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ABSTRACT
                An observer's views of Open-informal education and
its central issues are presented in view of increasing interest in
opening up classroom procedures and activities. The problems in
defining Open Education are noted, but, in general, the events,
relationships, activities and materials in the classroom are seen as
being neither standardized nor routinized. Dimensions of classroom
practices take into account space, activities of children, locus of
activity selection by teacher or child, content or topics, time, and
teacher-child relationships. The teacher's role is seen to be an
authoritative one. The open-informal methods' promise of co-occurring
achievements of academic, intellectual, and personal growth in
children is considered to be of major significance. Proposals for
research and development efforts include focusing on preschool and
primary education, opening classes which are now traditional or
formal rather than opening up new experimental schools and classes,
and examining the teacher role and attitudes more closely. (LH)

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RESEARCH ON OPEN EDUCATION: PROBLEMS AND ISSUES

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RESEARCH ON OPEN EDUCATION: PROBLEMS AND ISSUES

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This conference on Open Education is one of many events in recent
years signifying increasing interest in opening up classroom procedures
and activities. This movement in the direction of open education has
been developing alongside 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 some important
differences between them. One of the common themes involves rejection
of traditional-formal academically oriented education, another is the adoption
of a rhetoric emphasizing commitment to "humanistic" values, including
self-determination, freedom of choice and aesthetic appreciation.

Reasons for such widespread interest, by now reaching the propor-
tions of a bandwagon are no doubt many and varied (Featherstone, 1971;
Hapgood, 1971). 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 groundswell. Possibly a
long-standing Anglophilism contributes to Americans' receptivity to
British developments as well. Notably, a body of evidence that open-
informal education is effective is <u>not</u> available, and is not among the
many causes of the spreading enthusiasm. 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 childhood education. Before we examine some of the reasons,

let us look at some problems of definition.

Problems of Definition

In spite of the current interest in Open Education, a definition
of the term which would answer the question "How will I know it when
I see it?" has not been found. The formulation of an operational
definition is difficult, and has been understandably resisted by
workers in the field. The resistance stems from fear of the development
of orthodoxies, doctrines and rigidities. On the problem of definition
Spodek has commented: "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" (1970). The comment reflects a common assertion that
specificity must necessarily, in and of itself, betray the spirit of
openness and informality.

.Another source of definition difficulty arises from the fact
that open-informal education takes many forms. Some classes are "open"
throughout the school day, some only partially. On almost any
dimension of classroom life, there are wide varieties of style. No
ideal version of the Open Classroom has been advocated, endorsed or
adopted.

Further difficulty facing the would-be definer stems from the
fact that the major data base from which to extrapolate a definition
consists of "personal testimony" (See for example Silberman, 1970;
Featherstone, 1971 passim). The available personal testimony is
extremely difficult to conceptualize. Barth and Rathbone (1969) 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 prove, that there

are reliable relationships between ways of thinking, assumptions

about learning, classroom events and educational outcomes. In fact,

there is some reason to believe that practice is followed by rational-

ization rather than the reverse!

Another difficulty in formulating a working definition stems from

the fact that some attributes of the open classroom cannot be

discerned from direct observation at any given point in time. Rather,

they require a knowledge of the history or genesis of the event observed.

For example, suppose we see in a classroom a small group of children

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 is, the more likely it is that 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, the class

would be less "open". The same activity prespecified by the school

district syllabus, or by state requirements qualifies the activity as

even less "open". The personal testimony data generally include in

them some information about 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 et al (1970) and Walberg and Thomas (1971), the qualities of the teacher and 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 terms refer to broad or global configurations of teachers' and childrens' 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.

Tentative Definition of Open Education

The British apply the term "informal" to the practices of their modern infant schools (for children aged 5 to 7 years) 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. In an attempt to formulate some answers, the following list of dimensions of class-room 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 of the school campus itself.

2. Activities of Children

In varying degrees, the range of encouraged and permitted
activities is wider, less fixed or bounded, more open-ended
in open-informal than in formal-traditional classrooms. Activities
in open-informal classes may transcend the classroom itself.

