

# Evaluation Review

A JOURNAL OF APPLIED SOCIAL RESEARCH

**Editors:** Richard A. Berk, *Department of Sociology, University of California, Santa Barbara*, and Howard E. Freeman, *Institute for Social Science Research, University of California, Los Angeles*

**Associate Editor:** Wyatt C. Jones, *Florence Heller Graduate School, Brandeis University, and Veterans Administration Hospital*

## EDITORIAL BOARD

CLARK ABT, Abt Associates  
JERALD BAILEY, P.A.H.O., Washington, DC  
ROSINA BECERRA, School of Social Welfare, University of California, Los Angeles  
PETER BENTLER, Department of Psychology, University of California, Los Angeles  
ROBERT F. BORUCH, Department of Psychology, Northwestern University  
MARILYNN B. BREWER, Department of Psychology, University of California, Santa Barbara  
JAMES A. BROWN, Jr., Federal Communications Commission  
EDWARD C. BRYANT, Westat, Inc., Rockville, MD  
FRANCIS G. CARO, Office of Program Planning & Research, Community Service Society, New York  
NANCY COCHRAN, Illinois State Department of Mental Health and Developmental Disabilities  
ROSS F. CONNER, Program in Social Ecology, University of California, Irvine  
THOMAS F. COOLEY, Department of Economics, University of California, Santa Barbara  
JOHN E. COULSON, System Development Corporation  
JOHN CRAIG, Health Policy Research Group, Washington, DC  
LOIS-ELLEN DATTA, National Institute of Education  
JERRY GOLDMAN, Northwestern University  
TERRY E. HEDRICK, U.S. Department of Agriculture  
PAUL T. HILL, Rand Corporation  
RALPH R. HOEPFNER, System Development Corporation  
GENE G. KASSEBAUM, Department of Sociology, University of Hawaii  
SHEPPARD G. KELLAM, Department of Psychiatry, University of Chicago  
RITA MAE KELLY, Department of Urban Studies and Community Development, Rutgers University  
JACQUELINE KOSECOFF, Steiger, Fink and Kosecoff, Santa Monica, CA  
RICHARD LEMPERS, University of Michigan Law School  
HENRY M. LEVIN, Stanford University  
CHARLES E. LEWIS, School of Medicine, University of California, Los Angeles  
KATHERINE C. LYALL, Public Policy Program, Johns Hopkins  
JESSE J. McCORRY, Jr., Department of Health, Education and Welfare  
KEITH E. MARVIN, Program Analysis Division, U.S. General Accounting Office  
CHARLES E. METCALF, Mathematics Policy Research, Princeton, NJ  
STUART S. NAGEL, University of Illinois—Urbana  
JOSEPH P. NEWHOUSE, Rand Corporation  
JOHN H. NOBLE, Jr., Planning & Evaluation, U.S. Department of Health, Education and Welfare  
JERROLD OPPENHEIM, Legal Assistance Foundation of Chicago  
MARIANNE E. PIETRAS, U.S. General Accounting Office  
THOMAS F.A. PLAUT, National Institute of Mental Health  
ANDREW C. PORTER, Department of Education, Michigan State University  
ELIZABETH A. ROISTACHER, Queens College, CUNY  
PETER H. ROSSI, Social & Demographic Research Institute, University of Massachusetts, Amherst  
C. JAMES SCHEIRER, National Institute of Law Enforcement and Criminal Justice  
STEPHEN M. SHORTELL, University of Washington  
MARGARET C. SIMMS, The Urban Institute  
WESLEY G. SKOGAN, Department of Political Science, Northwestern University  
MARIAN A. SOLOMON, System Development Corporation  
PHILIP J. STONE, Harvard University  
ERNST W. STROMSDORFER, Policy, Evaluation & Research, U.S. Department of Labor, and Indiana University  
JAMES VANECKO, U.S. Department of Health, Education and Welfare  
KENT D. WALL, Department of Engineering Sciences and Systems, University of Virginia  
JOHN E. WARE, Jr., Rand Corporation  
MICHAEL J. WARGO, U.S. Department of Agriculture  
HELLMUT WOLLMANN, Freie Universität, Berlin  
SONIA WRIGHT, Department of Sociology, University of Massachusetts

# Evaluation Review

A JOURNAL OF APPLIED SOCIAL RESEARCH

Volume 4, Number 6

December 1980

## CONTENTS

<b>Benefit-Cost Analysis of Voyageurs National Park</b> ALLAN S. MILLS, JOSEPH G. MASSEY, and HANS M. GREGERSEN	715
<b>Processing Citizens' Disputes Outside the Courts:</b> <i>A Quasi-Experimental Evaluation</i> ROSS F. CONNER and RAY SURETTE	739
<b>Evaluation and Politics: A Critical Study of</b> <i>a Community School Program</i> LESLIE HENDRICKSON and LARRY BARBER	769
<b>Research Briefs</b>	
<b>A Model for the Estimation of Caseload Potential</b> PAUL G. COOPER and RICK L. PEARCE	789
<b>The Kansas City Preventive Patrol Experiment:</b> <i>A Continuing Debate</i> BARBARA J. RISMAN	802
<b>Craft Reports</b>	
<b>Effects of Evaluation Information on Decisions</b> CRAIG N. LOCATIS, JEFFERY K. SMITH, and VIRGIL L. BLAKE	809
<b>Relative Likelihood Analysis versus Significance Tests</b> JOHN A. CRANE	824
<b>Handling Nonorthogonal Analysis of Variance:</b> <i>A Review of Techniques</i> PAUL E. SPECTOR	843
<b>Index</b>	856



