The development of models to aid teachers and administrators in implementing and maintaining programs of open education in elementary schools
by Thomas Lauren Crumbaugh

A thesis submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION
Montana State University
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Abstract:
This study dealt with the problem of developing a teacher and administrator program model to aid interested educators in implementing and maintaining programs of open education in elementary schools.

Although there existed numerous articles and books dealing with various facets of open education, the writer found a limited amount of related research dealing specifically with various ways programs of open education might be implemented and maintained. The writer found a definite need for some type of program model which could prove beneficial for educators anxious to move toward programs of open education. The developed models should not be considered a complete "package" or strict set of "blueprints," which if understood and adopted, would somehow solve every problem and provide an easy road to a successful program. Rather, the developed models are intended to provide a set of procedures that should give the individual teacher or administrator a sense of direction and purpose in, working toward an open concept classroom.

In developing these models the writer followed the following procedures: 1) establishment of a working definition of open education, 2) documentary research, 3) developed questionnaires, and 4) personal interviews and observations.

Some of the major conclusions reached as a result of this study were: 1) Open education is a very emotive term which tends to be quite anxiety provoking to some people, 2) The maintenance and enhancement of the characteristics of the healthy child are congruent with the basic assumptions and principles upon which open education is based, and 3) No one should be forced into a program of open education.

The major recommendations made as a result of this study were the following: 1) The models actually developed in this study should be field tested by teachers and administrators anxious to implement and maintain programs of open education, 2) Based upon the attempts at implementation using the developed models as guides, further revision should be made of both models as a result of participant feedback, 3) Further research should be conducted into the characteristics of the "healthy child" and how these characteristics are congruent with the basic assumptions and principles which form the theoretical base of open education, 4) There should be a movement away from such terms as open education and a resulting enlistment of concerned educators in a move toward "quality education," 5) Involved teachers and administrators in programs of open education should be provided experiences and opportunities to become more congruent with themselves, for only through interactions with genuine people can children discover their true selves.
To understand life is to understand ourselves, and that is both the beginning and the end of education.

J. Krishnamurti
THE DEVELOPMENT OF MODELS TO AID TEACHERS AND ADMINISTRATORS IN IMPLEMENTING AND MAINTAINING PROGRAMS OF OPEN EDUCATION IN ELEMENTARY SCHOOLS

by

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A thesis submitted to the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION.

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Bozeman, Montana

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The writer wishes to pay particular recognition to the two people, who in truth, made this study possible—my wife and son. Thank you Sally and Sam for your understanding and love during the preparation of this paper.
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Chapter 1

INTRODUCTION

The current debate over the quality and relevancy of the educational offerings in the schools, from pre-school to university, rages across the land.

Howes (1970) has observed that in the age of Sputnik, education has responded to the authentic voice of moderation and evolutionary change. The curriculum has been updated, new architectural forms have been explored, instructional methods and other ways to organize students and teachers have served as focuses for various field experiments. While these improvements have not yet led us to a Shangri-La, they have been impressive and they deserve to be recognized (Phi Delta Kappan, 1971).

Concerning the positive contributions made by our present educational system, Morphet and Hansford (1971: V) have commented that the existing system:

... not only has contributed significantly to the progress of the nation but has been improved in many important respects in most communities and states. It has recognized and is attempting to deal with important problems which were ignored for many generations, including the provision of appropriate opportunities for under-privileged and disadvantaged children and youth, for slow learners and dropouts, for those who do not expect to attend institutions of higher learning, for adults who need continuing education, and even for college and university students who have received little benefit from traditional programs and procedures.

Praise for the practices and procedures found in our schools
is by no means unchallenged. A number of major educational writers have criticized, quite severely at times, many of these practices. Silberman (1970:10) has observed that:

It is not possible to spend any prolonged period visiting public school classrooms without being appalled by the mutilation visible everywhere—mutilation of spontaneity, of joy in learning, of pleasure in creating, of sense of self.

Silberman noted the result, by quoting psychoanalyst Erik H. Erikson, "is the mutilation of a child's spirit." (Newsweek, 1971:60).

Silberman is far from alone in describing and condemning the negative conditions and practices found in many of the classrooms in our educational system. The attack has been joined by such fiery reformists as Paul Goodman and Ivan Illich. Goodman (1964) believed that children would be better off in the streets than in the brutal and dehumanizing classrooms they are often forced to attend. He noted that:

The compulsory system has become a universal trap, and it is no good. Very many of the youth, both poor and middle class, might be better off if the system did not exist, even if they had no formal schooling at all (Goodman, 1964:39).

Illich (1970) argued for the mind-boggling proposition that compulsory education should be abolished for a system of education geared to individual initiative.

It is evident that education, like so many of our established institutions of today, is under almost constant attack. It would seem certain that as a profession, education is in for a seemingly long
period of critical self-examination. Traditional assumptions about how teachers teach, and how children learn, and what knowledge is of importance are being critically debated (Barth and Rathbone, 1969).

Many solutions and organizational systems have been proposed to improve the educational opportunities for the students. One such approach proposed to create a more effective and meaningful learning environment is "open education." Part of the interest in this movement is no doubt a reaction to the wave of technology and behaviorism which is currently swamping the educational system. But more important, interest has been motivated by a growing recognition that the traditional educational theories and practices have failed many of our children and that now a search for new alternatives must begin (Barth and Rathbone, 1969). To a growing number of educators, "open education" offers a genuine alternative to the "joyless schools" described by Silberman that are felt to have "failed" and "mutilated" our children both intellectually and spiritually at times in the past.

To advocates of open education there is a belief that:

Schools can be humane and still educate well. They can be genuinely concerned with gaiety and joy and individual growth and fulfillment without sacrificing concern for intellectual discipline and development. They can be simultaneously child-centered and subject-or knowledge centered. They can stress esthetic and moral education without weakening the three R's (Silberman, 1970:208).
STATEMENT OF THE PROBLEM

This dissertation will deal with the problem of developing a teacher model and an administrator model to aid involved educators in implementing a program of open education in the elementary grades. It is hoped that in developing these models, the various obstacles in the paths of American educators and possible strategies for overcoming these obstructions will be dealt with in detail.

NEED FOR THE STUDY

In the last few years, the American public has certainly not had to search far for an abundance of critical reports discussing the devastating learning conditions found in many American classrooms (Goodman, 1964; Silberman, 1970; Kozol, 1967; Holt, 1964). At the same time, an increasing number of authors have turned to Great Britain in hopes of finding something within the English open education approach that might help in making elementary education on this side of the Atlantic much more humanistic, meaningful and exciting to our children (Silberman, 1970; Featherstone, 1967; Hertzberg and Stone, 1971; Weber, 1971). These authors have described open education quite well in terms of the theoretical foundations, classroom environments necessary, and the seeming philosophical orientation needed by teachers.

Several authors (Hapgood, 1971; Gross and Gross, 1970;
Featherstone, 1971) have looked at the English approach and the American situation and presented some possible obstacles to implementing programs of open education in the United States. Another group of authors (Armington, 1969; Fisher, 1972; Hapgood, 1971; Hassett and Weisberg, 1972; Spodek, 1971; Hertzberg and Stone, 1971) have gone so far as to give American educators some suggestions for initiating a program of open education. While these suggestions would be helpful to a degree in starting such a program, they leave the interested and enthusiastic educator still with many questions unanswered concerning the best way to initiate and nurture a program of open education.

Hapgood (1971:66) has stated that, "the open classroom in this country is at a critical stage." She continues:

We cannot reach anything like the English achievement... without going through the necessary process of preparation, and without developing the supportive methods to foster it (1971:66).

Giacquinta (1968:IV), after trying to initiate a program of open education in an elementary school, concluded that the attempt at implementation showed "the importance of developing a strategy of implementation..." Barth (1972:33) continued with this theme by stating quite explicitly that "American models of open education need to be developed."

The proposed study will attempt to fill this void by developing models for teachers and administrators that will provide strategies and approaches for preparing for implementation, and for the supportive methods and services needed to maintain and enhance the program.
It should be noted that a thorough search of ERIC materials for the period January 1968 to July 1972 has yielded no such models for implementing and maintaining a program of open education.

GENERAL QUESTIONS TO BE ANSWERED

Some questions to be answered by the study will be:

1. What change factors must be recognized and understood if planned organizational change is to be successful?

2. What are the major obstacles in the paths of American educators anxious to implement open education?

3. What are the various strategies that might be followed that would culminate in the establishment and continuation of an open concept classroom?

4. What might be considered a primary and secondary reading and film bibliography?

5. What are the primary materials that might prove valuable in such a classroom and how might they be made or obtained?

6. How can the program best be introduced to the public?

7. What methods can be used in selecting proper teachers for the program?

8. How might such a program logically be introduced by an individual teacher or administrator in an elementary school?
9. How can the necessary continuing support for teachers involved in such a program be best provided?

10. What is the best means of supervising a program of open education for the improvement of instruction?

11. How can a program of open education be evaluated in terms of determining the authenticity of the program?

**GENERAL PROCEDURES**

The procedures to be followed in this study are:

1. Establishing a working definition of open education for the purposes of this study.

2. Documentary research. The researcher will conduct an intensive and thorough review of the literature as it pertains to open education, paying particular attention to those sections dealing with the factors necessary to initiate and maintain such a program. The author will also research data to determine what change factors must be recognized and understood if planned organizational change is to be successful.

3. Questionnaires will be developed and submitted to involved teachers and administrators to determine some of the problems, and possible solutions, often encountered in striving to implement and maintain a program of open education in the elementary grades.
4. Personal interviews will be held with some educators who have firsthand knowledge and experience with initiating a program of open education. To accomplish this, trips will be made to:

(a) Mountain View School, Great Falls, Montana
(b) Skyline School, Great Falls, Montana
(c) Longfellow School, Great Falls, Montana
(d) The Daly School, Hamilton, Montana
(e) Primary School, Whitefish, Montana
(f) Irving School, Bozeman, Montana

5. Actual models will be developed which hopefully will prove useful to educators interested and anxious to implement such a program.

LIMITATIONS

This study will be limited in the following ways:

1. Less effort and time will be devoted to the historical perspectives, theoretical background, and change factors necessary for meaningful change to occur, in this thesis, since these areas are more than adequately discussed in other publications.

2. This is a theoretical study only. The actual field implementation and evaluation of the strategies found in the devised models will not be tested at this time.

3. Only a randomly selected group of educators and researchers will be contacted for assistance in gathering data and in commenting on
the developed models.

4. The models to be developed in this study will not suggest a cure-all for the problems often encountered in striving to implement such a program. The models will not represent a complete "package" or strict set of "blueprints," which if understood and adopted, would somehow solve every problem and provide an easy road to a successful program. Rather, the models to be developed will provide a set of procedures that will give the individual teacher and administrator a sense of direction and purpose in working to implement a program of open education in the elementary grades.

5. The majority of sources considered in the development of this paper will be from the Montana State University Library, a personal library that includes over forty titles dealing with various facets of open education, other libraries through inter-library loans, and extensive use of ERIC resources.

6. A cost analysis of the various aspects and phases of the models for implementation and maintenance of such a program will not be dealt with.

DEFINITION OF TERMS

For the purposes of this thesis, certain key concepts will be considered in the following context:
Open Education

What exactly is "open education"? This seems to be a question asked more and more by often confused and bemuddled educators throughout the country. Some of the phrases used to describe the approach include "free day," "integrated day," "integrated curriculum," "informal classroom," "developmental classroom," "Leicestershire Model," and "informal education" (Dopyera, 1972). Arguments among advocates about which of these terms best conveys the desired connotations is unlikely since there is resistance to standardization of either the label or the connotations. The resistance stems from a fear of the development of orthodoxies, of doctrines, of rigidities (Katz, 1971).

As Spodek (1970:64) pointed out, the difficulties in defining open education are many.

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. This comment reflects a common assertion that specificity must necessarily, in and of itself, betray the spirit of openness and informality (Katz, 1971).

It has also been recognized (Katz, 1971) that another source of difficulty found in the process of defining open education is the great variety of forms and interpretations that can be found within the approach. No two open concept classrooms are exactly the same—just as no two children and no two adults are the same (Andreae, 1970). Some
classes are "open" just a part of the day, or a part of a period, while others are "open" throughout the day. It is also true that on almost any dimension of classroom activity, wide varieties of style and technique are included under the term open education (Katz, 1971).

Another difficulty in defining the term successfully lies in the fact that many of the descriptions of the approach cannot be operationalized (Katz, 1971). Barth and Rathbone (1969:1) have suggested that open education "is a way of thinking about children, learning and knowledge." Open education "is less an approach or method," according to Silberman (1970:208), "than a set of shared attitudes about the nature of childhood, learning, and schooling."

The writer feels that with these difficulties in mind, perhaps the most meaningful way to define open education for the purposes of this study is to present a fairly inclusive description of the approach, and then present characteristics common to an open education classroom. Armington (1968:5) has defined open education by stating that:

The environment we seek to create within the school is one which is truly responsive to the needs and interests of children; in which children's learning is deeply rooted in experience; where knowledge becomes important because it is relevant and put to use; and where children in an atmosphere of mutual trust and respect, can carry on with each other and with adults the kind of open dialogue that is the essence of good education. In such an environment most of the traditional academic goals are, of course, still important, but children will have the opportunity to pursue them in more flexible and self-directing ways so that their learnings become
a part of their life-style outside the classroom as well as inside.

The following list of characteristics common to an open concept classroom (Nation's Schools, 1971, and Andreae, 1970) are tentatively proposed:

1. Classrooms are decentralized into separate "learning areas."

2. Children have the freedom to move throughout the classroom, to work together, and to choose their own activities. Children from different grades are frequently grouped together.

3. Teachers work mostly with individual children or groups of two or three, while the rest of the children work on their own or with an aide.

4. Heavy stress is placed on designing a classroom environment rich in learning resources; including plenty of concrete materials as well as books and other media.

5. Each child works in his own way as does each teacher, planning and using the classroom in his own way.

6. Desks are often replaced with tables of different shapes and sizes which are used flexibly around the different areas for working on or for displays.

7. Materials and equipment relevant to a particular area are stored near the area and are accessible for use and replacement by the
8. There is a multitude of inexpensive raw materials such as spools, cardboard tubes, cartons, boxes, yarn, colored paper, bottle tops, string, rocks, shells, fabric pieces, etc.

9. In addition, there are tools and equipment such as scales, abacus, lens, microscope, measuring sticks, an oven, cuisenaire rods, mathematical games, building blocks, etc.

10. Children's work (including paintings, stories, clay models, scrap models, discoveries they have recorded, observation of gerbils, plants) is displayed everywhere.

The design for restructuring elementary classrooms along these lines is due to a belief that:

Children learn in different ways, at different times, from things around them which interest them, and from each other. And that children learn best when sparked by their own interest (Nation's Schools, 1971:48).

Perhaps this thought was best expressed many years ago.

I hear . . . and I forgot
I see . . . and I remember
I do . . . . and I understand

Ancient Chinese Proverb

Open Classroom

An open classroom is a classroom where the philosophical principles and theoretical beliefs underlying the open education approach are being actively put into practice. The term open classroom
does not necessarily denote a corresponding physical openness (i.e., with walls removed). An "open classroom" can be found in the most architecturally closed classroom in existence.

**Open Area, Open Space Education**

Open education as defined previously is not necessarily the same as open area, or open space education. Although an open physical environment (the main characteristic of the open area, open space approach) is at times conducive to open education, it does not necessarily follow that an open physical structure is synonymous with open education.

Open education is an approach to educating children, not a style of architecture. Even a building without walls can be impregnable sealed in by psychological walls, restrictive routines and strict and unyielding scheduling. The free atmosphere that is the stamp of open education can happen even in an egg crate type building (Flurry, 1971).

**Model**

The Dictionary of Education (1949: 350) defines a model as "a pattern of procedures." The models that will be developed in this study to aid in implementing and maintaining a program of open education will conform to this definition. The developed models will present a pattern of procedures that will aid teachers and administrators
anxious to initiate such a program.

Healthy Child

The term healthy child is used to refer to the child who exhibits the natural innate characteristics of spontaneity, curiosity, creativity, and a striving for self-realization. The healthy child exhibits "... an awareness, a curiosity, a great love of life that thrills and delights him . . ." (Axline, 1947:12).

Excitation

A matter of emotional freedom, honesty of response and the content thereof (Salter, 1961:33).

Inhibition

Excessive self-consciousness based on excessive consciousness of other people. It is emotionally dishonest and secretive and causes worry about the past and the future. It is paralysis of the emotions and living death (Salter, 1961:53-54).

Head Teacher

The term head teacher is somewhat analagous to our elementary principal. The two are similar in that they are both in charge of a school, although the degree of autonomy granted each may vary consider­ably.
The next topic in this study will be to present and discuss the procedures to be utilized in this study. This will be found in Chapter 2.
Chapter 2

PROCEDURES

The procedures to be used in this study and the criteria for their inclusion will be discussed in this chapter. It should be noted that the procedures discussed below appear in chronological order.

PROCEDURE ONE

The first procedure to be dealt with in this study concerned establishing a working definition of "open education" that would be relevant to the demands of this study. This procedure was discussed and dealt with in Chapter 1 with the presentation of a workable definition made up of what the writer felt accurately described the term open education as demanded by this study.

The presentation of such a working definition of open education was crucial for the purposes of this paper. Without an understanding of the term as it applies to this study, the reader might become quite confused as to exactly what type of program the author was trying to initiate and maintain through model development.

PROCEDURE TWO

The second procedure that must be dealt with successfully by the author is the review of related literature. To the writer the
review of literature is extremely important to this study for two reasons. First of all, it will hopefully give the reader a "feel" for what open education actually is. Secondly, it is hoped that the review will point up the definite need for the models to be developed in this study. The review of literature for this study will deal with the following areas:

Theoretical Background

This section will deal with the theoretical principles which support the educational philosophy that guides the open education approach to elementary education. The various educationists who have made contributions to the theoretical foundations will be discussed here. The various beliefs about human growth and development which support the open education approach will also be dealt with in this section.

Historical Perspectives

The author will attempt to give the reader some feel for the historical development of open education in Great Britain. The recent spread of the movement to this country within the past ten years will also be reviewed in this section.

Obstacles to Implementation

To determine the various obstructions to implementation, the
writer will rely basically upon documentary research. Additional obstacles likely to be encountered by teachers and administrators will result from a mailed questionnaire and personal interviews with experienced educators in the field. Results of the questionnaires will be reported in Chapter 4. Results of the personal interviews and observations will be reported in Chapter 5.

Strategies for Implementation

This section will deal with the various strategies and suggestions for successful implementation that have been researched by the author. Once again, the research will be based upon three sources of information: 1) documentary research, 2) results from a mailed questionnaire, 3) results of personal interviews with experienced educators in the field. By combining obstacles to implementation with strategies for successful implementation, the author hopes to have a basis for model construction.

Change

This section will deal with the various aspects of change that must be recognized and understood by those involved if a program of open education is to be initiated and maintained successfully in the elementary grades.
PROCEDURE THREE

Procedure three will deal with the development of a questionnaire designed to answer the critical questions as they relate to this study. After describing their approach to open education, respondents will be asked to comment on:

1. What are some of the problems often encountered in trying to implement and maintain a program of open education in the elementary grades?

2. What are some possible solutions to these encountered problems?

3. What are the most important factors to be recognized and dealt with in attempting to initiate and maintain such a program in the elementary grades?

The developed questionnaire will be mailed to each elementary principal mentioned by the three sources in the following paragraph. In addition, five additional questionnaires will be mailed to each principal for random distribution to teachers under his jurisdiction who are working in an open education classroom.

The names of these elementary principals will hopefully be obtained from the State Superintendents of Public Instruction for the states of Montana and North Dakota, and the Information Coordinator, Center for Teaching and Learning, University of North Dakota.
Montana was chosen for this sample because the writer is anxious to see what problems, and possible solutions, have been experienced by elementary educators in his home state. North Dakota was chosen because of the fairly large number of teachers within the state who have been exposed to the teacher training program which specializes in preparation for open concept classrooms at the Center for Teaching and Learning (formerly the New School for Behavioral Studies in Education), University of North Dakota.

Results of this survey will be reported in Chapter 4. The results will also be used in model development.

