This report outlines a set of research and development efforts by means of which the National Institute of Education might proceed to support and encourage a type of schooling called Open Education. Part I of the report, Research and Development for the Support of Open-Informal Education, is comprised of five sections: I. Introduction; II. The Problem of Terminology; III. The Problem of Definition; IV. Tentative Definition of Open Education; and V. Rationale for Open Education. Part II, Central Issues for the Implementation of Open Education, contains two sections: I. Introduction; and II. Research and Development Topics. These Research and Development Topics are: 1. Attributes and Behavior of Teachers Related to Effective Open Informal Teaching; 2. Authority, Control and Permissiveness in Teachers; 3. Determinants of Teacher Behavior; 4. Teacher Selection and Training; and 5. Approaches to Teacher Training. Problems related to open informal education are seen to be those involving administration, leadership style, school-community relations, curriculum materials, and evaluation. An appendix compares teacher-directed learning and teacher-facilitated learning. (DB)
OPEN-INFORMAL EDUCATION

Recommendations for Research and Development

Final Report

Submitted to the
National Institute of Education Planning Unit

by
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December 1, 1971
Part I

RESEARCH AND DEVELOPMENT FOR THE SUPPORT OF OPEN-INFORMAL EDUCATION

I. Introduction

The purpose of this report is to outline a set of research and development efforts by means of which the National Institute of Education might proceed to support and encourage a type of schooling which has come to be called Open Education.

Interest in Open Education has accelerated since the appearance of a series of descriptive reports on the modern developments in British Infant School education in 1966. During the subsequent five years, Open Education has been the central topic of numerous national and regional educational conferences, of several books, and many pamphlets and articles. This widening interest in opening up classroom procedures and activities has been developing along side a growing movement toward "independent" and "free" schools. The two movements--open education and free schools--have in common a few general themes, although there are also some important differences between them. Of interest in this report is the common theme of rejection of traditional-formal academically oriented education and a rhetoric emphasizing commitment to "humanistic" values, including self-determination, freedom of choice and aesthetic appreciation. One formulation of this position can be seen in Silberman's Crisis in the Classroom.  

II. The Problem of Terminology

The term "open education" has appeared with increasing frequency in the specialized and popular literature of education during the last five or

six years. Other terms associated with "open education" are: informal schools, integrated day, open classrooms, activity-centered education, British Infant School, and less often, child-centered education, humanistic education or free schools.

Agreement upon which of these many terms best conveys the desired connotations is unlikely. There is some resistance to standardization of either the label or the connotations. For the purposes of this report, the term open-informal is used in contrast to traditional-formal or conventional primary school practices.³ (See Appendix A)

III. The Problem of Definition

In spite of the current interest in Open Education, a definition of the term which would answer the question "How would I know it when I see it?" has not been found. The formulation of an operational definition is not only difficult, but it is also resisted by workers in the field. The resistance is understandable. It stems from fear of the development of orthodoxies, of doctrines and rigidities.

The difficulties encountered in definition are many. As Spodek has pointed out "We have talked around the concept of open education and provided some examples, but we have 'not' defined it. Perhaps that is because openness, like freedom, cannot be defined absolutely."⁴ The comment reflects a common assertion that specificity must necessarily, in and of itself, betray the spirit of openness and informality.

³See Appendix A for one analysis of the contrasts between open-informal and traditional-formal classroom practices.

Another source of difficulty encountered in the process of definition is the great variety of forms of open-informal education. Some classes are organized for mixed age groups, some are not. Some classes are "open" throughout the school day, some only partially. Similarly, on almost any dimension of classroom life, wide varieties of style are included in open education. No ideal version of the Open Classroom has been advocated, endorsed or adopted.

Further difficulty facing the would-be definier stems from the fact that the major data base from which to extrapolate a definition consists of "personal testimony." The available personal testimony is extremely difficult to conceptualize. Barth and Rathbone have suggested that Open Education "is a way of thinking about children, learning and knowledge." A "way of thinking" is difficult to operationalize. The available data imply (but do not verify) that there are reliable relationships between ways of thinking, assumptions about learning, classroom events and educational outcomes.

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5 See, for example, Silberman, C. Crisis in the Classroom. In Chapter 6, pp. 207-264 "The Case of the New English Primary Schools" forty-one "items" or vignettes consisting of personal testimony are presented.

6 See, for example, Featherstone, J. Schools Where Children Learn. Liveright, N.Y. 1971, passim.


Another difficulty encountered in the formulation of a working definition stems from the fact that some of the attributes of the open-informal classroom cannot be discerned from direct classroom observation at any given point in time. Rather they require a knowledge of the history or genesis of the event observed. For example, a small group of children may be seen recording their own direct observations of a small animal. The fact that they are working in a small group and are making direct, firsthand observations appears to qualify the event as "open." However, the more "open" the classroom, the more likely the activity is a consequence of a child's (or children's) spontaneously expressed interest in the topic. If the same activity had been prespecified by the teacher, independent of the children's interests, then the class is less "open." The same activity prespecified by the school district syllabus, or state requirements would mark the same activity as even less "open." The personal testimony data generally include the genesis of an activity; time sampling observations of classroom activities typically do not.

Finally, a major obstacle to operational definition is the centrality of the theme of the quality of relationships and consequent classroom climate to the openness of the classroom. In the preliminary research of Bussis\(^9\) et al. (1970) and Walberg\(^10\) et al. (1971), the qualities of the teacher-child and child-child relationships are given great emphasis. The qualities of relationships attributed to open classrooms include honesty, respect, warmth, trust and humaneness. To what extent these qualities can be analyzed and specified is an empirical question. To what extent these


terms refer to broad or global configurations of the teachers' and children's behavior is not clear. To what extent any two observers would agree that these qualities are present at a given point in time in a given classroom is also not known.

