The objectives of state-of-the-art reporting activities and approaches that may be utilized in this type of reporting (problem oriented, literature oriented, and discipline oriented) are discussed. The scope and definition are given, and utilizing the discipline approach, the parameters of the Art of Early Childhood Education are presented. These parameters are: characteristics of clients; characteristics of teachers and other assisting adults; program organization; philosophical orientation and historical factors; parent power; administrative factors and sponsorship; length of the program; and physical plant and climate. A matrix generated from the proposed parameters is then provided, with discussion of how it can be used to order information and raise questions. The Program for the State-of-the-Art Report at ERIC/ECE is presented as to (a) significant trends in the field; (b) proposed sequence of tasks for state-of-the-art reporting; (c) proposed assignment of tasks; (d) audience considerations; and (e) summary and recommendations. Four appendices present the following: A. Problem Oriented State-of-the-Art Reports Already Available; B. Problem Oriented State-of-the-Art Reports Known to Be in Preparation; C. Proposal for State-of-the-Art Coordinator; and D. Proposal for the Review of Early Childhood Education. (DB)
A PLANNING DOCUMENT:

STATE-OF-THE-ART REPORTING AT ERIC/ECE

Submitted by

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Director, ERIC/ECE

June 1970
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Special thanks are given to the consultants listed below. Discussions with them were both helpful and encouraging. However, all errors are mine.

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APPENDICES
SECTION I. INTRODUCTION

a) Objectives of the state-of-the-art reporting activities.

The broad objectives of the proposed state-of-the-art reporting activities at ERIC/ECE are:

1) to provide up-to-date, comprehensive analyses and summaries of the available knowledge in early childhood education and its closely related disciplines;
2) to derive from these analyses guidelines for future research, development, and program planning for early childhood education;
3) to provide guidelines for the acquisition and information analyses activities at ERIC/ECE;
4) to isolate and identify areas of the art in which knowledge is lacking or needed;
5) to develop strategies for the dissemination of state-of-the-art information to early childhood education workers and decision-makers.

b) Scope and definition of early childhood education.

For the purposes of this paper it is proposed that the referent for the term "early childhood education" be stated as follows:

Group settings which are deliberately intended to effect developmental changes in children in the age range from birth up to the age of entrance into the first grade.

Two points concerning this definition need attention. One point concerns exceptions to the referent as defined above, another concerns the variance of the proposed definition with the official "scope notes" assigned to ERIC/ECE by Central ERIC.

Concerning exceptions, a number of early educational intervention strategies now developing cannot properly be called "group settings". For example, there are programs in early education which focus on assisting mothers with the education of their infants in their homes. While such programs do not consist
of group settings, the literature surrounding them clearly falls into the
purview of ERIC/ECE, and shall be treated in the information analysis program.

Concerning the variance with ERIC/ECE scope notes, the descriptive
definition above differs with the official ERIC/ECE scope definition which
reads as follows:

The ERIC/ECE clearinghouse is responsible for research documents in
the physiological, psychological and cultural development of children
from birth through the primary grades.

The variance resides in the fact that the definition proposed herein extends only
to the care of children up to the age of entrance into the first grade. The
official definition extends our scope through the primary grades.

The shift downward, extending the age range only to the age of first
grade entrance is proposed for two reasons. First, much of the knowledge related
to the education of children through the primary grades falls within the scopes
of other clearinghouses (e.g., ERIC/CAPS, ERIC/IRCD, ERIC/CRIEF, ERIC/SEIAC,
ERIC/NCTE, ERIC/CAL, and ERIC/ETS). It seems best that plans for reporting
the state of knowledge related to the primary grades not be formulated until
the plans of the other clearinghouses listed above can be studied, negotiated
and coordinated more fully.

Secondly, the definition proposed herein is at variance with our official
scope notes in its relative emphasis upon education rather than upon development
as the context of inquiry. By formulating the proposed referent in terms of
an educational (vs. developmental) discipline, the point of entry into the
state-of-the-art has been shifted. However, coverage is expected to be suf-
ciently comprehensive to include the developmental parameters officially
designated as ERIC/ECE's responsibility. It should become clear from the plans
formulated below that the educational emphasis is essential in order to highlight
the major problems of implementing the knowledge acquired from the study of development.

c) Approach to the state-of-the-art report.

Customs associated with state-of-the-art reporting suggest that there are at least three major ways to organize the tasks involved, each of which is attended by specific advantages and disadvantages.

The first type of organization might be called problem oriented. It involves identifying the art's major problems and then summarizing the available knowledge related to those problems. The second type might be called literature oriented, which requires synthesis and summaries of all the art's literature. A third type of organization, discipline oriented, requires a definition of the art, plus syntheses and summaries of the knowledge (or gaps in knowledge) about all the elements implied by the definition.

A principal advantage to the problem oriented approach is its economy of effort. A selection of discrete and urgent problems can be isolated from the total range of activities in the field, and all of the available energy for analysis and synthesis can be deployed efficiently. The latter is close to a "task force" strategy. A potential weakness of this approach resides in the risk of identifying as problems those topics which are, for a variety of reasons, either in vogue, highly visible, or otherwise popular.

A principal advantage to the literature approach is that the delimitations of the state-of-the-art reporting task are relatively easily established. When the art has been carefully defined, the available literature can be cataloged and inspected, and a comprehensive synthesis of it can be launched. A weakness here is that reporters are likely to examine only the knowledge available; the posing of questions to which no literature has been addressed is not facilitated, although it is certainly not prohibited.
The third approach, discipline oriented, is dependent upon how well the discipline (or art) is defined. A useful definition will indicate the parameters of the art, and these in turn may be used to generate a set of interrelated taxonomies to guide the review, synthesis and analysis tasks. A potential advantage of this approach is that it may facilitate the search for knowledge not available, yielding a state-of-the-art report rather than a summary of available knowledge.

In developing a plan for state-of-the-art reporting at ERIC/ECE, each of the three approaches outlined above was considered. The discipline approach has been preferred primarily because it subsumes the tasks included in the other two approaches, and secondarily because present trends in the field suggest that the current preparadigmatic status of early childhood education represents in and of itself a major problem in the field.

In the section below, a preliminary effort to isolate the parameters of the art (or discipline) is presented.

SECTION II. THE ART OF EARLY CHILDHOOD EDUCATION

a) Definition of early childhood education.

As indicated above, we are taking for our definition of early childhood education "group settings deliberately intended to effect developmental changes in children from birth up to first grade entrance."

The discussion presented below is an attempt to derive the parameters of early childhood education in terms of which the discipline, or branch of knowledge, can be developed. These parameters are derived in part from the available research findings as well as from intuitive knowledge of early childhood education.

b) Parameters of early childhood education.
In this paper, the term parameter is used broadly to indicate a superordinate category of variables which applies to all early educational settings, and which typically remains constant during a given study or during a given instance of an event we might call "an early childhood program."