PROCEDURE FOUR

Personal interviews and observations with educators in the field who have firsthand experience with implementing programs of open education in the elementary grades will be dealt with in this section. The author hopes to gain additional insights into the problems, and possible solutions, often encountered by elementary principals by interviewing and observing in the following schools:

1. Mountain View School, Great Falls, Montana
2. Skyline School, Great Falls, Montana
3. The Daly School, Hamilton, Montana
4. Primary School, Whitefish, Montana
5. Longfellow School, Great Falls, Montana
The first four schools in the list represent schools that, according to the State Superintendent of Schools, have initiated programs of open education. The fifth school in the list represents a school that based upon the writer's observations in the various classrooms, should be included in a listing of schools with open classrooms. The last school represents an elementary school that tried to plan for initiating a program of open education, but experienced problems in implementing the organizational plan in the initial stages.

The findings from these interviews and personal observations will be discussed in Chapter 5.

PROCEDURE FIVE

Procedure five will deal with the actual development of models to be used by elementary administrators and teachers to aid in implementing and maintaining a program of open education in the elementary grades. As mentioned previously, the developed models will not represent a complete "package" or strict set of "blueprints," which if understood and adopted, would somehow solve every problem and provide an easy road to a successful program. Rather, the models to be developed will provide a set of procedures that will give the individual teacher or administrator a sense of direction and purpose in working to implement a program of open education in the elementary grades.
The models to be developed will give the teacher and administrator an overall picture of at least one way to logically proceed. From each point in the model a thorough discussion will follow, dealing with the procedures that might be followed to successfully accomplish the specific goals as presented in the model. Some of the tools and materials used in implementing the model will be developed or incorporated if previously developed by other authors. These would include:

1. **Interview Form.** What type of questions might an elementary principal ask of a prospective teacher if he was looking for someone who would be qualified, both in training and belief, to work in an open concept classroom?

2. **PTA Meeting.** What might the agenda for a local PTA meeting consist of if the elementary administrator was anxious to explain and discuss the concept of open education to the audience?

3. **Bibliography.** What is a basic, yet thorough, reading and film list that would aid in explaining the various concepts found within open education to interested teachers, administrators and parents?

4. **In-Service.** What types of in-service training would be provided that would best provide needed information and services to initiate and maintain programs of open education?

5. **Evaluation.** How can an operating program of open education best be evaluated to determine how authentic the program is in terms of
meeting the criteria established for an open concept classroom?

6. **Advisory Service.** What type of advisory service should be established and what functions should it perform in order to provide teachers with the continuing support often needed while moving toward a program of open education?

7. **Supervision.** What type of form can be developed to aid the principal in supervising a program of open education for the improvement of instruction?

8. **Physical Environment.** What and how can you use certain materials to develop a physical environment within the individual classroom that is conducive to open education? What materials can be used effectively and how can they be obtained to aid the teacher in building this learning environment?

9. **School Facilities.** How can the facilities of the total school best be used to foster an environment that is conducive to programs of open education? Specifically, how can the building and school grounds best be used to aid in nurturing a program of open education?

The next topic to be considered in this study will be a thorough review of related literature and research concerning open education in the elementary grades. This will be found in Chapter 3.
Chapter 3

REVIEW OF LITERATURE

An extensive review of the literature dealing with open education was conducted for the purposes of this paper. The purpose of this review of literature was to develop, through a critical appraisal of the numerous writings on the subject, a greater understanding of what is known about implementing and maintaining programs of open education in the elementary grades. In order to answer this question the literature was reviewed with the hope of answering the following specific questions:

1. What are the basic assumptions and theoretical principles which support open education?

2. Can open education be justified on the basis of these basic assumptions and theoretical principles?

3. What practical lessons for successful program implementation can be learned from reviewing the historical development of open education in England, and more recently in the United States?

4. What are some of the obstacles often encountered by teachers and principals as they move toward programs of open education?

5. What are some of the suggestions that have been advanced for implementing and maintaining programs of open education successfully?
6. What are the various aspects of change that must be recognized and understood by those involved in open education if the programs are to be successful?

THEORETICAL BACKGROUND

In conducting the review of literature as it relates to the topic at hand, the author soon realized that the concept of open education tends to be quite anxiety provoking to some people. The reason for this feeling of anxiety and uncomfortable ness might, in part, be due to the fact that open education as a possible approach to elementary education asks interested parents and educators to face squarely, and perhaps question, some of their previously held beliefs concerning children, childhood, learning, and education in general. Seemingly the toughest obstacle for some observers to overcome in looking at the strengths and weaknesses of the approach is simply the various connotations to the word open. The term open seems to be synonymous with permissiveness in the minds of some onlookers. To these observers permissiveness is adjunct to chaos and lack of control, i.e., out of control. The resulting thought that the organism can be out of control is unbearable. For this reason the concept of open education is indeed a hard and bitter pill to swallow for some.

The writer recognizes the preceding feelings as being quite legitimate and justifiable from that individual's frame of reference.
With this in mind an attempt will be made in the following section to verify that open education, as one of several alternative approaches to elementary education, can be justified as a legitimate and worthy way of educating young children.

At this point a clarification concerning the difference between freedom and permissiveness seems appropriate. Rollo May (1953:138) has defined freedom as "man's capacity to take a hand in his own development. It is our capacity to mold ourselves." Freedom, as proposed by the existentialists carries with it a certain "awfulness." Morris (1961:398) clarified this point:

There is an awfulness about freedom, but there is an exhilaration about it too. To realize that I can shape myself, redesign myself, do myself over into any likeness I desire, is to find the beautiful "Yes" in my life. To announce with my life what I think a man is—what assignment can be more affirmative than this? It is an awful responsibility, in the literal sense of a responsibility full of awe, to choose for man.

To the existentialists man discovers himself in full responsibility for his own conduct, in fact, in full responsibility for determining his own "essence" (Morris, 1966). Concerning man's individual responsibility for determining his own essence, Sartre (1939:107) commented that "we are responsible for what we are." In this sense freedom entails the right of individuals to pursue the individual answer to the existential question of "Who am I?" It is also quite important at this point to recognize that freedom overextended becomes permissiveness, or what A. S. Neill (1966) called "license."
Neill (1966:7) discussed the line between freedom and permissiveness by stating:

I define license as interfering with another's freedom. For example, in my school a child is free to go to lessons or stay away from lessons because that is his own affair, but he is not free to play a trumpet when others want to study or sleep.

It should not be inferred from the preceding discussion that man can legitimately destroy other men or reign destruction upon parts of society in the search of self. Gardner (1964) has pointed out that under conditions of social chaos, the individual cannot enjoy certain freedoms that are rightfully his as a matter of course in a lawful society. Cicero said, "We are in bondage to the law in order that we may be free" (Gardner, 1964:71). Neill (1960:356) clarified this point by stating that "no one can have social freedom, for the rights of others must be respected. But everyone should have individual freedom."

The existentialists are concerned with individual freedom, the freedom that man has to determine his own essence, to use Nietzsche's phrase, "to become what we truly are" (May, 1953:142).

Dr. S. G. Simpson of Montana State University has described freedom as being a very spontaneous state with choice and the responsibility for that choice dwelling within each individual. With the ultimate choice that each man has comes a genuine sensitivity to others. The truly free man is genuinely concerned with others. Dr. Simpson continued by describing permissiveness as an impulsive, non-choosing,
irresponsible and insensitive state of existence. Genuine freedom yields what Salter (1961) would call the excitatory personality while permissiveness would spawn the inhibitory personality.

Freedom then connotes affectionate and genuine caring. If someone honestly cares for a child, he will not permit that child to do something destructive to the child. Permissiveness, on the other hand, is a rejecting, non-caring state. Permissiveness involves no responsibility for the actions of others or the actions of oneself. If someone does not feel concern for a child, he will let the child do whatever he wants regardless of the desire of others (Furtak, 1972). Neill (1961:356) warned against permissiveness by stating that "anyone who allows a child to get all his own way is following a dangerous path."

In investigating the possibilities of a movement toward open education, a concerned educator must first resolve the crucial question of justifying such a move. In other words, why should educators move from more traditional approaches to more open approaches in elementary education? This section of the review of the literature will attempt to examine such a justification.

In justifying programs of open education a primary concern is a discussion of some of the psychological characteristics of the so-called "normal" or "healthy" child that might be involved in such a program. Such a discussion will hopefully point out that the
maintaining, and rekindling when necessary, of these natural psychological characteristics common to the healthy child can naturally lead not only to meaningful learning experiences for the involved child, but also to an affective climate which is quite conducive to the maintenance of good mental health for the involved student.

The writer realizes, of course, that some traditional classrooms, traditional in the sense of philosophic orientation and structural arrangement, have in the past, and will continue in the future to provide the positive learning environment that is conducive to the maintenance and enhancement of the natural character of a "healthy" child.

Discussing the psychological characteristics of healthy children Axline (1947:12) maintained that the healthy student exhibits "... an awareness, a curiosity, a great love of life that thrills and delights him." Young children naturally display a fantastic curiosity about their environment which in turn provokes them to explore and to ask numerous questions concerning their surroundings (Schools Council for the Curriculum and Examinations, 1969). The Plowden Report (Children and Their Primary Schools, 1967:17) restates this same point by saying that "the child appears to have a strong drive, which shows itself at a very early age, towards activity and the exploration of the environment." Rogers (1969:157) has said that children are naturally "... curious about their world" and that this
curiosity is in fact "unquenchable" (1969:190). Wenkart (Moustakas, 1966:195) mentioned this natural curiosity of the child by calling him "... a born explorer," one who is constantly "growing in a continuum of experience."

Another characteristic of healthy children is that of spontaneity. Spontaneity in this sense means that the behavior of the individual tends to be natural, easy, less self-conscious, and flowing automatically without design or intent (Maslow in Moustakas, 1956). Moustakas (1953:18) makes the point that "normal children are more decisive and spontaneous than disturbed children," and that they are quite "free and spontaneous in their play." Salter (1961) described the healthy person as the spontaneous person, the person who exhibits an excitatory personality. "The excitatory person is relaxed and spontaneous ..." (Salter, 1961:42). Salter (1961) described an excitatory individual as one who expresses his emotions in a very open, genuine and effective way. As a result of the honest expression of feelings the excitatory person harbors no unexpressed grudges which might serve as festering sores which could threaten the emotional health of the individual at a later date. The feeling of the excitatory personality is one of congruence because the individual is in touch, and in harmony with his own feelings. In a sense the excitatory individual is moving toward answering the age old existential question of "Who am I?" Conversely, the inhibited individual described by
Salter (1961:47) "suffers from constipation of the emotions." This individual is constantly preoccupied with unexpressed feelings and emotions; as a result a great deal of inner anxiety and tension is produced.

Maslow (1954:214) recognized that the spontaneous person has a:

. . . wonderful capacity to appreciate again and again, freshly and naively, the basic goods of life with awe, pleasure, wonder, and even ecstasy, however stale these experiences may be for other people.

Salter (1961:42) calls this "spontaneous, outgoing feeling . . . the basis of good mental health." Adler (1927) also recognized the importance of an individual's spontaneity as a basis for good mental health. Adler (1927:14) commented that "unless we become as little children, we cannot . . . attain happiness or mental stability here on earth." Spontaneity and its corollary, creativity, according to Moreno (Bischof, 1970), are of such immense importance that they are the problem of psychology and indeed of the universe. Without the s-factor (spontaneity factor), man is reduced to stereotyped behavior which paralyzes the personality. Moreno goes on to state that "robotism is the opposite of spontaneity" (Bischof, 1970:254).

In observing spontaneity in the young child as he progresses through the elementary grades Leonard (1968:111) has succinctly commented:

Go into a kindergarten room. By and large, the five-year-olds are spontaneous, unique. Tell them to dance, and they move
naturally with a sort of unorganized grace. Read them a story, and their eyes give you back its suspense, fear, laughter. We like to say their faces light up (a particularly telling phrase), and when we look into this illumination, we are not ashamed to let our own faces glow in return. All of this, we assume, is a natural condition of the very young.

Walk down the hall to a fourth-grade classroom. Very quickly, you will notice that something has been lost. Not so many eyes are alight. Not so many responses surprise you. Too many bodies and minds seem locked in painful self-awareness. This, too, we carelessly attribute to the natural order. It's just part of growing up.

But is it really? Is it really necessary for the human animal to lose in spontaneity and imagination as it gains in knowledge and technique? Must we shed the brightness of childhood as we put on the armor plating of age?

The psychologically healthy child also maintains a powerful internal force which strives continually for self-realization. One must be careful at this point not to confuse self-realization with self-actualization. Self-actualization has been described as the bringing together in a beautiful and harmonious way the affective and cognitive features of man. A merging of these two features leads to the experiencing of the true self at a given moment in history. Self-actualization then does not mean the striving for material things, but rather the striving for the true and harmonious self (Simpson, 1973). The striving for self-realization may be characterized as a movement toward maturity, independence, and self direction. Bischof (1970:549) has characterized the movement toward self-realization as "... an inner ability to make oneself the best and fullest possible
personality that he is able to create." Mairer (1971:205) has characterized this force found within each child as a "driving force" which pushes ahead "incessantly creating for himself new horizons of skills, knowledge, and emotional maturity." The movement toward self-realization goes on relentlessly to achieve consummation, but it needs good "growing ground" to develop a well-balanced organism (Axline, 1947). Axline (1947:10) continued:

Just as a plant needs sun and rain and good rich earth in order to attain its maximum growth so the individual needs the permissiveness to be himself, the complete acceptance of himself—by himself, as well as by others—and the right to be an individual entitled to the dignity that is the birthright of every human being in order to achieve a direct satisfaction of this growth impulse.

Maslow has also used the analogy of the growing seed to describe the natural growth impulse found within each individual. Maslow (Goble, 1970:55) believed that:

Man demonstrates in his own nature a pressure towards fuller and fuller being, more and more perfect actualization of his humanness in exactly the same naturalistic, scientific sense that an acorn may be said to be "pressing" toward being an oak tree.

Yet, except for a few students, who may or may not be good students, the great majority of students apparently fail to develop more than a tiny part of this tremendous capacity for learning, understanding, and creating with which they were born and of which they made full use during the first years of their lives (Holt, 1964). What factors might be responsible for turning off, or at least diminishing
to a great degree, these healthy and natural tendencies to explore, to learn, to create, and to be spontaneous?

Some writers have blamed the thwarting of these natural drives of children upon our schools. Schools have in the past been responsible, according to Silberman (1970:262) for destroying "children's spontaneity, curiosity, and love of learning..." Schools have also gone on "to mutilate childhood itself" in many instances (Silberman, 1970:262). Einstein (Rogers, 1967:IV) has commented that "it is in fact nothing short of a miracle that the modern methods of instruction have not yet strangled the holy curiosity of inquiry."

Salter (1961:37) mentioned that often he has found people entering into therapy asking, "How, in my childhood, was I robbed of my natural excitation? Where and how was this emotional component dwarfed, twisted, misdirected, or minimized?" Reich (1971:141) would answer Salter's questions by stating that "the process by which man is deprived of his self begins with his institutionalized training in public school..." In a Saturday Review of Education article (February 1973:24) James Cass continued with this point by discussing the "hidden curriculum" found in schools which:

... so often teaches conformity and order and acceptance, even while the educational rhetoric places primary emphasis on creativity, independent thinking, and academic self-sufficiency.

George Leonard (1968:110) discussed the "hidden function" of
many schools as being responsible for "the systematic, innocent destruction of the human spirit." Leonard (1968) continued by looking at the present school system as a barrier, in instances, to the fulfillment of the human potential. Leonard (1968:101) commented:

The most obvious barrier between our children and the kind of education that can free their enormous potential seems to be the educational system itself: a vast suffocating web of people, practices and presumptions, kindly in intent, ponderous in response.

Barth (1972) maintains that more and more educators are coming to wonder, as Jean-Jacques Rousseau did many years ago, whether the total effect of some schools upon children may not be more harmful than helpful.

Some authorities have pointed to a certain distorted view of young children, and of childhood in general as being responsible for some of the rather destructive practices found in elementary schools. In a prefacing essay to one of Adler's works F. W. Crookshank (Adler, 1927:XXXIV) discussed this distorted view of children and childhood held by some adults:

A form of cruelty is practiced in thousands of god-fearing homes throughout the land, a thousand times more disastrous in its effects than any of the physical cruelties so earnestly fought down by societies for the protection of children. This cruelty is the cruelty of discouragement and terrorization exercised by well-meaning parents who would nourish a child's soul and mind upon the mould crusts of Herbraic legality and putrid scraps of demonology and superstition saved from medieval hagiologies. This cruelty, this terrorization, this fear and sense of sin even in innocence, is one of the most stimulating foods of neurosis and disease, and
the most deadly poison to a simple, joyous, active, natural, intelligent, and sympathetic child-like life in relation to the community.

The brief preceding discussion of childhood tends to lead quite naturally to a philosophy of education that at times condones and encourages certain practices which tend to be harmful to children. These practices tend to arrest and stifle in many instances the individual's natural drive toward learning and toward good mental health.

English educationists who have been actively involved in programs of open education, on the other hand, believe that "... the best preparation for being a happy and useful man or woman is to live fully as a child" (Children and Their Primary Schools, 1967:188). Salter (1961:36) has said that "a childish childhood is a happy childhood" and one that prepares a firm foundation for continued healthy psychological growth.

As a result of this view of childhood, proponents of open education see the school not merely as a "teaching shop," but as "a community in which children learn to live first and foremost as children and not as future adults (Children and Their Primary Schools, 1967:187). The resulting belief that "education is not a thing apart from life itself" permeates the philosophy of open education (Andreea, 1970:8).

The preceding views are not intended to say that the accumulation of knowledge and certain academic skills are not important if
students are to gain satisfaction from their education, but rather that
the belief that these skills were necessarily fostered by the more
traditional, tightly structured approaches to elementary education has
proven wrong in many instances (Children and Their Primary Schools,
1967). The Plowden Report (Children and Their Primary Schools, 1967:
188) continues:

Children need to be themselves, to live with other children
and with grown ups, to learn from their environment, to enjoy
the present, to get ready for the future, to create and to love,
to learn to face adversity, to behave responsibly, in a word, to
be human beings.

In discussing the English philosophy of open education,
Silberman (1970:230) stated:

Central to the informal English primary schools . . . is a
view of childhood as something precious in its own right, something
to be cherished for itself and not merely as preparation for later
life.

The views of childhood previously discussed certainly form a
very integral part of a broader philosophy of education that seems to
permeate the open education approach.

From the preceding discussion a definition of what represents
a meaningful education from the standpoint of an open educationist must
necessarily follow. Proponents of open education would certainly
agree with the following statement made by Earl Kelley (Combs, 1966:373)
concerning the desired goals of education.

... the goal of education in the modern world must be the
production of increasing uniqueness. This cannot be achieved in
autocratic atmospheres where all decisions are made by the teachers and administration while students are reduced to passive followers of the established patterns.

Combs (1966:374) continued with this theme concerning the desired goals of education in the modern world:

Schools which do not produce self-directed citizens have failed everyone--the student, the profession, and the society they are designed to serve. The goals of modern education cannot be achieved without self-direction... The information explosion has blasted for all time the notion that we can feed all students the same diet.

Realizing this, Combs (1966:374) suggested that schools in many instances should "adopt a cafeteria principle in which we help each student select what he needs to fulfill his potentialities." The point has been made by Rogers (1969:163) that "the most socially useful learning in the modern world is the learning of the process of learning..." If our present culture is to survive, according to Rogers (1969:163) it:

... will be because we have been able to develop individuals for whom change is the central fact of life and who have been able to live comfortably with this central fact.

To be educated according to this philosophy would also mean that education would prepare people not just to earn a decent wage but to live a life—a creative, humane, and sensitive life. This means of course that the schools must provide a liberal and humanizing form of education. To be educated in this sense would also mean that the individual would be exposed to the real experience of beauty, perhaps
not to actually create it, but to at least be able to respond to the beauty of nature and to the art produced by our fellow man (Silberman, 1970). The Ontario, Provincial Committee on Aims and Objectives of Education (1968:33) has stated this same belief:

To find and appreciate beauty in the ordinary and the extraordinary is the right of every child, for esthetic experience is a basic need of all men in their universal struggle to add meaning to life. We owe to children the freedom to explore the full range of their senses; to appreciate subtle differences; to be aware of beauty wherever it is found; to see, to touch, to smell, to hear, to taste, so that each in his own way will strive to find and express the meaning of man and human destiny.

To be truly educated according to this view would also mean to understand something of how to make our beliefs mean something in the day to day world—really of how to apply knowledge to the life one is living in the society that one lives in (Silberman, 1970). Alfred North Whitehead (Silberman, 1970:115) has said that "a merely well-informed man is the most useless bore on God's earth."