IV. Tentative Definition of Open Education

The British apply the term "informal" to their modern infant school (5-7 years) practices suggesting that the events, relationships, activities and materials in the classroom are neither standardized nor routinized. The absence of formal, standard and routine procedures and processes accounts for the wide range of activities, transactions, styles and materials within a classroom and between classes, within a school and between schools.

The American term "open" for informal schools begs the question: What is open about open education? There are clearly considerable risks in proposing some answers. However, subsequent discussion of relevant R&D proposals requires some attempt to formulate some answers. The following list of dimensions of classroom practices is tentatively proposed.

1. Space

In varying degrees, the use of space and the movement of persons, materials and equipment within it, is less routinized, fixed or invariable in the open-informal than in formal-traditional classrooms. In open-informal classrooms movement may be outside the school itself.

2. Activities of Children

In varying degrees, the range of encouraged and permitted activities is wider, less bounded or fixed, more open-ended in open-informal than in formal-traditional classrooms. Activities in open-informal classes transcend the classroom itself.
3. **Source of Activity (Locus of activity selection - teacher/child)**

The more open or informal the classroom, the more likely are children's activities to be pursuits, extensions or elaborations of their own spontaneous interests, rather than activities selected by teachers.

4. **Content or Topics**

In varying degrees, the range of topics or content toward which children's attention and energy are encouraged and guided is wider, more open-ended than in formal-traditional classrooms. Content goes beyond classroom, and includes field studies.

5. **Time**

In varying degrees, the assignment of time for specified categories of classroom activities is more flexible in open than in formal-traditional classrooms.

6. **Teacher-child relationships**

   a. In the open-informal classroom, teacher-child interactions are likely to be initiated as often by the children as they are by the teacher.

   b. In the open-informal classroom, the teacher is more likely to work with individual children than with large or the whole group of children in his class. The more open the classroom, the less often the teacher addresses the whole group as an instructional unit.

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c. In the open-informal classroom, the teacher is likely to be seen giving suggestions, guidance, encouragement, information, directions, instructions, feedback, clarification, posing questions, probing children's thinking and listening to children, primarily during individual teacher-child encounters.

d. In the open classroom, the response of the teacher to undesirable behavior is more likely to be to interpret its meaning in terms of the classroom group's life and its moral implications, than either to exact punishment, or to ignore it.  

The tentative definition proposed may be clarified by comparing and contrasting the open-informal classroom to the formal-traditional classroom. The definition above is stated in terms of continua suggesting that on each of them, except one, emphasis on academic skills--the two classroom approaches lie toward opposite ends. See Figure 1.

Earlier in this discussion it was suggested that one cannot really properly answer the question How will I know it (open-informal education) when I see it? since one must know the history of what one is seeing in order to identify the observed event as characterizing open-informal education. Another aspect of the operational definition which cannot easily be displayed as points on continua has to do with the nature of adult and child authority in the open-informal classroom. The teacher's authority in the open-informal classroom is best captured by Baumrind's term "authoritative." 


Figure 1

The Position of Open-Informal and Traditional-Formal Classes on Selected Dimensions of Classroom Life

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Flexible Variable</th>
<th>O-I</th>
<th>F-T</th>
<th>Routinized Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities of Children</td>
<td>Wide Range</td>
<td>O-I</td>
<td>F-T</td>
<td>Narrow Range</td>
</tr>
<tr>
<td>Origin of Activity</td>
<td>Children's Spontaneous Interests</td>
<td>O-I</td>
<td>F-T</td>
<td>Teacher or School Prescribed</td>
</tr>
<tr>
<td>Content or Topics</td>
<td>Wide Range</td>
<td>O-I</td>
<td>F-T</td>
<td>Limited Range</td>
</tr>
<tr>
<td>Use of Time</td>
<td>Flexible Variable</td>
<td>O-I</td>
<td>F-T</td>
<td>Routinized Fixed</td>
</tr>
<tr>
<td>Initiation of Teacher-child Interaction</td>
<td>Child</td>
<td>O-I</td>
<td>F-T</td>
<td>Teacher</td>
</tr>
<tr>
<td>Teaching Target</td>
<td>Individual Child</td>
<td>O-I</td>
<td>F-T</td>
<td>Large or Whole Group</td>
</tr>
<tr>
<td>Child-child Interaction</td>
<td>Unrestricted</td>
<td>O-I</td>
<td>F-T</td>
<td>Restricted</td>
</tr>
<tr>
<td>Emphasis on Academic Skills</td>
<td>High</td>
<td>O-I</td>
<td></td>
<td>Low</td>
</tr>
</tbody>
</table>

O-I = Open-Informal Classes; F-T = Formal-Traditional Classes
It suggests a co-occurring pattern of adult nurturance, warmth, communication, control, and demandingness in which the child's feelings and ideas are treated by the adult as valid, but in which the adult exercises control and sets limits. The adult also makes decisions where his greater experience and maturity can be counted on to lead to better ones than the child alone would make. It should be emphasized here that the quality of authoritativness is applied to the children's work, as well as to their conduct. That is to say that the teacher exercises her (legitimate) authority in guiding the children's intellectual and academic work as well as in the interpersonal relations in the classroom.