While young children have been the subjects of disciplined inquiry for more than a half a century, their education has not. Specialists from many fields have strong scientific interests in the young child, but a distinct disciplinary approach to their education has been neglected in favor of problem oriented investigations designed to provide guidelines for program implementation in times of crisis.

Two studies have appeared in the recent early childhood education literature which have employed productive paradigms. Pierce-Jones (1966) and his associates at the University of Texas conducted a comprehensive study of Project Head Start Centers in Texas in 1965. The conceptual framework used for this study is shown in Figure 1.

In 1967, Prescott and Jones (1967) reported a study of group day care in the Los Angeles area using a similar, but more comprehensive framework. Prescott and Jones included no schematic illustration of their research design, but their report indicates that they studied all of the same classes of variables as the Texas group (except for those in the lower two boxes) plus some others of value like physical space, size of centers, and types of sponsorship.

The findings reported by the Pierce-Jones and Prescott and Jones projects strengthen the view that early childhood education, especially in its preschool manifestations, is a complex domain for study.
PRETESTS WILL SHOW THAT

Head Start Teachers Vary In
1. General preparation, experience, etc. in teaching
2. Specific experience and attitudes pertaining to cultural differentiation
3. Attitudes, toward children, which predict performance
4. Attitudes toward specific classes of child behavior
5. Other factors

Head Start Children Vary In
1. Cognitive-symbolic skills and habits
2. Perceptual and motor skills and habits
3. Social interaction patterns and emotional controls
4. Social-cultural, ethnic backgrounds
5. Other factors

Interact

"Input" (i.e., HEAD START CENTER PROGRAMS) Variations e.g., in level of verbal stimulation

THOUGH CONTINUING TO VARY, POST-TESTS WILL SHOW CHANGES IN CHILDREN'S

Cognitive Behaviors
Perceptual-Motor Behaviors
Social Interactions
Emotional Controls
Motive Factors

PRODUCING FURTHER CHANGES IN, AND INTERACTIONS AMONG

EDUCATIONAL DEVELOPMENT DURING EARLY GRADES (1-6)

EXTRASCHOOL ENVIRONMENT OF EXPERIENCE

Fig. 1-Schematic Representation of Multiple Interacting Factors Operating Through Head Start Center Programs to Produce and Predict Changes in Educational Development and in the Extra-School Environment
The set of parameters presented below is not intended to reflect or imply either a ranking of importance or a status of independence among them. There is as yet no empirical basis for establishing either the order of importance or the extent of independence/interdependence between the members of the set. Similarly, the extent to which they are confounded cannot be clearly specified. It has been suggested by two of our consultants that some of the separate parameters could be collapsed yielding a simpler matrix. Although a more parsimonious organization of the variables represented by the set would be desirable, they are presented here to illustrate our approach to state-of-the-art reporting at this point in our planning.

A brief descriptive outline of each of the parameters is presented below. The descriptions are not intended to be exhaustive, but merely to suggest some of the variables within each of them which have been, or could be used to form guidelines for research, review, analysis, and classification of information.

Parameter Descriptions

A. Characteristics of clients.

Variables within this parameter include variable characteristics of both the children and parents served by any given early childhood program. Examples of variables within this parameter are: age, socioeconomic background and status, ethnicity, sex, physical and/or mental health, mother tongue, second language, urban/rural background, goal orientation of parents, child rearing variables, etc.

B. Characteristics of teachers and other assisting adults.

This parameter includes variations in teacher role prescriptions and performance, teacher attitudes, teaching styles, and such teacher attributes as age, experience, sex, attitudes and beliefs, self-concept,
goals, ethnicity, training, satisfaction, etc.

C. Program organization.

This parameter includes such variables as the variety and quantity of stimulation offered in a program, the temporal organization of classroom activities, the lessons "taught" and not "taught", the materials available, the control of activity selection, the inclusions of rest time, story readings, formal group instruction, instruction organized by ability groups, meals, etc. This group of variables is commonly referred to as the curriculum.

D. Philosophical orientation and historical factors.

This parameter refers to the "school of thought" adhered to in any given early childhood program representing a range of values, goals and objectives; it includes also the learning theory "used". The philosophical orientation may be explicit or implicit, or it may vary on these two levels. Example programs with diverse philosophical orientations are Montessori Schools, models such as Bank Street, Behavior Modification programs, British Infant School, etc. Historical factors may include remote or immediate antecedents of contemporary program implementation.

E. Parent power.

This parameter refers to variations in the extent to which parents participate in central or peripheral decision-making concerning the operation of early childhood programs for their children. There are, for instance, parent cooperatives where parents participate fully in program operations, and university laboratory schools where parent participation in decision-making is minimal or peripheral. There are Head Start programs where parents select curriculum and staff, Head Start programs where parents are only consulted, and others where they are passive recipients of services. The extent to which parents pay
for services rendered by a preschool program also describes a variation in their power.

F. Administrative factors and sponsorship.

This parameter refers to variables associated with program administration such as size of program, distribution of authority, division of labor (maintenance, personnel, curriculum, etc.) staff morale, staff leadership, staff coordination, and cooperation vs. friction, etc. The parameter includes the variety of public and private sponsoring agencies. Examples are public school systems, community centers, churches, Office of Child Development, university laboratory schools, mental health departments, franchise entrepreneurs, parent cooperatives, one-shot demonstration projects, etc.

G. Length of program.

Variables within this parameter include the length of the school day and the number of days of schooling. Examples are: daily, all-day care; two-and-a-half hours per day, morning or afternoon sessions; two, three or four days per week, eight-week summer Head Start programs, etc.

H. Physical plant and climate.

This parameter includes variables in the amount of space, the type of space, outdoor/indoor facilities and accessibility, neighborhood location, the number of classrooms per site and climate (e.g., Head Start in Alaska vs. Head Start in Hawaii).

c) A matrix for early childhood education.

Figure 2 is a schematic representation showing how a matrix can be generated from the proposed parameters.

First let us look in turn at each cell falling into the diagonal and marked A, B, C, etc. One set of tasks involved in the state-of-the-art report for early childhood education requires comprehensive analysis of all the knowledge
<table>
<thead>
<tr>
<th>Parameters</th>
<th>A. Clients</th>
<th>B. Teachers</th>
<th>C. Program</th>
<th>D. Philosophy</th>
<th>E. Parents</th>
<th>F. Administration</th>
<th>G. Length</th>
<th>H. Physical</th>
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<tr>
<td>A. Characteristics of clients</td>
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<td>B. Characteristics of teachers</td>
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<td>C. Program organization</td>
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<td>C→H</td>
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<td>D. Philosophical orientation and</td>
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<td>D→E</td>
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<td>historical factors</td>
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<td>E. Parent power</td>
<td>E→D</td>
<td>E</td>
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<td>F. Administrative factors and</td>
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<td>G. Length of program</td>
<td>G→B</td>
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<td>H. Physical plant and climate</td>
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</tbody>
</table>

Figure 2. Schematic Representation of Parameters of Early Education
within each of these cells. The within-parameter knowledge indicated by the diagonal cells can perhaps be understood to focus on those studies and questions in which the variables within the cell constitute both the dependent and independent variables. For example, in the first cell, marked A, comprehensive analysis is needed of all of the literature related to child development and child rearing. Such a complete analysis would represent an encyclopedia of the developmental literature with special emphasis, of course, on the young child.