With these views of children, schools, and education in mind, proponents of open education continue their program justification by relating to various assumptions, and proven theoretical principles, concerning children's learning and human development which support the educational philosophy of open education.

The underlying assumptions, and proven theoretical principles of open education are not traceable to a single source. On the contrary, the principles and assumptions have evolved slowly, but steadily,
for over a hundred years. They represent the work of a number of theorists, and the essential concepts are understood and well accepted by substantial numbers of educators on both sides of the Atlantic (Hertzberg and Stone, 1971).

The belief that normal "children are innately curious and will explore without adult intervention" (Barth, 1972:18) their surrounding environment in a meaningful way certainly forms a cornerstone in the theoretical foundation underpinning open education. Rogers (1969:157) has maintained that children are genuinely "curious about their world" and "have a natural potential for learning." In fact according to Rogers (1969:157) children are "... eager to develop and learn." Children are also naturally quite anxious and willing to ask questions concerning certain unresolved views of their perceived surroundings (Schools Council for the Curriculum and Examinations, 1969). This drive towards activity and the resulting exploration of the environment becomes evident as a very early age in children (Central Advisory Council for Education, 1967).

The child also has the capacity not only to initiate exploration of the environment for himself but to sustain such activity over a fairly long period of time (Barth, 1972). Isaacs (1966:19) confirms this point by saying that "... explorations carried on in any consecutive direction can always be turned into a self-rewarding, self-extending, self-multiplying process." The preceding statements point
up another principle held as vital by proponents of open education, which is, "exploratory behavior is self-perpetuating" (Barth, 1972:19).

The preceding assumptions concerning motivation point toward an underlying sense of trust in the innate abilities of children, in their capacity to energize and direct their own exploration, and in their wanting to explore and learn (Barth, 1972). "This potentiality and desire for learning, for discovery, for enlargement of knowledge and experience . . . is a tendency which can be trusted," according to Rogers (1969:158). Rogers (1969:158) continued by saying that "this potentiality and desire" can be released only under "suitable conditions."

One of the suitable conditions necessary for learning relates back to the natural motivating force found within the child. While children may have in and of themselves the capacity for motivation, this motivation is realized only through the relationship of the child to something outside himself, to other people or to bits and pieces of the surrounding environment. That is the same as saying that one is not motivated in a vacuum, one must have someone or something to be motivated about. The source of motivation then resides neither in the child nor in the external world, but in the interaction of one with the other (Barth, 1972). Isaacs (1970:226) recognized the definite worth of providing for genuine interaction between children as a basis for learning:
It is not the mere presence of other children but active participation with them, doing real things together, an active interchange of feeling and experience, which educates the child.

In another work Isaacs (1971:171) stressed the importance of the verbal interaction between students as a means of promoting learning:

"... if we deprive him of free speech with his fellows, we take away from him one of the most valuable means of intellectual and social growth."

The importance of teachers providing a social and physical situation that will allow children to interact with various facets of the environment has also been recognized by other educators. Weber (1971:177) maintained that:

"Since social interchange, discussion, and differing points of view are essentials for the operation of the challenge of discrepancies, a free social situation is necessary. This free social interchange is "fed" best in a challenging atmosphere, rich in possible activities that can provide the "stuff" of discussion."

According to Barth (1972:20):

"One has only to imagine withdrawing all external stimuli from a motivated child to see the importance of the object of exploration as well as the capacity for exploration."

Berne (1964) has continued with this discussion concerning the importance of providing the individual with sensory stimulation through the environment by looking at the biological implications. Berne (1964:14) commented:

"On the biological side, it is probable that emotional and sensory deprivation tends to bring about or encourage organic
changes. If the reticular activating system of the brain stem is not sufficiently stimulated, degenerative changes in the nerve cells may follow, at least indirectly. This may be a secondary effect due to poor nutrition, but the poor nutrition itself may be a product of apathy, as in infants suffering from marasmus. Hence a biological change may be postulated leading from emotional and sensory deprivation through apathy to degenerative changes and death. In this sense, stimulus-hunger has the same relationship to survival of the human organism as food-hunger.

Another of the basic psychological conditions necessary for meaningful learning to occur, according to proponents of open education, is a feeling on the part of the individual student of being non-threatened by the surrounding environment. Barth (1972:21) makes this point by saying that "the child will display natural exploratory behavior if he is not threatened." The adult's quest for efficiency from children is one way in which children become quite threatened and as a result lose a degree of their natural drive toward self-fulfillment (Ginott, 1965). Ginott (1965:141) continued:

It is essential that a child's life not be ruled by the adult's need for efficiency . . . . It is too costly in terms of the child's emotional economy. It drains the child's resources, prevents growth, stifles interests, and may lead to emotional bankruptcy.

The Plowden Report (Children and Their Primary Schools, 1967:62) made the point concerning the need for providing a non-threatening atmosphere by saying that "children can think and form concepts, so long as they work at their own level, and are not made to feel that they are failures."

Another favorable psychological condition which closely follows
the preceding discussion relates to the confidence that the individual student has in himself. "Confidence in self is closely related to capacity for learning and for making important choices affecting one's learning" (Barth, 1972:21). There seems to be a relationship between knowing oneself and self-esteem, and this self-esteem is crucial for learning. To put it more strongly, a strong self-concept on the part of the student is the sine qua non of open education; if, and only if, the child respects himself will he be able to be responsible for his own learning (Barth, 1972).

Rogers (1969:21) tied the need for a non-threatening environment with the individual's movement toward self-discovery:

... the individual appears to have a strong desire to become himself; that given a favorable psychological climate he drops the defensive masks with which he has faced life, and begins to discover and to experience the stranger who lives behind these masks--the hidden parts of himself.

The importance of various physical conditions and materials, relative to the learning environment that surrounds the individual child, and the opportunities for the students to interact with this environment is also of great concern to open educationists.

Concerning the importance of the physical learning environment that surrounds each child Kundratis (1968:43) noted that:

... children come to school, already imaginative, curious, and intelligent. But to learn for themselves, they require materials, space, time and other people.
The Plowden Report (Children and Their Primary Schools, 1967:196) continued with the importance of the child's surrounding environment for learning by discussing, not just materials, but the need for "...rich and varied materials..." that can spark and maintain a child's natural curiosity and desire to learn. Blackie (1971:87) maintained that the child will on his own, when the time is appropriate for that individual child, discover various self-evident facts "if the relevant material is available to him in sufficient quantity and variety, if he is given many opportunities of handling it and trying it out..." Brearley and Hitchfield (1966:165) mention that, "a really rich and stimulating school environment engenders interests which in turn engender the energy to pursue them."

The provision for a rich and stimulating school environment should not be considered just as supplemental enrichment or as "aids to teaching," but as the material of action, the material on which accommodation, and therefore further reordering and rebuilding and stretching of the frame of reference happens (Weber, 1971). As expressed by Nathan Isaacs in an analysis derived from the writings of Piaget, because human mental growth "springs essentially out of the interaction between the child and the world he finds around him, ... (and) the character of that world must be constantly affecting his growth," the quality of the environment becomes important (Weber, 1971:182). Salter (1961:35) has discussed the importance of the
environment surrounding the child by saying that the child's "early environment is the sculptor's chisel."

The preceding discussion concerning the importance of the classroom environment illustrates another cornerstone in the foundation of open education. Barth (1972:23) seems to have summed this belief up quite well by stating that "active exploration in a rich environment, offering a wide array of manipulative materials facilitates children's learning."

One might logically wonder of what good is this exciting, stimulating learning environment of the classroom if the child is not allowed to interact with it in a way that is both real and suited to the needs of the child? The advocates of open education maintain that play, in the sense of children interacting with numerous physical objects (including other children) and various ideas is the child's chief means of learning about life, and must therefore be provided for in the classroom. Barth (1972) has pointed out that perhaps the term involvement, as opposed to lack of involvement, would be a more appropriate term than play for the interaction between the child and his environment that is seen as basic for learning to occur.

Dr. S. G. Simpson, in a lecture delivered at Montana State University stated that "play is the natural language of childhood." Isaacs (1970:66) continued with this thought by maintaining that "play is the child's means of living and learning about life." The
preceding quote by Isaacs forms another cornerstone in the philosophical foundation of open education. The Plowden Report (*Children and Their Primary Schools, 1967*) called this form of play, or involvement, "messing about." The Plowden Report (*Children and Their Primary Schools, 1967*:193) continued with this thought by commenting that:

We know that play--in the sense of "messing about" either with material objects or with other children, and of creating fantasies--is vital to children's learning and therefore vital in school.

Providing children with numerous objects and situations to interact with and explore seems crucial for real learning to occur.

Barth (1972:24) maintained:

Children's learning, like motivation, does not occur in a vacuum. Children play with something or someone; they do not just play. Exploratory behavior is of little consequence, unless there is something to explore.

The Schools Council for the Curriculum and Examinations (*Mathematics in Primary Schools, 1969*:XI) made the point that "... sound and lasting learning can be achieved only through active participation" on the part of the student. "Learning occurs when a child is totally involved in his own exploration and discovery," according to Andreae (1970:9). Andreae (1970:9) continued with this theme:

It [learning] is an active, rather than a passive, process. Children learn from experience, from exploration, and from active participation in discovery... Dewey (1916) called learning by active involvement learning by doing. He maintained that learning was "an active, personally conducted
affair" (Dewey, 1916:335). The belief that "significant learning is acquired through doing" was also expressed by Rogers (1969:162). Blackie (1971:87) made the point that active learning (learning by doing) would likely occur "if the relevant material is available . . . in sufficient quantity and variety," and if the student "is given many opportunities of handling it and trying it out . . . ."

Play also has another important role in the intellectual growth of the child, being at once the cause and expression of changes from egocentric to objective judgements and of growth of landscape and of reversible action and judgements (Peel, 1960). "In play," according to the Plowden Report, "children gradually develop concepts of casual relationships, the power to discriminate, to make judgements, to analyze and synthesize, to imagine and to formulate" (Children and Their Primary Schools, 1967:193). "The type of learning that occurs in play . . . is the learning of variability" according to Sutton-Smith (1973:49). "As the player builds up a rich pattern of associations with the materials (and the people), he enhances his ability to give birth to more novel suggestions when they are called for" (Sutton-Smith, 1973:49). The Plowden Report continues with the importance of play by stating that play "is the way through which children reconcile their inner lives with external reality" (Children and Their Primary Schools, 1967:193).

The belief that "children have both the competence and the right
to make significant decisions concerning their own learning" (Barth, 1972:26) represents another essential ingredient of open education.

For a child to develop a sense of self-reliance and adequacy according to Erickson, "it is necessary that he experience over and over again that he is a person who is permitted to make choices" (Shane and Anderson, 1971:125). Rogers (1969:162) maintained that "learning is facilitated when the student participates responsibly in the learning process." The responsibility and self-direction needed for student involvement with learning can only be acquired from experience (Combs, 1966).

They [responsibility and self-direction] must be acquired from experiences, from being given opportunities to be self-directing and responsible. You cannot learn to be self-directing if no one permits you to try . . . . If young people are given self-direction, then it must be through being given many opportunities to exercise such self-direction throughout the years they are in school . . . . If we are to produce independent, self-starting people we must do a great deal more to produce the kinds of experience which will lead to these ends (Combs, 1966:375).

Another extremely important part of the basic foundation of open education pertains to the intellectual development of children. Many of the assumptions made by open educators about children's intellectual development mirror the thinking of Jean Piaget, the Swiss philosopher and psychologist; indeed, many of these beliefs are his thinking. Many of these assumptions have been sufficiently examined empirically to challenge the contention that they are assumptions at all and not established principles of intellectual development. The
main elements of intellectual development emphasized by open educators appear to be the following: children need time to learn; they go through definite developmental stages; their thinking progresses in a sequence from concrete to abstract (Barth, 1972).

The formation of concepts proceeds quite slowly in children, as a result, time must be provided for concept formation (Barth, 1972). Featherstone (1971:26) has recognized the need for time to allow for concept formation:

Much learning involves what often looks to an adult like mere play or mindless repetition. A teacher can quicken learning and direct it along more methodical lines by providing suitable experiences and discussion, but children need time and often learn most efficiently on their own.

Piaget was one of the first to see that the process of forming a concept takes far longer than had once been believed, and that much work, at times seemingly unrelated to the concept, must be done before there is any clue to the direction which the thinking is taking (Dienes, 1960). To truly understand a concept, according to Hawkins (1965:65), "... all of us must cross the line between ignorance and insight many times before we truly understand." Featherstone (1971:25) continues with this thought:

... a great majority of primary school children can't just be told things, ... they learn basic mathematical concepts much more slowly than adults realize, and ... the patterns of abstract thought used in mathematics ought to be built up from layer after layer of direct experience ... .

The theoretical principle which implies that children go
through definite intellectual developmental stages--each in his own way, at his own rate, in his own time is also emphasized by open educators (Barth, 1972).

According to the Schools Council for the Curriculum and Examinations (Mathematics in Primary Schools, 1969:9):

Although children think and reason in different ways, they all pass through certain stages depending on their chronological and mental ages and their experiences.

Mann (1966:2) maintained that "there is an individual pattern of growth for all living things." "Children learn by stages," according to Blackie (1971:86), "and . . . it is no use hurrying them on to later stages before they have mastered earlier ones."

The principle that intellectual growth and development takes place as a result of a sequence of concrete experiences followed by abstractions is also emphasized by proponents of open education (Barth, 1972).

One of the most important conclusions to be gained from the research of Piaget, according to the Plowden Report (Children and Their Primary Schools, 1967:192) is that:

... the great majority of primary school children can only learn efficiently from concrete situations, as lived or described. From these situations, children acquire concepts in every area of the curriculum.

If abstract learning is a goal to be worked for then the student must be provided with something from which to abstract
(Sealey, 1963). Sealey (1963:4) continues with this thought by stating that "... in order to establish a conceptual framework, you have to draw away the true nature of the ideas from direct experience."

In summary, programs of open education can be justified, according to Barth (1972:56), because they provide "... an environment in which the possibilities for exploration and learning of self and of the world are unobstructed." The Plowden Report justified open education as an approach to elementary education by proclaiming that it is "... ideally suited to the needs and nature of young children and to their development as human beings" (Children and Their Primary Schools, 1967:67). It would seem that a synthesis of the preceding assumptions and theoretical principles provides firm support for the growing trend toward open education in this country, as well as in Great Britain (Hertzberg and Stone, 1971).

HISTORICAL DEVELOPMENT

This section of the review of literature will deal with the historical development of open education in both Great Britain and the United States.

Great Britain

The trend toward open education in Great Britain is not a sudden departure from the past. On the contrary, it has developed
gradually over the last half century, out of the insights and experiences of many teachers, administrators, local and national school inspectors and advisors, and various college and university personnel (Silberman, 1970). The history, in fact, can be traced back to the founding of the first infant school by Robert Owen in the first part of the 19th century, and to Margaret McMillan's work, particularly her advocacy of open-air-type schools and required medical inspections, and her leadership in winning permissive legislation and state grants for nursery education in 1917 (Weber, 1971).

Gardner (1949:6) notes that Owens, in establishing the first infant school in 1816 (twenty years before Froebel's first kindergarten), stressed that:

The children were to be out of doors as much as possible and to learn when their curiosity induced them to ask questions, . . . . They were to be educated and trained without punishment or the fear of it, no unnecessary restraint was to be imposed upon them and they were to be taught only what they could understand.

According to Marshall (Silberman, 1971:213) this trend started by Owen and McMillan was based on the "professional instincts" of teachers in infant classes throughout Great Britain who believed:

A happy child actively involved in something he wanted to do was getting more out of his educational opportunities than a passive, bored child politely resisting most of the instruction dished out to him in 30-minute parcels.

This "professional instinct" mentioned by Marshall gained official recognition and encouragement in the 1930's with the
publication of two studies, both under the chairmanship of Sir Henry Hadow. The first of these two studies (Report of the Primary School), according to Clegg (1971:29), contained "probably the most quoted of all educational words uttered this century in England." The Report of the Primary School (Clegg, 1971:29) stated:

"We are of the opinion that the curriculum of the primary school is to be thought of in terms of activity and experience, rather than knowledge to be acquired and facts to be stored."

This "instinct" was reinforced again during World War II when urban teachers and students were evacuated to the more rural areas because of the bombing raids (Silberman, 1970). The evacuation of the urban schools "jerked everybody out of their ruts and made all sorts of improvisations and makeshifts necessary" (Blackie, 1971:10). It was often true during this period, according to Blackie (1971:10), that:

"Teachers who had taught the same stuff in the same city classrooms for fifteen years found themselves in the fens, or the hills, or the farmlands, the only link with the children's background, and they simply had to re-think what they were doing."

When the war ended and teachers returned to their former classrooms they were confronted with a roomful of children who had been

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dispersed throughout England as a result of the war. Faced with a range of background, knowledge, and ability several times the prewar norm, teachers once again found it necessary to improvise to meet the needs of the students. As a result of this recognized need by postwar teachers the movement toward a more open curriculum, one "to be thought of in terms of activity and experience, rather than knowledge to be acquired and facts to be stored," (Clegg, 1971:29) was again advanced and reinforced (Silberman, 1970).

The rapid growth of such open-informal schools in England after World War II went largely unnoticed in this country, and to a surprising degree, in England itself, until 1967 when a Parliamentary Commission, the so-called Plowden Committee, called attention to the new approach and urged its adoption by all English primary schools* (Silberman, 1970).

In urging the adoption of this approach for English elementary schools the Plowden Report, Children and Their Primary Schools (1967:187) expressed the philosophy that:

A school is not merely a teaching shop, it must transmit values and attitudes. It is a community in which children learn first and foremost as children and not as future adults. In family

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life, children learn to live with people of all ages. The school sets out deliberately to devise the right environment for children, to allow them to be themselves and to develop in the way and at the pace appropriate to them. It tries to equalize opportunities and to compensate for handicaps. It lays special stress on individual discovery, on first hand experience and on opportunities for creative work. It insists that knowledge does not fall into neatly separate compartments and that work and play are not opposite but complementary. A child brought up in such an atmosphere at all stages of his education has some hope of becoming a balanced and mature adult and of being able to live in, to contribute to, and to look critically at the society of which he is a part.

Concerning the growth and spread of open, informal education in Great Britain, as advocated by the Plowden Report, Featherstone writing in the Spring edition of the Harvard Education Review (1968b: 320) commented:

For it is now clear... that the English are on their way toward establishing certain conditions for good learning on a fairly large, national scale... In all, the report [Children and Their Primary Schools, commonly known as the Plowden Report], estimates that one-third of the country's schools are quite clearly good. There is nothing dogmatic about the Plowden Report, and it is quite willing to grant that some formal schools give a good education. But the report is promoting a trend, and it strongly implies that most of its good third are preceding along informal lines. Of the remaining English schools, it says a third are somewhat affected by the changes taking place, and another third are scarcely touched at all, frozen into rigid patterns of teaching and learning.

United States

The history of open education in this country is a fairly recent one. Barth (1972) maintains that perhaps the first significant American exposure to the open, informal practices found in many English
schools occurred in 1961 when William Hull traveled to England to observe the work of Z. P. Dienes. As a result of Hull's visit and subsequent report (Hull, 1970) visits by American educators to England increased greatly. As a result of these visits to English primary schools a substantial number of personal accounts and journals* began to be published and circulated in this country concerning the merits and possibilities of open education for the American classroom (Barth, 1972).

Perhaps the most noteworthy of these numerous personal accounts were the articles by Joseph Featherstone which appeared in The New Republic in August and September of 1967. In these articles** Featherstone intimated that the English development in open, informal education might well intrigue certain American educators. This interest originally kindled by Featherstone swelled tremendously with the amazing popularity of Charles Silberman's report (see Silberman, 1970) in 1970 documenting the now familiar crises, in which he contrasted...
American rigidity and "joylessness" with English informality (Fisher, 1972). What Silberman with the publication of *Crises in the Classroom* accomplished was to articulate a feeling that had gnawed at many Americans for a long time—the uneasy feeling that many elementary schools are actually harmful to a child's natural development (Newsweek, May 3, 1971). Following the publication of these accounts (Featherstone, 1968a and Silberman, 1970), interest in open education grew rapidly in the United States.

