# A Review of Early Childhood Education: First Annual Evaluation Report, 1973-74

Arlene Fink and Ralph Hoepfner
Center for the Study of Evaluation, UCLA

#### INTRODUCTION

The Early Childhood Education Program (ECE) is an attempt to comprehensively restructure public elementary education in California. ECE, established by the Legislature in 1972 (Chapter 1147, Statutes of 1972), is unique in two important ways. First, the program actualizes a belief in the local control of education by being based on the development by the local district of a school-by-school master plan. To this end, the Legislature specified that the governing board of the district must seek direct community, parent, and teacher involvement in the development of the plan.

The second way ECE is unique is in its insistence upon evaluation <u>during</u> the growth of the program, and not just after its completion or certification. Thus, the California Legislature requires that each district receiving ECE allowances must submit to the Department of Education at least one report each year dealing with fiscal expenditures, degree and success of program implementation, and quantitative estimate of pupil progress (Chapter 6.1, 6445.10). In addition, the Department of Education must report to the Legislature the degree of program implementation and the successes of districts participating in the program (Section 11).

The inclusion of an evaluation as part of the dynamics of an educational program is a relatively new phenonmenon. Few precedents exist for conducting such evaluations of programs as large as ECE. The report prepared by the Department of Education, Early Childhood Education: First Annual Evaluation Report, 1973-74, is a result of that effort. The following review, prepared by the Center for the Study of Evaluation (CSE), is a summary and critique of the evaluation report.

In preparing the review, distinctions were made among the program, the evaluation conducted by the ECE schools and the Department of Education, and the evaluation report. The review is not an evaluation of the ECE Program.

That evaluation was assigned to the ECE schools and the Department of Education by the Legislature, and no attempt has been made to duplicate their achievements. Moreover, the review does not contain the results of an audit of the evaluation. An audit is usually performed to verify the accuracy of an evaluation, and it involves going to the original sources and reinterpreting evaluation information. CSE did not attempt to refer to the original Department of Education sources. Instead, the review focuses on the content of the evaluation report, or those aspects of the evaluation that were selected and recorded as a comprehensive and accurate representation of the conclusions reached about ECE and the methods used to reach them.

It is generally accepted by practitioners that certain information must be included in an evaluation report if it is to be worthwhile. For this review, the information has been grouped into three categories. These are:

- (1) The conceptualization of evaluation. This category includes the definitions, purposes, and framework of the evaluation, and a description of the audience for whom the report is intended. The review will focus on the extent to which this information has been presented in the ECE evaluation report.
- (2) A description of the program to be evaluated. The review will discuss the clarity with which the program has been described, particularly those components of it that constitute the objects of the ECE evaluation report.
- (3) Descriptions and explanations of evaluation procedures. The review will focus on the evaluation procedures that were used to obtain information about three factors: program implementation, product evaluation, and fiscal management.

## THE CONCEPTUALIZATION OF THE EVALUATION

In directing that there be an evaluation of ECE, the Legislature also established guidelines for the evaluation. They were that the Department of Education should report to the Legislature the degree of program implementation and the successes of the districts participating in the program. Included in the report was to be a composite score for each school in the pro-

gram that took into account three factors: fiscal expenditures (20% of the score), degree and success of program implementation (70% of the score) and a quantitative estimate of pupil progress (10% of the score). Finally, the legislature stated that the Department of Education was to compute an index of student attainment, "using factors which have been shown to be predictive of school success" (6445.11).

In response to the Legislature, the ECE evaluation report did address the program's implementation, pupil progress, and fiscal management. However, it did not provide this information for each district and school. Instead, the information was summarized for the entire program. Student progress data, for example, were presented by grade level for all students in the program or by the funding sources of programs combined with ECE. Fiscal management was described according to expenditures by account classification, and pertained to the whole program rather than to specific schools or districts. Finally, although the evaluation report states that the Department computed an index of student attainment for each particular school, a description of how this was done and the identities of the schools were not given.

