator	Will review Coordinator's checklist	Evaluator's report in Evaluator's office.	Last two weeks of semester
11.0 The Coordinator	Will inform the Director and Evaluator in writing of all regulations and ordinances pertaining to the center	Coordinator's copy of memo, letter, and manual in Coordinator's office.	Before the beginning of center operation
12.0 The Evaluator	Will ensure that the center is in compliance with all ordinances and regulations	Evaluator's report and checklist in Evaluator's office.	Last two weeks of center operation

GOAL II To expand educational opportunities in the Los Angeles Community College District by increasing college accessibility.

TARGET	TASK	MEASURE	DATE
2.2 The Director	Will ensure admission priority as determined by criteria format	File of ranked applications in Director's office.	Continuously during center operation
2.8 The Evaluator	Will determine the financial impact on the Community College District	Evaluation report in Evaluator's office.	Within 2 weeks following end of semester

Section 5 - Program Evaluation Performance Objectives are Essentially Research Hypotheses¹

It is the present point of view of the three Los Angeles County Educational Program Auditors that data collected relative to performance objectives should be treated statistically in the same manner as data collected in the testing of research hypotheses.

An example or two may be in order. Suppose an objective stated that there will be a 7-month gain (on Test A) pre to post (October and May) for students in the XYZ program. Since the auditor selects a sample of XYZ students, rescores pre and post tests, and computes a mean gain based on a sample of pre and post test scores, the auditor should employ a confidence interval to test whether or not the objective was attained. Similarly, it is recognized that if the external auditor's sample mean or sample proportion is to be compared to the internal evaluator's population mean or population proportion, the confidence interval method should again be used.

The confidence interval estimate procedures for the pre to post test gain and post test only are shown below in Tables 3 and 4.

TABLE 3 - Confidence Interval Estimation Formulae for the Pre to Post Test Gain Condition for Means or Porportions

<i>Hypotheses</i>	<i>Test statistic</i>	<i>Confidence interval</i>	<i>Assumptions</i>
$H_0: \mu_1 = \mu_2$ or $\theta = \mu_1 - \mu_2 = 0$ $H_1: H_0$ is false	$t = \frac{d\sqrt{N}}{S_d}$ where $v = N - 1$	$\mu_1 - \mu_2 = d \pm t_{\alpha/2} \left(\frac{S_d}{\sqrt{N}} \right)$	1. Dependence between samples 2. Independence within samples 3. Normality 4. Variances unknown
$H_0: p_1 = p_2$ or $\theta = p_1 - p_2 = 0$ $H_1: H_0$ is false	$Z = \frac{p_1 - p_2}{\sqrt{p_0 q_0 (N_1 + N_2)}}$ where $p_0 = \frac{N_1 p_1 + N_2 p_2}{N_1 + N_2}$	$p_1 - p_2 = (p_1 - p_2) \pm Z \left(\frac{\alpha}{2} \right) \sqrt{\frac{p_1 q_1}{N_1} + \frac{p_2 q_2}{N_2}}$	1. Independence between samples 2. Independence within samples 3. Binomial 4. $N_1 p_0 > 5, N_2 p_0 > 5$ $N_1 q_0 > 5, N_2 q_0 > 5$

¹Dr. James Vogler contributed to this section.

TABLE 4 - Confidence Interval Estimation Formulae for the Post TestOnly Condition for a Mean or Porportion

Hypothesis	Test statistic	Confidence interval	Assumptions
$H_0: \mu = \mu_0$ $H_1: \mu \neq \mu_0$	$t = \frac{\bar{X} - \mu_0}{S/\sqrt{N}}$ where $\nu = (N - 1)$	$\mu = \bar{X} \pm t_{\nu} \left(\frac{\alpha}{2}\right) \frac{S}{\sqrt{N}}$	1. Independence 2. Normality 3. Variance unknown
$H_0: p = p_0$ $H_1: p \neq p_0$	$Z = \frac{\hat{p} - p_0}{\sqrt{p_0 q_0/N}}$	$p = \hat{p} \pm Z \left(\frac{\alpha}{2}\right) \sqrt{\frac{\hat{p} \hat{q}}{N}}$	1. Independence 2. Binomial variable 3. $Np > 5$ $Nq > 5$

The Confidence Interval Estimate Procedure was used last year. The results of one such analysis is shown in Table 5 below.

Objective 4.0

Upon completion of the program year in 1974, Title I project participants will, in spelling skills, have demonstrated more than one months gain for each month in the program as measured by scores on the WRAT.