Another early pioneer and booster of open education in this country has been Professor Lillian Weber of the City College of New York. Professor Weber is unique in that she was one of the first educators actually to return from England and then to get busy with the difficult job of actually implementing programs modeled after the English approach. In 1967 Professor Weber returned from an 18-month study and work trip in England firm in her conviction that public schools in New York City had a long way to go in being honestly supportive of the way children learn. The result of her work has been the formation of "open corridor" hours in various public schools in New York City. These periods allow the children to explore and learn through activities that are self-directed and allow for meaningful interaction with the environment (The Center Forum, 1969).

One of the involved principals in Professor Weber's program discussed (Schneir and Schneir, 1971:97) the pros and cons of the
program by saying:

There's a certain feeling of life here at 84 (P.S. 84) that I didn't find any place else. Along with that there goes a lot of other things; we've had a lot of problems, lot of conflict, lot of turmoil. I'd rather live with that than be in a place where nothing is happening.

The "open corridor" program of Professor Weber's is meeting success and acceptance in the elementary schools of New York City. It is estimated that presently, in New York City, notably in the East Bronx and Brooklyn areas, many teachers are changing their classrooms to permit a more open approach (Schneir and Schneir, 1971).

In the 1960's, according to Barth (1972), the Education Development Center (EDC) in Newton, Massachusetts, was unquestionably the unofficial center for thought, dissemination, and implementation of open education in the United States. Within EDC, the Elementary Science Study (ESS) was the primary contributor to the growth of open education on this side of the Atlantic. Through ESS, an informal, remarkable sharing of people, ideas, and materials took place between English and American educators anxious to see programs of open education implemented successfully. As a result of this early work done by the ESS staff some 90 elementary classrooms in ten school districts throughout the Eastern half of the United States were established to serve as models for others anxious to move toward more open programs of elementary education.

The growth of open education in this country can also be
witnessed by the number of state departments of education, such as those in New York, New Jersey, Massachusetts, and Vermont which are showing considerable enthusiasm (and allocation of funds) for open education, as are many federally funded follow through programs. In addition, certain teacher-training institutions all over the country, such as those at Leslie College, Wheelock College in Boston, the University of North Dakota, the University of Connecticut, and Harvard are devoting a great deal of time and energy toward open education (Barth, 1972).

With this great increase in interest and enthusiasm for the possibilities of open education the question that remains is where do we stand today in terms of seeing programs successfully implemented and maintained in the elementary schools of this country. Perhaps the current state of the movement toward open education in this country was best presented by the title of a very timely article by Hapgood (1971). The article entitled "The Open Classroom: Protect It From Its Friends" stated that the movement in this country toward open education is at a very critical stage. Hapgood (1971:66) believes that:

There is a very real danger that the open classroom will go the same sad way as the "children's house"methods of Montessori and the "progressive education" of Dewey and be discarded by enthusiasts who have only half-understood its principles.

It is crucial, according to Hapgood (1971:66), that Americans anxious to implement programs of open education realize that:

We cannot reach anything like the English achievement without fully understanding the principles on which it is based, without
going through the necessary process of preparation, and without
developing the supportive methods to foster it.

The movement toward open education in this country seems to be
at a definite crossroads. If the advocates of open education are
knowledgeable, understanding and sincere in their commitments, and
willing to start on a small scale and work diligently toward their
objectives then open education has a real chance to change some of the
curriculum practices found in elementary education. If, on the other
hand, implementation is tried on a wholesale scale in an overnight
attempt to change the educational format in elementary schools, then
open education will likely "follow team teaching, programmed instruc-
tion, and educational television to the graveyard of educational
panaceas" (Barth and Rathbone, 1969:1-2).

OBSTACLES TO IMPLEMENTATION

This section of the review of literature will examine some of
the various obstacles that have been encountered by educators as they
moved towards programs of open education.

One of the major obstacles that seems inherent in the movement
toward open education in this country is the difficulty found in naming
or labeling the approach successfully and the subsequent problems with
a specific label. As in any learned paper the denotation and connota-
tion of terms is remiss if it does not reflect changes in meaning as
a result of the times when it is written, hence the writer believes that the term "open education" means something different today than it did twenty years ago, and it will mean something different twenty years hence. It is also true that with any term a certain degree of ambiguity is associated with it because of the various frames of reference brought to bear upon it (Bryson, 1972). An example of this could be found in the view that many people have in associating open education with openness in the Summerhillian sense, where rules are determined by the corporate community meeting in open council, and where children have the freedom to do as they please. When in truth programs of open education in English schools are not as loosely constructed as they first appear to be. For the most part, they retain (sometimes only in attenuated form) a number of traditional expectations and procedures, which supply a sense of continuity with the past (Fisher, 1972).

Another problem in trying to label the approach is that as a descriptive term, "open education" can be relatively meaningless. What is to be defined as open and consequently what is to be considered closed? When education becomes completely open, what remains? The answer might well turn out to be nothing. When the concept is carried to its logical conclusion, it leaves little place for schools as we know them today. Openness must therefore be considered as a relative term describing a condition which can contribute to more tangible and more conclusive qualities (Fisher, 1972).
Barth (1972) has also mentioned the polarization that can occur within a faculty due to the use of labels. If a classroom in a school becomes known as an "open classroom" what are the others to be called--"closed classrooms?", "traditional classrooms?", "regular classrooms?", It must be recognized that in fact there is no term totally devoid of perjorative overtones.

In addition to introducing divisive forces within a school faculty, labels and their accompanying stereotype, can also limit a teacher's flexibility of response. An example of this might be the "open classroom" teacher who finds it difficult to offer large group instruction, even if this was felt as quite necessary for the children, because this action would somehow contradict what a teacher in an open classroom does (Barth, 1972).

Going a step farther with the problem of labels and the resulting pitfalls that educators must be aware of Barth (1972:219) states that:

It will be unfortunate indeed if labels and their accompanying constraints take the place of administrative dicta in calcifying practice and depriving teachers of the flexibility and freedom to make instructional decisions on the basis of their observations of children's needs.

The damage often done by attempting to fix a label to a process of education described in this paper has caused Featherstone to comment:
I'm growing wary of slogans like open education. . . . I think they may do more harm than good. Currently I'm seeking to enlist everybody in favor of open, informal schooling into a movement whose one slogan will be a demand for decent schools (Barth, 1972:X).

Yet, labeling does serve a positive function. Alexander (1969:29) referred to labels as the "vehicles of meaning wherever communication is involved." In a conversation with Dr. Gerald Sullivan of Montana State University, Dr. Sullivan reiterated the importance of labeling by stating that:

Yes, indeed labeling does serve a useful function. Labeling allows the reader to call to mind certain characteristics commonly associated with the previously mentioned label or name.

So it is that while we are certainly beset with problems and pitfalls in labeling we must somehow give this approach, this method, this process a name, and with all of its shortcomings the term "open education" seems to be most appropriate for the purposes of this work.

Another major obstacle confronting involved educators in open education is the attempt by some teachers and administrators to achieve instant reform— to arrive by one giant step at a kind of education that has taken many years to achieve in England. The American pattern is often that of a teacher who tried to revolutionize the classroom after being inspired by a summer workshop, or worse yet, by a single journal article. After a brief period of failure that is always inevitable (since neither she, her students, nor the community has been sufficiently prepared for the change), she abandons the new approach
as impractical and foolish (Hapgood, 1971). Oettinger (1969:121) has expressed a similar distrust of instant reform by observing that often a promising innovation will come:

... roaring in on a wave of rhetoric, there is a bustle to get on the bandwagon, things seem to be burgeoning, and then suddenly disenchantment occurs when reality falls short of the glowing press releases.

The plea against the attempt at instant reform and the resulting need for time and patience has also been sounded by other writers. Hertzberg and Stone (1972:73) note that the "... most important ingredient of openness is time. ... The British have been involved in the open education idea for over forty years, and they are still willing to probe. So why are we Americans in such a rush?" Hertzberg and Stone (1972:73) continue with this theme by saying that "if open education is to emerge from the pressure cooker, much time is needed for its proper growth."

This writer believes that an obstacle often encountered in moving toward a program of open education is the teacher or administrator who say they want open education but are ready to change only the appearances. They install water and sand tables for math, work tables in place of desks, classes in corridors, and nature study. They adopt the vocabulary: "integrated day," "interest areas," "free choice," and "student initiated learning." However, few of these educators have a real understanding of, let alone commitment to, the
philosophical, personal, and professional roots from which these practices have sprung and upon which they depend so completely for success. By only changing physical appearances to more closely resemble English open classrooms without understanding, accepting, and believing in the rationale underlying, these changes will lead inevitably to failure and conflict among children, teachers, administrators, and parents (Barth, 1971).

For the change to open education to be valid, physical changes must follow, not precede, an inner change on the part of the teacher. A different way of seeing and thinking about children, about learning (including their own), about the place of feelings in learning, and about the depth and meaning of interpersonal relationships must be examined by each teacher (Yeomans, 1971).

Another major obstacle in the path of Americans anxious to work toward programs of open education in the schools is the role quite often assigned to the principal by the local school system. This assigned role of the American elementary principal should be compared with his English counterpart--the head teacher. Katz (1971:28) makes this point by saying that:

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.
The institutional demands of the two positions are quite different in many instances. According to Hertzberg and Stone (1971) the English head teacher is mostly involved with students and teachers, while his American counterpart, the principal, is mostly involved with various and numerous administrative chores. As a result of this difference in role definition the head teacher is in a much better position to strive for curriculum improvements. Fisher (1972:15) states that the English head teacher "takes seriously the responsibility for curriculum leadership in his school."

Numerous factors seem to account for this difference in role definition between English head teachers and American principals (Hertzberg and Stone, 1972). Perhaps the most deciding factor is the autonomy granted to the person who is placed in charge of the school. In England the head teacher sets "the path of education in her school" (Weber, 1971:45). Blackie (1971:43) reiterates this by saying that "once he is appointed, a head teacher is given almost complete freedom in deciding how his school is to be run." The head teacher is also given "the power to run it as he thinks best" (Blackie, 1971:43). The head teacher is then actually responsible for--and for the most part free to shape and mold--methods of teaching, curriculum, materials, and staffing (Hertzberg and Stone, 1971).

Not only is there the feeling of freedom on the part of the head teacher but also the fact of freedom, expressed in government
The only uniformity of practice that the Board of Education desire to see in the teaching of public elementary schools is that each teacher shall think for himself, and work out for himself such methods of teaching as may use his powers to the best advantage and be best suited to the particular needs and conditions of the school. Uniformity in detail of practice (except in the mere routine of school management) is not desirable, even if it were attainable. But freedom implies a corresponding responsibility in its use.

Needless to say most American principals do not enjoy this degree of autonomy. The extraneous responsibilities that come with the elementary principalship on this side of the Atlantic are much greater. Here the principal is responsible in part to central administrative personnel, to a local board of education, to local taxpayers, and to numerous state and federal governmental regulations. He must, therefore, work with systemwide curriculum guides, maintain the safety and security of the students in predetermined ways, deal with parental demands and requests, use state-adopted texts, and last but not least, administer federally sponsored lunch and milk programs (Hertzberg and Stone, 1971).

Another factor which may account for the difference in the two roles is school size. The majority of British head teachers work in a school of about two hundred and fifty students, while the American elementary principal usually works with more than double that number (Hertzberg and Stone, 1971). According to Silberman (1971:275) this
"difference in size is not coincidental: the English have deliberately opted for small schools." Katz (1971) has noted that the small size of the English schools acts as a definite contributor to the relatively small administrative demands placed on English head teachers. In this kind of organizational arrangement it is easier for the head teacher to know and work with the staff for curriculum improvement. He can better help a staff of ten than thirty. He can get to know how these teachers work with, and relate to children, reinforce teacher strengths, try to minimize weaknesses, and work with an individual teacher over a period so that there is a continuity and depth to the help that is offered (Hergzberg and Stone, 1971).

Another factor responsible for the difference in role between English head teachers and American elementary principals is to be found in the presence or absence of certain community pressures. The English head teacher who is anxious to innovate in the school, does. He is much freer to experiment, to try things out, to stimulate a group of teachers to use new materials, to employ different teaching methods, to work with new kinds of organizational patterns than his American counterpart. The American principal is less free to take such actions. He is accountable to the taxpayer (Hertzberg and Stone, 1971). This "vulnerability to public pressures probably causes American school people to be reluctant to adopt a child-centered approach to teaching" (Rogers, 1969:74). Upper-middle-class parents
in the United States often tend to serve as local opinion leaders and school officials often dare not to tread upon them; in England many of these parents simply do not care what happens in the state schools (Fisher, 1972). As a result of this lack of interest among a potentially vocal and influential group the autonomy of the English head teacher is enhanced.

If open education is to have a fundamental and positive influence on American education, and if changes are to be consciously made, rhetoric and good intentions will not suffice (Barth, 1971). What is needed for open education to work is a real understanding of the philosophical and theoretical foundations of the movement and a sincere belief in educating children in this manner. Without this understanding and sincere belief on the part of the individual teacher, open education will end up as traditional education with simply a new name for the same old, outdated practices.

A warning issued by John Dewey in his later years concerning the progressive movement in education seems appropriate for the current movement toward open education. Dewey (Dworkin, 1959:129) warned that "the real danger is in perpetuating the past under forms that claim to be new but are only disguises of the old." A classroom that has changed only in appearances to resemble an open classroom and consequently run without a complete knowledge and belief in its philosophical foundations and inner workings, can be a miserable experience for
the children as well as the teacher (Murrow and Murrow, 1971).

STRATEGIES FOR IMPLEMENTATION

This section of the review of literature will look at the various suggestions that have been mentioned by numerous writers for successfully implementing and maintaining programs of open education in the elementary grades. It should be noted that the writer in conducting this painstaking review of literature has not been able to find anything that resembles a thorough and detailed plan for initiating and maintaining programs of open education.

Implementing

What are some of the suggestions that have been made to aid in initiating programs of open education in the elementary grades?

Hapgood (1971) has suggested that perhaps the first step should be a thorough preparation of the entire community. Moral support for good education from the community is perhaps more important than money. Only when there is strong support and understanding in the community can a start be made toward meaningful change. Even a pilot program on a very small scale must be widely approved and understood before it is started, for it will almost certainly experience difficulties that will be defeating to the program unless there is widespread faith, fortitude, and patience, and at the same time an honest reporting about
what is going on. The reporting by the school to the involved parents of what is happening in terms of changed procedures and curriculum should be done in a "matter of fact" manner. The schools should be careful to avoid fanfare and educational jargon in communicating to the public so that unrealistic expectations will not develop (Johnson and Page, 1971). The schools should also be careful to prevent premature exposure because exposure too early can create unrealistic expectations and be a serious threat to success (Hertzberg and Stone, 1972).

Andreae (1970) has suggested that one of the best ways to inform and explain the program to parents is through the formation of an Advisory Board, consisting of one or two parents from each involved classroom. The teachers from the open classrooms would meet with this board to discuss the parents' concerns and questions and to ascertain from them how they could best meet the needs of the remaining parents. The Advisory Board would be responsible for bringing to the faculty's attention other parents' questions and comments, and for relaying needed information to parents which might prove helpful in explaining the program.

Parents and other community members can be exposed to what open education is, and how it can be obtained, through films, speakers, newspaper articles, or discussion groups. Each effort to reach people must be carefully planned to be to the point, sincere, and honest in
the presentation (Hapgood, 1971). The community must be involved in the program; if they understand and believe in it, then the foundation is firm to build the program upon.

The importance of using the correct selecting procedures for determining the teachers who will participate in open education classrooms cannot be stressed enough. In selecting teachers to participate, administrators must exercise extreme caution in not forcing any teacher into such a program. Johnson and Page (1971:66) have stated that "participation by teachers must be voluntary." Spodek (1970:73) has made the same point by saying that in fact "any program of open education imposed on teachers cannot be considered open education." Realizing that administrators have never been, and will never be able to change teacher's beliefs and practices by fiat (Barth and Rathbone, 1969), participation in such an endeavor must be by teachers who are genuinely understanding and sympathetic toward the approach. If change toward open education is forced upon teachers it is a safe bet that open education would follow other recently touted alternative approaches to the graveyard of educational gimmickery (Barth and Rathbone, 1969).

If a successful implementation depends in part on voluntary participation by teachers what are the characteristics of volunteer teachers who would likely be successful in such an endeavor?

According to Johnson and Page (1971) teachers of all ages, experiences, and backgrounds can make the transition to open classrooms
but experienced, emotionally secure, conventional teachers who have a constructive relationship with children have the best chances for success. Hassett and Weinberg (1972) believe that such a program is best introduced by a teacher with proven classroom ability, coupled with discipline control, who is confident of the classroom objectives and how to attain them. In looking further into the needed characteristics of involved teachers Andreae (1970) has mentioned the need for a strong self-concept, and the awareness of personal inadequacies on the part of the teacher. The awareness of individual classroom inadequacies allowed these teachers to admit their weaknesses openly and honestly; this caused many of them to seek help and to be flexible enough to make positive use of the help received.

While the desired teacher characteristics mentioned in the preceding discussion do not offer the concerned administrator a definitive list of reliable predictors of teacher success in an open classroom they do offer a point of departure for further discussion.*

*Other works which relate to desired teacher characteristics would include:


Having discussed the need for involving and preparing the community and the importance in selecting the proper teachers for the program the next question is how does a teacher actually start the move toward a more open classroom? While there are probably as many ways to begin the move toward an open classroom as there are teachers every teacher should be encouraged to tailor the program to suit his own personality and classroom style (Hassett and Weinberg, 1972). It seems reasonable to assume that teachers beginning the movement toward an open classroom should begin the transition by retaining those elements of the conventional setting which they need in order to feel reasonably secure (Johnson and Page, 1971). Hertzberg and Stone (1972:73) writing in the *National Elementary Principal* also reiterate this point:

> ... teachers who are not ready to make a large-scale transition can make successful changes in specific areas in which they feel most comfortable.

Some teachers may start this move with art, others with science, some with math, others will begin with social studies; the important thing is to pick a starting point where the teacher feels comfortable and competent and then expand into other areas (Hertzberg and Stone, 1972).

Featherstone (1968a) has suggested that teachers might begin to move to an open classroom by allowing the children one free period in the day, when writing, painting, and working with different mathematical apparatus is encouraged. As the children get used to working
on their own, the teachers gradually extend the free period and start altering the layout of the classroom. The importance of altering the physical arrangement of the room to provide interest areas to correspond with the new openness in the various curriculum areas is stressed by Hassett and Weinberg (1972). The importance of the physical arrangement of the room cannot be underestimated. It provides the means for valuable learning interactions between student and student, between student and teacher, and between student and environment. Featherstone (1968a:2) has suggested that principals:

making the transition from formal to informal methods often start with a pair of willing teachers—with the idea that two people encourage each other, help create materials, and cheer one another up when things go badly.

The role of the principal in getting a program of open education started successfully and then in providing the necessary support for its continuation and growth is vital. Hassett and Weinberg (1972:117-118) have expressed this view by stating that "lack of support on the part of the principal can kill any new program in a school."

With this realization of the need for administrative understanding and support what might be the best way for an enthusiastic principal to get a program of open education started?

An article in the National Elementary Principal (1972) expressed the view that a principal interested in moving his staff in
the direction of open education should strive to create a positive building climate for educational growth in this direction. This positive climate for growth could be partially accomplished by the principal bringing together the proper mix of people and resources. It has been suggested (Nation's Schools, 1971) that a principal should start this move by engaging his staff in discussions and readings concerning open education. During this start the principal must make sure that no teacher is forced to initiate the program until he understands it quite thoroughly and has decided voluntarily to put it into practice in the classroom. Featherstone (1968a) has also stressed the importance of voluntary participation by teachers by mentioning that an important key to the success of the primary school revolution in England has been the provisions made for the teachers who don't approve of the new methods.

In actually getting the program started Andree (1970) maintains that the role of the principal must be much broader than that often observed in current practice. With this new role priority would be more obviously placed on the following: (1) learning alongside the teachers, (2) supporting the teachers whenever possible by giving encouragement, (3) showing genuine interest—as well as seeing that adequate materials are supplied, and (4) providing the needed answers to parents' questions. In helping teachers to get started toward programs of open education Hertzberg and Stone (1971) have discussed eight ways a principal might aid in this move. These suggestions range
from the importance of the principal in providing for individual conferences with teachers to promote individual growth to the importance of the principal in helping the faculty to become acquainted with a variety of materials to be used for the improvement of instruction. Hassett and Weinberg (1972) have suggested that the principal could provide needed support to involved teachers by: (1) making materials available, (2) providing small amounts of money to get the program started, (3) classroom visits to show genuine concern to the teacher and pupils, and (4) positive suggestions for further developments.