The findings of an evaluation are usually summarized and reported by listing the compelling, or at least convincing, implications of the investigation. However, many of the summarized conclusions of the ECE report, especially those regarding further needs [e.g., "Districts should be encouraged to expand health and auxiliary services" (p. vi); "Activities must be initiated to improve coordination with other state and local agencies to improve the delivery of local health services" (p. vi); and "Standardized testing for all ECE participants is necessary" (p. vi)] cannot be substantiated by the evidence that is provided in the report. Thus, they appear to be implications based upon unreported findings or conclusions drawn from other sources of information or belief. Further, several tables (e.g., tables 6 and 9) seem to lack any relevance to the mandates of the evaluation. (They may provide important internal information for the Department of Education, however.) Finally, the ECE report is fragmented and unorganized. Page 8, "Personnel in the Programs" defies meaningful organization without the insertion of at least two other sections or headings like "Number of Full-Time Equivalent Personnel Employed in Early Childhood Programs" and "Required ECE Components."

Since the evaluation report excludes school or district data, as required by the legislation, it is possible that it was written for an audience other

than legislators. In the introduction to the report, Dr. Riles commends it to "all Californians," suggesting a lay audience. If certain information has been excluded for this audience, but it is available in some other place, this should be made clear in order to facilitate complete understanding.

#### THE DESCRIPTION OF THE PROGRAM

Early Childhood Education is conceived of as a comprehensive restructuring of primary education. The governing boards of any school districts that have kindergarten, first-, or second-grade students can develop or submit for approval a master plan for early childhood education. The plan, developed in cooperation with the community and school personnel must include a comprehensive statement setting forth the district's program on a school-by-school basis. The ECE legislation contains standards set by the State Board of Education for review of the master plan by the Department. Districts and schools are specifically not limited to adherence to the standards.

The ECE evaluation report, however, neglects to provide descriptions or explanations of district or school programs. The reader of the evaluation report can develop no "feel" for what actually occurred in the ECE schools. Further, no information is given about those schools that stayed within limits and those that elected to try out "optional components" like music, art, health, and bilingual education, although 50% of the schools are stated to be associated with such a component.

As a result of the lack of specificity about the individual programs, a variety of questions about their comparative effectiveness were not addressed by the report. Some questions that might have been asked about them are: Did some districts or schools have similar objectives for their students but different plans for achieving them? To what extent was each program successful for all participants? Did some schools achieve a great deal of success with respect to some purposes, but not with others? Did some schools have difficulty implementing certain components of the programs, and why?

Lack of information about the individual district and school leaves the impression (counter to the legistative intentions) that ECE in California is relatively static and undimensional. Further, in such circumstances, the focus of the evaluation was invariably shifted from the unique and dynamic aspects of

of the programs that are claimed to constitute ECE to those that conform to statutory limits. In addition, no distinctions are even made among the ways in which different programs, while attempting to adhere to legislative limits, interpreted them. For example, ECE legislation requires that master plans include "staff development and inservice training" (6445.4). A more adequate representation of the program would have resulted if the definition of this requirement and a description of its implementation had been presented in the report by district or school.

## REVIEW OF THE EVALUATION PROCEDURES

In reporting the results of ECE, the Department of Education was concerned with three major factors: program implementation, product evaluation and fiscal management. Because the evaluative procedures associated with the three factors were oriented towards different purposes, each will be reviewed separately.

### Program Implementation

As specified by the ECE legislation, program implementation was to constitute 70% of the overall evaluation rating for each school during the first year of ECE's existence. Program implementation data for 1973-74 were obtained from a school-level plan prepared according to a special form and a review of that plan by at least two members of the ECE management team also using a special form. The average of two ratings was then converted to a standard score. When the results differed more than a set amount, a third rating was assigned. The three ratings were then averaged and converted to a (undefined) standard score for that school.