In the cell marked B, we need a comprehensive analysis of all of the knowledge related to these within-parameter variables, for example, the answers to questions related to teacher recruitment and training, occupational status, credential and licensing patterns, teacher-assistant teacher relationship, etc. In a similar way each of the remaining diagonal cells requires comprehensive within-parameters analyses, and should serve to stimulate the posing of new questions. For instance, there is no literature which answers questions concerning teacher turnover in Head Start, and yet in terms of personnel training planning the detection of underlying facilitators of recruitment and causes of withdrawal could be significant aspects of the state-of-the-art.

Next, taking each parameter in the rows, and moving across to the columns we can ask questions related to the effect of each of the parameter variables in the rows on each of those in the columns. For example, if we look at Parameter A, characteristics of clients, and go to the second column, we require a comprehensive analysis of the knowledge available (and needed) concerning the effects of A variables on B variables (A→B). The type of question could be stated as what characteristics of children influence the teachers' behavior in what ways? or, what effect does the age range in a given
class have on the teacher's behavior? If a teacher has fifteen or twenty 3-year-olds, then she is likely to be working with a smaller range of social and intellectual maturity than if the age range were 3 to 5 years. How does this age range composition affect the teacher's definition of her role? Or we could ask, what are the effects of the sex distribution of the class membership upon the teacher? Compare for example a class consisting of two-thirds boys with one consisting of two thirds girls, or classes of one sex only? These are simple examples of questions which might be suggested by the cell. The point here is that the questions would guide the search for the knowledge to be analyzed, synthesized, and summarized. It is important to note, however, that questions concerning "effects" reflect an idealized conception of field research! The probability of isolating causes from effects is dismally small at present. In general our data suggest relationships between co-occurring events. Similarly, establishing the extent of interaction between the variables is desirable. Typical research in early childhood education answers questions concerning the effects of selected program variables on children's development (A→C). It would be desirable to ascertain which program variables affect which clients in which ways.

If we look at the second row, Parameter B, characteristics of teachers and other assisting adults, and its intersection with the first column (marked B→A) then we begin to ask questions concerning the effects (and/or relationships) between the variables of Parameter B on those in A. The effects of teacher behavior on children are among the many topics which belong in this cell.

In order to illustrate further the use of the proposed matrix in our state-of-the-art reporting, we can examine briefly the remainder of the cells...
in column B. For example in the cell marked C\(\rightarrow\)B, we can synthesize the knowledge (available or needed) concerning the effects of program organization variables upon teachers, although again these are more likely to be co-occurring events than causes and effects. For example, let us suppose that a program is organized so that children are required to attend to a group story-reading activity in such a way that alternative behavior is not permitted. How does such a programmatic constraint affect teachers and which teachers, etc?

In row D (D\(\rightarrow\)B) answers to questions pertaining to the relationships and effects of philosophies (values, goals and objectives etc.) upon teacher performance are sought. Let us take for example the observation reported by Sears and Dowley (1963, p. 857) that there are teachers who have "child-centered theory and authoritarian practice." One could ask, at least theoretically, can the reverse be true? Or what are the elements which account for the gap between rhetoric and performance? It is commonly assumed that when teachers embrace the philosophy of the modern British Infant School, their classrooms will become "open." However, it may be that such embrace is necessary but insufficient. According to the British Infant School program organization, the teacher probably must also be high on fluency and flexibility in generating potential extensions and elaborations of children's spontaneously expressed interests.

Historical factors, namely a program's past experiences, may be causally related to teacher variables. Let us suppose, for example, that a Head Start program has had a history of threats of nonrefund. In what ways might this history affect teachers' commitment, optimism, etc.?

In row E. (E\(\rightarrow\)B) we search for information about the relationships between variables of parent power upon teacher variables. For example, when parents pay high fees for an early childhood program, are teachers likely to experience
pressure to interact with children in ways that they would not otherwise choose? How do teachers feel about being hired (or fired) by parents? The list of questions here is potentially very long.

In Row F we pose questions concerning administrative factors and their impact on relationship to variables in parameter B (F→B). For instance Alexanian (1967, p. 1) reported "In some instances, the administrative problems of Head Start centers were so overwhelming that the very survival of the program was the all important focus." Questions about the uncertainties associated with year to year funding belong in this cell. Similarly, questions concerning how equipment and supplies are secured belong here. It has also been observed in some Head Start programs that giving equal pay to teachers with widely different training and experience contributes to staff friction and unrest.

In Row G (G→B) questions concerning the relationship between length of program and teacher variables are raised. Is it really easier to attract highly trained personnel to work in half-day programs than in all day programs? Or we could ask, at least theoretically, whether teaching a whole day is characterized by twice as much of whatever characterizes a half-day? Obviously factors like fatigue should be considered. The management of nap times in all day programs frequently induces stress and strain in teachers as well as children.

In Row H, Physical plant and climate, (H→B) we pose questions concerning the relationship between physical plant variables and teacher variables. For example, in some physical facilities children can move freely from indoors to outdoors without encountering potential physical danger. However, in others all children must be visible and accounted for because the plant borders on a major highway, or there are stairways and long corridors to consider. Similarly, in some geographical climates the weather is congenial for outdoor activity only
half of the school year—proverbially rainy days affect teachers as well as children.

In the preceding discussion we have tried to show briefly how the proposed matrix can be used to order information and to raise questions. In addition to synthesizing the information available or needed for each cell, we can treat a wide range of combinations of cells. For example, an important question for early childhood education is what is the role of charismatic leaders (historically and contemporaneously) in program development? Or, to what extent are effective programs, even though of widely different types, associated with leader evangelism? These questions fall into the intersection of cells B and C and D and F. Similarly, other groups of cells can be taken for inspection.

The list of questions for which information and answers will be sought is potentially very long indeed. It is expected that the generation of such lists of questions within each of the cells and combinations thereof will facilitate the ordering and synthesizing of a large and scattered body of literature, as well as serve to throw into sharp relief those areas in which no literature has yet been developed.

SECTION III. PROGRAM FOR STATE-OF-THE-ART REPORTING AT ERIC/ECE

a) Significant trends in the field

1. Current activity in the field

In terms of activity in the field, an assessment of the proportion of recent literature falling within each of the parameters outlined above was made. The distribution of abstracts of documents submitted to Research in Education (RIE) and to Current Index to Journals in Education during the preceding five-month period is shown in Table 1.
<table>
<thead>
<tr>
<th>Parameter of Main Topic</th>
<th>RIE (N=133) %</th>
<th>CIJE (N=181) %</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Characteristics of clients</td>
<td>48.9</td>
<td>80.0</td>
</tr>
<tr>
<td>B. Characteristics of teachers</td>
<td>6.0</td>
<td>5.0</td>
</tr>
<tr>
<td>C. Program organization</td>
<td>35.3</td>
<td>8.8</td>
</tr>
<tr>
<td>D. Philosophical orientation</td>
<td>4.5</td>
<td>3.3</td>
</tr>
<tr>
<td>E. Parent power</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>F. Administrative Factors</td>
<td>4.5</td>
<td>2.7</td>
</tr>
<tr>
<td>G. Length of program</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>H. Physical plant and climate</td>
<td>0.7</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
An overview of current activity in the field can be summarized as follows:

1. A dominant feature of the literature in the field is its scatter and disarray, reflecting the heterogeneity of its workers, their interests and their separate orientations to young children.