In recognizing the extreme need for active administrative support Johnson and Page (1971:66) maintain that "visible administrative support for teachers who are making changes is a necessity, and actual administrator participation in the classroom is highly desireable."

For the teacher or administrator enthusiastic about the possibilities of open education it is also important to "remind ourselves that there is no single way that works for everyone" (National Elementary Principal, 1972:78). There will be both teachers and students who "will not function well in an open classroom, even after extended periods of time. Alternatives which have more structure should be available. . . ." (Johnson and Page, 1971:68). It is important for both teachers and administrators to recognize that "embracing the new can occur in addition to, rather than instead of, retaining the old" (National Elementary Principal, 1972:68).
As programs of open education are successfully started at the elementary level the subsequent problem to confront involved teachers and administrators is one of providing the proper climate for maintenance and continued growth of the individual problems. What are some of the services that seem necessary to provide involved teachers in such programs if they are to conquer often encountered problems, and as a result provide for continued growth of the programs? These questions will be discussed in this section.

After working with an elementary staff for two years Andreae (1970:34) reported that perhaps the biggest problem in moving toward open education was the teacher's "lack of practical foresight..." Teachers often failed to realize such simple things as how important it is to have the paint near the sink so when spills occurred a child would not walk across the room dripping paint all the way!

The tendency of some teachers to forget that children are natural creators, and given the opportunities, the materials the the encouragement, student ideas would certainly not be lacking proved to also be a problem. As a result many of the teachers beginning to start an open classroom had a tendency to spend the vast majority of their time and energy thinking up ideas and experiences for the children rather than simply providing the environment that would allow the children to create on their own (Andreae, 1970). Wolfson (Howes,
1970) reported that getting the classroom stocked with an adequate amount and variety of materials in each of the interest areas also represented a frequent concern for many teachers. When the classrooms were stocked adequately with various and numerous materials for the children to interact with some teachers found it very difficult to cope with the many new housekeeping chores that arose from the added materials (Andreae, 1970).

Due in part to their previous experience in more traditional classrooms some teachers had added problems at first with student behavior. As the classroom began to open up the children began to form a more natural relationship with the teacher and their reactions became much more natural. For some teachers it was difficult for them "not to take this behavior as a personal reflection of their ability to control the class" (Andreae, 1970:37).

The reaction of other teachers who were not engaged in the open classroom programs seemed to oftentimes bother teachers just starting such programs. The involved teachers felt that these teachers were reacting unfavorably to what was happening in the open classrooms (Howes, 1970). Another experience that proved unsettling to many of these teachers involved in open classrooms was the feeling of uncertainty often experienced. Previously there had always been a manual to isolate each step and define what should be covered in each subject area. Now the teachers were on their own to provide for the
individual needs of the children and the resulting fear of the unknown proved great at times (Andrease, 1970).

If the preceding teacher oriented problems are to be conquered several services, each with its own functions, seems necessary.

One of the most important of these needed services is in-service training for the teachers. Schafer (1967) believes that if open education is to work in the elementary grades, teachers must be provided with a means to continue meaningful retraining (in-service programs) throughout their career. Hapgood (1971) maintains that this retraining must be a continuous process; it cannot depend on one period of days or weeks but must extend over the first year and be offered at intervals in the ensuing years. Hapgood (1971) continues with the belief that the in-service training program for first year teachers should be two-pronged. First, it should offer teachers new and needed competencies--skills in teaching children things they want to learn. Secondly, the in-service program should provide experiences that allow the involved teachers to learn from firsthand experimentation that children must actively do their own learning. What the program must do is not lecture about modern learning theory but rather provide the teacher with the chance to create exciting and challenging learning situations for individual children to respond to. This could be done by working in the beginning with Piaget tasks for children and continuing on to develop the challenging learning situations for the
individual student.

The importance of involving the administrators of such programs in the in-service workshops has been stressed by several writers. Silberman (1970:321) has pointed out that:

The teachers re-education that accompanies introduction of informal methods must include the supervisors as well, for they, too, are victims of the school culture.

Hapgood (1971:75) believes that "administrators who would take on the role of headmasters should be students alongside their teachers."

One of the important functions served by the in-service workshops is that of providing support for teachers initiating these new programs. Armington (1969) maintains that teachers who are working in ways that are drastically different from what they have known in the past need continuing support, and in-service workshops can provide this needed support. Concerning the definite need for teacher support during this period of transition Johnson and Page (1971:66) state that "all teachers undergoing change need someone to consult with at frequent intervals and in a highly personal way." Silberman (1970:320) believes that:

It is essential that someone be available to relieve teachers' anxiety about what their supervisors may say if they see children talking or moving about in class.

Perhaps the person best suited for this job of providing support and encouragement to involved teachers is a consultant, or advisor; with no supervisory responsibilities in terms of evaluating teacher
performance (Silberman, 1970). This person would have to be able to listen to constant anxieties and pessimism, and to offer support and encouragement continually, while coping with the red tape that the implementation of such a program always encounters (Andreae, 1970). Besides providing needed support and encouragement to teachers the consultant would also act as "facilitator between administration and principals, principals and teachers, teachers and children, or teachers and parents... (Andreae, 1970:50). Another extremely important role assigned to the consultant is one of providing opportunities for the teachers to have experiences and then to facilitate the teachers' role in providing experiences that would be relevant to the individual needs of the children (Andreae, 1970). Armington (1969) has discussed the major activities consultants might be involved in ranging from (1) conducting orientation courses for teachers and administrators in the philosophy of the open classroom and in practical techniques for making it work, to (2) maintaining communication with appropriate administrators, bringing to their attention ways in which they might aid teachers involved.

From the preceding discussion it is quite evident that the problems faced in initiating and maintaining programs of open education are formidable indeed. Realizing this the aim of this paper will be to hopefully develop models which will give concerned teachers and administrators one approach which might provide for a successful
A selected review of the literature on planned change was conducted in order to complete this section on related literature. The purpose of this review was to develop, through an appraisal of general works in the area, a greater understanding of what is known about the successful implementation of organizational innovations. Havelock (1970) mentioned that writings dealing with research in the area of planned organizational change would include bibliographical listings for over 4,000 works, for this reason the writer attempted to selectively choose certain salient characteristics or factors which might be crucial for successful program innovation. Specifically, the writings in the area of planned change were reviewed with the hope of gleaning bits of information that might be useful to educators anxious to implement programs of open education in the elementary grades.

Nearly two hundred years ago various experts on innovation commented on human nature in the Declaration of Independence to the effect that:

All experience hath shown, that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed (Geiser, 1972: 25).
Toffler (1970:45) has maintained that:

It would be a mistake to assume that the present-day educational system is unchanging. On the contrary it is undergoing rapid change. But much of this change is no more than an attempt to refine the existent machinery, making it every more efficient in pursuit of obsolete goals.

At first reading the two preceding quotations may seem to be in opposition to one another, but upon closer perusal it is evident that both are presenting the same message, i.e., that man in many instances would rather exist with the status-quo, regardless of the degree of uncomfortability associated with it, than to try to institute meaningful change that could lead to the betterment of all.

There are teachers and administrators inhabiting all of our public schools who genuinely want to change the educational environment surrounding our children, but do not. Why are the vast majority of teachers and administrators so afraid of change? Why do we find so few educators who are willing to try something different with only the thought or hope of helping the children?

Geiser (1972) pointed out that often there are many teachers who would like to change what and how they teach but do not. The reason is usually the response of their fellow teachers to any hint of deviation from the standard operating procedures of the school. How many times have we heard a dialogue in the teachers' lounge much like the following directed at the teacher who would like to change:
"We tried that once and it didn't work," says one teacher who has been teaching for quite a few years and has resisted quite a few changes. Thus the teacher who wants to change is made to feel behind the times.

"But we've always done it this way," says the teacher who has been on the faculty longer than anyone else. "The children and their parents will be upset if we change it now." Now the young teacher who wants to change turns pale at the thought of irate parents and children.

"I'd love to do it with you," says another faculty member, "but suppose we tried it and the children didn't learn?" The now somewhat insecure young teacher who wants to change blushes.

"Perhaps it isn't such a good idea after all," she mumbles (Geiser, 1972:25).

The barriers to change are numerous and varied. John Gardner (1965) discussed several of the barriers to change in a chapter entitled "Obstacles to Renewal." Gardner pointed out that many of the barriers to change are to be found in the minds of the people, rather than in any external arrangements. Examples of these major barriers to change would include the habits, attitudes, precedents, and belief systems of the involved participants (Morphet, et al., 1967). Continuing with this theme, Gardner (1965:43) commented:

As every good management consultant knows, it is relatively easy to specify the things about an organization that need renewal; what is difficult is to cope with the habits and attitudes that permitted the organization to go to seed in the first place.

Gardner (1965) also notes that people tend to become nostalgic about the "good old days," "the golden age" and often defend present practice by relating them to "high moral principles." Both practices
are found in people preferring not to be a part of the change process. Lippitt (1958:83) reinforced the preceding point made by Gardner in referring to the seeming degree of safety found in the plea for the "good old days" by saying:

We might also include among familiar satisfactions the modeling of present behavior on past traditions, for the conviction that things are being done now as they have always been done can be a source of great pleasure and security. Another of the major objections to change invokes the spectre of the unknown and the potentially destructive features often associated with change. This is the "What if they don't learn?" or "What will happen to them next year?" objection (Geiser, 1972:31). The fear of failure and of the unknown often dulls the appetite for innovation (Miller, 1967). The client system may well fear that it will be unable to make the necessary changes successfully or that, once accomplished, the change will demand things of people which they are unable to produce. To these people only the status quo seems safe; anything else seems to carry a threat of failure (Lippitt, 1958).

Change is also a threat to an individual's adjustment. When you say, "Let's change," many people respond by saying, "What's wrong with what I've been doing?" By proposing change the prior adequacy of those involved is questioned and to some people that is the same as saying all they have done in the past is worthless (Geiser, 1972:31).

In discussing further the factors inhibiting change, Miller
(1967:9) made the obvious point that "laziness as an inhibiting factor is almost too common for mention; and yet, how can it be avoided?"

Innovations associated with change require hard work and extra effort. Some educators are just drawing their paychecks and working with little real professional zeal or dedication. As a result the movement of change is greatly inhibited (Miller, 1967).

Perhaps the most familiar form of resistance to change is that of clinging to existing satisfactions. This would include the situation in which subparts with vested interests know that they benefit from the status quo and want to keep it that way, as well as the situation in which the client system as a whole is reluctant to give up familiar types of satisfactions (Lippitt, 1958). This reluctance of people to depart from the known is certainly nothing new. In 1597, Francis Bacon wrote On Innovations in which he stated:

It is true, that what is settled by custom, though it be not good, at least it is fit. And those things which have long gone together are as if were confederate within themselves; whereas new things piece not so well; but though they help by their utility, yet they trouble by their inconformity. Besides, they are like strangers, more admired and less favored (Miller, 1967:8).

The limitations for change placed upon individuals and organizations by vested interests may make them much less venturesome than the individual or organization who through choice or necessity is "traveling light" (Gardner, 1965:51). Griffiths made a similar point by saying that "the number of innovations is inversely proportional to
the tenure of the chief administrator" (Miles, 1967:434).

The deadly influence, in terms of allowing for change, exerted by vested interest has caused Gardner (1965:53) to remark:

... they are among the most powerful forces producing rigidity and diminishing capacity for change. And these are the diseases of which organizations and societies die.

After spending time in the preceding pages discussing some of the often encountered obstacles to change the writer will not look at a portion of the various suggestions advanced by writers in the field for successful organizational change.

Warren Bennis (1966) identified eight traditional change strategies which represent a "common sense" approach to successful change. The eight strategies developed by Bennis (1966) for successful change ranged from the exposition and propagation which argues for the linking of great ideas with great men to the developmental research strategy which emphasizes the adaptation of basic research findings to the "real world." The assumption here seems to be that if it works in the abstract, it can be put to work in a practical way. While the right strategies proposed by Bennis differ in terms of assumptions, theoretical constructs, and values, they are similar in that each seeks to achieve some socially desirable goal through a planned process. Yet each of the strategies exhibits a basic weakness because it relies upon the unproven assumption that knowledge equals power. Information and knowledge are fundamental to planned strategy but a
Concerning the various ingredients or antecedents of successful organizational change Miles (1964) has maintained that before any innovation has a high adoption rate it must be of proven quality and value, easily demonstrable in its effect, have information about it easily available, the costs must be reasonable, and it must be accessible to the adopter. The work of Burns and Stalker (1961) and Mann and Neff (1961) support the notion that a past history of frequent change may make for an atmosphere of change within the organization that may also contribute to successful change. Other often encountered antecedents to successful change according to Greiner (1967) are a building of outside pressure and a resulting buildup of internal pressure which seeks relief. Greiner (1967) indicated that another antecedent to "success at change" in many organizations was a newcomer, a change agent intervening at the top of the organization, who initiated the changes he believed to be necessary. Havelock (1970) maintained that regardless of the job title and position the change agent can work in one of three primary ways. The change agent can be primarily: a catalyst, a solution give, or a process helper. After discussing the roles of the three various types of change agents Havelock (1970:5) commented that "probably the most important change agent role is that of helper in the processes of problem solving and innovating." Giacquinta (1968) also found that an outside expert
with a positive image, i.e., a change agent, seemed to have a definite positive impact on successful implementation of organizational innovations.

The importance of change agents during the initiation phase of the change process seems to be based on the following reasoning: In general, neither individual members nor organizations can competently evaluate or diagnose their existing situations with a real degree of objectivity. Outside change agents with expert knowledge are able to approach situations in a much more objective manner, and as a result their analyses are usually more realistic than those of organizational members. Change agents also help increase the amount of communication within the organization which generally leads to more information, greater knowledge, a clarification of problems, and an eventual resolution of defined conflicts (Giacquinta, 1968).

Havelock (1970) presented a model for rational problem solving which provides a meaningful way to incorporate the preceding antecedents of successful change into model form.
The preceding model starts with a recognized disturbance and subdivides the response "activity" into four steps: (1) a decision to do something; (2) an active attempt to define what the problem is; (3) a search for potential solutions; and (4) an application of one or more potential solutions to see if it will satisfy the need (Havelock, 1970).

Havelock (1970) proceeds from the model depicting stages in the change process to a discussion of the change agent as a vital factor in the movement toward successful organizational change. As Havelock (1970) previously mentioned, of the three change agent roles
probably the most important role is that of helper in the processes of innovating successfully in an organization.

The first thing (Stage 1) the successful change agent needs to develop, according to Havelock (1970), is a viable relationship with the prospective client or clients. A secure and reasonably well defined helping role is an essential place from which to start the movement toward successful change. Once established in the client system the change agent must find out if the client is aware of his own needs, and if the client has been able to define and articulate the needs as problem statements. This point in the change process is designated as Stage 2. With the client's problem well defined the client system needs to be able to identify and obtain resources related to possible solutions (Stage 3). Stage 4 is arrived at when the client system with a problem well defined and a good deal of relevant information at hand generates a range of alternatives, and then settles upon a potential solution. With the potential solution to the defined problem determined the next stage (Stage 5) occurs when the proposed solution adapted and reshaped to meet the special needs of the client. The reshaping of the proposed solution hopefully develops attitudes and behaviors supportive of the innovation within the client system. Finally the client needs to develop an internal capability to maintain the arrived at change and continue appropriate use without outside help (Havelock, 1971).
In much the same manner Bushnell (1971) outlined six steps that a school administrator might logically follow to improve the school's program. These steps include: (1) diagnosing the problem, (2) formulating objectives and criteria of effectiveness, (3) identifying constraints and needed resources, (4) selecting potential solutions, (5) evaluating these alternatives, and (6) implementing the selected alternative within the school system.

According to Bushnell (1971) step 1, diagnosing the problem, is quite necessary because until the organizational system, or parts of it, recognize that it is malfunctioning a successful systematic change strategy cannot be initiated. Step 2, formulating objectives, represents that point in the change process where those in the organization who seek reforms, have identified or separated the real from the imagined problems. With the formulation of objectives, the search for solutions can begin. In step 3, identifying constraints and needed resources, Bushness (1971) stresses the point that before launching any change effort, the individual or individuals striving for change should be fully aware of the past history and traditions which surround established practices, and should possess a detailed knowledge of the resources needed to successfully implement a new program. After having successfully analyzed the community concerns, identifying the underlying cause, or causes of these concerns, established specific objectives, and identified possible barriers and needed resources,
step 4, selecting potential solutions for the perceived problems is arrived at. Such a step involves the introduction of two important elements: (1) awareness of potential solutions arrived at through the systematic review of appropriate informational sources, and (2) the choice of the one solution which seems to best fit the problem at hand from the several promising alternatives. In step 5, evaluating alternatives, the individual working for change must select the best alternative from the array of possible courses of action. This selection necessarily involves establishing criteria for comparative purposes. Feasibility, workability, and effectiveness are three criteria that should be weighed in evaluating various alternatives. Feasibility in this instance is mainly determined by the constraints and needed resources specified under step 3. Workability in this model relates to the extent to which a potential solution can be successfully implemented. Effectiveness relates to the ability of the employed strategy to meet or exceed the stated objectives. The last stage, step 6, implementing the selected alternative, is reached when a potential solution has been decided upon and now the staff must go about implementing the strategy and gaining acceptance of it in the system (Bushnell, 1971).
SUMMARY

The writer attempted in this chapter to develop a foundation, through a review of related literature, for the later development of models which will hopefully aid teachers and administrators in implementing and maintaining programs of open education in the elementary grades. The writer attempted to aid future model development by discussing and answering the following pertinent questions:

1. What are the basic assumptions and theoretical principles which support open education?
2. Can open education be justified on the basis of these assumptions and theoretical principles?
3. What practical lessons for successful program implementation can be learned from reviewing the historical development of open education in England, and more recently in the United States?
4. What are some of the obstacles often encountered by teachers and principals as they move toward programs of open education?
5. What are some of the suggestions that have been advanced for implementing and maintaining programs of open education successfully?
6. What are the various aspects of change that must be recognized and understood by those involved in open education if the programs are to be successful?
The writer attempted to answer question 1 by first of all dis-
cussing the various assumptions concerning children and learning that
form an integral part of the foundation for open education. In present-
ing this portion of the program justification the writer strived to
recount important points concerning children's natural curiosity. It
was maintained that children are by nature very curious beings, as a
result they will explore their environment in a meaningful way with a
minimum of adult intervention. Along this same vein the view was pre-
sented that not only can children initiate exploration of their environ-
ment but they can sustain such activity over a fairly long period of
time as well, if the environment is nonthreatening to this natural
drive. The natural curiosity of children grows and blooms just as a
plant grows and blooms in the proper environment, but in a hostile
environment, i.e., one that threatens this natural drive, the spirit
of curiosity will soon wither due to a lack of proper nutrients just
as a plant will cease to grow if it is not provided with the proper
nutrients.

The importance of play as the child's means of living and
learning about life was also presented and documented. The term play
was used in the sense of involvement with the environment as opposed
to non-involvement. The point that significant learning on the part
of the child is often acquired through actively "doing" was also
documented. The "doing" in this sense could be considered as play
because it represents the active involvement of the child with various aspects of the environment in a genuine learning relationship. Play was also viewed as quite important to children because often it provides the means which children can reconcile their inner lives with external reality.

The writer continued the review of literature by next looking at some of the theoretical principles that buttress the open education approach to elementary education.

One of the theoretical principles documented in this section was that active exploration in rich and varied environments, offering a wide array of manipulative materials greatly facilitates children's learning. The importance of the interaction (both verbal and physical) found between the child and the surrounding environment was documented by various authorities. The point was documented that the source of motivation resides not wholly in the child, nor in the external world, but in the interaction of one with another. The resulting implication for teachers concerned the necessity of providing for social and physical situations that allow children to interact with the various facets of their environment. The importance of providing not just a learning environment but a "rich and crucial" one was also discussed at some length.

Concerning the intellectual development of children the view that children need time to learn; that they go through various
developmental stages, each in their own way at their own pace; and that their thinking progresses in sequence from concrete to abstract was also presented.

In attempting to answer question 2, the natural characteristics of the "healthy child" were discussed. The term healthy child refers to the child who is psychologically and spiritually alive with life; the child who has not yet conceded the natural tendencies of life to a modern society; the child who is comfortable, content and spontaneous with himself and the world. The characteristics of the healthy child included curiosity, spontaneity, creativity, and the striving for self-realization. It was found that the natural characteristics of the healthy child were certainly recognized and provided for in the basic assumptions, theoretical principles, and philosophical beliefs which support open education. In fact, the maintenance and enhancement of the characteristics of the healthy child are congruent with the assumptions and principles upon which open education is based.