In much of the literature concerning open-informal education there is strong emphasis on achieving an open "climate." The specific cues by which observers judge a classroom climate are not clear. They appear to be related to the wide variety of activities to be seen, the "project-oriented" organization of the room, the active involvement of children with each other, and the teacher's constant guidance, encouragement and stimulation.

* It should be noted also that some of the open-informal education literature strongly emphasizes the importance of learning centers as a particular way of "provisioning" for learning. The learning centers are relatively permanent sections of the classroom or corridor featuring displays of topical materials, an assortment of manipulanda, assignment cards of suggested activities for using the materials and equipment displayed an an assortment of reference books and pictures. Furthermore, in many versions of open-informal education, a central reference library is a pivotal program and provisioning feature.
of individual and small group work. It should however be restated that there are almost as many definitions of the open-informal classroom climate as there are classrooms.

V. Rationale for Open Education

As already indicated in the preceding pages, there is widespread interest in open education in the United States today. Silberman's book Crisis in the Classroom, advocating the adoption of the British modern infant school informal style is said to be a best seller. Other signs of its spread are the numerous conferences, new books, films, feature articles in the lay press, as well as the increasing frequency of inquiries about it received at ERIC/ECE. The intensity of interest alone is one reason why the new National Institute of Education would be both wise and helpful in launching a program of R&D related to open-informal education.

Reasons for such widespread interest, by now reaching the proportions of a "bandwagon" are no doubt many and varied. Certainly the general dissatisfaction with so-called traditional (i.e. formal) schooling and the resulting readiness to "try anything" may be at work behind the swell. Possibly a long-standing Anglophilism and the aura attributed to British developments contributes to American enthusiasm.

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20 Silberman, C. op cit.
25 ERIC Clearinghouse on Early Childhood Education, University of Illinois.
26 Featherstone, J. op. cit.
Notably a body of evidence that open-informal education is effective is not available, and is not among the many causes of the spreading enthusiasm. While reliable evidence of positive outcomes of the method is not available, nor is there as yet any counter evidence. In spite of the absence of accumulated and reliable evidence of effectiveness, several lines of reasoning support the position that Open Education represents a viable alternative approach to early education.

The strongest reason to believe that open education represents a viable approach to early education is the assumption that classroom activities derived largely from the spontaneous and natural interests of the pupils themselves, is more likely to result in positive attitudes towards school and learning than are classroom activities which are prespecified independent of the children to be served.

A third reason for supporting the development and refinement of open-informal education in America is the one usually couched on the now popular terminology of "humanism." In the context of the present discussion, it is reasonable to state the argument in the following way. There is now some convincing evidence that it is possible to teach children the basic academic skills (the three R's) in the early years of schooling by the application of traditional instruction aided by the use of behavior modification techniques, and by intensive drill methods. But these

27 Silberman in Crisis in the Classroom, summarizes some available evidence of positive outcomes.
29 This assumption needs to be tested.
31 Bissell, J. op. cit.
approaches only answer the question: How can we teach children the specific skills they need? It is the question itself which is inappropriate. The proper question is:

How can we teach children the skills they need while at the same time we strengthen and in fact enhance their sense of self-respect, self-responsibility, and sense of dignity, their capacity for curiosity, exploration, investigation, for tenderness, compassion, understanding and insight?

It is for the co-occurring achievements of academic, intellectual and personal growth that the open-informal educational approach recommends itself.

The available reports of the outcomes of research on comparative effects of early childhood curriculum models indicates with impressive consistency a finding known as specificity of effects, namely, children learn those 'lessons' which are emphasized by the curriculum model to which they are exposed. This consistent finding implies that (as for all other approaches, methods, or models), open-informal education can be expected to foster the acquisition of the 'lessons' emphasized by it: academic skills, intellectual competence and personal resources. In open-informal education these are a group of mutually inclusive objectives, now seen as highly desirable by a growing proportion of the practitioners and clients of early childhood education programs.

Some other reasons for supporting open-informal, though primarily conjectural, might be considered here. In a recent summary of relevant research, Rohwer has suggested that there is no evidence to show that the

32 Bissell, J., ibid.
instruction offered to children in conventional elementary school classrooms has any concurrent validity for them. That is to say that the day to day instruction received by elementary school pupils helps them to solve no problems they encounter outside of the classroom doors. While Rohwer's position may have been cast too strongly, there is certainly a basis upon which to assert that there is a need to open up the range of activities and topics available to children in classrooms such that there is greater continuity and generalizability between classroom and extra-classroom problems faced by children. Another way to state this is to say that basic academic skills typically taught during the early childhood years should be introduced and employed as tools with which children can study their own environments, (in later years, to study other people's environments). Open-informal education takes into account the general and individual environments of pupils and strives to help children acquire basic academic tools with which to examine, analyze, record, observe, measure, explore, grasp, recreate and organize their own experiences—eventually the experiences of others—and eventually to be able to reflect upon them.

In summary, there are four persuasive reasons to support and encourage the refinement and adoption of open-informal education in the U.S.:

1. There is already widespread client and practitioner interest in adopting it.

2. Open-informal education promises to increase children's liking for school and learning.

3. Open-informal education is committed to helping children to acquire the academic skills needed for contemporary living at the same time as it strengthens their personal resources.
4. Open-informal education introduces the basic academic skills to children as ways of making sense and of understanding their own environments and experiences in such a way as to extend their usefulness in day to day extra-school living.