SAGE PUBLICATIONS / Beverly Hills London

- GULLIVER, P. H. (1973) "Negotiation as a mode of dispute settlement: towards a general model." *Law and Society Rev.* 7: 667-691.
- (1963) *Social Control in an African Society*. Boston: Boston Univ. Press.
- HAGER, P. (1977) "Burger warns U.S. may be overrun with lawyers." *Los Angeles Times* (May 28): 1, 4.
- HUFF, C. R., R. F. CONNER, and G. GEIS (1975) *Planning Correctional Reform: An Assessment of the American Bar Association BASICS' Program*. Washington, DC: American Bar Association.
- JOHNSON, E., Jr., V. KANTOR, and E. SCHWARTZ (1977) *Outside the Courts: A Survey of Alternatives to Civil Cases*. Williamsburg, VA: National Center for State Courts.
- Law Enforcement Assistance Administration (1975) *Citizen Dispute Settlement: The Night Prosecutor Program of Columbus, Ohio*. Washington, DC: U.S. Department of Justice.
- McGILLIS, D. and J. MULLEN (1977) *Neighborhood Justice Centers: An Analysis of Potential Models*. Washington, DC: U.S. Department of Justice.
- MUND, G. (1976) "The need for community arbitration." *Arbitration J.* 31: 109-115.
- NADER, L. (1975) "Forums for justice: a cross-cultural perspective." *J. of Social Issues* 31: 151-170.
- [ed.] (1969) *Law in Culture and Society*. Chicago: Aldine.
- and D. METZGER (1963) "Conflict resolution in two Mexican communities." *Amer. Anthropologist* 65: 584-592.
- NADER, L. and L. R. SINGER (1976) "Dispute resolution." *California State Bar J.* 57: 281-286, 311-320.
- POSPISIL, L. (1967) "Legal levels and the multiplicity of legal systems in human societies." *J. of Conflict Resolution* 11: 2-26.
- SUCHMAN, E. (1969) *Evaluation Research: Principles and Practice in Service and Social Action Programs*. New York: Russel Sage.
- YNGVESSON, B. and P. HENNESSEY (1975) "Small claims, complex disputes: a review of the small claims literature." *Law and Society Rev.* 9: 219-274.

*Ross F. Conner is Associate Professor in the Program in Social Ecology and Research Psychologist in the Public Policy Research Organization, both at the University of California, Irvine. He is coauthor of Sesame Street Revisited and Attorneys as Activists: Evaluating the American Bar Association's BASICS Program (1979), and author of a number of papers on evaluation research. His current work focuses on the ethics of social experimentation, clients' reactions to randomization in evaluation research programs, and the evaluation of research utilization.*

*Ray Surette is Assistant Professor in the School of Public Affairs and Services, Department of Criminal Justice, Florida International University. His research interests include statistical criminology, organizational analysis, and program evaluation.*

*Nationwide community school programs have been started in 1400 school districts to increase use of school facilities and to improve classroom instruction. Rigorous evaluations of these programs have not typically taken place. This evaluation of a ten-site school program briefly describes the history of community schools, the local program's goals, and the method used to study each goal. Approximately 1100 interviews were conducted with school staff and city residents. Included also, are a structural equation model of the data and a discussion of the politics of the evaluation.*

## EVALUATION AND POLITICS

### A Critical Study of a Community School Program

LESLIE HENDRICKSON  
LARRY BARBER

*Eugene, Oregon Public School District*

American educational thought has long stressed the use of school buildings to educate adults and to provide services to people living in the surrounding area. This article briefly presents the history of the community school movement and the method used by a school district to evaluate its community schools. Also discussed are the social forces supporting community schools and the problems that existing theory has with evaluating politically supported programs. Next is a discussion of the program goals and their ambiguities. After comments on the accuracy of data collection in the program's records, summaries are provided of how each goal was studied and what results were found. The politics that evaluators dealt with are discussed, and the article concludes with comments about the need to better define the program's goals in order to concentrate its resources.

The first use of public schools for evening adult education was in Providence, Rhode Island, in 1810. By 1910, 55 cities had recreation programs using schools and their playgrounds. In some urban areas, for

example, Chicago in 1865, school boards provided educational opportunities for adults.

Aided by the favorable philosophical climate of progressive education, the first Community Education Association and community schools were founded in the 1920s. In 1926, the Charles Steward Mott Foundation was incorporated in Flint, Michigan, and by 1936, five community schools were operating in the city. Beginning in the 1930s, and with substantial financial backing from the Mott Foundation, many cities established community schools. More state and national organizations were formed during the 1960s and 1970s, such as the National Community School association in 1966. The first Community Education Center was established in 1963 at Michigan State University; there now are approximately 95 regional centers in the United States. In the late 1960s, Eugene, Oregon established its first community school. (For a detailed history of community schools, see Decker, 1972; Mott Foundation, 1967; and Olsen, 1978; Olsen and Clark, 1977.)