Perhaps the following figure (Figure 2) will visually demonstrate the position of an open classroom relative to the characteristics of the healthy child and the basic assumptions and theoretical principles common to open education.
Open education is based upon the premise that for education to be meaningful it must be in harmony with the natural characteristics of the healthy child. The school must provide for the self by allowing it to grow and remain genuine. In this sense the classroom might be thought of as a greenhouse which provides a very conducive environment for the growth and resulting blooming of individual plants of all descriptions. So the classroom must provide the proper environment (affective and physical) for the maximum growth of every student.

The writer attempted in the section dealing with the historical development of open education in Great Britain and the United States to determine what lessons might be learned for future attempts at open education by concerned educators in this country. In reviewing
the historical development of open education in Great Britain it became apparent quite soon that the current movement is not a sudden departure from the past. In fact, open education has been developing over the last half century in Great Britain. The development and growth of open education has occurred mainly through the insights and experiences of many teachers, administrators, local and national school inspectors and advisors, and various college and university personnel.

It would seem important to note that it has taken English open educationists over a half century of work to arrive at a point in time where approximately one third of English primary schools are developed and maintained according to the principles and beliefs of open education. Approximately another one third of the English primary schools are affected to varying degrees by open education. The remaining third of English primary schools are seemingly unaffected by the movement toward open education in the other schools.

In reviewing the historical development of open education in the United States it was soon evident that the movement is a fairly recent one on this side of the Atlantic. Perhaps the first real exposure of an American to open education occurred as late as 1961. After the initial exposure and resulting discussions the interests in the concept mushroomed considerably in this country. During the period following 1961 two American authors greatly increased the impact of
open education on the American people by their writings. One of these writers was Joseph Featherstone who wrote a series of three articles for the New Republic in August and September of 1967. These articles seemed to ignite a spark within some American educators for more information concerning English open education. This spark was fanned into a fire by the publication in 1970 of Charles Silberman's controversial book, Crises In The Classroom.

It now seems apparent that the movement toward open education in this country is at a definite crossroads. On the one hand there is a very real chance that open education may follow other recently touted solutions to the often encountered problems in elementary education to the trash heap of educational gimmickery simply because the concept is not understood nor believed in by those concerned. Open education in this country seems destined for oblivion if it is tried by some to implement the approach in one sweeping wholesale move overnight. On the other hand, if the advocates of open education are knowledgeable, understanding and sincere in their commitments, and willing to start on a small scale and work diligently toward their objectives then open education has a real chance to change some of the harmful practices currently found in many of our elementary schools.

In reviewing the literature for obstacles often encountered by involved teachers and administrators in the move toward programs of open education, the writer found problems inherent in the label
"open education."

The problems inherent in accurately and adequately labeling the approach were found to be several. The writer first found that as with any label the term "open education" has a certain degree of ambiguity associated with it. The term if fairly ambiguous because of the various frames of reference brought to bear upon it. The term open means many different things to various people. Some had simply associated an architectural openness with the term while others had associated the term with openness on a philosophical level, much in the Summerhillian sense.

Another problem encountered in trying to label the approach is that as a descriptive term, "open education" can be relatively meaningless. What is to be defined as open and consequently what is to be considered closed? As a result, openness must be considered as a relative term; one that must be described accurately and thoroughly in each instance if it is to convey the proper meaning. A polarization within a faculty can also be due to the faulty use of labels. If a classroom becomes known as an "open classroom" what are the others to be called? The misuse of labels can also limit a teacher's flexibility of response because labels often dictate accompanying stereotypes. The teacher in an open classroom might shy away from large group instruction even when the needs of the children dictated it because this form of instruction would somehow contradict what a teacher in an
open classroom should do.

While discussing the obstacles inherent in labeling the writer also discovered that labeling can be beneficial. With proper use, labels can call to mind on the part of the reader certain relevant characteristics commonly associated with a specific label.

The attempt by some teachers and administrators to achieve instant reform in the classroom or school is another often encountered obstacle to legitimate programs of open education. Often these teachers and administrators become caught up in the current educational novelty of the day and try to arrive in one giant step at a kind of education that has taken many years to achieve in England.

Another commonly encountered obstacle in the move toward more open classrooms has been the attempt by some to change only the physical appearance of the classroom or school to correspond to the numerous descriptions found in the literature of open classrooms and schools. It must be remembered that by only changing the physical appearances of the classroom or school to more closely resemble English open classrooms without a corresponding change in the theoretical and philosophical orientation of the teacher, or teachers, the resulting physical changes will lead inevitably to failure and resulting harm to the children.

The various roles assigned to the American principal as opposed to his counterpart—the English head teacher also generated
certain obstacles to the proper implementation of programs of open education in this country. From reviewing the literature it is evident that in many instances the roles assigned or assumed, as the case may be, by American elementary principals and English head teachers differ greatly. Perhaps an inkling of the different roles often assumed by each can be gained from examining the titles assigned to each. The English generally consider the school leader as first and foremost an expert teacher, or head teacher, someone quite knowledgeable and involved with curriculum improvement and the students. On the other hand the American principal is often an administrator first, and an involved educator second. Often we see elementary principals on this side of the Atlantic tied down with administrative minutia and sacrificing as a result curriculum improvement to individual teachers, local curriculum specialists, or often simply to happenstance. The American principal seems to be often tied to the office while the English head teacher’s office seems to be in each and every one of the classrooms in the building.

Why is there often such a difference in job responsibilities between the American principal and the English head teacher? The review of literature pointed out that the English head teacher has a much greater degree of autonomy in running a school than does the American principal in most instances. As a result of this degree of autonomy the English head teacher for the most part is free to shape
and mold the methods of teaching, curriculum offerings, materials and staffing in the school. The American elementary principal on the other hand in the majority of instances does not enjoy this degree of autonomy. The extraneous responsibilities are much greater for the American elementary principal. Here the principal is responsible in part to central administration personnel, to a local board of education, to local taxpayers, and to numerous state and federal agencies. As a result of these numerous and varied demands the American elementary principal in many instances is divorced from real involvement in the actual processes of education.

School size is another factor which may account in part for the difference in the two roles. The majority of English head teachers work in a school of about 250 students, while the American elementary principal usually works with at least double that number. With the difference in school size it is of course easier for the head teacher to work with the staff for curriculum improvement. Another factor responsible for the difference in roles is found in the presence or absence of certain community pressures. The English head teacher seemed much freer to explore, to try things out, to work with various teaching methods and organizational patterns than his American counterpart. The American principal appeared less free to take such actions in many instances because he is accountable to many more interests. The American elementary principal anxious to improve
curriculum change seems shackled at times by the administrative demands of the position.

In attempting to answer question 5 the writer reviewed the literature for possible suggestions that have been previously advanced by various authors for ways of successfully implementing and maintaining programs of open education.

Suggestions for important factors to be understood and reckoned with by those moving toward open education included the importance of preparing the entire community adequately for the program. The point that the program should be presented in a very "matter of fact" manner avoiding fanfare with premature exposure, and the use of boring educational jargon in presenting the program to the public was noted by many authorities. The importance of using the correct procedures for selecting teachers for the program was also stressed in the literature reviewed. The writer also reviewed a number of writings that pointed out that participation on the part of teachers must be voluntary. The suggestion was also made in the literature reviewed that a principal might start the program with a pair of knowledgeable and willing teachers who can provide support and reinforcement for each other.

In terms of actually setting a program of open education started by an individual teacher the writer found several suggestions in reviewing the literature. The importance of individual teachers tailoring the proposed program to fit their own personality ana
classroom style was recognized as an important ingredient in a successful attempt. Another suggestion made to teachers anxious to start moving toward an open classroom was the importance of picking a starting point in a curriculum area that is comfortable and expand gradually into the other curriculum areas. The review of literature also reinforced the importance that the physical arrangement, and the physical objects found within the classroom, can have on the degree of meaningful interaction between student and the surrounding classroom environment.

It was found in reviewing the literature that a principal anxious to initiate a program of open education under his supervision should strive to create a building climate conducive to change and growth. A staff might initially be involved in pertinent readings and discussions concerning the merits and demerits of open education and its applicability to existing situations. In looking toward such a program an elementary principal must be extremely careful not to force any teacher into such a program against their will, participation must be voluntary. The use of individual conferences between principal and teacher was mentioned as one way of better presenting the concept to the staff. Once a program has been started it is crucial for the principal to provide genuine interest, support, and encouragement to those involved teachers. This might be done by often visiting the involved classrooms and by making every effort to supply all the needed
In terms of maintaining and enhancing already existing programs of open education the review of literature indicated the importance of providing in-service training for involved teachers. The type of in-service program suggested would be a continuous program that provided experiences which allowed teachers to develop needed new competencies and programs that allowed the teachers to learn from firsthand experimentation that children must actively do their own learning. The orientation of such an in-service program would be upon the active involvement of all those participating. Too often in the past in-service programs have dealt with only the psychological or philosophical "why" relative to a certain program, paying little, if any, attention to the "how to" aspect of the concept in question.

The importance of involving principals in all facets of the in-service program in an active way was also stressed in the literature. Principals need to roll up their own sleeves and learn alongside the teachers. Not only does this tend to provide for a climate conducive to growth it also provides needed positive reinforcement for the teachers.

The review of literature also described the important role that might be assumed by a consultant to programs of open education. The consultant could provide much needed support and help to the involved teachers by giving demonstrations, conducting orientation courses, and
maintaining open lines of communication between teachers and administrators.

In the section dealing with planned organizational change the major works in the area were reviewed with the hope of gleaning bits of information that might prove useful to educators striving to implement programs of open education in the elementary grades. In attempting to determine what information concerning planned organizational change might be useful to educators anxious to implement programs of open education the writer looked first at the obstacles often encountered in the path of planned change. The next discussion dealt with some various suggestions for ways to successfully surmount commonly encountered obstacles to change.

In terms of obstacles to change it was found that often members of the organization would rather maintain the status-quo, regardless of the degree of uncomfortability associated with it, because to change would mean to venture into an unknown area that to many would be much more threatening and disturbing that the discomfort associated with the present status-quo. The spectre of the unknown and the potentially destructive forces associated with change are often strong deterrents to change in many people. At the same time it must also be readily admitted that within the teaching profession there are teachers still willing to change, but often they don't. It was found in reviewing the literature that often the main reason for this failure
on the part of teachers to try something new is due to the negative responses of fellow teachers. Something similar to "Oh, I tried that three years and it almost ruined the children" is often the comment made to the teacher who previously had been anxious to try something different.

It was also found in reviewing the literature that many barriers to change are found in the minds of people rather than in any external arrangements. Examples of these internal barriers to change would be the habits, attitudes, precedents, and belief systems of the involved individuals. It was also found that people often become rather nostalgic about the "good old days." This feeling of nostalgia, of course, hampers any movement for successful change. Laziness was another barrier to successful change found by the writer in reviewing the literature. For change to be successful hard work is required of those involved, and some individuals are not up to the task. It was also found in reviewing the literature that vested interest among individuals, or subgroups, within the organization tend to stifle the movement towards successful change because these individuals profit from the maintenance of the status-quo.

The various barriers often encountered in striving for successful organizational change were documented. Some of the various means of surmounting these barriers to change and thereby providing for successful organizational change were also documented.
Some of the factors often conducive to successful organizational change included a past history of change within the organization which accounted for an atmosphere appropriate for change. A certain internal tension, or dissatisfaction, which caused a searching for various means of eliminating the unrest within the individual or organization was also viewed as often being necessary in many instances for successful change to occur. The various stages in the searching for alternatives to the perceived internal tensions within the client system are represented by four stages: (1) a decision to do something; (2) an active attempt to define what the problem is; (3) a search for potential solutions; and (4) an application of one or more potential solutions to see if it will satisfy the need.

The review of literature also pointed out that another extremely important antecedent to successful change is oftentimes a change agent; a person with a positive image who intervenes at the top to initiate the change deemed as necessary. Of the various roles (catalyst, solution giver, process helper) that might be assumed by the change agent, the most important one oftentimes is that of process helper.

In working to achieve meaningful change in an organization there are various stages through which a change agent must successfully pass. These stages are: (1) development of a viable relationship with
the prospective client or clients; (2) determination if the client is aware of his own needs and if the client has been able to define and articulate these needs as problem statements; (3) identify and obtain resources related to possible solutions; (4) generation of a range of alternatives, and determination of a potential solution; (5) adapting and reshaping the proposed solution to meet the unique needs of the client; and (6) the development on the part of the client an internal capability to maintain the arrived at change and continue appropriate use without outside help.

The basic components of a systematic process for providing and allowing for successful change in an organization were documented at this point. The six steps that a school administrator might follow to improve the schools program are: (1) diagnosing the problem, (2) formulating objectives and criteria of effectiveness, (3) identifying constraints and needed resources, (4) selecting potential solutions, (5) evaluating these alternatives, and (6) implementing the selected alternatives within the school system.

The next chapter will discuss the results of a mailed questionnaire to administrators and teachers who have firsthand experience with attempts to implement programs of open education in the elementary grades.
Chapter 4

QUESTIONNAIRE RESULTS

In this chapter the writer will present, describe, and discuss the results of a mailed questionnaire to selected educators in the states of Montana and North Dakota.

In the following discussion of the teacher and administrator questionnaire results the writer will only narratively discuss those responses which were mentioned by 15.0 percent or more of the responding educators.

It should be noted at this point that the writer will present the more pertinent results of Section II of the teacher and administrator questionnaire in narrative form. The writer feels that the collected data can be presented in a more meaningful way by a narrative discussion as opposed to a graphic or tabular presentation. For readers interested in a tabular presentation of the collected data please refer to Appendices F and G.

Montana was chosen for this sample because the writer was anxious to see what problems, and possible solutions, have been experienced by elementary educators in his home state. North Dakota was chosen because of the fairly large number of teachers and principals within the state who have been exposed to the teacher training program which specializes in preparation for open classrooms at the Center for Teaching and Learning (formerly the New School for Behavioral
The writer felt the use of questionnaires could be valuable in gaining greater insights into some of the antecedents of successful programs of open education. The results from the returned questionnaires will be used in later model development.

The developed questionnaire was of two types. One was aimed at elementary teachers and the other at elementary administrators. The list of elementary administrators were obtained by writing the State Superintendents of Public Instruction in Montana and North Dakota and asking for a list of elementary administrators who in their opinion had firsthand experience in implementing and maintaining programs of open education in the elementary grades. In addition to these two sources the Information Coordinator, Center for Teaching and Learning, University of North Dakota was contacted for assistance in compiling the North Dakota list. The writer also included one elementary administrator from Montana who in the writer's opinion had definite firsthand knowledge and experience with programs of open education but who for some reason was omitted from the list received from the State Superintendent.

The administrator questionnaire was sent to a total of twenty-three elementary administrators. Five of these administrators were in Montana and the remaining eighteen were from North Dakota. It should be noted that of the twenty-three mailed administrators' questionnaires
sixteen were completed and returned for a 69.57 percent return rate.

The teacher questionnaire was completed by teachers who were selected by one of the listed administrators as persons having first-hand experience with implementing and maintaining programs of open education in the elementary grades. Each administrator received a packet containing, in addition to an administrator questionnaire, five teacher questionnaires. A total of 115 teacher questionnaires were mailed to the twenty-three listed administrators. Of the 115 mailed teacher questionnaires, eighty were completed and returned for a 69.57 percent return rate.

The original questionnaire was mailed on November 18, 1972, with the follow-up letter being sent on December 7, 1972. The returned teacher and administrator questionnaires were all received by February 1, 1973.

Both the teacher and administrator questionnaire were constructed to aid the writer in answering the following germane questions:

1. What are some of the problems often encountered in trying to implement and maintain a program of open education in the elementary grades?

2. What are some possible solutions to these encountered problems?

3. What are the most important factors to be recognized and dealt with in attempting to initiate and maintain such a program in
the elementary grades?

In addition to the preceding relevant questions the writer asked both teachers and administrators to also comment on the following question: What do you feel are the major characteristics of your program of open education? The writer felt this question was important in trying to determine what attempts at open education were in fact legitimate attempts rather than simply various and sundry other approaches such as open area, open space education passing in name only for open education.

The preceding four questions constituted Section II of both the administrator and teacher questionnaires. Section I of both questionnaires was designed to answer certain logistical questions that hopefully would give enlightening background information concerning the various attempts at open education.

The administrator questionnaire dealt with the following logistical questions:

1. Total number of teachers under your supervision?
2. How many of these teachers are involved in programs of open education?
3. How long have these programs been in operation?
4. Number of students in your school?
5. Percentage of student body involved in programs of Open Education?
6. Generally, my school serves students from:
   ____ Low socio-economic areas
   ____ Middle class socio-economic areas
   ____ Upper class socio-economic areas

The teacher questionnaire dealt with the following logistical questions:

1. Number of students in your classroom?
2. Is additional para-professional help available to you as a teacher in an Open Education program? If yes, to what degree?
3. Number of years of working in a program of Open Education?
4. How did you originally become involved in Open Education?
   (check appropriate spaces)
   ____ University courses  ____ Involved administrators
   ____ In-service programs  ____ Involved teachers
   ____ Books and articles  ____ Other (specify)

TEACHER QUESTIONNAIRE

Section I

Section I of the teacher questionnaire yielded the following logistical information. The number of students in the responding teachers classroom ranged from a low of twenty to a high of seventy-five with the mean number of students per classroom at thirty-eight. To the eighty teachers who returned the questionnaire seventy-two, or
81 percent, had some form of para-professional help for at least a part of the school day. The remaining fifteen teachers, or 19 percent, responded that they had no para-professional help during any portion of the school day.

The average number of years working with a program of open education for the responding teachers ranged from a low of six months to a high of seven years with the mean period of time being three years, one month.

In answer to question four, concerning how the responding teachers became originally involved in programs of open education, 26.10 percent of the responding teachers initially became associated with the program through involved administrators. Another 22.6 percent of the responding teachers replied that they initially became involved in programs of open education through university course work. Of the remaining teachers, 15.70 percent became initially aware of the program through already involved teachers; 13.10 percent by various books and articles dealing with open education; 12.20 percent by in-service programs. The remaining 10.30 percent responded by checking the space provided for "other" means of initial association. The twelve written responses following "other" means represented various ways of original involvement in programs of open education ranging from a mandate issued by the board of education to a personal desire to improve teaching abilities.
Question 1 of the teacher questionnaire dealt with the major characteristics of the various attempts at programs of open education. Of the eighty teachers who responded, over one third, 35.0 percent, replied that the major characteristic of their program of open education was a greater degree of individualized instruction. Upon closer perusal of the responses it is evident that many of the attempts at individualized instruction are restricted to just one or two areas of the curriculum. One teacher replied that her program was individualized in "reading and math, taking into consideration each child's needs and abilities." The various means of individualizing instruction also seemed to vary quite often from teacher to teacher. One teacher responded that instruction was individualized "using contracts" while another replied that "a master plan was developed for each child which allowed them to work at their own pace."

The next most frequently mentioned characteristic of the various programs dealt with the degree of flexibility necessary in meeting the needs of the various children. Of the responding teachers 30.0 percent replied that a greater degree of flexibility in meeting individual student needs was the major characteristic of their attempts at open education.

For twenty-two of the responding teachers, or 27.5 percent, team teaching was mentioned as the major characteristic of their
attempts at open education. This response rate seemed to verify a belief that the writer has maintained for sometime, i.e., that the term "open education" has often been misconstrued by some to denote an open space, open area approach to elementary education utilizing team teaching. Open education in the misinterpreted form is used incorrectly to denote a physical or architectural openness rather than an intellectual and spiritual openness which is characteristic of genuine programs of open education. It seems that in the minds of some open education has come to mean team teaching in a physically open building in the sense that the majority of interior walls are missing.

The next most frequently mentioned characteristics were those of self-directed learning experiences reported by 17.5 percent of the teachers responding and multi-age, family grouping also reported by 17.5 percent of the teachers. These two characteristics would seem to be quite complimentary to both of the first two noted characteristics, i.e., more individualized instruction and a greater flexibility in meeting children's individual needs. Both self-directed learning experiences and multi-age, family grouping would certainly provide the means for more individualized instruction and for greater flexibility in meeting the needs of the children.