A large proportion of the currently available descriptive and persuasive literature on open-informal education asserts of the validity of these propositions, although they remain largely untested.
Part II
CENTRAL ISSUES FOR THE IMPLEMENTATION OF OPEN EDUCATION

I. Introduction

The list of research and development projects by which to strengthen and support the development of open-informal education is potentially very long indeed. It is in fact not uncommon to see in the relevant literature the proposition that the development of open-informal education depends upon the realization of a whole new society! The research and development required for that achievement cannot be undertaken by NIE alone. In order to proceed, some guiding principles and delimitations are needed. These are outlined below.

A. The focus of NIE's research and development efforts supporting open-informal education should be on preschool and primary education, usually called early childhood education.

This guiding principle stems first from the fact that the main data base, such as it is, and the principal literature currently available are focused on the early childhood years. We thus have some preliminary information upon which to build. Secondly, current developmental psychology provides a stronger rationale for the suitability of open-informal methods for the younger children than it does for older ones. Thirdly, the current spread of open-informal methods is already well underway in early childhood programs, and should be strengthened in those settings where they are now developing.
B. NIE efforts to support and encourage open-informal education should be low-keyed, studied and deliberate rather than dramatic, noticeable and evangelical. That is to say that maximum energy and resources should be absorbed by program implementors in the work of implementation itself, rather than in drawing attention to its work, in converting the faithless, in justifying and explaining themselves to outsiders and in premature formal evaluation. This principle is difficult to articulate except to say that the style of support should be modesty rather than exhibitionism, problem solving rather than package-making, and oriented to steady ground-gaining rather than spectacular plays.

C. If resources for the support of research and development in open-informal education are limited, a priority thrust should be toward "opening" classes which are now closed and formal, rather than establishing afresh brand new open classes in laboratory or experimental stations. If resources are not limited, then both the opening up of formal classes and the establishment of brand new ones should be supported and compared

34"...We seem to be in great danger of falling into the evangelical model....We will dissipate our energy in the efforts at conversion. Rather what seems to be in order is a deepening and refinement of what we mean and of what is implied by OPEN EDUCATION; some real and vital exercise of it as we deepen our grasp of its many facets, features and forms. When we have really deeply achieved an open-ended beginning of it, we may attract potential joiners, adopters, experimenters and disseminators. But if on the other hand we turn our energy to broadcasting, we may find that we have only a superficial manifestation to exhibit rather than a robust exemplar to draw and excite others.

Closely tied to this urge to Stop the Movement is another hunch I have: One cannot really teach anyone in order to impress or please a third party (e.g. an observer or a customer). For that isn't really teaching, but performing or acting. This hunch is especially crucial in OPEN EDUCATION, since the teacher-learner relationships must be real (rather than performed), authentic and immediate at the same time as they are thoughtful, reflective, intelligent and purposeful." From Katz, L. Memo Concerning "Open Education"--Stop the Movement! ERIC Clearinghouse on Early Childhood Education. March 1971.
as alternate strategies for change.

The reasons underlying this principle are first, that laboratory schools and experimental classes are doubtful sources of generalization to the broader educational scene. Secondly, many aspects of open-informal procedures take time to learn; formal teachers always have their pre-experimental formal routines to fall back on in case of panic; brand new classes (even if teachers have had traditional-formal experience previously) require uniquely competent individuals who can socialize their pupils to the flexible procedures quickly or else be faced with chaos. Such unique individuals can be found, but do not represent adequately the magnitude of the problem of opening up the average school.

D. For every dollar allocated to empirical research and actual development, a fixed proportion of it should be earmarked for review and documentation. (This is a general problem of all educational R&D).

The current pattern of proliferating separate reports of non-comparable samples, treatments and measures can only be maximized if serious systematic critical review is supported. The ubiquitous idiosyncrasies in the variables under investigation in educational research can best be dealt with by thoughtful inspection of cross-study consistencies and contradictions.

Documentation of development activities can be a rich source of information and insight into the facilitators and inhibitors of implementing open-informal procedures in diverse settings. Subsequent analyses of such documentary histories of development projects can be used as formative evaluation and guidelines for planning. Careful review work transforms information into knowledge from which sounder judgements can be made.  

II. Research and Development Topics

Given the guiding principles outlined above, four categories of problems for research and development are suggested: 1) problems involving teaching, 2) problems involving administration, 3) problems involving school-community relations and 4) curriculum materials.

A. Research and Development Concerning Teaching the Open-Informal Approach

Most specialists in open-informal education agree that qualities and competencies of the teacher are the key factors in implementation. No reports of reliable predictors of teachers' success at implementing open-informal classes have been found in the available literature, although the work of Bussis and Chittenden\textsuperscript{36} and Resnick\textsuperscript{37} represent useful points of departure. There are numerous research and development issues in need of investigation. A selected list of the most important ones are presented below. Although they are stated in broad terms they ultimately must be analyzed in terms of sub-topics and component items.

Research and Development Topic #1
Attributes and Behavior of Teachers Related to Effective Open-Informal Teaching.

This research program is designed to answer the question: What pattern of attributes and behaviors characterize successful open-informal teachers? The term attributes is used here to refer to characteristics of the teachers which "belong" to her whether she is in the classroom or not. Examples of attributes are: age, sex, experience, amount and type of training, intelligence, belief system, etc. Behavior refers to what the teacher can be seen to do in the classroom. This includes, for example, ways of responding to

\textsuperscript{36}Bussis, A. and Chittenden, E.A., op cit.

undesirable behavior, fluency of ideas and suggestions given to children, question-asking skills, her explaining behavior, etc.