The passage of the Community School Act by Congress in 1974, gave substantial impetus to the work of the Mott Foundation in establishing community school programs. Approximately 1400 school districts now have community schools (Kildee, 1978). However, rigorous evaluations of these programs are infrequent: the literature generally consisting of either exhortative advice (e.g., Stufflebeam et al., 1971; Hammond, 1975) or unpublished self-evaluations by program staff (e.g., Thornton, 1971; Alma College, 1972; Liebertz, 1977). "Independent evaluations by outside teams or consultants are rare . . . and evaluation of community education programs is mostly informal." (Boyd, 1975).

In December 1977, the Eugene, Oregon, school board directed the district's evaluation unit to look at the district's 10 community schools. The board's request was motivated by concern with the costs of a rapidly growing program and an uncertainty as to what the program was accomplishing. The superintendent refused to release the needed funds and placed the decision before the district's budget committee. In March 1977, after extensive negotiations and a trade-off between proponents and opponents, the budget committee approved funds for the program's expansion and evaluation.

This study of a controversial program illustrates recurrent problems in human service programs, the difficulty of running and evaluating a program with multiple clients, and the political context within which contemporary evaluations exist.

In 1980, the Eugene, Oregon, district had 20,000 students, 1100 teachers, and 45 schools. The number of community schools steadily increased from 1971 to 1979 with the help of a supportive superintendent. In 1979-1980, the proposed budget for the district's 10 community schools was \$193,000, divided equally between the city and the school district.

The situation was further complicated by the controversial transfers of three principals by the superintendent, by an unsuccessful attempt to recall the board, and by the subsequent election of three new members to the seven-person board on a "get-rid-of-the-superintendent" platform. The superintendent resigned to take a position in Oklahoma City, Oklahoma. Program supporters were afraid that a more conservative board would use the evaluation to terminate the program.

### SOCIAL FORCES SUPPORTING COMMUNITY EDUCATION

A discussion of the social context of community school support is useful. Evaluators did not explicitly study the social milieu that encourages community schools, thus the following comments are impressionistic inferences from the evaluators' data and experience.

Supporters of community schools can be roughly divided into two categories: those who are receivers of community school program services and those who are employees and organizational members. The results of a telephone survey show a sizeable percentage of the agencies and organizations of the first category reported that the program provided significant material benefit to them. Many of these organizations are small social networks lacking the substantial social capital of reputation, buildings, and bank accounts of established groups such as the Boy Scouts. Some of these organizations are characterized as "community," "counter culture," or "alternative," as distinguished from "straight" or "establishment" organizations. The provision of public services to groups, such as the use of a school building for meetings and free advertising via school newsletters, contributes to their growth and maintenance. Neighborhood political groups also met in the schools. Thus, a substantial number of liberal social and political organizations are active in defense of the community schools. Conversely, the program has been criticized by the more "conservative" school board members and city council people for its support of "alternative" culture trends.

The second, and numerically smaller, group of supporters consists of people active in community school advisory councils or employed by the program. Each of the schools has an advisory council, which sends a representative to a district-wide advisory council. These councils provide to members status, organizational leadership, and a chance to influence school decision-making. The council members have taken an active part in passing city and school budgets and traditionally have participated in school board elections. Other people who are directly employed by the program use their organizing and coordinating skills in its defense. The program provides substantial services to a wide variety of organizations and organizers. Social forces supporting the program have maintained an aggressive and political defense against budget threats and "conservative" efforts to reduce or eliminate the program.

Selecting a method for evaluating the community school program was difficult because no satisfactory models have yet been developed. In 1979, in an effort to categorize extant evaluation models, the Center for Evaluation, Development, and Research in Bloomington, Illinois, identified 33 "evaluation models." Each of these had been cited in at least two references in the evaluation literature. The 33 models were then divided into six categories, based on problems analyzed. The result was "the multiple model mess," according to the Center staff. In a yet unpublished review done in July 1979, the Illinois staff and invited consultants agreed that the models had omitted procedures for accommodating, coping with, and evaluating the effects of organized political pressure groups and community schools. The models that had included the political group item were either too costly to conduct, e.g., the advocate team model, or were deemed to be generally unacceptable to school administrators and boards.

After a consideration of the options available, Eugene evaluators adopted a multiple independent data base strategy. Three distinct data bases were created, so that if any one data base was discredited, the others would still be of value in analyzing the program. This strategy was combined with elements from a discrepancy model (Provus, 1971) and a C.I.P.P. approach (Stufflebeam et al., 1971).