2. The literature indicates the existence of a vacuum in both activity and literature production. This vacuum could be defined as the space between knowledge of the young child and post-test data banks.

3. A number of problem-oriented state-of-the-art reports are now available, and known to be in progress. They are listed in Appendix A and B respectively. The developmental psychology literature is clearly growing at a rapid rate. The revised edition of Carmichael's Manual of Child Psychology (P. Mussen, Ed.) is expected to be available in the fall of 1970. The table of contents for the Manual is attached to Appendix B. The Manual will in large measure fulfill our need for encyclopedic knowledge within parameter A (Characteristics of clients).

4. In summary, the major portion of activity in early childhood education is focussed on either Characteristics of clients (Parameter A) or Program organization (Parameter C). (See also Scott and others, 1969) There appears to be an assumption that it is possible to transport a carefully derived and "packaged" early childhood education program from one context to another, and to expect positive outcomes. The point here is not to deny the centrality of questions in these two active areas. Rather, it is important to emphasize that knowledge of the complex events in any given program context, or knowledge of the relative influence of all of the other parameters may enhance our power to predict and replicate the findings of current research and development projects.
5. Another interesting trend in the field is the increasing frequency with which ERIC/ECE is called upon to participate in the state-of-the-art reports being planned by other interested organizations. Such requests were received from Ginn and Company, a commercial publisher based in Boston, Massachusetts; the Center for the Environment and Man, Inc., associated with the Traveler's Research Corporation, Hartford, Connecticut; Dean John Goodlad, University of California at Los Angeles, connected in an unspecified way with I/D/E/A (Institute for the Development of Educational Activities, Inc., home base: Dayton, Ohio). Similarly, various federal agencies are involved in large task-force reports on specified topics or problems in the field. Day care is currently receiving a large proportion of the activity in federal agencies.

6. Inquiries from ERIC/ECE users.

In terms of topics, the major trends in our requests in rank order of frequency (1=high) are:

1. Day care program planning
2. Infant program planning
3. Problems associated with evaluation
4. Effects of intervention programs
5. Contrasting program models
6. Other aspects of curriculum development
7. Teacher and paraprofessional training
8. All other topics.

b) Proposed sequence of tasks for state-of-the-art reporting

1. Refinement of the parameters. The first task in the plan for state-of-the-art reporting calls for refinement of the proposed parameter definitions. The definitions submitted herein undoubtedly represent
areas of overlap and confounding which require examination and clarification. The wisdom of collapsing them in order to yield the most efficient matrix also needs attention. This process should be coordinated with current concept development occurring in the Head Start Research and Evaluation Centers.

2. Development of a taxonomy. Refinement of the parameters should be accompanied and followed by the development of a taxonomy of early childhood education. This taxonomy is expected to facilitate the ordering and retrieval of diverse information for subsequent review, synthesis and analysis. This taxonomy should be interfaced with the ERIC Thesaurus in such a way as to facilitate information storage and retrieval procedures for all ERIC users. The development of this taxonomy will be based on the experience of ERIC/ECE staff with its own current information coding scheme. The work involved in taxonomy development should be coordinated with the development for a national information system for psychology (Van Colt, 1970). It is interesting to note that an adequate taxonomy is one of the strong concerns underlying the development of the information system for psychologists. Van Colt pointed out "indexing in Psychological Abstracts is shallow" (p.iv) and that a thesaurus of psychological terms which will provide a structured display of the relationships among index terms is also planned for the new National Information System for Psychology.

3. Simultaneously, ERIC/ECE will explore the applicability of the refined matrix and taxonomy to its own document collection. These first three tasks constitute a type of meta-research on the nature of knowledge in the field.

4. A satisfactory taxonomy can serve as a basis for generating and updating bibliographies plus abstracts. These
bibliographies can be made available to individuals and organizations consigned, assigned, or otherwise interested in performing analyses and syntheses of parts of the matrix. Annual or semi-annual refinement and up-dating of the bibliographies can serve to support a program of annual reviews and syntheses.

5. Annual reviews (or state-of-the-art reports) of parameter related topics should constitute the basic information analysis program at ERIC/ECE.

c) Proposed assignment of tasks

Task 1: Refinement of parameters

Proposed procedures: It is recommended that refinement include three procedures:

1. In-house application of current document collection to matrix and vice versa. Evaluation and feedback to be used for refinement.
2. Preparation of proposed matrix for presentation to selected consultants (not more than 3) who would provide evaluative and critical feedback to be used for refinement.
3. Preparation of proposed matrix for dissemination to workers in the field of early childhood education through conventional publications and/or conferences. Evaluative and critical feedback can serve as a basis for refinement of parameters and matrix.

Task 2: Development of a taxonomy

Proposed procedures: It is recommended that refinement include the following procedures:

1. In-house application of current coding categories to the matrix, and vice versa, and evaluation of outcome.
2. Appointment of one or more specialists in lexicography or taxonomies to study the problems associated with indexing the discipline of
early childhood education, and meeting user needs.

3. Developing a mechanism for one or two ERIC/ECE staff members to meet with or otherwise communicate with the staff of the National Information System for Psychologists, American Psychological Association in order to maximize the needs of both groups.

Task 3: Surveillance of state-of-the-art reports produced elsewhere.
Proposed procedures: The attached proposal for a state-of-the-art coordinator, Appendix C, outlines proposed procedures for maintaining close vigilance of relevant work performed outside of ERIC/ECE.

Task 4: Preparation of matrix oriented bibliographies.
Proposed procedures: These tasks can be performed by in-house ERIC/ECE staff in accordance with current practices.

Task 5: Coordination with other clearinghouses.
Proposed procedures: It is proposed that in-house staff be assigned to matrix-based topics which overlap with one or two other clearinghouses. This involves extending the questions and problems raised to the age range officially assigned to ERIC/ECE, namely through the primary grades. Such staff members will be responsible for negotiation with the relevant clearinghouse to assure efficient and full coverage and coordination.