Such a research program includes the refinement of criteria by which the subjects are identified as open-informal and some plausible hypotheses concerning expected relationships between the variables under investigation.

The available literature on open-informal education tends to emphasize the importance of the teachers' assumptions about the nature of growth and learning. However, the relationships between such attributes (e.g. assumptions about learning) and their expected or assumed behavioral manifestations is largely unknown.

Research and Development Topic #2
Authority, Control and Permissiveness in Teachers.

This research should answer the question: What are the psychosocial processes underlying teachers' attitudes toward and management of his/her power over children?

Although it is generally agreed that teacher-child power relationships are a problematic issue in schools in general, and open-informal classes in particular, satisfactory formulations of the problems have not been found. There is some impressionistic evidence to suggest that some teachers' resist "openness" out of fear of losing authority and control.


39 The work of O.J. Harvey and associates does suggest that such relationships may exist. See Harvey, O.J. et. al. "Teachers belief systems and preschool atmospheres" J. Educ. Psychol. 1966, 57, 373-381.

40 Many observers point out that while this aspect of teacher-child relations is problematic in the U.S. it appears to be less so in Britain. For some background information on the contrasts between teaching in the two countries see "Teachers in England and America" by G. Baron, and A. Tropp in Halsey, A.H., J. Flood, and A. Anderson (Eds.) Education, Economy and Society. Free Press, 1961. See also Bussis, A. op. cit.
Similarly, some teachers are attracted to the open-informal approach because they confuse it with permissiveness to which they are drawn because of their own personal historical problems with power and authority. The distinction between adults who are authoritative, authoritarian and permissive, suggested by the work of Baumrind\(^4\) represents a useful point of departure for such research. A sharper understanding of teachers' problems in this sensitive area is urgently needed.

**Research and Development Topic #3**

**Determinants of Teacher Behavior.**

Given that teachers have all the intrapersonal resources and skills required for successful implementation of open-informal methods, what other factors impinge upon successful implementation? The question to be answered here is: What are the immediate causes of teacher behavior?

Analysis of potential causes or determinants should include the examination of interactive as well as direct influences. For example, it is not sufficient to ask whether or not the quality of the physical plant is a determinant of teachers' behavior. The question which must also be asked is: What types of teachers are influenced by the quality of the physical plant? Are some teachers able to be informal, independent of the physical setting? Categories of causes of teacher behavior should include the members of the teacher's role-set, (i.e. pupils, colleagues, peers and assistants, parents, supervisors, principals, board members, janitors, etc.). Other categories of potential causes include the physical plant, availability and type of materials, and so forth. Of particular interest in this line of investigation is the pupil as a cause or determinant.

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of teacher behavior. It is more customary to examine teacher influence on pupils than the reverse. However, such inquiry should help to answer questions concerning the effects of different types of children (e.g. self-reliant, dependent, verbal/non-verbal, etc) on teachers' attempts to guide, stimulate and control them. 42

Research and Development Topic #4

Teacher Selection and Training.

The research question to be answered here is: What are useful methods and procedures for selecting teachers for open-informal education?

Both program implementors and teacher trainers are interested in answering the question: On what bases and with what procedures can teachers and trainees for open-informal education be selected? Another way to state this is: If I have 20 applicants for 10 (open-informal education) positions in either training or teaching, on what bases and by which methods and procedures should I distinguish the more from less suitable candidates? The development of informal interview schedules, teacher observation checklists, etc. based on some reasonable constructs concerning personal resources and preferences should be developed. For example, if ideational fluency is a prerequisite skill for teaching informally, one questionnaire or interview item might be to ask the candidate to generate ideas for activities she/he would suggest to a child following his expressed interest in a given object or event. The list of ideas thus generated can be examined in terms of its length (i.e. fluency) and qualities (e.g. age-appropriateness, appeal to children, etc.).

A segment of this research might be the close study of a known population of effective teachers who are nominated by various specialists in open-informal education, such as advisors now working in open-informal classrooms, and teacher trainers from various settings. The work now in progress by the Early Childhood Group at the Educational Testing Service should help to sharpen some of the questions to be answered about teacher characteristics and selection.

Research and Development Topic #5
Approaches to Teacher Training.

This research and development program should help to answer the following questions:

What set of experiences are needed in order to prepare teachers to use open-informal methods?

In what sequence should these experiences be provided?

What alternative methods for providing such experiences should be studied?

a) Directory of Current Programs

A preliminary segment of this R&D effort should consist of a thorough collection and summary of descriptions of current programs and projects focused on teacher training for open-informal education. A few preliminary lists are already available, however, programs and projects are presently proliferating at a rapid rate.

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43 See Silberman, C. op. cit. pp. 412-522. Information may also be available through the Bureau of Educational Personnel Development, USOE, HEW. The methods and procedures developed by The New England Program in Teacher Education, (Roland Goddo, Director) at the New England Center for Continuing Education, 15 Garrison Avenue, Durham, New Hampshire, has produced a survey of New England activities. The Institute of Learning at Chapel Hill, North Carolina has instituted regional centers to assist schools in their transitions to open-informal methods, and should be consulted on these issues. The Educational Development Center, Inc. (55 Chapel Street, Newton, Massachusetts) has extensive experience in training and advising teachers in the open-informal approach.
b) The Selection of Experiences Needed by Teacher Trainees

The term 'experiences' is used broadly here to refer to any category of events deliberately planned with the intention of helping trainees to acquire the knowledge, skills and personal qualities thought to increase their ability to teach the open-informal approach. Distinctions should be made in terms of experiences needed for trainees without any teaching experience, and those with traditional experience. If the amount of support available for R&D in this category is limited, priority should be given to examining the retraining of experienced teachers who request it, rather than inexperienced trainees. A variety of pilot projects might be considered. Such pilot projects should vary in relative emphasis given to on-site/off-site training, practical classroom experience versus formal instruction on the knowledge base, skill-acquisition oriented versus personal development oriented, etc.