The two characteristics of continuous progress and learning centers were mentioned next in frequency by the responding teachers. Each of these characteristics was mentioned by twelve (15.0 percent) of
the responding teachers. Continuous progress according to one responding teacher provided for "no failures" in the classroom. One teacher commented concerning learning centers that not only do they allow for "active learning" they also are important because they "guide the children to be more independent."

Question 2 of the teacher questionnaire dealt with the problems often encountered by teachers as they progress toward programs of open education. Of the eighty responding teachers thirty-eight, or 47.5 percent, said that a lack of planning time was the major problem often encountered. One teacher responded by saying that "It [open education] requires so much teacher planning time to have enough different activities available to the children." Another teacher stressed the importance of planning and preparing well by stating that "if you don't want to work night and day, forget it." It must certainly be recognized that teachers in open classrooms are not unique in their requests for more planning time, but it does seem appropriate to note that often the statement concerning the need for release time for planning was coupled with a statement describing the tremendous amount of work that had to go into planning for all the children rather than for one class of students.

Another problem often mentioned by teachers was a lack of needed materials and supplies. Of the responding teachers thirty, or 37.5 percent, felt that the lack of needed materials and supplies
was a definite problem in the implementation and maintenance of an open classroom. One teacher stated that in order "to maintain a program there must be a fantastic supply of teaching aids and materials." The importance of supplies and materials needed in the elementary classroom would seem to be directly related to the importance placed by open educationists on the learning environment that surrounds the child as a means of providing the "doing" that oftentimes seems to coincide with meaningful learning. One teacher pointed out the relationship between a lack of adequate planning time and the lack of needed materials and supplies by commenting that "teachers need more planning time to help in organizing resource materials for the kids."

A lack of administrative support for the various attempts at open classrooms was the next most noted problem mentioned by the responding teachers. Of the eighty returned questionnaires, 23.8 percent commented that a lack of administrative support was a definite problem. One teacher responded by stating that if the program is to work there must be a "total and complete commitment of all individual instructors, and administration." Another teacher responded by saying that "cooperation from the school board is vital" if the attempt at open education is to be successful. The same percentage of respondents (23.8 percent) also replied that a lack of professional help in the classroom was also a major problem in moving towards an open classroom. One teacher responded to this question by stating that "assistants,
aidss, student tutors or parent volunteers are essential for the successful program." It would seem from reading the responses to this question that teachers who listed lack of professional help in the classroom as a problem felt that in striving to meet the needs of every student by not relying on one single lesson was an experience that demanded some form of assistance in meeting these needs. As noted in Section I, 81 percent of the responding teachers had some form of para-professional help for at least part of the school day.

The lack of community understanding as a perceived problem was mentioned by 18.8 percent of the responding teachers. Concerning community misunderstanding one teacher responded by replying that the main problem was due to "parental misunderstanding of what one is attempting" exemplified by the "general public equating it [open education] with permissiveness." The next factor most often mentioned as a problem by the responding teachers was a lack of compatibility and cooperation among involved teachers. Of the eighty teachers who completed and returned the questionnaire twelve, or 15.0 percent, stated that the lack of compatibility and cooperation was indeed a problem implementing and maintaining a program of open education in the elementary grades.

Question 3 of the teacher questionnaire dealt with possible solutions advanced by teachers in the field to some of the often encountered problems in the movement toward open education. The most frequently mentioned possible solution to the often encountered
problems dealt with the need for additional para-professional help in the classroom. Twenty-eight of the responding eighty teachers (35.0 percent) mentioned the need for additional para-professional help as possible solution to some often experienced problems. The type of para-professional help recommended on the returned questionnaires varied from older children, to parents, to retired teachers who were still anxious to work with children.

The next most frequently mentioned possible solution dealt with a community orientation program to explain the open education concept to the community. This factor was mentioned by 30.0 percent of the responding public. Concerning the importance of adequately informing the community one teacher commented that:

"The general public must be educated (informed) concerning the concept of open education, basic characteristics of an open classroom, how learning is accomplished in such a program and the benefits of this type of educational program."

Another responding teacher commented concerning the importance of community understanding by stating that "without the public's support its [open education] chances for success are small."

The need for adequate planning time as a possible solution to some of the often encountered problems was mentioned by 23.8 percent of the responding teachers. Of the responding teachers 20.0 percent stated that adequate materials and supplies for the open classroom was one possible solution to often encountered problems. One teacher
reinforced this for a great many materials and supplies, plus the knowledge of how to use them successfully by commenting that, "Have materials, visual aids, etc., galore and trained people that know when and how to use these materials."

In-service training for those involved in programs of open education was mentioned as a possible aid in surmounting certain problems in the move toward a more open classroom by 18.8 percent of the responding teachers. It is interesting to note that in addition to the 18.8 percent of teachers stressing the need for in-service training 10.0 percent of the responding teachers also mentioned the need for pre-training in the orientation of the open classroom. One teacher commented that "pre-training as well as continuous training through in-service programs, workshops, and frequent visitations by consultants is vital."

The point that attempts at open education to be successful must be initiated gradually was made by 17.5 percent of the responding teachers. Several of the teachers who responded to the importance of starting gradually in an attempt at open education continued by giving, what in the writer's opinion were, quite good suggestions for starting out. One teacher recommended that "when implementing the program take one area first (math, reading, etc.) and concentrate on developing it into an open classroom situation." The same teacher also suggested that "another way is to take one day a week at first, then increase the
time per week." The idea to "begin with one center and gradually work into others" was mentioned by several responding teachers. The word of warning that seemed to permeate the responses in this area were summed up well by one teacher who stated that it was best to "take it a step at a time rather than jumping in with a total open classroom."

The need for genuine and determined administrative support and leadership to teachers embarking on the road to a more open classroom was viewed a possible solution to often encountered obstacles by 16.3 percent of the responding teachers. One teacher stated that "extra considerations and understanding by administrators is needed if the program is to be a success."

It was also of interest to the writer that two of the responding teachers replied to this question by simply stating, "I wish I knew!"

Question 4 of the teacher questionnaire was concerned with the most important factors that need to be recognized and dealt with by teachers in attempting to initiate and maintain a program of open education. Not surprisingly to the writer the most frequently mentioned factor concerned the real need for genuine enthusiasm and the total commitment of all those concerned with the program. Twenty-two of the responding teachers, or 27.5 percent, viewed the need for enthusiasm and total commitment as the most important factor to be recognized and dealt with in a move toward open education. In reading through the
teacher responses to the questionnaire the writer was continually impressed with the number of times teachers referred to the need for understanding of, belief in, and commitment to the program as necessary factors for a successful program. One teacher made this point quite well by stating the need for "total and complete commitment of every individual teacher and administrator."

The next most frequently mentioned factor dealt with the need for slow and unhurried progress towards an open classroom. Twenty-five percent of the responding teachers mentioned this as the most important factor to be reckoned with. Several teachers replied that "you cannot rush into such a program." One teacher continued by saying that "I believe it should take about 3 years before it [the classroom] is completely open."

The need for additional resource materials was mentioned by 20.0 percent of the responding teachers as the most important factor to be recognized and dealt with in successfully moving toward a program of open education. Often the responding teachers would stress the importance of a great number and variety of materials and supplies for the classroom, and admit at the same time that keeping the proper amount of continually challenging materials available to the children was a never ending task. It seemed to these teachers that just as one learning center was equipped fairly well with useful materials it was time to subtract and add other materials to maintain the children's
The fourth most important factor necessary for successful program implementation and maintenance according to the responding teachers was a good public relations program. Fourteen of the eighty teachers (17.5 percent) responded by mentioning this need for a good public relations program as the chief factor to be recognized and dealt successfully with. Such a public relations program, according to one teacher, would "establish a credibility so that parents and students feel assured that 'the basics' will still be assimilated, but in a much broader and more enriching manner." Another teacher reinforced the need for a good public relations program by stating that for the attempt to be successful "the community must know what you are attempting and why."

ADMINISTRATOR QUESTIONNAIRE

Section I

Section I of the administrator questionnaire yielded the following logistical information. The total number of teachers under the supervision of an administrator ranged from a low of eight teachers to a high of 140. The mean number of teachers under the supervision of the contacted administrators was 28.19 percent. Of these teachers the number actually involved in programs of open education ranged from a low of three per administrator to a high of
forty-three, with the mean being 15.00. From the preceding information it can be recognized that slightly over half (53 percent) of the teachers under the supervision of the described administrators were involved to some degree in programs of open education.

The length of time that the described programs of open education had been in existence ranged from three months to six years. The mean number of months that the various programs had been in operation was 36.80, or slightly over three years. The number of students in the various schools under the jurisdiction of the described administrators ranged from a low of 157 students to a high of 2,304 students. The mean number of students under the supervision of the responding administrators was 536. The percentage of the total number of students under the jurisdiction of the responding administrators involved in programs of open education ranged from a low of 20 percent to a high of 100 percent. The mean percentage of students involved in programs of open education from the sample was 71.00 percent.

In terms of the socio-economic background of the students under the jurisdiction of the responding administrators 38.18 percent of the students were from low socio-economic backgrounds, while 47.60 percent were from middle socio-economic backgrounds and the remaining 14.30 percent were from upper socio-economic backgrounds.
Section II

Question 1 of the administrator questionnaire dealt with the major characteristics of the various programs of open education under the supervision of the contacted administrators. Eight of the responding sixteen administrators (50.0 percent) stated that the individualization of instruction was one of the major characteristics of their involved programs. One administrator stated the goal of individualized instruction by maintaining that, "We look at each child and ask, 'what is the best thing that I can do for this child?' This differs from the more common question, 'What is the best thing I can do for these children?'

Following the mention of individualized instruction as one of the major characteristics of the various attempts at open education the responding administrators mentioned five other characteristics, each of which was mentioned by 18.8 percent of the administrators as major characteristics of their programs of open education. These five characteristics included: (1) team teaching, (2) child centered curriculum, (3) interest centers, (4) freedom of choice within the curriculum areas, and (5) freedom of movement in the classroom.

Question 2 of the administrator questionnaire asked the contacted administrators to discuss some of the often encountered problems that might be expected by other administrators as they attempted to implement and maintain a program of open education in the elementary
grades. Poor community preparation was mentioned by 31.3 percent of the responding administrators as an often encountered problem. One administrator reiterated the importance of proper community preparation by commenting that "lack of understanding of what the program is attempting to do on the part of the community is a real problem."

This same administrator continued by saying that "community support is very important." Another administrator stressed the point that community preparation "must convince parents that learning can occur in an informal classroom."

The second most often mentioned problem likely to be encountered according to the responding administrators was an attempt by some to move too far too fast. Twenty-five percent of the responding administrators considered the head long rush into such a program as a problem likely to be encountered. The preceding point was bluntly made by one respondent, "too much too soon can mean failure." Another administrator cautioned that moving in the direction of open education too fast can result in a "chaotic situation."

The third likely to be encountered problem according to the responding administrators was a lack of real understanding on the part of all those concerned with the basic conceptual foundation of open education. Of the sixteen administrators who completed and returned the questionnaire 25.0 percent felt that the preceding problem was a legitimate one that might often be encountered.
The need for greater community involvement as one means of surmounting some of the often encountered problems was mentioned by 37.5% of the respondents. One administrator suggested that there should be "community involvement in planning and establishing goals" for the program. Another administrator suggested that the school should strive to develop a strong program of community involvement which can aid teachers in individualizing instruction, offer more options for students, and remove many of the clerical tasks from teachers so their role can be more diagnostic and prescriptive.

The need for in-service training programs as a means of overcoming some of the often encountered problems was also mentioned by 37.5% of the responding administrators. According to one respondent "continuous in-service workshops and seminars in which total staff involvement is required for the success of the program." The point was also made by 18.8% of the responding administrators that a possible solution to some often encountered problems might be slow, well planned, and deliberate move toward open education. One administrator commented that to implement the program successfully one must "take very small steps." Another respondent replied that "the classroom should open up slowly--keeping the children's needs in mind."

Question 4 of the administrator questionnaire asked the
respondents to briefly discuss the important factors that must be recognized and dealt with in attempting to initiate and maintain a program of open education in the elementary grades. Of the responding administrators 25.0 percent mentioned the need for a well informed and supportive public as a crucial factor to be recognized with successfully in initiating such a program. One administrator suggested that one way to inform and gain support from parents was to make every effort to "keep communication lines open in all directions--invite parents into the school, allow them to question and disagree." The same percentage (25.0) of responding administrators also replied that adequate materials and supplies was a factor that must be recognized and successfully dealt with. One administrator stated this view by commenting that "having the proper equipment and materials is crucial" for a successful program.

Following the mention of an informed and supportive public and the need for adequate materials as important factors to be recognized and successfully dealt with in program implementation and maintenance the responding administrators mentioned six other characteristics, each of which was mentioned by 18.8 percent of the respondents as important factors to be recognized and dealt successfully with in implementing and maintaining such a program. These six characteristics included: (1) proper selection of personnel, (2) in-service training, (3) adequate physical facilities, (4) attitude of participants, (5) adequate
planning time for teachers, and (6) administrative support.

Commenting on the need for in-service training one administrator replied that "teacher in-service programs must be provided to stress the need for individualizing, and ways in which this can be accomplished." Another administrator commented concerning the need for administrative support by replying that "a dynamic elementary principal is important, one that sees his role as instructional leader, and who helps plan such a program."

**SUMMARY**

The writer attempted in the preceding chapter, with the use of teacher and administrator questionnaires, to develop a greater understanding of what problems and resulting possible solutions have been encountered by educators in the field working toward programs of open education. The findings of these questionnaires will be used in the later development of teacher and administrator models for implementing and maintaining programs of open education in the elementary grades.

**Teacher Questionnaire**

The responses to Question 1 pointed out what the individual teachers considered the major characteristics of their attempts at programs of open education. The most frequently mentioned characteristics included: (1) individualized instruction, (2) greater flexibility
in meeting needs of children, (3) team teaching, (4) self directed learning, (5) multi-age, family grouping, (6) continuous progress, and (7) learning centers. Of the preceding characteristics all seemed to agree with the basic assumptions and theoretical principles underlying open education with the exception of the view held by some (27.5 percent) that team teaching was an integral characteristic of open education. As mentioned previously the writer feels that open education in the minds of some has come to mean a physical or structural openness, rather than an intellectual or spiritual openness that is in fact a true characteristic of the approach. What the writer has found in schools preporting to have open education is oftentimes simply a team teaching approach occurring in a physically open building.

The writer felt that the teacher responses to Question 2 touched upon some very crucial problems that must be successfully reckoned with if an attempted program of open education is to be realized. The responding teachers mentioned a "lack of:" (1) adequate planning time, (2) necessary materials and supplies, (3) administrative support, (4) professional help in the classroom, and (5) community support as very real problems that are often faced by teachers as they move toward more open classrooms.

In replying to Question 3, possible solutions to often encountered problems, the responding teachers often referred back to the factors mentioned in Question 2. The possible solutions that
seemingly answered the problems often mentioned in Question 2 included: (1) para-professional help, (2) a community orientation program, (3) adequate planning time, (4) adequate materials and supplies, and (5) administrative support and leadership. In addition the responding teachers mentioned the need for gradual program implementation, and the need for continuous in-service training for those involved.

In replying to Question 4 concerning the most important factors that must be recognized and dealt successfully with the responding teachers replied that the most important factor for a successful program was the enthusiasm and total commitment of those concerned. Other factors mentioned as important ingredients of a successful attempt included: (1) enthusiasm and total commitment of all concerned, 2) slow progression into the program, 3) need for additional resource material, and 4) good public relations.

Administrator Questionnaire

The replies to Question 1 pointed out what the responding administrators considered the major characteristics of their programs of open education. Of the responding administrators 50.0 percent replied the individualization of instruction was the major characteristic of their attempts at open education. It is interesting to note the same characteristic (individualized instruction) was mentioned by the largest number of responding teachers as the major characteristic
of their programs of open education. Other major characteristics each listed by 18.8 percent of the responding administrators included: (1) team teaching, (2) child centered curriculum, (3) interests centers, (4) freedom of choice within curriculum areas, and (5) freedom of movement within the classroom.

In answer to Question 2 concerning the problems often encountered in moving toward more open classrooms the responding administrators mentioned poor community preparation. The importance of gaining community understanding and support was a theme struck numerous times by both teachers and administrators in responding to various aspects of the questionnaire. In response to this question the administrators who responded also mentioned the attempt by some to move too far too fast, and the lack oftentimes of those involved of a real understanding of the basic principles of open education. Both of these problems were also mentioned in various ways throughout both the teacher and administrator questionnaires.

Question 3 asked administrators to mention possible solutions to the often encountered problems previously mentioned in Question 2. As might be expected the most frequently mentioned possible solutions included: (1) greater community involvement, (2) in-service programs, and (3) a gradual move into the program.

In answer to Question 4, concerning the major factors that must be recognized and dealt with successfully, the responding
administrators again mentioned the need for an informed and supportive public as a crucial factor for a successful program. Also mentioned by the same percentage of respondents (25.0) was the need for adequate materials. The need for adequate materials and supplies was also mentioned by 20.0 percent of the responding teachers as a major factor in a successful attempt at open education. Other important factors of a successful program mentioned by the responding administrators included: (1) proper selection of personnel; (2) in-service training, (3) adequate physical facilities, (4) attitude of participants, (5) adequate planning time, and (6) administrative support.

To summarize: The belief on the part of some teachers and administrators that team teaching is a major characteristic of open education would seem to be inconsistent with the philosophy expressed by major writers in the area. Team teaching might well be associated with open space or open area approaches to elementary education, but certainly not necessarily with a genuine open education approach. The writer believes that the bastardization of the term open education by some can only hurt the chances for meaningful advances toward more genuinely open classrooms. Teachers, administrators, parents and students who become dissatisfied with open space approaches utilizing team teaching oftentimes seem to blame "open education" when in fact the program was open only in a physical sense, certainly not in the sense that open education is "open."
The point that the community must be well prepared in the sense of understanding what, why, and how programs of open education are to function cannot be overstressed. Without community support the attempts would seem to have a very short life expectancy. The importance of having involved teachers and administrators who are also knowledgeable, understanding and sympathetic to the principles and beliefs inherent in open education is crucial for program success. Without educators who understand and are totally enthusiastic about the program, doom is easily forecast for the attempt. An extension of this point would be the necessity of voluntary participation on the part of teachers and administrators. To declare by fiat that open education will be "the way" to educate all elementary students in a school or school system is to surely invite disaster. Since the program is so individual, not only in a student sense but also in a teacher sense, participation must be an individual matter. Just as we must provide for the child who doesn't function well in an open classroom so too must we provide for the teacher who is also ill at ease in such a setting.

Since meaningful and lasting change is often an evolutionary, rather than revolutionary matter the importance of a gradual move into such a program would appear vital. To declare that "tomorrow we will have open education" is only to invite the ridiculous and harmful. The process of moving toward an open classroom must be a gradual and planned experience. A classroom will open up just as the teacher and children
do, in a natural and gradual way.

While teachers are gradually moving toward a more open classroom the provision of in-service programs and workshops would seem quite important. Not only can these presentations and workshops provide needed answers to certain questions, reinforcement for all concerned, but also the "how to" of implementation and maintenance.

The need for adequate materials and supplies would seem quite necessary to the successful program of open education. Since the approach is based in part on the belief that "I do and I understand" the resulting classroom environment must provide a stimulating and challenging source of student interaction. The point that students learn through actively interacting with the surrounding environment reinforces the belief held by open educationists that the environment must be a varied and interesting one.

The next chapter will discuss the results of personal interviews conducted with administrators experienced in programs of open education.
Chapter 5

INTERVIEWS AND OBSERVATIONS

The next step in this study was to conduct personal interviews and observations with various educators who were involved in implementing programs of open education in the elementary schools. The main purpose of these interviews and observations was to provide the writer with additional insights into the problems, and resulting possible solutions, often experienced by elementary principals as they progressed toward programs of open education. The writer was also interested in ascertaining how the administrators interviewed defined their various programs of "open education." The writer was also anxious to determine how many of the interviewed administrators were actually cognizant of the differences between genuine programs of open education and open-area, open-space approaches. It was also of interest to the writer to see which type of program the individual administrators had actually implemented in their respective schools.

As previously mentioned, the interviews and observations were conducted in the following elementary schools:

(a) Mountain View School, Great Falls, Montana
(b) Skyline School, Great Falls, Montana
(c) Longfellow School, Great Falls, Montana
(d) The Daly School, Hamilton, Montana
(e) Primary School, Whitefish, Montana
INTERVIEWS

In defining the various programs, four of the five administrators interviewed made the point that many different definitions can be applied to the term open education. One administrator replied by stating, "Well, it depends on what you mean by open education." Another participating administrator restated this point by saying that "Open education, as you are aware, means many things to many people."