Task 6: Performance of information analyses for the annual state-of-the-art reports.
Proposed procedures:
1. It is proposed that ERIC/ECE be funded in such a way as to provide three yearly post-doctoral fellowships. These fellowships would be awarded competitively to recognized specialists in various sub-specialties of the total field. The purpose of the fellowship
is to invite such scholars to operate on the document collection, and to stimulate the in-house ERIC/ECE staff. The sub-specialties should be designated through an analysis of current information analysis priorities. For example, the first year of fellowships should include scholars interested in the meta-research tasks outlined above as Tasks 1 and 2. Each applicant would be invited to submit a proposal of intended work. Rotating annual fellowships would be more likely to add diverse strengths to the ERIC/ECE staff capabilities, than simply adding more staff positions.

d) Audience considerations

It is not known what proportion of workers in the field can or would want to use state-of-the-art reports. The major users of the proposed state-of-the-art reports are scholars and research program planners. Dissemination outlets for the proposed state-of-the-art reports are:

1) The ERIC system itself.

2) The proposed quarterly journal, Review of Early Childhood Education (see attached proposal, Appendix D). Unfortunately the proposed journal awaits funding support to get it launched. No progress has yet been made in the search for funds. It is expected that the University of Illinois Press, expected publisher of the journal would be willing to issue in separate volumes those journal articles constituting the state-of-the-art report.

3) Special preparation of selected sections of the state-of-the-art reports can be prepared for special audiences such as administrators (e.g. superintendents, principals, etc.), legislators, teachers.
and parents. Each such targeted publication would emphasize heavily the implications of the state-of-the-art for its respective audience. It is possible that the manuscripts of such targeted publication could be submitted to the relevant professional association to be enfolded into their own publications programs. In this way, special publication funding would not be required at ERIC/ECE itself.

e) Summary and recommendations

It has been proposed here that ERIC/ECE undertake to develop a definition of the field of early childhood education to refine a matrix describing the field's parameters, and to develop a taxonomy for information retrieval and classification for ERIC/ECE users. Procedures for stimulating and generating annual state-of-the-art reports are suggested. Figure 3 gives an outline of the tasks proposed for the state-of-the-art reporting activities.
<table>
<thead>
<tr>
<th>TASKS</th>
<th>FUNDING REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No supplement required</td>
</tr>
<tr>
<td>1) Parameter refinement</td>
<td></td>
</tr>
<tr>
<td>a) Comparison with document collection</td>
<td>x</td>
</tr>
<tr>
<td>b) Consultant review</td>
<td>x</td>
</tr>
<tr>
<td>c) Professional dissemination</td>
<td>x</td>
</tr>
<tr>
<td>2) Taxonomy development</td>
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</tr>
<tr>
<td>a) Comparison of parameter with present classification system</td>
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</tr>
<tr>
<td>b) Consultation with lexicographers</td>
<td></td>
</tr>
<tr>
<td>c) Liaison with NISP</td>
<td></td>
</tr>
<tr>
<td>3) State-of-the-art surveillance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(funding pending)</td>
</tr>
<tr>
<td>4) Bibliographies</td>
<td>x</td>
</tr>
<tr>
<td>5) Coordination with other clearinghouses</td>
<td>x</td>
</tr>
<tr>
<td>6) Annual state-of-the-art information analysis</td>
<td>x</td>
</tr>
</tbody>
</table>

Figure 3. Summary Table
References


APPENDICES

A. Problem Oriented State-of-the-Art Reports Already Available
B. Problem Oriented State-of-the-Art Reports Known to be in Preparation
C. Proposal for State-of-the-Art Coordinator
D. Proposal for the Review of Early Childhood Education
APPENDIX A

Problem Oriented State-of-the-Art Reports Already Available

"Background Information: National Conference on the Paraprofessional, Career Advancement, and Pupil Learning." ED 030 933 Parameter B


Boger, Robert P.; Ambron, Sueann R. "Subpopulational Profiling of the Psycho-educational Dimensions of Disadvantaged Preschool Children: A Conceptual Prospectus for an Interdisciplinary Research." Head Start Evaluation and Research Center, Michigan State University in conjunction with the Merrill-Palmer Institute. PS 003 2/0 (To be submitted to RIE) Parameter A


Caldwell, Bettye M. "The Effects of Psychosocial Deprivation on Human Development in Infancy." ED 034 574 Parameter A


Eisenberg, Leon. "Child Psychiatry; The Past Quarter Century." ED 027 951 Parameter A

Eisenberg, Leon. "The Social Development of Human Intelligence." ED 028 817 Parameter A

Gray, Susan W. "Selected Longitudinal Studies of Compensatory Education--A Look from the Inside." Demonstration and Research Center for Early Education, George Peabody College of Teachers. ED 033 762 Parameter C
Grotberg, Edith H. "Review of Research 1965 to 1969." \(ED\) 026 308
Parameters A,B,C,E

\(ED\) 034 088 Parameters A,B,C,E

Hawkridge, David G.; and others. "A Study of Selected Exemplary Programs for the Education of Disadvantaged Children: Parts I and II." \(ED\) 023 776
Parameter C


Parameters A,C,D,F

Katz, Lilian G.; Weir, Mary K. "Staffing Preschools: Background Information." \(ED\) 034 589 Parameter F

Martin, Marian. "Behavioral Research Relevant to the Classroom." Urbana, Illinois: National Laboratory on Early Childhood Education. \(PS\) 003 277
(To be submitted to \(RIE\)) Parameter B

Milich, Cynthia; and others. "An Institutional Analysis of Day Care Programs. Part I, Group Day Care: A Study in Diversity. Final Report." \(ED\) 036 310
Parameter C

Miller, James O. "Review of Selected Intervention Research with Young Children." \(ED\) 027 091 Parameter C

Raynor, Elizabeth. "Race and Sex Identification in Preschool Children." Research Projects in Early Childhood Learning, University of California, Los Angeles. \(PS\) 003 296 (To be submitted to \(RIE\)) Parameter A


Sigel, Irving E.; and others. "The Role of the Teacher in Intervention Programs --Proceedings of the Head Start Research Seminars: Seminar No. 6, The Teacher in Intervention Programs." \(ED\) 036 333

Turknett, Carolyn Norris; and others. "The Sociology of Early Childhood Education: A Review of Literature." \(ED\) 032 944 Parameter A,C,D

Parameters A,B,C
Appendix B

Problem Oriented State of the Art Reports Known to be in Preparation


Hunt, J. McVicker; and others. "Research Knowledge and Program Practices Relating to Day Care Concepts [Title Supplied]." Office of Economic Opportunity. Parameters C,D,F

Katz, Lilian G. "Teacher Training." ERIC Clearinghouse on Teacher Education. Parameter B

Kessen, W.; and others. "A Review of the Literature in Day Care: A Report for the Association for Aid to Crippled Children." Parameters C,D,F

Lazar, Irving; and others. "The Kirschner Report [Tentative Title]." Office of Child Development. Parameters C,E


Parker, Ronald K.; and others. "Overview of Cognitive and Language Programs for Three, Four, and Five Year Old Children." Center for Advanced Study in Education, City University of New York. Parameter C
### SECTION I

**Biological Basis of Development**

- **Chapter 1** Ethology and developmental psychology
- **Chapter 2** Genetic influences on behavior and development
- **Chapter 3** Physical Growth
- **Chapter 4** Physiological development