Additional implementation information was obtained through the use of Department program audit consultants who visited ECE schools using special audit forms. While in the school, the consultants observed class activities, interviewed parents, teachers, and staff. On the basis of a ten-point scale, the school was rated according to its implementation of its own plan. These ratings were converted to (undefined) standard scores.

A third program implementation evaluation procedure was also developed. It was incorporated in the E-127-I form, which was a report due from each school

in December, 1973; April, 1974; and July, 1974. The reports were assessed and the results converted into (undefined) standard scores.

On the whole, the ECE report provides an easy-to-follow outline of the evaluative steps taken to obtain implementation information. Thus, the quality rating of the school plan, as designed by each school; the quality of program implementation, as determined by the program audit; and the results of the E-127-I evaluation reports were used to rank schools for eligibility or expansion, and ultimately provided the basis for computing 70% of the overall evaluation of the school.

In addition to outlining the steps taken to determine the degree and success of program implementation, the evaluation report also identifies reasons given for not implementing particular program activities. For example, "insufficient time allocated in original planning for completion of activity," was the reason given most frequently. The report also presents data on the proposed number of activities for a program component like staff development and the number of activities that were and were not implemented. Further, the data are presented to demonstrate that the schools that rated high on the onsite program audits and on their school-level plans tended to be more successful in implementing their plans. The program implementation section of the evaluation report concludes with the assertion that "the data collected show that a program with well-defined plans and program audits can be evaluated with greater confidence in the accuracy of the evaluation product than a program with plans that are not well-defined."

Despite the varied and optimistic findings, and the presentation of an outline of the steps that produced many of them, the ECE report is lacking the detail that is necessary to mentally reconstruct the evaluation in order to more firmly grasp the connections that are said to exist between the conclusions and the procedures used to arrive at them. For example, Form A-127-S was used by schools to describe their plans. However, no sample forms are provided to graphically explain the specific requirements to which the schools were to conform. Also, no samples of acceptable plans are given as a standard of comparison among plans. Further, the forms used by the ECE Management Team in reviewing those plans is omitted from the ECE report so that the correspondence between the reviews and the plans can only be a hopeful assumption.

Another omission from the ECE evaluation report is a detailed description of the program audit - a key component of the evaluation - resulting in many unanswered questions. For instance, what were the qualifications of the audit consultants, and on which activities did classroom consultants focus their attentions? What scale did they use in making their assessments? Were all classes in an ECE school observed or were only samples observed? If samples were observed, how were they selected? Were the consultants who observed the classroom the same people who interviewed parents, teachers, and staff? Were these latter individuals sampled, or was everyone involved in the program interviewed? What did the E-127-I report form look like and what procedures were used to assess the school's evaluation reports so that the results could be converted to a standard score?

The purpose of raising these questions and others like them is not to cast doubt on the qualifications of the individuals responsible for the report, or even the care they took in compiling it. Experienced evaluators have become rather familiar with the pressures associated with producing a timely and accurate report. Nevertheless, the use of specially-developed and unique evaluation procedures for a program of ECE's magnitude suggests the need for a detailed but concise explanation of what was done, how it was done, and the limitations, if any, on interpretations of the outcomes. In the absence of such careful documentation, the results of the report tend to lose their impact. And this is what unfortunately happens in the ECE report.

## Product Evaluation

Based on statutory requirements, the ECE evaluation report describes the degree of effectiveness of each of six components of the overall program. These were reading/language, mathematics, health/auxiliary services, parent education, parent participation and community involvement, staff development, and inservice education. The ECE evaluation report also concerns itself with optional program components, like music and art, included in 50% of the ECE schools. Because the six components comprise the essential ingredients of all ECE programs, regardless of other planned-for variations the evaluative procedures associated with each will be described.