Documentary histories of such training efforts, as well as formative and summative evaluation procedures should be included in such projects.

c) Sequence and Duration of Training Experiences

Conventional teacher education typically submits the trainees to a sequence of experiences which begins with philosophical issues, proceeds to theory and principles and ends with the practica. While this traditional sequence clearly ignores the sequence of developmental tasks faced by teacher trainees themselves, it is not clear what sequences are needed for retraining of teachers with diverse backgrounds, previous experiences and earlier training. The optimal duration of training projects is also not

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known. Methods of determining the successful completion of training are also required.

d) Alternative Methods of Providing Training Experiences

i) One of the most significant aspects of the British educational development pattern which has attracted American attention is the Teacher Center concept. There is no standardized version of Teachers' Centers. In general, they are places where teachers gather together fairly regularly to help each other learn or re-learn skills, ideas, techniques and methods, to exchange views, share concerns, enjoy congenial relationships and participate in brief or extended in-service courses.

A number of pilot teachers' centers should be funded exemplifying a range of organizational patterns which can be compared and assessed.


46 In Britain, teachers' centers are facilities which provide a focus of the communications between teachers and advisors who consult with teachers according to their own specialities. "The teacher center in England is locally controlled and developed to meet a need. It provides materials, advisory help and in-service course work in academic areas where teachers and heads might require help. These centers can be found in science, mathematics and language arts. They are staffed by specialists from the field who know materials and can work with teachers and provide in-service courses." From T. Manolakes, "Teacher Centers." Unpublished paper, University of Illinois, Urbana, Illinois, 1971.
For example, within a school district, NIE could support: one or two centers initiated and operated by teachers and accountable to teachers; one or two centers initiated by teachers who subcontract the staffing and operation to a group or agency selected by them; one or two centers initiated by locally qualified institutions of higher learning and co-operated with teachers; as well as solicit proposals for other patterns of providing teacher centers.

In connection with the teachers' center development effort, a survey of current projects and styles should be made and disseminated through regular NCERD channels, relevant professional organizations' channels and conferences, and possibly a specialized invitational conference, partially sponsored by NIE.

The potential involvement of current regional resource centers (e.g. those operated by the Texas Education Agency or the New England Program in Teacher Education and North Carolina Regional Centers) in teacher centers should be explored. A major issue to be explored with these regional resource centers is the extent to which authority is assigned to teachers and teachers' groups in their use and management of the centers.

ii) Another significant aspect of British practice which has attracted the attention of American educators is the role of advisors and/or inspectors in supporting educational change. 47, 48, 49

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49 Armington, D. "A Plan for Continuing Growth" Educational Development Center, Newton, Massachusetts, mimeo, n.d.
Armington describes the British advisory as follows:

"Advisors play a unique role, one for which there seems at present no precise counterpart in American public education. As facilitators of change, advisors have extensive knowledge of the learning process, practical experience as teachers, and familiarity with curriculum materials. They have the capacity to work with teachers in unthreatening ways, to be sensitive to the needs and strengths of each school and classroom, and to take account of the social and "political" elements that may affect the forces of change in those situations. The advisor's position is flexible. His style is to work with those individuals who are ready for his services. His aim always is to help schools realize their own unique potentialities and to help make change self-sustaining.

...He is not a supervisor...goes only on invitation. He is not an administrator...shorn of most of the trappings of power there is only one thing he can do: give advice."50

The three significant characteristics of the advisory are: first that they work with teachers only by invitation, and second, that their work is done on-site, and third, their approach is clinical rather than pedagogical.

There is a wide range of possible bases from which advisors might operate. The Educational Development Center at Newton, Massachusetts has already had extensive experience with advisories in the U.S. and should be consulted in depth for guidance on development projects to be supported.

The special problem of identifying educators who are qualified and capable of being advisors needs attention also. The NIE development projects

50 Armington, ibid. Italic mine.
in this area may have to begin on a very small scale (e.g. 50 "hand-picked" individuals) to work at sites to which they are invited, and where they can also be training their own successors.

iii) The Development of a Video-Tape Bank.

In connection with pilot teachers' centers and the work of advisors, a bank of video tapes (or film strips and slides) which can be disseminated and shared by designated groups for illustrative and instructional purposes should be supported.

iv) Dissemination through the Public Broadcasting Service.

As indicated earlier in this report, one of the proposed guiding principles for NIE support of open-informal education is that R&D efforts be cast in a low-key non-sell tone. This principle is not to suggest deliberate withholding of information (although occasions for that may occur) but rather, to satisfy the current high demand for information with exposition rather than persuasion.

The development of a series of programs for teachers and/or the community at large which informs and exposes the on-going research and development and problems in open-informal education should be considered. Such a series may of course be embedded in a series which encompasses many other approaches to early childhood education.