Authors:
- E. Hess, Chicago
- G. McClearn, Colorado
- J. Tanner, London
- D. Eichorn, Berkeley

### SECTION II

**Infancy and Early Experience**

- **Chapter 5** Infancy
- **Chapter 6** Onset and Early Development of Behavior
- **Chapter 7** Studies of early experience

Authors:
- W. Kessen, Yale
- L. Carmichael, National Geographic Society
- R. Thompson, Queens University

### SECTION III

**Cognitive Development**

- **Chapter 8** Piaget's Theory
- **Chapter 9** Werner's theory of development
- **Chapter 10** Association learning and child development
- **Chapter 11** Sensory and perceptual development
- **Chapter 12** Learning
- **Chapter 13** Children's reasoning and thinking
- **Chapter 14** Concept development
- **Chapter 15** Language development
- **Chapter 16** Development of mental abilities
- **Chapter 17** Creativity, fantasy, play, humor
- **Chapter 18** Individuality and cognitive performance
- **Chapter 19** Implications of cognitive development for education

Authors:
- J. Piaget, Geneva
- J. Langer, UC
- S. H. White, Harvard
- H. & A. Pick, Minnesota
- H. Stevenson, Minnesota
- D. Berlyne, Toronto
- J. Flavell, Minnesota
- D. McNeil, Chicago
- N. Bayley, Berkeley
- M. Wallach, Duke
- W. Rohwer, Univ. of Calif., Berkeley

### SECTION IV

**Socialization**

- **Chapter 20** Sex differences, sex typing and identification
- **Chapter 21** Affiliative behavior and dependency
- **Chapter 22** Aggression
- **Chapter 23** Moral values and behavior
- **Chapter 24** Peer interaction and social organization
- **Chapter 25** Social class and ethnic group influences on socialization
- **Chapter 26** Cross-cultural approaches to the study of child development

Authors:
- W. Mischel, Stanford
- E. Maccoby, Stanford
- S. Feshbach, UCLA
- M. & L. Hoffman, Michigan
- W. Hartup, Minnesota
- R. Hess, Stanford
- R. LeVine, Chicago
SECTION V  Psychopathology

Chapter 27  Mental retardation
Chapter 28  Behavior disorders
Chapter 29  Psychosis in childhood

H. & N. Robinson,
U. of Washington
J. Anthony, Washington U.
W. Goldfarb, Ittleson
for Child Research
A Proposal to establish an ERIC/ECE State-of-the-Art Coordinator

Department of Health, Education and Welfare
Procurement Section

RFP 24-70-HEW-OS Revised

Contracting Institution: College of Education
University of Illinois
Urbana, Illinois 61801

Initiated by: Lillian G. Katz
Director, ERIC/ECE
805 West Pennsylvania Avenue
Urbana, Illinois 61801
217 + 333-1386

Transmitted for the College of Education: J. Myron Atkin
Dean
College of Education
University of Illinois
Urbana, Illinois 61801
217 + 333-0960

Contracts Officer: William M. Griffith
Assistant Bursar
217 + 333-2186

Transmitted for the University Research Board: H. R. Snyder
Secretary
University Research Board
217 + 333-0037

Amount requested: $26,895

Duration: June 15, 1970 - June 15, 1971
Abstract

Title: A proposal to establish an ERIC/ECE State-of-the-art Coordinator

Principal Investigator: Lilian G. Katz, Ph.D.

Amount: $26,895.00

Dates: June 15, 1970-June 15, 1971

Summary: The specific purpose of this proposal is to establish a coordinator for the ERIC Clearinghouse on Early Childhood Education who will undertake a set of tasks related to coordinating, gathering and analyzing the diverse efforts directed to describing the state-of-the-art of early childhood education and development. In order to strengthen the basic ERIC/ECE operations and activities, it is proposed that the major portion of the coordinator's work be undertaken at a site in Washington, D.C. in the Office of Education.
A proposal to establish an
ERIC/ECE State-of-the-Art Coordinator

Submitted by
Lilian G. Katz, Ph.D.
Director, ERIC Clearinghouse
on Early Childhood Education
University of Illinois
College of Education

May, 1970
The following proposal outlines the tasks, products and specifications related to the proposed staff position designated as State-of-the-Art Coordinator for the ERIC Clearinghouse on Early Childhood Education. This proposal is presented in four parts: Part I describes the objectives sought through this proposal; Part II defines the tasks leading to attainment of objectives; Part III describes the proposed products; Part IV lists the specifications associated with the implementation of the proposal.

Part I. Objectives

This proposal is addressed to a set of problems issuing from the extensiveness and diversity of state-of-the-art reporting activities in the field of early childhood education and its closely allied disciplines. An increasing number of federal agencies and departments are involved in the production of reviews, position papers, task force reports and advisory panel reports concerning early childhood programs and problems. Within the diverse departments of the government many divisions and sections are involved in reporting on each childhood topic. These state-of-the-art efforts often overlap and duplicate each other. The specific objective of the coordinating role proposed herein is to collate, integrate, review and synthesize all of the state-of-the-art products emanating from the diverse producers, and in this way to strengthen and enhance the basic clearinghouse functions of ERIC/ECE.

Part II. Tasks of the Coordinator

1. The coordinator is expected to collate and explicate the substance and recommendations presented in recent state-of-the-art reports on early childhood education research and development.

2. The coordinator is expected to explicate the empirical method and findings presented in such state-of-the-art reports and to delineate the recommendations derived from the evidence presented.
3. The coordinator is expected to integrate the evidence and recommendations of the separate state-of-the-art reports. The integration should be sufficiently thorough so that the primary documents upon which the integration is based are needed only by specialists.

4. The coordinator is expected to provide the following specific information:
   a. how state-of-the-art recommendations have been implemented;
   b. when and where such implementations have occurred;
   c. the persons and/or institutions undertaking such implementations.

5. The coordinator is expected to analyze and review all relevant published and unpublished reports, recommendations contained in task force and advisory panel reports, relevant conference papers, reports from various groups in NIH, NIMH, NICHD, OEO, OCD, OE, NSF, and other government reports.

6. The coordinator is expected to serve a clearinghouse role for all proposals related to early childhood education emanating from diverse federal funding sources and agencies.

7. The coordinator will transmit relevant documents to ERIC/ECE for storage and dissemination processing, contingent upon obtaining necessary releases and permission from document originators and/or sponsors.

8. The coordinator is expected to support and strengthen ERIC/ECE's state-of-the-art planning and reporting.

Part III. Products of Coordination

1. The coordinator is expected to prepare no less than ten copies of three quarterly reports, due September 15, 1970, December 15, 1970, and March 15, 1971, respectively, plus 50 copies of a final report of the year's work by June 15, 1971.
2. The quarterly reports are to contain the coordinated state-of-the-art report based on the work outlined in Part II, Sections 1, 2, and 3, as well as an account of all activities undertaken by the coordinator during the quarter.

3. The final report is expected to be a comprehensive report detailing the status of the field of early childhood education as determined through the activities outlined in Part II of this proposal.