### PROGRAM GOALS

After receiving authorization from the budget committee, preliminary evaluation design work began in spring 1978, with 25 interviews of

TABLE I  
City and District Goals for Community Schools

- |        |  |
|--------|--|
| Goal 1 | To develop processes to identify needs and interests, establish objectives by priority; and identify resources to meet the prioritized objectives of the local community school area.  |
|        | (a) To aid all segments of the local community to <i>identify</i> that community's <i>needs</i> and interests, and to prioritize those needs and interests it wishes to pursue.  |
|        | (b) To aid all segments of the community to <i>identify resources</i> , both within the local community and in the broader community, appropriate to meet the needs and interests in the order of the established priority.  |
|        | (c) To <i>develop a coordinated program</i> to meet the previously prioritized community needs and interests with the identified resources to the extent possible, given a limited community school budget and limited resources, both within and outside the local community. |
| Goal 2 | To expand local citizen participation and involvement in decision-making and leadership in the community school and in all aspects of civic and community activities.  |
| Goal 3 | To expand the use of human and physical community resources to meet the identified needs of community school instructional staff in the required and optional curriculum and instruction.  |
| Goal 4 | To expand the level of communication and cooperation among existing community agencies, public and private, and all segments in the delivery of needed community programs and services.  |
| Goal 5 | To expand the use of existing school and community facilities and human resources to their maximum usefulness.   |

school board members and school and city staff. Interviews with school board members generated 102 questions about the program. Simultaneously, a search of the ERIC Clearinghouse data bank and the library of the Community Evaluation Center at the University of Oregon was made for evaluations by other school districts.

An item analysis of the questions asked of those interviewed showed that most of them could be answered by reviewing the goals and objectives of the program. Table I contains the wording of the five goals which had been mutually negotiated by the city's manager's office and the school district staff. These goals were approved in August 1977, by the city council and the school board.

After reviewing the goals, evaluators concluded that the wording of the goals did not clearly identify the purpose of the program. The goals

contained ambiguous terms; for example, "community," "all segments of the local community," and "need." The word "community" appears to presume some shared sentiment or commonality among the people living in a school attendance area. Is it possible that some attendance areas do not have a "community" or have a low degree of "community"? What does the phrase "all segments of the local community" mean? How does a community school staff know when "all segments" have been aided? Is the segmenting to be done by age, occupation, education, or some other criterion?

And is a single representative from each segment to be interviewed, or is it to be a certain minimal proportion of the individuals in the "segment"? What is a "need"? How does a "need" differ from an "interest"? How does a "need" differ from a "desire"?

Thus, on close examination, key terms in the goals had indeterminate implications for evaluators who were attempting to verify whether or not the goals were accomplished. The existence of vague goals was accompanied by substantial problems in the program's record keeping. For example, Table 2 presents a page from the program's self-evaluation.

When interviewed during April and May of 1978, board members were asked by evaluators if they had read the self-evaluation produced by the program's director. Two board members questioned the accuracy of information presented in the tables. For example, in Table 2, how is it that Willagillespie School records 320 "program volunteers" and 21,081 volunteer hours" whereas Edison school records 442 "program volunteers" yet has 2,654 "volunteer hours"? How is it that Willagillespie records 298 "activity leaders" but only had 68 "scheduled activities," whereas Laurel Hill had 32 "activity leaders" but 260 "scheduled activities"?

When asked to verify these and other reported data showing the number of visits to the school by different categories of people, staff at five of the ten schools were unable to document any figure reported. With exceptions, staff at another four schools could roughly verify their reported data to within a range of 15% plus or minus. Data were lost at two programs and discarded at two others.

The program had no written set of definitions explaining how to define the data categories used in the program, and new staff hired received no training in the collection or reporting of data. It was not surprising that substantial differences existed among program staff in how data were reported. For example, the self-evaluation claimed that

TABLE 2  
Page 7 of the Community Schools Mid-Year Evaluation Report  
of March 20, 1978 (reprinted as it appeared)

Much of the following set of data is also of the same type collected, printed and presented last year. Please keep in mind that when reviewing last year's figures it was for September 1, 1976, through March 31, 1977. This year's data is for September 1, 1977, through January 31, 1978, or two months less time (five months vs. seven months). These figures also do not reflect the summer programs provided through *volunteer* efforts by several of the community school coordinators in cooperation with other agencies and community volunteers.

Participant Categories	Program Volunteers	Volunteer Hours	Activity Leaders	Scheduled Activities	TOTAL	
					In-School	People in Leadership
Laurel Hill	211	288	32	260	36	243
Lincoln	107	2,166	85	50	572	192
Patterson	70	1,594	146	282	178	216
Whiteaker	145	3,980	75	95	no data	220
Coburg	143	1,208	24	22	1,560	167
Dunn	21	2,295	16	60		45
Willagillespie	320	21,081	298	68	3,269	618
Edison	442	2,654	224	215	896	666
Madison	39	500	24	31	4	67
Willard	68	242	31	16	65	164
TOTALS 9/1/77-1/3/78	1,498	38,608	995	1,099	6,580	2,598
TOTALS 9/1/76-3/31/77	1,210	35,529	656	436	no record	no record

118,000 "youth contacts" had been made during 1977-1978 by the program. School staff had different conceptions of what a "youth contact" was. For example, assume 10 adults and 200 kids attended a Fun Fair at a school; some program staff recorded 200 "youth contacts" and others reported 10 times 200 contacts, 2000, reasoning that the adults were volunteers and each adult had 200 contacts. Evaluators concluded that at least 35,000 claimed "youth contacts" were unverifiable. Thus, evaluators were faced with classic problems in the evaluation of human service programs. The politics are polarized, what the program is supposed to accomplish is not clear and the program's records contain substantial public relations puffery.