1. Problems Involving Administration

A frequent comment found in the current literature on modern developments in British primary education concerns the role of the Headmaster (or principal) in setting the "tone" for the school and in continuous in-service
training of his staff. In general, the British pattern suggests a "professional leadership" emphasis for the head teacher (or principal) which is facilitated by a long tradition of virtually unlimited autonomy.\(^{51}\) Observers of the British scene also often note the small size of the school as a contributor to the relatively small administrative demands placed on British Heads.\(^{52}\)

The reports of British leadership styles, autonomy and control, and school size (not class size) patterns suggest that NIE should support:

a) the development of a new role for elementary school administration, namely an Executive Secretary, who is responsible to the Principal and his staff for day-to-day administrative functions. The Executive Secretary would relieve the Principal of administrative detail, and free him/her for in-service leadership and training.

A few pilot projects in schools of varying size which elect to participate in such a project should be supported for two or three years of development. A careful documentation of the natural history of the development project should be required.

2. Problems of Leadership Style

In addition to the development activity suggested above, some consideration and effort must be given to summarizing current reliable knowledge of the impact of leadership style (of principals, superintendents, educators, etc.) on day-to-day classroom life. It is reasonable to assume that educational

\(^{51}\) It should be noted that emphasis on the "professional leadership" aspect of the American principal's role is often found in the American literature. See for example, Gross, N. and Herriott, R.E. Staff Leadership in Public Schools, 1965., N.Y. Wiley and Sons. However, unlimited autonomy for the American principal is not a common occurrence.

leadership roles have, in recent years, been high risk occupations! The NIE might encourage and support careful and concerning the optimal preparation and selection of educational leaders, as well as some experimental projects, such as leadership apprenticeships of various types. 53

3. Problems Involving School-Community Relations

Most of the central precepts of open-informal education are not really new to the American educational scene. 54 Some observers suggest that one of the sources of difficulty encountered by open-informal methods in the U.S. resides in the area of school-community relations. A particular aspect of such relations in need of examination is the match between parental expectations of their school and teachers, and the teachers' and school administrators' expectations of themselves. Some parents are abandoning the local public school with disgust and launching their own "independent"

53 Many observers of developments in early childhood education have expressed concern over its apparent reliance on the charismatic qualities of its leaders, prophets and institutions. This is a serious issue for two major reasons. First, the achievements of charismatic leaders tend to fade, if not be reversed, when they leave the scene. Secondly, the field is currently more dependent on the most attractive or charismatic leader than it is on the soundest evidence. Clearly charisma in leaders or institutions can be associated with either desirable or undesirable causes. For these reasons, the causes of reliance on charisma, some explanations of how they "work" and how they fail, etc. should be examined.

or "free" schools. On the other hand some efforts to use open-informal methods in public schools are rejected by parents whose expectations of the school's role closely parallels the "military academy" model. Current literature suggests some 'polarization' of the community in terms of expectations, although the size of the "indifferent center" is not known.

NIE should support some thoughtful assessment and study of community readiness, and willingness to support open-informal methods. Special attention should be given to identifying the segments of a given school's community so that a full appreciation of the heterogeneity of schools' clientèles can be obtained.

4. Problems Involving Curriculum Materials

This sector of the development and spread of open-informal education appears to have already attracted much energy. The general trend of developments will not be commented on at this point.

Of specific interest here is the central importance of children's use of reference resources, and the potential value of developing a computer-based resource retrieval system for use by primary-age children. In its broad conception it is proposed here that NIE support the R&D of computer-based reference/resource "libraries" by means of which primary age children may "look up" a wide range of facts and figures.

Let us suppose for example that a group of children have become interested


56 See also. Sieber, S. and Wilder, D. "Teaching Styles: Parental Preferences and Professional Role Definitions" Sociology of Education, 40 (4). Fall, 1967. pp. 302-315. This study suggests a high level of discrepancy between school and community expectations of teachers such that school persons are more oriented to "openness" than parents.
in a nearby river. It is conceivable that among the questions they will "look up" will be such facts as its origin, its variations in height and rate of flow, etc. The computer-based capability already seems to be well developed. \(^{57}\) (For example, PLATO, University of Illinois). In addition, this R&D effort should explore specifically the refinements needed for computer responsiveness to children in an open-informal curriculum, and some techniques whereby children's questions and interests and knowledge-products can form the basis for developing the information bank.

5. Additional R&D Problems Related to Open-Informal Education

The entire subject of evaluation has not been explored here thus far. There is much comment on the problems of evaluating the outcomes of open-informal education. The literature gives the impression of a dangerous quagmire developing in this area.

It is recommended here that NIE specifically support a wide range of proposals of approaches to the problems of evaluation. The following points should be considered:

a) In-house historians.

Although the case-study or documentary approach to research is generally not seen as reputable, it is recommended here. Three precautions are in order. First, the useful case-study requires a trained and disciplined worker \(^{58}\) as much as does any reputable research approach. Second, a case study is likely to be enhanced

\(^{57}\) Computer-based technology as exemplified by PLATO at the University of Illinois.

when the student "knows what to look for." No doubt this "knowing" is strengthened during training. Nevertheless, it is reasonable to assume that the students' theory (explicit or implicit) tells him what is worth knowing. Formal theories of open-informal education have not been found. 59 Any of the available theories of learning and development may serve for such case studies. Fresh theories should be welcomed. 60 Third, case studies are useful only when they are used, i.e. analyzed and cross-examined for fruitful leads on further research and development activities.

With these precautions in mind, it is hoped that documentary or case studies conducted "in-house" will help to answer questions concerning what factors account for successful and/or unsuccessful implementation of the projects' objectives. It is recommended that all development projects include such a trained on-the-site historian.