4. The reports of the coordinator shall be submitted to Dr. Lilian Katz, Dr. Marian Sherman, and Dr. Lois-ellin Datta.

Part IV. Specifications of Coordinator's Role

1. Qualifications for the position include at least a Master's degree in early childhood education or a closely related discipline, plus relevant experience.

2. The ERIC/ECE coordinator role is planned as a full-time staff position of the ERIC Clearinghouse on Early Childhood Education. However, in order to facilitate access to the various federal agencies and their reporting activities, the coordinator will perform his duties at a site in Washington, D.C., to be designated by OCD and OE personnel.

3. The coordinator is expected to travel to and from ERIC/ECE approximately eight times during the year. The coordinator is expected to report to the director of ERIC/ECE and to enhance the fundamental ERIC/ECE acquisitions and information-gathering operations. Though the coordinator is directly responsible to the director of the ERIC Clearinghouse on Early Childhood Education, his tasks will be performed in coordination with Dr. Marian Sherman, Division of Education Laboratories, Office of Education and Dr. Lois-ellin Datta, Research and Evaluation, Office of Child Development.
Budget

I. Direct Costs

A. Personnel
   1. Coordinator (to be based in Washington, D. C.)
      1 FTE at $11,000/yr. for 6/15/70-8/31/70: $916 x 2 1/2 mo. $2,292.00
      1 FTE at $12,000/yr. for 9/1/70-6/15/71: $1000 x 9 1/2 mo. 9,500.00
         11,792.00
   2. Clerk-Typist II (to be based in Champaign-Urbana)
      1/2 FTE at $4140/yr. for 6/1/70-6/30/70: 1/2($345) x 1 mo. 173.00
      1/2 FTE at $4264/yr. for 7/1/70-5/31/71: 1/2($354) x 11 mo. 2,127.00

B. Employee Benefits
   1. Retirement
      12% of $13,919 1,670.00
   2. Health Benefits
      $5/mo/FTE 90.00
   3. Workman's Compensation
      .6% of $13,919 84.00

C. Travel
   1. To and from ERIC/ECE
      8/year at $250 per trip 2,000.00
   2. For conferences, seminars, etc.
      4 trips at $200 each 800.00

D. Report preparation
   includes 3 quarterly reports, and 1 final report 120.00

II. Indirect Costs
   59% of $13,919 8,212.00
   Total $26,895.00
A proposal to establish the
REVIEW OF EARLY CHILDHOOD EDUCATION

Submitted by
Lilian G. Katz, Ph.D.
Director, ERIC Clearinghouse
on Early Childhood Education
University of Illinois
College of Education

May, 1970
CONTENTS

Introduction

1. Objectives 1
2. Statement of Need 1
3. Evidence of Support 4
4. Bases of Financial Support 6
5. Operational Factors 8
6. Governance 8
7. Time Schedule 9
8. Editorial Consultants and Staff 9
Introduction

The purpose of this proposal is to outline the objectives, procedures, and requirements for the establishment of a specialized, refereed quarterly journal tentatively named Review of Early Childhood Education.

1. Objectives

The specific objectives of the proposed journal are:

1.a. to provide a refereed journal of original, critical review articles, essays, state-of-the-art papers, and monographs dealing with all topics related to early childhood education;

1.b. to increase the usefulness of information residing in primary reports of research and development activities by publishing papers which clarify the issues, findings, and procedures implied in primary reports;

1.c. to encourage, stimulate, and emphasize information analyses and syntheses which refine and order philosophical and theoretical issues and which draw implications for research, teaching, development, and social action in early childhood education and its closely related disciplines.

2. Statement of Need

2.a. During the 1960's, the field of early childhood education and the number of workers in the field grew in astronomical proportions. Parallel to this growth has been an increase in the production of primary documents in early education and its closely related fields. One response to this increase has been the establishment of the ERIC Clearinghouse system, of which the ERIC/ECE is a part.
Experience gained during the three years in which the ERIC/ECE Clearinghouse has been in operation indicates that primary reports of research and development activities in the field are so overwhelming in number that a crucial need has emerged for reviews, criticism, state-of-the-art papers, compilations, and compressions of first-order information.

The number of primary, unpublished documents currently processed by ERIC/ECE averages roughly 100 per month; published reports of research currently processed number just over 100 per month. In both categories of research reports, the rate of increase in numbers is probably close to 10%. It is difficult to predict the level at which the volume will stabilize, but it appears that early childhood education and its closely allied fields will generate some 4000 primary reports of research and development activities in a twelve-month period. This trend seems to imply that reviews synthesizing primary documents would render current research and development activities more useful to all workers in the field. These syntheses should be such that the primary documents themselves would be necessary only to specialists.

2.b. Another consideration behind the proposed Review of Early Childhood Education is the nature of the field itself. The fact that early childhood education is a complex domain, resistant to the application of highly controlled experimentation as in a "hard science"; makes the need for serious criticism, evaluation, and commentary very important. Since the young child, who is the center of the great activity in the field, is unable to speak for himself, the profession is all the more obligated to maintain continuous dialogue about its own ideas and activities.
2.c. There are currently 17 publications in disciplines and fields related to early childhood education. Of these, only one-half are refereed, and these consist mainly of primary reports of research. The two journals focusing specifically on early childhood education are *Young Children* and *Childhood Education*, neither of which is refereed. In the 1968 issues (representing 6 issues for *Young Children* and 11 issues for *Childhood Education*), the average percentage of pages used for theoretical papers or empirically based papers was less than 12%. *Childhood Education* publishes 58,000 copies; *Young Children*, 17,000.

2.d. In a survey conducted through the ERIC Clearinghouse Newsletter, the question was asked:

"In what form, in addition to this Newsletter, would you like to receive information?"

A cumulative compilation of the 3492 replies ranked preferences as follows:

<table>
<thead>
<tr>
<th>Types of Publications</th>
<th>N*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digests of recent research</td>
<td>2747</td>
</tr>
<tr>
<td>Special Topic newsletter</td>
<td>2178</td>
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<tr>
<td>Curriculum pamphlets</td>
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<tr>
<td>Monographs</td>
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<tr>
<td>State-of-the-art paper or position papers</td>
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<tr>
<td>Selected bibliographies</td>
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<td>Nonselective bibliographies</td>
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<tr>
<td>Single page announcements</td>
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</tr>
</tbody>
</table>

*Multiple checking was permitted

These survey results suggest that a review journal such as is proposed here would meet a felt need in the field.
3. Evidence of Support

3.a. As the concept of Review of Early Childhood Education has been developing, the director (Lilian G. Katz) of ERIC/ECE has discussed its purposes and potential with many leaders in the field throughout the country. These informal discussions have confirmed the position set forth above, namely that there is an excessive number of first order reports, that thorough reviews are needed, and that the field of early education is more than ready for serious critical dialogue among its workers. No deliberate solicitation of statements of support has yet been made.