Evaluators advised the program staff that they should draft a written definition of how each data category should be described, sit down and negotiate differences of opinion about them, and then agree to use this

common set of definitions. It was further suggested that new staff members would be given these definitions and trained in how to use them to report operating statistics.

## METHODOLOGY AND RESULTS

First, the methodology used to study each goal is described; then the results are presented. Evaluator's recommendations to program staff are cited throughout this section as the program had problems which are frequently encountered by evaluators of human service programs.

### GOAL 1

*To Develop Processes To Identify Needs and Interests, Establish Objectives by Priority, and Identify Resources To Meet the Prioritized Objectives of the Local Community School Area.*

*Methodology.* Evaluators sought to verify that the population of a community school's attendance area had been questioned to determine the needs and interests which could be met by the community schools. The goal apparently requires that a ranked list of priorities should have been produced from such a survey and matched, within budgetary limits, to a list of resources, also identified by program staff.

*Results.* No community school had a successful comprehensive survey of the needs and interests of the people in its attendance area unless someone else had done it, such as the county's health and social services department. Those programs which started survey research efforts by themselves did not have high response rates. For example, one school sent a questionnaire to approximately 1000 addresses and received 20 responses; another sent out 1500 questionnaires and received 50 responses. Program staff had neither the resources nor training to establish what the needs and interests were in the surrounding geographical area.

Each program staff member had some listing of available resources; however, the systematic linking of needs and resources, i.e., "the coordinated program," envisioned in Goal 1 did not occur. Rather, projects became organized episodically as someone expressed an interest in doing them and resources became available.

Evaluators advised staff of the two funding agencies, the city and school district, that it was unrealistic of them to use sophisticated planning procedures, assuming complex social science data gathering, when program staff had neither the resources nor training to gather data.

### GOAL 2

*To Expand Local Citizen Participation and Involvement in Decision Making and Leadership in the Community School and in All Aspects of Civic and Community Activities.*

*Methodology.* Given evaluators' skepticism about the reliability of program estimates of participation, an alternative data base was created. This evaluation strategy proved very useful.

In order to determine how many people used the public schools, evaluators decided to ask a random sample of people in the city. A random sample of households was chosen from seven of the ten community school attendance areas and, for comparison purposes, from seven contiguous noncommunity school areas. A total of 1050 households was randomly selected from the 25,000 households in the 14 areas. Approximately 1800 visits were made to the 1050 addresses, and 770 completed interviews were obtained. All addresses that were not vacant, not a place of business, or nonexistent were visited until either an interview had been completed or four unsuccessful visits had been made. The nonexistence of an address was confirmed by two independent searches for it. Interviewers questioned household members as to the frequency and kind of contacts they had with schools. Because evaluators used a random sample, the results can be generalized for the entire 25,000 households in the 14 attendance areas.

*Results.* Of the households interviewed, 182 contained people who attended activities at either a community or a noncommunity school. This translates to some 5000 household out of a total population of 25,000 households.

Other findings were:

- (1) Of households having one or more members attending an activity at an elementary school, 85% of those living in a noncommunity school area attended a noncommunity school, while 82% of those living in a community school area attended a community school.

- (2) Participation in school activities was somewhat higher in noncommunity school areas than it was in community school areas. However, the difference was not statistically significant.
- (3) In the area surveyed, an estimated 500 senior citizens participated in a school activity. All of these activities occurred at community schools.
- (4) Monthly estimates of volunteer hours, number of volunteer activities and average per person volunteer activities were all significantly higher at noncommunity schools.
- (5) In community school areas, 10% more people reported that they knew more about activities at their local elementary schools, that they were interested in attending activities, and that their participation and volunteer time at the schools had increased.

Two methods were used to determine which factors most influence participation and volunteer rates in schools. First, a step-wise multiple regression program in the Statistical Package for the Social Sciences (SPSS) was used. It was found that the most important factor affecting both volunteering and participating rates was whether or not there were school-age children in the household.

Overall, participation and volunteering were not greater at community schools, compared to noncommunity schools. However, evaluators did not study the possibility that local citizens' involvement may have been considerably lower in community school areas than in noncommunity school areas because of socioeconomic differences.

Second, data from 423 households which had been at the same address for over a year and had no missing data on any variable, were further analyzed using a LISREL IV structural equation program (Jöreskog, 1973, 1978). LISREL is a general computer program for providing consistent estimators of unknown coefficients in a set of linear structural equations. Seven observable independent variables affecting participation and four observable dependent variables measuring participation were used. The variables in the independent set included whether or not the local school was a community school, a measure of proximity to a community school, the number of senior citizens in the household, the number of children, income, education levels, and the number of years at current address. The measures in the dependent set were self-reports of the number of school meetings attended, the number of different community school activities volunteered in and participated in, and the number of hours persons in the household participated in community school activities.