TABLE 5 ---- Wide Range Achievement Test - Spelling

Grade	Sample	Means		Grade		Gains in	Attainment		Concurrence
		Raw	Score	Pre	Post		of Objective	Yes	
K	10	7.2	18.0	PK7	1.0	13	✓		Concur
1	10	15.0	23.0	K7	1.5	8	✓		Concur
2	10	19.4	28.0	1.1	2.2	11	✓		Concur
3	10	26.3	31.0	1.8	2.6	8	✓		Concur
4	10	28.7	35.5	2.3	3.2	9	✓		Concur*
5	10	30.1	35.2	2.5	3.2	7	✓		Concur*
6	10	35.4	40.7	3.2	4.7	15	✓		Concur

*An upper statistical limit score was calculated and used for grades four and five using the t distribution and the confidence interval method.

The Auditor concurs with the evaluator that the objectives for grades kindergarten through sixth grade were attained.

For the data from grades 4 and 5, the auditor would have disagreed with the evaluator's statement that the objective had been attained, had he not calculated the confidence interval.

Section 6: Some Questions and Answers Regarding the Educational Program Audit Process²

WHAT IS AN EDUCATIONAL PROGRAM AUDIT?

DEFINITION: An educational program audit is a performance control process based upon external reviews conducted by qualified outside consultants. It is designed to verify the results of the evaluation of an educational program and to assess the appropriateness of evaluation procedures used for determining the effectiveness of the operation and management of the program.

WHY HAVE AN AUDIT? WHAT MIGHT RESULT FROM IT?

There are many reasons why local educational agencies request program audits. Some of the results of past audits are:

1. The identification of clearer definitions of program personnel responsibilities.
2. The gathering of needed baseline data on the level of success of an educational program.
3. The determination of test scoring discrepancies.
4. The identification of model or "turnkey" programs which deserve to be developed and expanded.
5. The identification of areas for inservice training.
6. The enhancing of credibility for the program and for the local educational agency.

²Most of the credit for the question and answer format and content of this section belongs to Dr. Jean Wiener. Other consultants who have contributed to this section include Dr. Dale Russell and Dr. Tom Bishop.

WHAT ARE THE PROFESSIONAL ROLES OF THE EDUCATIONAL PROGRAM AUDITOR?

The educational program auditor brings a relatively new professional role to education. He serves as a third party, free of local ties and interests, who verifies the results of the internal evaluation of an educational program.

THE AUDITOR IS:

1. Independent from the program to be audited.
2. A reviewer and not a decision-maker.
3. A reporter and an observer.
4. A professional who exercises care and integrity in performing the audit examination and in preparing audit reports.
5. Equipped to innovate within his own profession and to encourage reforms in the schools.

WHAT ARE THE STAGES IN THE AUDIT PROCESS?

STEP A: Optional Pre-Audit Assistance: Educational Program Evaluation Assistance

Local educational agencies may elect to receive Educational Program Evaluation Assistance prior to having an audit of a program. Educational Program Evaluation Assistance is a service which is intended to strengthen the internal process of evaluation in a local educational agency. In collaboration with a county consultant, the local evaluator designs an effective evaluation system with appropriate statistical procedures which includes development of performance objectives, process objectives, evaluation specifications, the evaluation design, and related documents.

Step 1 - Orientation

Orientation sessions to the audit may be conducted for local educational agency personnel.

Step 2 - Review of the Total Program

The product and process objectives, the evaluation specifications, design management plan, time frame, and related documentation are reviewed to ensure the auditability of the program.

Step 3 - Development of the Audit Plan

The audit plan is a planning and operational control document for the auditor and a quality and management control document for both the local program director and the local program evaluator. This plan indicates the techniques, schedules, processes, and procedures which the auditor will use in judging the adequacy of the evaluation process and in verifying the evaluation findings. One method of random sampling frequently used is matrix sampling.

Step 4 - The Audit Contract

The audit contract is a written agreement between the local education agency and the Los Angeles County Superintendent of Schools Office. The purpose of the contract is to make explicit the conditions of the audit agreement. One section, for example, is the Assurance of Confidentiality section.

Step 5 - On-Site Visit(s)

Typically, the auditor makes one announced on-site visit and one unannounced on-site visit. During on-site visits, the auditor collects firsthand data as identified in the audit plan and for the purpose of ascertaining the degree of attainment of process objectives.