## A. Reading/Language

The reading/language component involved the testing of 134,470 students in Kindergarten, first, second, and third grades (the number, supplied in Table 8, cannot be made to jibe with those in Tables 12 or Tables 13, 14, 15, but no explanation is provided). The determination of the effectiveness of this component was based on test scores provided by the districts for each school and aggregated by the Department of Education to provide information about the overall program.

To obtain this information, students in ECE schools were first given a pretest. Seven months later they were given a posttest to ascertain the extent of reading/language improvement as a result of being in the program. The evaluation report states that in the reading/language development component, the achievement test scores showed an average gain of 1.1 months of growth per month of instruction in grades one through three. In some program combinations e.g., grade two, ECE and Miller-Unruh, these gains were as high as 1.4 months.

Other results presented in the evaluation report include the average reading/language development achievement by funding sources that were combined with ECE money for each grade; the rank order of ECE program test results as compared to the 1974 state assessment results; and the number and percentage (by grade level) of ECE students who scored in each quarter of the distribution of reading/language development achievement as measured by the pretest and the postest. In all cases, ECE students were reported to have performed well. For instance, the report states that the number of students in each grade level in the lowest quarter of the distribution decreased during the seven months between the pretest and the posttest, while the number in the fourth quarter increased.

The results of the overall ECE program, however impressively presented, must be interpreted and accepted cautiously. Of course, caution in the interpretation of results is advisable when reviewing any evaluation report, since evaluation techniques are continuously evolving and few rules or certainties to guide the reader, presently exist. Because of this, it is extremely important for the writers of evaluation reports to explain the limitations that are attendant upon the conclusions so that they are not taken out of context and misused. ECE's evaluation report provides no such warnings to be cautious with the findings, although several are clearly necessary. For example, the student progress data are not presented by school or district and no comparisions among

students are offered so that a determination could be made as to whether some students were responsible for gains or whether all students made equivalent gains. Having access to such information would help provide the readers with a more balanced view of the effectiveness of ECE.

The ECE evaluation report not only neglects to provide reading/language achievement data by district or school, it also neglects to provide information comparing students attending ECE schools with students in ordinary schools within the same district. Although the ECE reading/language gains may truly have been exceptional, it would have been useful to have been given additional assurance that the gains really were due to the ECE program rather than to some external influence, like district-wide improved instruction or materials that favorably affected most students.

It is important to note that the ECE evaluation report emphasizes the concept of "gain," whereas only first-grade students scored at grade level (1.9) on the posttest. Second graders completed the seven-month academic period with a score of 2.5, and third graders completed the year with a score of 3.3. If reading at grade level is a criterion of effective school programs, and the use of grade equivalent scores implies that it is, then ECE gains must be reviewed with some reservations.

One last caution should be mentioned. It is customary in evaluation reports to fully describe the measures and instruments used. These descriptions usually attend to the measures' psychometric properties like reliability, validity, and norm quality, and often detail the circumstances under which tests were administered, observations were made, etc. For instance, the spectacular monthly gains in reading and language can only be assessed by norm-referenced tests that provide both fall and spring grade-equivalent norms -- but no test names are provided in the report as assurance that such norms exist, and that the reported findings are not spurious. By failing to include this information, the reader of the ECE report has been severely limited in ability to determine whether the gains on the achievement tests are accurate reflections of what students really know about reading and language.

## B. <u>Mathematics</u>

The mathematics component of ECE is discussed in a manner similar to that of the reading/language component, and the exact same warnings about the

reported conclusions apply. The ECE evaluation report states that achievement test scores showed an average gain of 1.2 months of growth per month of instruction in grades one through three. The expected growth is one month of growth per month of instruction for the average student and .7 months for disadvantaged students.

In interpreting the report's findings, it must be kept in mind that no between or within school or district comparisons are presented; many children were not included in the computations from pretest to posttest; that only the first graders completed instruction at grade level; and that no descriptions of achievement tests are provided.