First, a principle component analysis was done, which showed that two independent factors accounted for 48% of the variance in the

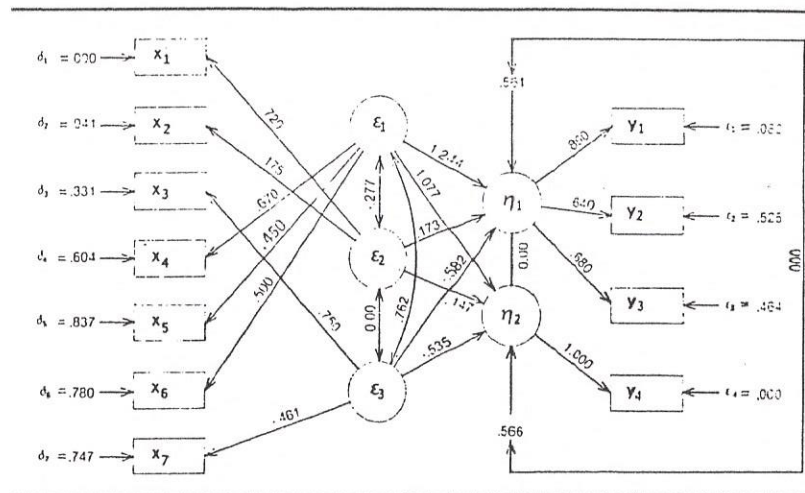


Figure 1: LISREL Structural Equation Model of Community School Data

$$\chi^2/df = 78.9/31 = 2.55$$

independent measures and one dependent factor accounted for 65% of variance in the dependent measures. Twelve causal models postulating different numbers of unobservable or latent variables were analyzed and maximum likelihood chi-square analyses were made of the discrepancies between the observed and fitted covariance matrices. Derivatives, corresponding to fixed parameters were used to improve the fit and decide which model best reflected the original data (Sörbom, 1975).

As Figure 1 indicates, a model with three independent latent factors and two dependent latent factors gives the best fit. A  $\chi^2$  goodness-of-fit test is used to determine the extent to which the estimated parameters can reproduce the original input data matrix. The  $\chi^2$  values which are large relative to the degrees of freedom, indicate a poor fit.  $\chi^2$  values approaching the degrees of freedom indicate a better fit (Long, 1976: 168-173; Jöreskog and Sörbom, 1977: 290-291). The observed  $\chi^2$  value of 78.9 with 31 degrees of freedom yields a ratio of 2.55, demonstrating adequate fit.

Three nonorthogonal independent factors were found. Two variables,  $x_1$  and  $x_2$ , whether or not a community school was in the respondent's neighborhood and how far they lived from the school, loaded on factor 2,  $\xi_2$ . Three variables  $x_4$ ,  $x_5$ , and  $x_6$ , the number of children, amount of income, and education of respondent loaded on factor 1,  $\xi_1$ . Two

variables  $x_6$  and  $x_7$ , the number of senior citizens in the household and how long the respondents had lived at their present addresses loaded on the third factor  $\xi_3$ . This measurement model accounted for 40% of the variance in the seven observed variables.

These results indicate that more independent variables need to be measured in order to understand why adults go to public schools. Given that there is no theory or cumulative literature which treats this question, researchers must develop their own hypotheses. Likely independent variables include respondent's age; whether or not respondents are members of informal social networks, such as athletic teams or craft and hobby groups; psychological preferences for group vs. individual activities; and political or civic participation.

In the structural model, Figure 1 indicates that  $\xi_1$  and  $\xi_3$  had the greatest effect on the dependent factors. Approximately 75% of the variance in the four dependent measurements of participation was accounted for by the two dependent factor measurement model. These results indicate it was considerably easier to measure the dependent measurement model than the independent one.

### GOAL 3

*To Expand the Use of Human and Physical Community Resources To Meet the Identified Needs of Community School Instructional Staff in the Required and Optional Curriculum and Instruction.*

*Methodology.* When interviewed, school board members expressed significant interest in knowing what impact the community schools program had on classroom instruction.

Interviews were conducted with approximately 50 community school teachers and 50 noncommunity school teachers who had taught at the 14 selected schools during the 1977-1978 school year. All 100 teachers were randomly selected. Principals in the 14 schools were also interviewed. The questionnaire items were drawn from the school board members' questions, the community schools' own objectives under their Goal 3 and interviews with community education specialists, community school staff, and community school principals.

Comparisons were made between community and noncommunity schools in the use of classroom volunteers, after-school programs, classroom speakers, and field trips—topics chosen to reflect the impact of the community school in the classroom. Community school princi-

pals were interviewed to obtain their perception of the effect of the community school program.

*Results.* In general, the presence of a community school program did not result in significantly more instructional services to students. Administrators varied in their support of the program. Priorities and expectations placed on the program varied from school to school. Evaluators informed the school board that the situation is not likely to change without guidelines from the district outlining what constitutes implementation of the goal.

More specifically, it was found that community schools offered their students slightly more field trips and significantly more afterschool programs. Teachers in community schools received assistance in volunteer recruitment, field trip planning, and speaker recruitment from the community school program staff. For example, 22% of the community school teachers stated that they had more time for curriculum planning because of this type of assistance.

Slightly more teachers in noncommunity schools used speakers and used them more frequently than did their community school counterparts. Noncommunity school teachers did their own speaker recruitment and field trip planning. Volunteer recruitment in noncommunity schools was done primarily by the counselors and the teachers themselves. Evaluators found that community school staff performed activities done by principals in schools without community programs.

It was estimated that about one-half the teachers in schools with the program were enthusiastic about it. About one-third the teachers did not view the program as a benefit, and the remainder saw some value in it.