Step 6 - Interim and Final Audit Reports

Typically, the auditor presents an interim report following each on-site visit and a final audit report following the receipt of the final evaluation report.

The final audit report is presented to the program evaluator, program director, and superintendent, usually within twenty working days of receipt of the final evaluation report. All of the reports are confidential and presented to only the program evaluator, program director, and superintendent.

Step 7 - Exit Interview and Local Educational Agency Evaluation of the Educational Program Audit Service They Have Received

It is recognized that the audit process should itself be evaluated by those who receive the service.

CAN LOCAL EVALUATORS RECEIVE ASSISTANCE?

Yes. Should a local evaluator of a program which is being audited desire consultant assistance in the development of an evaluation management plan, statistical data analysis, data synthesis, evaluation report writing or interpretation, he should, as soon as possible, initiate a request for assistance by writing to Dr. Gordon Footman, Director, Division of Program Evaluation, Research, and Pupil Services, Los Angeles County Superintendent of Schools, 9300 East Imperial Highway, Downey, CA 90242.

CAN PROGRAM OBJECTIVES BE REVISED?

Yes, upon the agreement between the local program personnel and the auditor.

WHAT AUDIT TRAIL DOCUMENTS SHOULD PROGRAM PERSONNEL KEEP?

In order to do the job of verifying the evaluation of an educational program, the auditor must have direct access to firsthand evaluation data. The rule here is "Keep all evaluation trail documents. Keep whatever measure is used by the evaluator to determine whether or not each program objective is attained." Evaluation trail documents often used are test booklets and answer sheets, pre- to post- tests,

or post-tests only, summary sheets, levels mastered on criterion referenced tests, attendance rosters for inservice staff meetings.

HOW DOES THE AUDIT RELATE TO THE STULL BILL?

Whereas the Stull Bill is concerned with the evaluation of a single person, the audit is concerned with verifying the evaluation of an educational program. The local program evaluator will present a final evaluation report, and possibly interim reports as well, on the attainment or nonattainment of program objectives. As an outside, third party, the auditor samples evaluation data and verifies the results of the internally conducted program evaluation. The auditor's reports include audit findings relative to the attainment or nonattainment of program objectives. While the Stull Bill is concerned with a single person, the audit is concerned with a program. No person is mentioned by name in an audit report. If a program process objective were stated as "All instructors teaching a certain level will receive the math textbook, Mathematics Fundamentals, by the first day of class," and if during the on-site visit the auditor found that four instructors out of ten interviewed did not receive the books by the date indicated, the audit report would present just this information. The point of focus for the audit is the program.

WHAT IF OTHER QUESTIONS COME UP?

Call your auditor of record to discuss the situation.

Section 7 - Conclusion

The purpose of this paper and oral presentation is to give visiting CERA Conference attendees one consultant's view of the State of the Art and Science of Educational Program Evaluation Services (K-14) in Los Angeles County. The three-way program evaluation services that have been provided to more than 40 elementary

secondary, and unified school districts and community colleges are described. Some of the results or the progress of evaluations of Early Childhood Education, Compensatory Education, Mentally Gifted Minors, Educationally Handicapped, Career Awareness, Veterans' Recruitment, Children's Centers, and Ransom Reading Programs were examined. The assertion is made that performance objectives as used in program evaluations are essentially research hypotheses and that data analyses and interpretations should recognize this fact. Finally, the writer would like to agree with Stufflebeam in his assertion that three criteria should be used in judging program evaluation: (1) standards of behavioral science research, (2) utility, and (3) cost-benefit considerations.

Bibliography

Los Angeles County Superintendent of Schools Office, Educational Program Audit Handbook, 1973 (Drs. Jean Wiener, Ruth Cohen, and Bill Turner - editors). In ERIC. ED 084 664.

Los Angeles County Superintendent of Schools Office, Educational Program Evaluation Handbook, 1974.

Stufflebeam, Daniel L. "The Use of Experimental Design in Educational Evaluation," Journal of Educational Measurement. Vol. 8, No. 4, Winter 1971.