59 Assertions and assumptions about expected relationships between processes and products are available in the open-informal education literature. Much informal theory of open-informal education is attributed to Piaget.

60 It is interesting to note that the extensive developmental psychology literature on modeling and imitation has not yet served as a basis for systematic classroom interaction research in early childhood education.
b) Observational Studies

In open-informal education strong emphasis is given to a creative and interesting classroom climate or environment for learning. Implied in much of this literature is that the open-informal classroom provides children with day-to-day experiences of particular qualities. These qualities include personal involvement (in an activity), and feeling states such as satisfaction, eager interest, curiosity, self-respect, self-assurance, enjoyment (of working with others) etc.

Classroom observational studies which systematically assess the quality of individual children's ordinary or typical day-to-day experiences (or feeling states) are needed.

c) Liking for School and Learning

The common assertion that the open-informal classroom increases children's liking for school and learning is another high priority target for evaluative study. A research and development program which explores the dimensions and complexities of children's attitudes toward and associations with school, and various component aspects of it, is recommended. Comparative examination of the attitudes of children in both open-informal and traditional-formal classes would be of interest.

It is assumed that (i) freedom of choice, (ii) the pursuit of their own interests, as well as (iii) respectful treatment by teachers all contribute strongly to liking of school and learning.

61 It is assumed that children's liking of school is desirable. For some significant questions on this assumption see Dorothy Lee "Developing the Drive to Learn and the Questioning Mind" In A. Frazier (Ed.) Freeing Capacity to Learn. Association for Supervision and Curriculum Development. Washington, D.C., 1960.
The finding of a reliable two-way prediction on these variables would strengthen this assumption. Mixed findings may lead to clarification of the true predictor variables. It should be noted also in such research that within a given classroom, it may be possible to identify and study children experiencing these three variables at different levels (or scale values).

The application of unobtrusive measures of attitudes towards school and its components is also recommended.62

d) Given the complexities of evaluation in general and of open-informal education in particular, the NIE would be wise to institute an evaluation advisory group and partially sponsor occasional conferences on evaluation problems.

62The use of traditional methods of assessing academic growth and of studying intellectual development is likely to continue without NIE support. However, it may be wise for such evaluations to look for (and welcome) steady small and stable increments in such measures rather than to insist on significant, large (but short-lived) gains.
Part III
SUMMARY AND POSTSCRIPT

In the preceding pages I have attempted to sketch a working definition of open-informal education, to set out some guidelines for an NIE R&D effort, and to outline some broadly stated R&D activities which NIE might support.

Priorities

When resources are limited, the pressure for ordering activities in terms of urgency and usefulness increases. This pressure operates in spite of the fact that no single or selected few of the activities can achieve very much by themselves. (Cliché or not, we need a new society!).

It is recommended that the NIE form a national consultant group in order to arrive at an ordering of priorities. 63

(Under protest) I would have to put the development of the Advisory [See R&D subtopic No. 5d(ii)] as a reasonable first step, and all other R&D proposals as equally important second steps.

Reliable or reasonable methods by which to estimate of the anticipated costs of the proposed R&D efforts have not been found.

63 See Appendix B for suggestions of advisory group membership.
Postscript

In the preceding pages, the reader has been subjected primarily to one observer's views of open-informal education, and its central issues. Other workers in the field can be expected to differ on each and every point.

It should be added, if it has not already been detected, that this observer is not optimistic about the spread of open-informal methods in the U.S., and furthermore, would not be surprised to learn that the recent 35 years of advance in England recedes.

There are no problems in education which are not also problems in the rest of our society: mistrust as well as demandingness, abuses of power as well as the abdication of authority, doubts about values as well as passivity, ad infinitum.

While it is reasonable to assert that educational development must be seen in its moral, philosophical, economic and social context, it may be that the most fruitful posture for educators to have at present is to identify their own unique responsibility, to do just that extremely well, while at the same time they encourage and support all their allies working on the many other fronts.
Appendix A

Teacher-directed learning

(i) The lesson content to be covered is planned by the teacher (with or without the use of a syllabus).

(ii) The order of presentation is planned, and adhered to, except in unforeseen circumstances.

(iii) The presentation is assisted by such devices as these:
  a) using some form of motivation;
  b) using the blackboard, or other audio-visual aids;
  c) questioning;
  d) recapitulating and reinforcing.

(iv) The class organization is planned. This may mean that the class is organized as a whole, into groups, for individual work, or in some combination of these.

(v) Some evaluation of this 'reception' learning is planned.

Teacher-facilitated learning

(i) The teacher relies on the child's interest in making an inquiry or engaging in an activity.

(ii) This interest is 'assisted' by the creation of a stimulating environment for the child to work in. This may be done by providing books, telling stories, encouraging children to express their interests and bring materials to school, keeping animals and birds in school, providing equipment of various kinds, posing problems, asking critical questions that redirect a child's endeavour, etc.

(iii) Investigations are allowed to take their course, but are supervised, assisted and checked by the teacher.

(iv) Records and reports are made. These may take a variety of forms, and may involve the use of reference works, e.g. encyclopaedias. The sophistication of these records and reports depends of course on the stage of development of the children.

(v) A high degree of variety in content is accepted by the teacher.
(vi) A flexible use of time is accepted. Clearly, children working in this way will vary greatly in the amount of time they devote to a particular task.

(vii) A flexible class organization is accepted; informal social interaction is permitted.

(viii) Appraisal by the teacher is continuous, and on an individual basis.