### GOAL 4

*To Expand the Level of Communication and Cooperation Among Existing Community Agencies, Public and Private, and All Segments in the Delivery of Needed Community Programs and Services.*

*Methodology.* The verification of this goal centered on identifying the use that public and private agencies made of the community schools. In their self-evaluation, community school staff listed 191 groups, organizations, and agencies which had "utilized the community school operations" during the 1977-1978 school year. Evaluators made 500 telephone calls to these agencies and 154 telephone interviews were



completed. The questionnaire items were designed to elicit information about who participated in a particular group's activities, how beneficial the use of the community school program was to that group, and whether the community programs were meeting their stated goals concerning organizations and agencies.

*Results.* The telephone interviews resulted in evaluators being able to more precisely identify the nature of each organization and its relationship with the community schools. The types of groups using the community schools range from city and county agencies to special interest groups and classes sponsored and presented by one individual. Fifteen percent of the programs were made possible only by the existence of community schools, while others used these schools in addition to other facilities. Forty-three percent of the programs served the local community almost exclusively, while others drew participants from the entire metro area. Some of the businesses listed were used by the community schools for programs, such as placing students in the business in an "apprenticeship" project.

The first part of Goal 4 "to expand the level of communication and cooperation among existing community agencies," was not being done, according to interview responses, nor was it even an explicit objective of any of the community schools. Evaluators questioned whether it was an appropriate function of community school staff.

The second part of Goal 4 was interpreted by evaluators to mean that the community schools will help to improve the communication between community residents and organizations. This was accomplished in part as 30% of the organizations felt that their communication with community residents had improved, primarily through the community school newsletters. Of the organizations, 22% thought that one or more persons had been referred to them by the community school, although only 10% felt that attendance at their meetings was improved by their being at a community school.

A wider variety of activities took place in schools with community programs because they have developed relationships with other organizations which go beyond the schools simply being used as meeting places. Of the organizations contacted, 54% said that it would have been either more difficult or impossible to offer their programs if the community schools did not exist.

In 1978, Development Associates (1978: 47) carried out a nationwide study of 90 federally supported community school programs. They also found evidence that community agencies were satisfied with community education programs and received support from the program.

## GOAL 5

*To Expand the Use of Existing School and Community Facilities and Human Resources to Their Maximum Usefulness.*

*Methodology and Results.* Goal 5 sought to encourage the maximum use of the school's physical facilities. Are schools with community school programs being used more than schools without such programs? Evaluators believed that the best way to answer this question would be to send observers to randomly selected schools with and without community programs to determine how long the school building was used each day and how much of it was used. However, because the budget committee wanted to have the results reported to them by January 1979, data were primarily collected during July, August, and September of 1978. Evaluators concluded that data on building usage collected during this time would not be representative of the September to May school year. Therefore, this goal was not studied.

## ACCOUNTABILITY PROBLEMS IN THE CHAIN OF COMMAND

Community school staff pointed out that there were problems in the chain of command. A review of staff job descriptions corroborated this claim. According to the position's job description, the central office specialist who directed the program was responsible "for the overall development, organization, operation, coordination, and evaluation of the community school program." On the other hand, the ten-school staff was to be "directly accountable to the principal." Additionally, the specialist did not have budgetary control over the staff's actions, but "assist[ed] the principal."

The management functions of "organization, operation, and coordination" which the program director was required to perform, could not be carried out efficiently, given that the program's workers and their budgets were accountable to ten other administrators. Even advisory activities became difficult if other administrators were unsympathetic to the program, as some principals were. This tension between centralization and decentralization is a recurrent problem in human service organizations with multiple delivery sites. It has parallels in other situations such as the functioning of the Health, Education, and Welfare (HEW) regional offices.

### THE REACTION OF COMMUNITY SCHOOL SUPPORTERS TO THE EVALUATION

The evaluation was closely watched by program supporters. In September 1978, all school board members, the district's superintendent, and the city manager received a three-page letter criticizing the evaluation design and commenting on possible biases in data collection resulting from it. This letter was sent by the head of the Community Schools Advisory Council and stimulated evaluators to keep the advisory council informed of evaluation procedures. At the request of the advisory council, evaluators carried out a questionnaire study of the membership and functioning of each program's advisory committee.

In January 1979, the College of Education at the University of Oregon sponsored a questionnaire study of 90 randomly selected teachers in the schools with and without community school programs. A number of the questions asked duplicated those that evaluators had asked two months earlier. Similar results were found. This was a verification of evaluators' findings that community school programs had a limited educational impact upon the classroom. The results of the interviews were not shared with the school board. Evaluators believe that if the replication had found data showing the community school program substantially helped classroom teachers, these results would have found their way to the school board.

In February 1979, a principal at a community school asked a consultant at the University of Oregon to review the evaluators' final report. A three-page analysis was sent to the principal and evaluators. Based on the comments of the principal and the consultant, it is reasonable to infer that the principal was critical of the report's findings and hoped the consultant would find something wrong with them. Fortunately for evaluators, the consultant reported, "the conclusion that I come to is that the community school program had had the good fortune of receiving a well-thought-out and carefully implemented evaluation which supports several solid recommendations for program improvement."