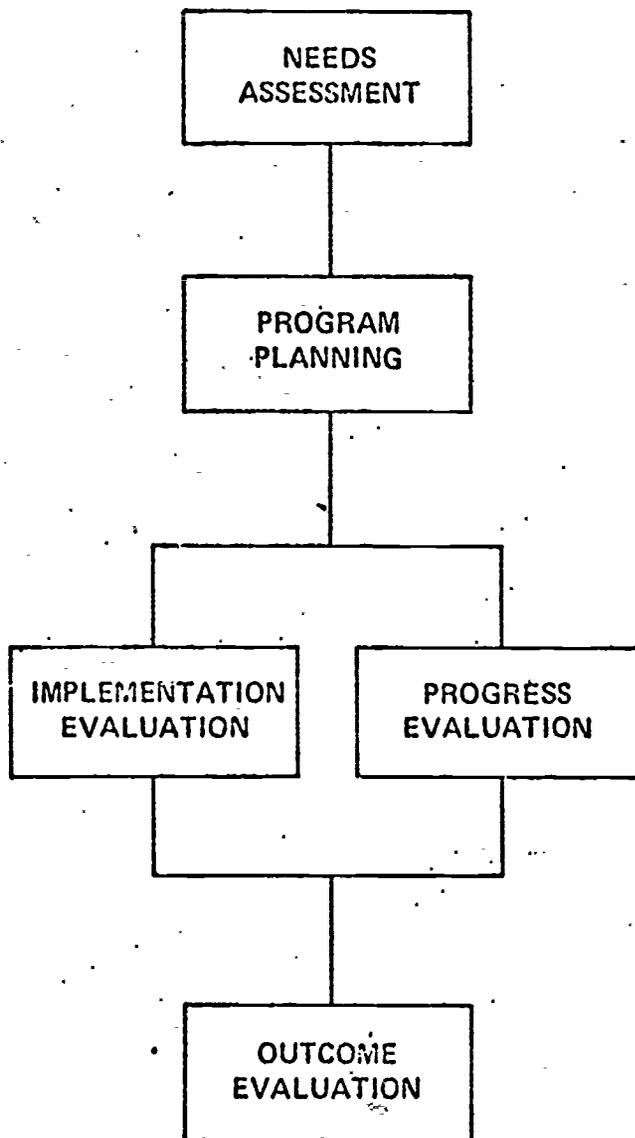
UCLA, Center for the Study of Evaluation, Evaluation Workshop 1, 1971.

UCLA CENTER FOR THE STUDY OF EVALUATION

EVALUATION MODEL

Evaluation is the process of determining the kinds of decisions that have to be made and selecting, collecting, and interpreting the information needed in making these decisions.

Five evaluation phases provide the framework for the decision-making process:



Needs Assessment involves stating the objectives to be met and determining how well an existing program is meeting these objectives. This information is used to identify school or program needs.

In Program Planning, the evaluator provides the project director with tools to help make planning decisions. He also builds into the program the procedures that will be needed for assessing whether or not it is operating, as planned and how well it is achieving its objectives.

Implementation Evaluation is a monitoring process to determine the extent to which the specified elements of the program have been implemented as planned.

Progress Evaluation provides information about the progress of the program's components in meeting the program's objectives. This information is used to modify the program where necessary.

Outcome Evaluation provides information about the success of the entire program. This information can support a decision to maintain, modify, expand, or discontinue the program.

LOCAL EDUCATIONAL AGENCIES IN THE LOS ANGELES COUNTY INCLUDE THE FOLLOWING:

I. Elementary School Districts

Alhambra City	Lancaster	Rosemead
Castaic Union	Lawndale	San Gabriel
Eastside Union	Lennox	Saugus Union
East Whittier City	Little Lake City	Soledad-Agua Dulce Union
El Monte	Los Nietos	South Whittier
Garvey	Lowell Joint	Sulphur Springs Union
Gorman	Manhattan Beach City	Valle Lindo
Hawthorne	Mountain View	Westside Union
Hermosa Beach City	Newhall	Whittier City
Hughes-Elizabeth Lakes Union	Palmdale	Wilsona
Keppel Union	Redondo Beach City	Wiseburn

II. High School Districts

Alhambra City	El Monte Union	South Bay Union
Antelope Valley Union	Hart, Wm. S., Union	Whittier Union
Centinela Valley Union		

III. Unified School Districts

ABC Unified	Downey Unified	Montebello Unified
Arcadia Unified	Duarte Unified	Norwalk-La Mirada Unified
Azusa Unified	El Rancho Unified	Palos Verdes Peninsula Unified
Baldwin Park Unified	El Segundo Unified	Paramount Unified
Bassett Unified	Glendale Unified	Pasadena Unified
Bellflower Unified	Glendora Unified	Pomona Unified
Beverly Hills Unified	Hacienda-La Puente Unified	Rowland Unified
Bonita Unified	Inglewood Unified	San Marino Unified
Burbank Unified	La Canada Unified	Santa Monica Unified
Charter Oak Unified	Las Virgenes Unified	South Pasadena Unified
Claremont Unified	Long Beach Unified	Temple City Unified
Compton Unified	Los Angeles Unified	Torrance Unified
Covina-Valley Unified	Lynwood Unified	Walnut Unified
Culver City Unified	Monrovia Unified	West Covina Unified