3. Locus of activity selection--teacher/child

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

4. Content or Topics

The range of topics or content to which children's attention and
energy are guided is both wider and more open-ended than in formal-
traditional classrooms.

5. Time

Time for specified categories of classroom activities is more
flexibly assigned in open classrooms 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 groups.

   The more open the classroom, the less often the teacher

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addresses the whole group as an instructional unit.

c) In the open-informal classroom, the teacher is likely to be seen giving suggestions, guidance, encouragement, information, directions, feedback, clarification, posing questions, (primarily during individual teacher-child encounters).

d) In the open classroom the teacher's response to undesirable behavior is likely to be to offer the child an interpretation of it in terms of the classroom group's life and its moral as well as functional implications. She is not likely to ignore the behavior or to exact punishment.
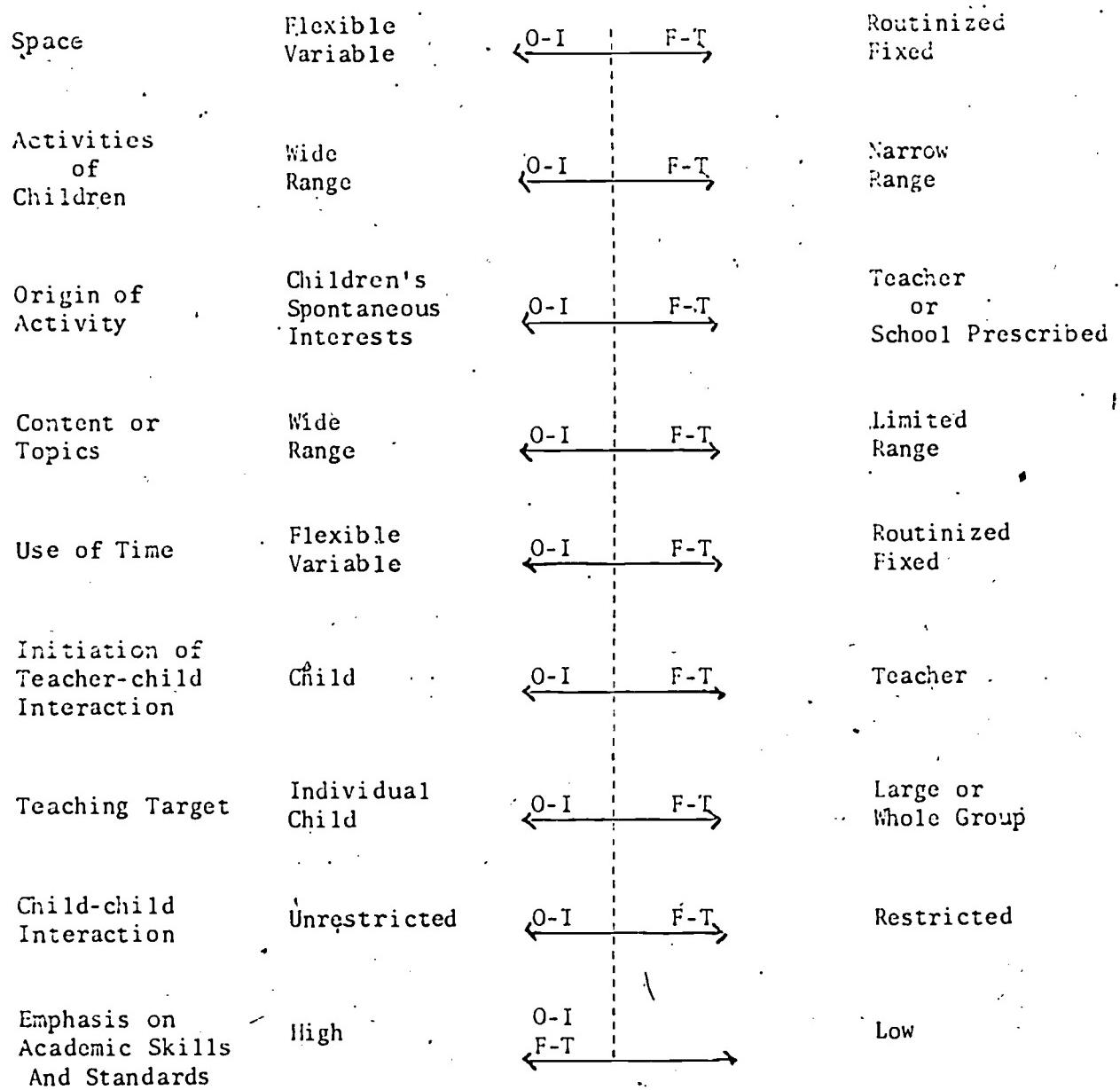
e) In the open-informal classroom teachers are likely to emphasize appropriately high standards of work as in the traditional-formal classroom.