In March 1979, the 68-page evaluation report was presented to the Eugene school board. Over 50 supporters of the program signed up to speak to the board, led off by a city councilman. Community school supporters were not concerned about the program recommendations

since they approved of them. Rather, people were apprehensive that the school board would use the report's findings to cut the program. Instead, the board unanimously adopted the report's recommendations and took no further action affecting the program.

Another political facet was injected by the news media. In April 1979, the Willamette Valley *Observer*, an influential, liberal weekly newspaper, ran a full-page story on the evaluation. An *Observer* reporter had been present at the March school board meeting and had been following the evaluation. An *Observer* staff member told the authors that the paper had been contacted by a member of the Community School Advisory Council who expressed concern over possible school board action. The full-page article extensively reviewed criticisms that community school supporters had made about the evaluation.

### CONCLUDING COMMENTS

Peter Drucker (1973: 104-105) argues that the concentration of resources is essential for successful performance. In this framework, evaluators concluded that having multiple clients and vague goals fragmented the program's efforts. Lacking a program focus, the program's data collection also lacked a focus. Critical objectives were not systematically identified nor were resources concentrated in ways that yielded high returns. Evaluators urged program staff and clients to winnow unnecessary tasks, collect fewer but more reliable data, and concentrate resources.

Evaluators frequently reported finding programs with poorly defined goals and fragmented organizational efforts. These findings appeared to be logical consequences of a program with multiple, often incompatible, clients and vague goals.

In summary, evaluators had to cope with a political process which variously involved them with local decision makers, technical studies, other peoples' consultants, and critical news media. Evaluators concluded that they should have consulted earlier with program supporters and involved them in reviewing the evaluation design.

## REFERENCES

- Alma College (1972) "Evaluations of the Alma Center." Gratiot County, Michigan, January.
- BOYD, A. (1975) Evaluation Today in Community Education. Washington, DC: U.S. Department of Health, Education and Welfare, Office of Education. (contract 300-75-0366)
- DECKER, L. E. (1972) pp. 33-58 in Foundations of Community Education. Midland, MI: Pendell.
- Development Associates (1978) An Evaluation of the Community Education Program. Final Report. Washington, DC: U.S. Department of Health, Education and Welfare, Office of Education, Community Education Advisory Council. (contract 300-77-0159)
- DRUCKER, P. (1973) Management: Tasks, Responsibilities, Practices. New York: Harper & Row.
- HAMMOND, R. L. (1975) "Establishing priorities for information and design specifications for evaluating community education programs." Community Education J. 5: 13-16.
- JÖRESKOG, K. G. (1978) "Structural analysis of covariance and correlation matrices." Psychometrika 43 (December): 443-447.
- (1973) "A general method for estimating a linear structural equation system," pp. 85-112 in A. S. Goldberger and O. D. Duncan (eds.) Structural Equation Models in the Social Sciences. New York: Seminar.
- and D. SÖRBOM (1977) "Statistical models and methods for analysis of longitudinal data," pp. 285-325 in D. H. Aignes and A. S. Goldberger (eds.) Latent Variables in Socioeconomic Models. New York: Elsevier North-Holland.
- KILDEE, D. (1978) "The community schools and Comprehensive Community Education Act of 1978." Community Education J. 6: 3.
- LIBERTZ, S. (1977) "Evaluation—community school program, 1976-77." Salem Public Schools, Community Services Department, Salem, Oregon, September 1.
- LONG, S. (1976) "Estimation and hypotheses testing in linear models containing measurement error." Soc. Methods and Research 2 (November): 157-206.
- Mott Foundation Publications (1967) Mott Foundation Building, Flint, Michigan.
- OLSEN, E. G. (1978) "Standing on the shoulders of pioneers," pp. 18-23 in M. H. Kaplan and J. W. Warder (eds.) Community Education Perspectives. Midland, MI: Pendell.
- and P. A. CLARK (1977) pp. 57-80 in Life-Centering Education. Midland, MI: Pendell.
- PROVUS, M. (1971) Discrepancy Evaluation: For Educational Improvement and Assessment. Berkeley, CA: McCutchan.
- SÖRBOM, D. (1975) "Detection of correlated errors in longitudinal data." British J. of Mathematical and Statistical Psychology 28: 138-151.
- STUFFLEBEAM, D., W. J. FOLEY, W. J. GEPHART, E. G. GUBA, R. I. HAMMOND, H. O. MERRIMAN, and M. M. PROVUS (1971) Educational Evaluation and Decision-Making. Itasca, IL: Peacock.
- THORNTON, J. (1971) "Evaluation of program for culturally disadvantaged pupils: community schools." Highline Public Schools, Seattle, Washington.

*Leslie Hendrickson is a sociologist who evaluates administrative operations and school programs for the Eugene, Oregon, Public School District 4J. He is a methodologist who has published descriptions of evaluations in reading, writing instruction, health services, and the centralized ordering and processing of books. His interests focus on role analysis of evaluators, the use of structural equation methods, and maximum likelihood exploratory factor analysis.*

*Larry Barber is the Assistant Superintendent for Research, Evaluation Planning, and Development for the Eugene, Oregon, Public School District 4J. In 1978-1979, he was Chairperson of Division H of the American Educational Research Association. He has published numerous articles in this area over the past years.*