## C. Health/Auxiliary Services

The health/auxiliary services were reported as effective in providing health examinations. According to the ECE report, the level of effectiveness was determined primarily by three evaluation methods: subjective staff judgments (47%), counting of participants or activities (42%), and "objective" measurements, like ratings (11%). The report also concludes that it is "evident that auxiliary services were effective" in ECE programs. It adds that the effectiveness was determined from the resulting improvement noted in pupil health, pupil attitudes, and improved school attendance. However, procedures for obtaining and synthesizing information about student health, attitudes and attendance either by the ECE programs or the Department of Education are not described.

Finally, the ECE report's recommendations taken from the schools' reports are vague and probably not specific enough to offer guidance to future ECE programs. They include injunctions such as "to improve communication" and "increase parent involvement." The lack of specificity in describing the type of health services, examinations, etc. suggests that conclusions concerning the program in this area must be accepted with care. Further, it also suggests that in attempting to implement recommendations, like the one to provide additional services, it is necessary to first define and explain what services presently exist, how they work, and under what circumstances they might continue to work.

### C. Parent Education

The parent education component required specific objectives and activities that would increase the parents' effectiveness by encouraging them to become an integral part of the formal education process. The Department of Education, relying upon an unspecified number of ECE reports, states that parent education activities were evaluated by identifying the criteria for a successful program and assessing the level of specific activities in meeting those criteria. The report provides a list of some of the activities rated by school personnel as most important and effective, like instructional classes for parents. However, there are no school-by-school descriptions or explanations of specific parent education programs or their evaluations. Thus, the nature and effectiveness of the parent education program remains unclear.

# D. Parent Participation and Community Involvement

The parent participation and community involvement component of ECE required specific plans for the improvement of communication between the schools and the community as well as parent participation in the planning, implementation, modification, and evaluation of the program and in the classroom education of the children. According to the ECE report, parent involvement activities that were most effective were parent-teacher conferences, advisory committee meetings, school-parent meetings, use of parent volunteers and home communication. However, the report also concluded that parent education and involvement activities were sometimes commingled in practice, which may account for some of the problems that existed in interpreting the results of the parent education component. The events leading to the conclusion were not described, nor was the extent to which the commingling took place discussed. Also not dealt with was the degree of relationship between parent education and involvement activities and the specific successes of ECE school programs.

# E. Staff Development Inservice Education

The staff development and inservice education component relied primarily on subjective judgments (67% of the methods used). Comparisons were also made

between the importance and the effectiveness of staff development activities. The nature of the judgments and the procedures for the comparisons are not described. Further, as the ECE evaluation report states, this component was rarely evaluated in terms of the implementation of inservice training into the classroom. Further, even for cases where implementation records were kept, no information was provided in the report about the relationship between inservice education and improved student performance.

### F. Fiscal Management

The report of the fiscal-management component also is summarized over all schools and districts, contrary to legislative mandate. The summary indirectly indicates overall compliance with the legislative intent for expenditures; but in an all-too-common disregard for compelling logic, the recommendations bear little connection to the reported findings.

#### CONCLUSION

The Early Childhood Education: First Annual Evaluation Report, 1973-74 has left many questions unanswered. Some of them, especially those concerned with describing and comparing the implementation and outcomes of each ECE school program must be answered if accurate and valid interpretations of the effectiveness of the entire ECE program are to be made.

To some extent, however, the fact that many questions remain unanswered should be regarded by the evaluator as a likely effect of participating in the development of any new program and sharing its growing pains. Nevertheless, there is a definite need for a "master evaluation plan," analogous in spirit to the required master plan for each ECE school. This plan should be responsive to the purposes of specific programs, but must be primarily oriented toward the concept of early childhood education as an overall restructuring of California's schooling. To achieve this, the master evaluation plan would contain detailed guidelines for the selection, collection, analysis and reporting of information about the individual and comparative accomplishments of all ECE schools.