3.b. As the ideas developed, the director of ERIC/ECE (Lilian G. Katz) discussed the basic purposes of the proposed Review of Early Childhood Education with Dr. Celia B. Lavatelli. She enthusiastically accepted the position as Editor-in-Chief of the proposed journal. Her special qualifications are:

Education

B.S. Teachers College, Columbia, 1937
M.A. Teachers College, Columbia, 1940
Ph.D. Columbia University, 1947

Professional experience

Teaching and research
Instructor, Teachers College, Columbia, 1944-1946
Assistant Professor to Professor of Education, University of Illinois, 1946-to date
Visiting Professor of Education, University of Hawaii, Summer, 1942
Visiting Professor of Education, Columbia University, Summer, 1954
Visiting Professor of Psychology, University of California, Berkeley, 1965-1966
Visiting Research Psychologist, SCIS, Department of Physics, Berkeley, September, 1966-February, 1967
Associate Director, National Laboratory on Early Childhood Education, February, 1967-September, 1969
Consultant

Catholic Charities Day-Care Centers, St. Louis, Missouri.
Ford Foundation Project, University City, Missouri,
Kindergartens.

Publications (partial listing)


Aspects of Piaget's Theory that have Implications for Teacher Education. J. Teacher Educ., 16, 329-335, 1965.


A laboratory approach to individualizing instruction in science.

A Piaget-derived model for compensatory pre-school education.


The Macmillan Science Series, with J. Darrell Barnard. Books 1-6
Science: Observing Things
Science: Finding Out
Science: Being Curious
Science: Testing Ideas
Science: Comparing Things
Science: Measuring Things

3.c. In the course of preliminary organization of the core editorial personnel, in-person and telephone responses were received acknowledging willingness to serve on the Review of Early Childhood Education consulting staff. The letters received from others are enclosed.

4. Bases of Financial Support

An overview of the field suggests that it is reasonable to expect the proposed journal to become self-supporting within a few years. At present there is no reliable way to predict whether self-support will be obtained in two, three or five years. The financial requirements for the establishment of the Review of Early Childhood Education
enumerated below are based upon discussions with the staff of the University of Illinois Press.

4.a. No financial commitment has been made to the Editor-in-Chief, Dr. Lavatelli. It is assumed at the outset that her services are offered as a contribution to the development of the profession.

4.b. The ERIC/ECE will contribute staff time to assist in soliciting, handling and editing manuscripts in accordance with the University of Illinois Press requirements. The cost of such support shall be no more than three-fourths of one full-time equivalent (FTE), costing approximately $9,000.

4.c. The College of Education is respectfully requested to assist the Review of Early Childhood Education to the extent of basic xeroxing and typing time—about 20 hours per issue, typing time plus xerox and paper supplies. Cost of these services and supplies for a 3- to 5-year period will range within $300 to $500.

4.d. Other production costs include: costs of copy editing, subscription maintenance (correspondence, labor, updating), advertising, storage, and distribution, and all phases of production (typeset, layout, indexing, design, printing, etc.). Specifically, the amount required to support the journal for a 3- to 5-year period will be in the range of $18,000 to $20,000 per year. The first year is typically more costly than succeeding years, so the $20,000 sum should be considered for 1971, and lesser sums for following years. After the initial 3- to 5-year period, support could be cut back to $5,000 or $6,000. If the journal becomes self-sustaining in that period, financial support will no longer be necessary at all. (Figures provided by the University of Illinois Press, based on the
Press' experience in producing journals, between 1,000 and 2,000 copies per issue during the first year of production. At the present time the University of Illinois Press publishes eight scholarly journals.

4.e. Fifty reprints (of whole issue) for each contributing author.

<table>
<thead>
<tr>
<th>Estimated cost per year</th>
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</thead>
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<td>$2,400</td>
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</table>

4.f. Based upon the financial considerations delineated in Sections 4.c, 4.d, and 4.e., the cost of the journal for the initial 3- to 5-year period will range within $72,300 to $102,500.

5. Operational Factors

5.a. Pricing (subscription and single issue) will be determined within a range: high enough to pay some (or, later, all) of the costs, but low enough to be attractive to the audience. The current range of subscription rates for quarterly journals is from $7.50 to $12.00 per year. Suggested annual subscription rate for Review of Early Childhood Education is $12.00 per year and $3.00 per single issue.

5.b. Pricing depends also in part upon the number of pages in each issue. Recommended length: 64 pages per issue in 1971, possibly growing to 96 in 1972.

5.c. The University of Illinois Board of Trustees will be designated as owners and as copyright holders.

6. Governance

6.a. To decide questions of policy regarding the operational factors and other factors involved in the production of the journal, a Governing Board will be established.
6.b. The Governing Board will be made up of the Editor-in-Chief, the Director of ERIC/ECE, and an individual appointed by the Dean to represent the College of Education.

7. Time Schedule

7.a. Immediately upon securing adequate financial support, ERIC/ECE will announce the forthcoming journal.

7.b. Subscription information will be issued and subscriptions solicited by the University of Illinois Press.

7.c. Potential contributors will be contacted by the Clearinghouse and invited to submit manuscripts.

7.d. Manuscripts received from authors will be read and evaluated by the Editor-in-Chief, Dr. Lavatelli, and members of consulting editors group.

7.e. The consulting editors will return the manuscripts to ERIC/ECE with recommendations for revision or editing in accordance with a procedure to be developed by the Editor-in-Chief.

7.f. Production procedures related to the first issue will begin in the fall of 1970.

7.g. The first issue will appear in January, 1971.

7.h. Contents will be projected for one year ahead; an occasional topical issue is to be considered.

8. Editorial Consultants and Staff

Editor: Celia B. Lavatelli
Managing Editor: Louise B. Griffin

Consulting Editors:

Dr. Millie Almy
Columbia University

Dr. Queenie B. Mills
University of Illinois
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Dr. Wesley C. Becker</td>
<td>University of Illinois</td>
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<tr>
<td>Dr. Sidney Bijou</td>
<td>University of Illinois</td>
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<tr>
<td>Dr. Courtney Cazden</td>
<td>Harvard University</td>
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<td>Dr. J. McV. Hunt</td>
<td>University of Illinois</td>
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<td>Dr. Merle B. Karnes</td>
<td>University of Illinois</td>
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<tr>
<td>Dr. Jenny Klein</td>
<td>Department of HEW</td>
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<tr>
<td>Dr. Robert LaCross</td>
<td>Pacific Oaks College</td>
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<td></td>
<td>Pasadena, California</td>
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<tr>
<td>Dr. Shirley Moore</td>
<td>University of Minnesota</td>
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<tr>
<td>Dr. Pauline S. Sears</td>
<td>Stanford Center for Research and Development in Teaching</td>
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<tr>
<td>Dr. Bernard Spodek</td>
<td>University of Illinois</td>
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<tr>
<td>Dr. Carolyn Stern</td>
<td>University of California</td>
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<td>Los Angeles</td>
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<td>Dr. Bernice Wolfson</td>
<td>University of Wisconsin</td>
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<tr>
<td>Dr. Lilian G. Katz</td>
<td>ERIC/ECB</td>
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