In Figure 1, a tentative answer to the questions involved in defining open education is suggested in terms of continuous dimensions on which, except for one (emphasis on academic skills and standards), open and traditional practices lie at opposite ends.

Earlier in this discussion it was suggested that 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 continuous dimensions concerns 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" (1971).

Figure 1

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

Dimension	Open-Informal Pole		Formal-Traditional Pole
Space	Flexible Variable	$\longleftrightarrow$ O-I ¦ F-T	Routinized Fixed
Activities of Children	Wide Range	$\longleftrightarrow$ O-I ¦ F-T	Narrow Range
Origin of Activity	Children's Spontaneous Interests	$\longleftrightarrow$ O-I ¦ F-T	Teacher or School Prescribed
Content or Topics	Wide Range	$\longleftrightarrow$ O-I ¦ F-T	Limited Range
Use of Time	Flexible Variable	$\longleftrightarrow$ O-I ¦ F-T	Routinized Fixed
Initiation of Teacher-child Interaction	Child	$\longleftrightarrow$ O-I ¦ F-T	Teacher
Teaching Target	Individual Child	$\longleftrightarrow$ O-I ¦ F-T	Large or Whole Group
Child-child Interaction	Unrestricted	$\longleftrightarrow$ O-I ¦ F-T	Restricted
Emphasis on Academic Skills And Standards	High	$\longleftrightarrow$ O-I F-T	Low

O-I = Open-Informal Classes; F-T = Formal-Traditional Classes

It suggests a <u>co-occuring</u> pattern of adult nurturance, warmth, communication, control, <u>and</u> 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 authoritativeness 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 of individual and small group work. It should be restated however, that there are almost as many definitions of the open-informal classroom as there are classrooms.

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*It should be noted also that some of the open-informal education literature strongly emphasizes the importance of <u>learning centers</u> 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 and 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.

Why Open-Informal Education?

As already indicated, there is widespread interest in open-informal education in the U.S. today, and some of the societal reasons underlying this interest have been suggested. What are some of the educational or pedagogical reasons for encouraging open-informal methods?

The strongest reason to support open education is the assumption that classroom activities derived largely from the spontaneous and natural interests of the pupils themselves are 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. This assumption, however, needs to be tested.

Another reason for supporting open-informal methods can be stated 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 approaches only answer the question How can we teach children the specific academic skills they need? It is the question which is inappropriate. A more appropriate question is: How can we teach children the skills they need <u>while at the same time</u> strengthening and enhancing their feelings of self-respect, self-responsibility, and sense of dignity, their capacity for curiosity, exploration, investigation, for tenderness, compassion, understanding and insight? <u>Open-informal methods promise the co-occurring achievements of academic, intellectual and personal growth in children.</u>

Research reports on comparative effects of early childhood curriculum models indicate 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 (Bissell, 1971). This consistent finding implies that open-informal education can also be expected to foster the acquisition of the lessons emphasized by it: academic skills, intellectual competence and personal resource development. 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 education, though mainly conjectural, might be considered here. Rohwer (1971) has suggested that there is no evidence to show that the day to day instruction received by elementary school pupils helps them to solve problems they encounter outside of the classroom doors. While Rohwer may have overstated his position, his report certainly suggests that we would be wise to open up the range of activities and topics available to children in classrooms so as to provide greater continuity and generalizability between classroom and extra-classroom experiences. Open-informal education takes into account the general and individual environments of pupils and tries to help children acquire basi academic tools with which to examine, analyze, record, observe, measure, explore, grasp, recreate and organize their own experiences, and eventually the experiences of others.