IV. Community Colleges

Antelope Valley	Long Beach	Mt. San Antonio
Cerritos	Los Angeles City	Pasadena
Citrus	Los Angeles Harbor	Rio Hondo
Compton	Los Angeles Pierce	Santa Clarita
East Los Angeles	Los Angeles Southwest	Santa Monica
El Camino	Los Angeles Trade-Technical	West Los Angeles
Glendale	Los Angeles Valley	

LOS ANGELES COUNTY SUPERINTENDENT OF SCHOOLS

Administrative Organization to
facilitate delivery of Educational
Program Evaluation Services to all
School Districts and Community
Colleges in Los Angeles County.

COUNTY BOARD OF EDUCATION

Dr. Daniel L. Towler, President

Vincent H. Simpson, Vice President

Robert M. Bock, Member

Mrs. Pauline Chase, Member

Mrs. Lucille M. Fields, Member

Dr. E. V. Pullias, Member

Mrs. Kathryn Vanderhook, Member

Dr. Richard M. Clowes, County Superintendent of Schools

Dr. E. Maylon Drake, Assistant Superintendent, Educational Programs
and Services

Dr. Gordon Footman, Director, Division of Program Evaluation, Research,
and Pupil Services

Dr. Warren Newman, Assistant Director, Division of Program Evaluation,
Research, and Pupil Services



List of programs where services have been provided by consultants in educational program evaluation and educational program audit.

- | | |
|---|--|
| 1. Administrator Evaluation | 21. English |
| 2. Career Awareness | 22. Funded Projects |
| 3. Career Education | 23. Graphic Arts |
| 4. Children's Centers (Community Colleges) | 24. Instructional Plan (Junior High) |
| 5. Social Studies & Urban Planning | 25. Learning Skills Center |
| 6. Computer Assisted Instruction | 26. Mathematics, Individualized Computational Skills Program |
| 7. Computer Management | 27. Mentally Gifted Minors |
| 8. Continuous Progress System in Mathematics | 28. Nursing |
| 9. Counseling | 29. Opportunity Classes |
| 10. Counseling Needs Assessment | 30. Reading |
| 11. Criterion Reference Measurement System | 31. Reading, Methods, and Techniques |
| 12. Decentralized Educational Plan or Management Plan | 32. Remedial English |
| 13. Demonstration Reading Project | 33. Remedial Reading |
| 14. District Math Program (3-4) | 34. Science (Elementary) |
| 15. ESEA Title I | 35. Semi-Departmentalized Program (7-8) |
| 16. Early Childhood Education | 36. Special Education |
| 17. Educational Opportunity Program Services (Community Colleges) | 37. Staff Differentiation |
| 18. Educationally Mentally Retarded | 38. Teacher Inservice |
| 19. Elementary Math | 39. Team Teaching Assessment |
| 20. Emotionally Handicapped | 40. Veteran's Recruitment |
| | 41. Vocational Education |

This is an alphabetical listing of the Los Angeles County Superintendent of Schools consultants who provide various kinds of assistance in Program Evaluation. These consultants work under the direction of Dr. Richard Clowes - Superintendent, Dr. Maylon Drake - Assistant Superintendent, Dr. Gordon Footman - Division Director, and Dr. Warren Newman - Assistant Division Director, Division of Program Evaluation, Research, and Pupil Services.

Dr. Tom Bishop - Educational Program Evaluation Planning and Audit Assistance
Dr. Tom Butterworth - Educational Program Evaluation Planning Assistance
Mrs. Mary Hearne - Educational Program Evaluation Planning Assistance
Dr. Don Kester - Educational Program Audit and Evaluation Planning Assistance
Dr. John Martois - Direct Evaluator Assistance
Dr. Jerry Olson - Educational Program Evaluation Planning and Audit Assistance
Mr. Earl Owens - Direct Evaluator Assistance
Dr. Dale Russell - Educational Program Audit Assistance
Dr. Jim Vogler - Educational Program Evaluation Assistance
Dr. Jean Wiener - Educational Program Audit Assistance