Where Should We Start?

In the present period of shrinking funds, it seems wise to con-
centrate our research and development efforts in open-informal
education on the preschool and primary years. This proposal 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.

Another proposal concerning R&D efforts is that a priority thrust
should be toward "opening" classes which are now traditional or formal,
rather than opening up new experimental schools and classes. The
reasons underlying this proposal 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

Research and Development Topics

. Most specialists in open-informal education agree that qualities and competencies of the teaching staff are key factors in implementation. Research is needed which should 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 undesirable behavior, fluency of ideas and suggestions given to children, question-asking skills, her explaining behavior, etc.

The available literature on open-informal education tends to emphasize the importance of the teachers' assumptions about the nature of growth and learning (Barth, 1970). However, the relationships between such attributes (e.g. assumptions about learning) and their expected or assumed behavioral manifestations is largely unknown, although the work of Harvey et al (1966) suggests that such relation-ships may exist.

We also need research to 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 relation-ships 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. 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 Baron and Tropp (1961). 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 (1971) represents a useful point of departure for such research. A sharper understanding of teachers' problems in this sensitive area is urgently needed.

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 cuase or determinant 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.

Another research question 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.

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. 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.

The reports of British leadership styles, autonomy and control,
and school size (not class size) patterns suggest the need for
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 develop-
ment. A careful documentation of the natural history of such a

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development project would be helpful.

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.

Most of the central precepts of open-informal education are not really new to the American educational scene. 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" 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 (Barth, 1970). Current literature suggests some 'polarization' of the community in terms of expectations, although

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the size of the "indifferent center" is not known.

The research of Sieber and Wilder (1967) suggests that attention should be given to identifying the segments of a given school's community so that a full appreciation of the heterogeneity of schools' clienteles can be obtained.

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. One strategy to consider is to employ "in-house historians." Although the case-study or. documentary approach to research is generally not seen as reputable, it is recommended here, although three precautions are in order. First, the useful case-study requires a trained and disciplined worker (See Becker, 1958) as much as does any reputable research approach. Second, a case study is likely to be enhanced 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, although much informal theory is attributed to Piaget. Any of the available theories of learning and development may serve for such historical case studies. Fresh theories should be welcomed. 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.

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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. The information gained by such histories would strengthen our ability to interpret the findings produced by conventional assessments of pupil learning.

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 childrens ordinary or typical day-to-day experiences (or feeling states) are needed.

There is a 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 seems to be needed. Comparative examination of the attitudes of children in both open-informal and traditional-formal

classes would be of interest. It is assumed that (a) freedom of choice, (b) the pursuit of their own interests, as well as (c) respectful treatment by teachers all contribute strongly to liking of school and learning. 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, or suggest the nature of some mediating variables.

Summary

In the preceding pages, the reader has been subjected primarily to one observer's views of open-informal education, and its central issues. 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 if the recent 35 years of advance in Gread Britain subsided.

Finally, it should be noted that there are no problems in education which are not also problems in the rest of our society. As Thelen has pointed out:

> The classroom is a small but complete piece (microcosm)
> of the larger society. It is swept by the same controversies,
> has the same values and behavioral norms as the community...
> After all, the teacher and pupils live most of the time
> in the larger community, and they become socialized into
> it...they internalize its controls and guidelines, and
> their...employ these in the classroom. (pp. 75-76, 1971)

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It seems to me that whenever I look at an educational problem--
no matter how small or how discrete, I get the impression that we need
a new society. But the schools cannot develop one by themselves.

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References

Baron, G. and Tropp, A. "Teachers in England and America." In Halsey, A.H., Flood, J. and Anderson, A. (Eds.) , Education, Economy and Society. Glencoe, Ill.: Free Press, 1961.

Barth, R. Open Education. Unpublished doctoral dissertation, Harvard University, Cambridge, Mass., 1970.

Barth, R. and Rathbone, C. The Open School: A Way of Thinking About Children, Learning and Knowledge. The Center Forum, Vol. 3, No. 7, July, 1969.

Baumrind, D. "Current Patterns of Parental Authority." Developmental Psychology Monograph, Vol. 4(1), Part 2, Jan., 1971.

Becker, H.S. "Problems of Preference and Proof in Participant Observation." American Sociological Review, 1958, 23(6), pp. 652-659.

Bissell, J. Implementation of Planned Variation in Head Start. Washington, D.C., Office of Child Development, HEW, 1971.

Bussis, A.M. and Chittenden, E.M. An Analysis of Open Education. Princeton, N.J.: Educational Testing Service, 1970.

Featherstone, J. Schools Where Children Learn. New York: Liveright, 1971.

Hapgood, M. The Open Classroom: Protect it From its Friends. Saturday Review, Sept. 18, 1971.

Harvey, O.J. et al. "Teacher's Belief Systems and Preschool Atmospheres." Journal of Educational Psychology, 1966, 57, pp. 373-381.

Rohwer, W. "Prime Time for Education: Early Childhood or Adolescence?" Harvard Educational Review, 41(3), 1971.

Sieber, S. and Wilder, D. "Teaching Styles: Parental Preferences and Professional Role Definitions." Sociology of Education, 40(4), Fall, 1967, pp. 302-315.

Silberman, C. Crisis in the Classroom. New York: Random House, 1970.

Spodek, B. Extending Open Education in the United States. In Open Education, Washington, D.C.: National Association for the Education of Young Children, 1970.

Thelen, H.A. "A Cultural Approach to In-Service Teacher Training." In Improving In-Service Education, Rubin, L. (Ed.). Boston: Allyn & Bacon, 1971.

Walberg, H.J. and Thomas, S.C. Characteristics of Open Education: Toward an Operational Definition. Newton, Mass.: TDR Associates, Inc., 1971.

Postscript

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EDUCATIONAL ADMINISTRATION MANAGEMENT
University of Oregon
Library--South Wing
Eugene, Oregon   97403

EDUCATIONAL MEDIA & TECHNOLOGY
Institute for Communication
 Research
Stanford University
Stanford, California   94305

EXCEPTIONAL CHILDREN
Council for Exceptional Children
1411 S. Jefferson Davis Highway
Suite 900
Arlington, Virginia   22202

HIGHER EDUCATION
George Washington University
One Dupont Circle--Suite 630
Washington, D.C.   20036

JUNIOR COLLEGES
University of California
Powell Library--Room 96
405 Hilgard Avenue
Los Angeles, California 90024

LANGUAGE & LINGUISTICS
Modern Language Association
 of America
62 Fifth Avenue
New York, New York   10011

LIBRARY & INFORMATION SCIENCES
American Society for Information
 Science
1140 Connecticut Avenue, N.W. Room 804
Washington, D.C. 20036

READING AND COMMUNICATION SKILLS
National Council of Teachers of English
1111 Kenyon Road
Urbana, Illinois   61801

RURAL EDUCATION & SMALL SCHOOLS
New Mexico State University
Box 3AP
Las Cruces, New Mexico   88001

SCIENCE & MATHEMATICS EDUCATION
Ohio State University
1460 West Lane Avenue
Columbus, Ohio   43221

SOCIAL STUDIES/SOCIAL SCIENCE EDUCATION
855 Broadway
Boulder, Colorado   80302

TEACHER EDUCATION
One Dupont Circle - Suite 616
Washington, D.C.   20036

TESTS, MEASUREMENT, & EVALUATION
Educational Testing Service
Rosedale Road
Princeton, New Jersey 08540

VOCATIONAL & TECHNICAL EDUCATION
Ohio State University
1900 Kenney Road
Columbus, Ohio   43212

*ERIC/ECE is responsible for research documents on the physiological, psychological,
and cultural development of children from birth through age eight, with major
focus on educational theory, research and practice related to the development
of young children.