In terms of actually defining individual programs, one administrator readily admitted that when "compared with British infant schools we are not open." This administrator continued with a program definition by stating that, "we have an open-space school working toward an open concept in terms of feelings for kids." Program characteristics that were mentioned by this administrator included continuous progress, individualized instruction, and team teaching.

Another administrator described his program as representative of open education to a degree "because of the movement we are making to a child centered curriculum." Another administrator described his program as a "combination of many things because we use team teaching, team planning, and individualized work as far as we can." The point was also made by this administrator that "as far as open education is concerned we are doing it as much as we can but we cannot just go off
and do our own curriculum." One of the interviewed administrators mentioned that while his school's program was not truly an open approach it did incorporate some characteristics of open education. These characteristics included grouping by need rather than by ability, providing various physical learning experiences, and the utilization of various learning centers. When asked how far this program was from truly becoming a genuine example of open education this administrator replied that, "personally I think we have a long way to go."

When asked to differentiate between an open-area, open-space program and a true program of open education one principal responded by stating that open education allowed those involved to "take off and do what you want, not hindered by curriculum guides." Another principal mentioned that open area education is "just a facility, not necessarily a philosophy." The remaining administrators interviewed differentiated between open-area and open education by discussing the former in a physical sense and the latter in a philosophical sense.

In response to the question: "Do you think the move toward open education will continue?" all of the administrators replied that they felt the current movement would continue in varying degrees. In reply to this question one principal stated that "Yes, I think so." Another seemingly more enthusiastic principal responded to the same question by saying, "Oh, yes, I think we have just started."

In discussing problems often encountered in the move toward
open education one administrator stated quite philosophically that "the only obstacle that we have really encountered has been ourselves." This administrator continued by saying that "one way or another we have freed ourselves to do what we thought was right." Another principal reinforced the need for a personal internal openness on the part of those involved by stating that the desire to change toward a more open classroom must come from within each individual.

The interviewed administrators all agreed that staff members who are incompatible philosophically with the basic assumptions underlying the approach can produce serious obstacles to a successful program. Every administrator agreed that provisions should be made for the teacher who feels uncomfortable in an open concept classroom to return to a more traditional classroom.

Another problem encountered by three of the administrators interviewed concerned problems caused by other educators within the system who were either not in basic philosophical agreement with the approach, or afraid of the change that might be thrust upon them if the various programs in open education proved successful. One administrator maintained that the lack of visible support from the central administration had sounded the death knell for his attempted program. This administrator continued to say that this lack of visible support might well have been due to a lack of effective communications in adequately defining his program of open education.
A problem experienced by another administrator concerned poor communications between school and parents relative to the pending movement toward open education. While advocating an effective communications program between school and parents the same administrator warned against premature exposure of the program to the total community. Several of the principals interviewed made the point that program exposure to the public before the involved staff had individually digested the various program components might lead to staff uncertainties, and eventual program failure. One administrator quite candidly commented that "we didn't publicize the program until it was actually working."

The failure to provide adequate pre-service and in-service training programs was also mentioned as possible problems by several of the interviewed administrators. In one instance an entire staff was transferred from a traditional program in a structurally traditional building and placed almost overnight in an open-space environment with no thought to preparing the teachers for the change. Relative to lack of adequate pre-training, the need for continuous in-service training programs was mentioned by all those administrators interviewed as a very necessary component of a successful program attempt.

Problems were also encountered by some of the interviewed administrators because the educational terms employed were not adequately defined to the public. The need to avoid educational jargonese
when explaining the program to the public was stressed by those administrators interviewed.

In terms of possible solutions to often encountered problems, the administrators interviewed responded with several suggestions which might greatly aid others in the movement toward open education. The importance of actually getting the parents into the schools, and the various classrooms, so that the programs can actually be seen was stressed by all those interviewed. One program invited parents to school during the day so that actual classes could be observed. Time following the school day was provided for these parents to sit down and discuss individual concerns with involved teachers. From this point the parents were brought back into the schools for parent-teacher conferences. All administrators interviewed saw the parent-teacher conference as a very valuable means of presenting and justifying the move toward open education to parents.

Other means of getting parents actively involved in the school and hopefully involved with open education included providing for parent-teacher visits to already existing programs of open education. Another suggestion involved the formation of a committee of parents to act as a planning and resource committee for involved teachers.

The need for pre-service and in-service programs and workshops was stressed by every contacted administrator. Pre-service workshops and programs were deemed essential to adequately explain the components
of an open classroom to interested teachers. From this point both pre-service and in-service workshops and programs were viewed by the interviewed administrators as necessary devices to adequately prepare and later maintain teachers in an open concept classroom. Some suggested activities for these programs included evening seminars, visitations, selected readings, films, demonstrations, lectures, and conferences. The view that the service programs must be a continually ongoing process was maintained by all of the interviewed administrators.

The need to understand exactly what open education is as it applies to a specific school is of extreme importance according to the interviewed administrators. Before teachers can be successful in a new program they must be knowledgeable about it and sympathetic toward it. Accordingly teachers should be selected on a basis of those who "want to," rather than those who "have to." A teacher cannot be forced into such a program if the program is to be in fact called "open" in a legitimate sense. The interviewed administrators stressed the need to provide an out for the teacher who felt uncomfortable with the program.

**OBSERVATIONS**

For the conducted observations in the different schools the writer used various parts of the observation rating scale developed by TDR Associates, Inc. (Appendix J) to aid in determining the authenticity of the various programs. The entire form was not used because the
writer attempted to observe in all of the classrooms involved in pro-
grams of "open education." As a result of this the writer only
responded to the statements that paralleled, or contrasted with actual
observed phenomenon in each of the classrooms.

After talking with the involved administrators the observations
that followed within different classes in the various buildings proved
to be revealing and quite rewarding to the writer. Of the five pro-
grams observed only two (in the writer's opinion) could be called truly
characteristic of open education as it is defined for the purposes of
this paper. In each of these buildings the writer was quite impressed
with the natural easiness in which the children went about their work.
On several occasions students walked up to the writer and started very
friendly, outgoing conversations. One first grader was very anxious
to show his prized marble collection to the writer, and to explain how
he planned to write a story (with the teacher's help) about a recent
marble match.

It is interesting to note that of these two schools that repre-
sented what the writer considers genuine attempts at open education,
one was quite closed in an architectural sense while the other was very
open physically. Both schools, though, expressed and exemplified an
"open" philosophy that placed the individual child and his needs before
anything else. These two schools were characterized by a great deal of
color, movement, and active involvement.
The classrooms, or in the case of the physically open building—the areas, were filled with student work tastefully displayed on carpet covered boxes. Children's activities, products, and ideas were reflected abundantly about the classroom. This observed program trait corresponds to a characteristic defined as representative of open education in Chapter 1 of this paper, i.e., children's work is displayed everywhere in the classroom. Numerous and varied physical objects and materials for the children to interact with were quite evident in all of the classroom areas. These materials and objects were both student and teacher supplied or made. This program trait corresponds to a characteristic defined as representative of open education in Chapter 1 of this paper, i.e., there is a multitude of inexpensive raw materials available in the classroom. It was also interesting to note that several different activities were going on simultaneously in each of the various classrooms or areas. Some children would be reading books of their choice while others were receiving small group work in math. At the same time another group might be writing a story about the feeding of a pet turtle. This observed program trait corresponds to a characteristic defined as representative of open education in Chapter 1 of this paper, i.e., children have the freedom to move throughout the classroom, to work together, and to choose their own activities.

In these two observed programs of open education, books were supplied in diversity and profusion ranging from general reference
to children's literature. Actually, anything with the printed word on it might well have been found in these classrooms. Not only was there a great diversity of reading materials, there were also several comfortable places in each room or area for reading. Easy chairs and pillows were quite common in the rooms. This observed program trait corresponds to a characteristic defined as representative of open education in Chapter 1 of this paper, i.e., materials and equipment relevant to a particular area are stored near the area and are accessible for use and replacement by the children. The writer observed children curled up with a book in one of the reading areas in almost every classroom. Students in these programs were also using "books" written by their classmates as part of their reading and reference materials. One of these two schools encouraged reading to the extent that the library had no checkouts. If a student wanted to read a book he simply took the book and returned it when the book was finished.

The three remaining observed schools varied considerably in the degree that open education was actually being practiced. As mentioned previously one administrator in a very physically open school candidly commented that when "compared with the British infant schools we are not open." After observing in the various classrooms in this particular building the writer wholeheartedly agreed with the preceding statement that "... we are not open." In observing in the various
classrooms the writer observed a library that could only be visited one time per week, usually by the entire class; no comfortable reading areas in any part of the building; very few books to encourage free reading in any of the classrooms; desks in rows all facing the board (the principal mentioned that this might be due to achievement tests that had been administered earlier in the day); work areas not being utilized.

It seemed to the writer that this particular attempt at "open education" was a very superficial attempt at best. The only thing that seemed open about the program was the physical environment, and the teachers had done a great deal to eliminate this aspect of the program by strategically placing various objects between the areas. One teacher reinforced this impression by commenting that, "they might as well put walls back in for all the good this openness is doing us."

The remaining two schools that the writer visited were similar in many instances in their attempts at, and progress toward, open education. Both administrators interviewed distinguished correctly between open-area, open-space programs and programs truly representative of open education. The point that their programs were open to a much greater extent in a physical sense, as opposed to a curriculum openness was made by both administrators. After observing in each of the buildings the writer did feel that both programs were farther along the path toward open education than the previously discussed attempt, which
in the writer's opinion represented nothing more than a very traditional approach in an open building.

In terms of the traits characteristic of open education, both schools displayed flexible seating arrangements; i.e., seats arranged to best meet the immediate concerns of the students. This observed program trait corresponds to a characteristic defined as representative of open education in Chapter 1 of this paper, i.e., desks are often replaced with tables of different shapes and sizes which are used flexibly around the different areas for working on or for displays. The flexible seating did vary somewhat from area to area, and it was more evident in the early grades. Students' work was displayed to a degree in both programs. Basic beginnings at interest centers were being made in both programs. This observed program trait corresponds to a characteristic defined as representative of open education in Chapter 1 of this paper, i.e., classrooms are decentralized into separate "learning areas." Some inter-class grouping by need was being done in each of the programs. In some instances student-made "books" were available as part of the reading and reference materials. Teachers in both programs were grouping and re-grouping children for lessons aimed at specific needs. Children were permitted in each of the programs to work individually and in small groups at various activities. This observed program trait corresponds to a characteristic defined as representative of open education in Chapter 1 of this paper,
i.e., teachers work mostly with individual children or groups of two or three, while the rest of the children work on their own or with an aide. To a somewhat limited degree the learning environment included materials developed or supplied by the children. In some of the areas several different activities were going on simultaneously with the teacher moving from group to group.

There were several observed activities and situations occurring in both schools that tended to lessen the overall degree of movement toward open education in the writer's opinion. In both schools texts and materials were supplied in class sets so that each child had his own. Materials, in most instances, were kept out of the way until they were distributed or used under the teachers' directions. Children in both schools were grouped for reading according to achievement predictive tests, rather than diagnostic tests. It was also evident that individual teachers based their instruction on curricular guides or textbooks for the grade level taught. In reinforcing this view a principal in one of the programs mentioned that, "we must follow the same course of study as everyone else in town. We use the same textbooks, and are considered the same." In both schools in most instances teachers used tests to evaluate children and rate them in comparison to their peers. It also seemed evident that in the majority of instances academic achievement, as measured by various tests, was the teacher's top priority for the children.
In terms of abundant materials and objects for children to interact with, both school environments seemed lacking. The libraries in both schools, while aesthetically pleasing, seemed to be organized for efficiency rather than for reading. One library's sole attempt at creating a reading environment was a neatly piled stack of cushions. Few reading areas were found in the classroom areas of either school.

SUMMARY

The writer attempted in the preceding chapter, with the use of personal interviews and observations with various educators experienced in implementing programs of open education, to develop a greater understanding of the problems and resulting solutions that have been experienced by these educators as they worked toward open education. Various program definitions were also sought by the writer. The writer was also anxious to determine how many of the interviewed administrators were actually cognizant of the differences between genuine programs of open education and open-area, open-space approaches. It was also of interest to see which type of program, in the writer's opinion, each administrator had actually implemented.

In discussing the sometimes encountered problems in the move toward open education the interviewed administrators mentioned several problems likely to be incurred by others making the change to open education. One of the problems mentioned concerned staff members who
were uncomfortable, or incompatible philosophically, with the program. The point that necessary provisions must be made for these staff members to function in classrooms where they do feel comfortable, both physically and philosophically, was made by each of the administrators. Another problem encountered by three of the interviewed administrators concerned problems caused by other educators within the system who were either not in basic philosophical agreement with the approach, or afraid of the change that might be thrust upon them if the various programs in open education proved successful.

A problem experienced by another administrator concerned poor communications between school and parents relative to the pending movement toward open education. The failure of provide adequate pre-service and in-service training programs was also mentioned as possible problems by several of the interviewed administrators. Problems were also encountered by some of the interviewed administrators because the various educational terms employed were not adequately defined to the public.

In the writer's opinion perhaps the most revealing and pertinent problem mentioned was the one made by the administrator who said, "the only obstacle that we have really encountered has been ourselves." In terms of possible solutions to these often encountered problems the interviewed administrators responded with several suggestions which might greatly aid others in the movement toward open education. The
importance of actually getting the parents into the schools, and the various classrooms, so that the programs can actually be seen was stressed by all those interviewed. All of the interviewed administrators saw the parent-teacher conference as a valuable means of presenting and justifying the move toward open education. Parent-teacher visits to already existing programs of open education was another possible solution advocated by some administrators.

The need for pre-service and in-service programs and workshops was stressed by every contacted administrator as possible solutions to often encountered problems. Both pre-service and in-service workshops and programs were viewed by the interviewed administrators as necessary devices to adequately prepare, and later maintain, teachers in an open concept classroom. The interviewed administrators all stressed the need to provide an out for the teacher who felt uncomfortable in the open concept classroom.

The writer was somewhat surprised to find that all of the interviewed administrators differentiated between strictly open-space, open-area programs and genuine programs of open education. Most of the administrators made this differentiation between open-area and open education by discussing the former in a physical sense and the latter in a philosophical sense. Most of the administrators seemed to view an open-area approach as a possible first step toward a truly open concept classroom.
After interviewing the involved administrators the observations that followed within different classes in the various buildings proved revealing and quite rewarding to the writer. Of the five programs observed only two in the writer's opinion could be called truly characteristic of open education as it is defined for the purposes of this paper. The three remaining observed schools varied considerably in the degree that open education was actually being practiced. One of the schools represented, in the writer's opinion, simply a very traditional approach to education occurring by chance in a physically open building.

The remaining two schools were similar in many instances in their attempts at, and progress toward, open education. While both programs were much more open in a physical sense than a curriculum sense they both had various program components typical of legitimate programs of open education. After observing in each of these buildings the writer felt that both programs were certainly farther along the path toward open education than the previously discussed attempts.

The next chapter will deal with the program model flow charts actually developed to aid elementary administrators and teachers in moving toward programs of open education.
Chapter 6

MODEL DEVELOPMENT

This chapter will deal with the presentation and discussion of the program model flow charts developed by the writer for possible utilization by elementary administrators and teachers in moving toward programs of open education. The writer used the words "possible utilization" rather than follow, in the preceding sentence because it must be remembered that the developed models do not represent a cure-all for the problems often encountered in striving to implement a program of open education. The developed models do not represent a complete "package" or strict set of "blueprints," which if understood and adopted, would somehow solve every problem and provide an easy road to a successful program. Rather, the developed models are intended to provide a set of procedures that should give the individual teacher or administrator a sense of direction and purpose in working toward an open concept classroom.

The chapter is arranged by first presenting the developed models in flow chart form. Hopefully this will give the reader a meaningful explanation of how an individual might logically proceed to arrive finally at a program of open education. The master flow chart is designed to give the reader an overall picture of program development.

Following the developed master model flow charts, further description and discussion of program development will be accomplished
by examining the various stages within the master flow charts. This will be accomplished by both expanding each juncture into its own flow chart where applicable, and by narratively discussing the salient factors to be dealt with successfully at each juncture in the model. In looking at any one stage in the master model the reader will note a subheading. The indicated subheading refers the reader to the section where the appropriate sub-flow chart and/or narrative discussion will follow. The writer will present and discuss the administrator model first, followed by a similar description of the teacher model.

The developed program model flow charts were based on a paradigm for program development presented by Throop (1972). Throop maintained that in order for a paradigm to be a dynamic rather than a static one, and in order for it to be successful, it must consist of five well planned stages of development. The first stage of development is the conceptual stage. Here an idea or problem is formed and developed into a specific problem statement. The conceptual stage represents the point of entry. The planning stage is the second stage in the paradigm for program development. At this point the following questions should be answered: why, what, who, when, where, and how. The pilot program stage is designed to determine the effectiveness of a planned program on a limited basis and to allow program modification and refinement. The fourth stage is represented by the program evaluation. In this stage the effectiveness of the program is evaluated.
The results serve as a basis for program refinement or program termination. The final stage is the program refinement stage. The program refinement stage is designed to permit needed modification to the program resulting from the evaluative process.

To aid the reader in interpreting the following program model flow charts, the various symbols used will be presented at this time. The circle represents the start, and end, of a certain set of procedures, and a program termination before implementation is successfully completed. An arrow represents an offpage connector.

A parallelogram represents a decision juncture requiring a binary response. A hexagon represents a predefined process juncture. The predefined process junctures will often be represented and expanded by corresponding sub-flow charts with narrative discussions following. A rectangle represents a narrative description, or statement, without an accompanying sub-flow chart.

The reader at this point is referred to the developed program model flow chart on the following page.
Prior to actual entrance into the developed set of procedures represented by the two program model flow charts, both administrators and teachers must diagnose a need for possible entrance. That is, both administrator and teacher must determine from their own perceptual field a definite need to try an alternative approach to current elementary classroom practices.

B-1

This indication of need is represented in the program model flow chart by juncture B-1. For the administrator this need might arise after talking with several teachers disgruntled over present curriculum offerings, or scheduling procedures. The need could also occur with the administrator after talking with an angry parent concerning such things as a strictly textbook approach to math being conducted in a certain classroom. For the teacher the indication of need might occur upon realization that the students were, in many instances, bored with the current classroom offerings or that the present organization of the classroom allowed little, if any, time for student free reading or self-expression. The point is that something pointed out to the involved administrator and teacher a need to try something different in hopes of providing a more meaningful education for the students.

With an assessed need for some type of positive change in the
educational system both administrator and teacher progress now to the second program juncture B-2, Research Program Possibilities.

**B-2**

The following sub-flow chart will hopefully aid the reader in recognizing and understanding the various steps which might be logically followed within juncture B-2.
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In the initial phase of individual entrance into the developed program model flow charts the administrator and teacher must first of all conduct a degree of research in the area of open education to determine if in fact this approach to elementary education might answer some of the individual administrator and teacher designated needs.

Three possible ways of introducing and elaborating the concept of open education to an interested administrator or teacher could be through readings dealing with the topic (Section A-1.1), viewing films concerned with open education (Section A-1.2), and by visiting already existing programs of open education (Section A-1.3).

For an informative presentation of the various salient characteristics of open education the concerned administrator should consult the reading bibliography presented in Appendix H. Appendix H presents what the writer feels is a basic bibliography for those individuals anxious to become better acquainted with the various concepts inherent in open education. The writer believes that two works in the developed bibliography would be particularly helpful to an administrator beginning to study the possibilities of open education for an individual school. The two publications are: Barth, Roland S. Open Education And The American School. New York: Agathon Press, Inc., 1972; and Hertzberg, Alvin and Edward F. Stone. Schools Are For Children. New York: Schocken Books, 1971.

Another means of becoming better acquainted with the concept of
open education is of course through the viewing of appropriate films dealing with the topic. The interested administrator and teacher might do well to initially view the British Broadcasting Corporation's Discovery and Experience (10 films, 30 minutes each) viewing first the program segments entitled "Learning by Doing," and "Finding Out." The reader will find a more extensive film bibliography in Appendix I.

The administrator or teacher anxious about discovering the possibilities of an open concept classroom should also visit existing programs (Stage A-1.3) of open education when possible. The administrator or teacher proceeding out to observe various programs should be aware that in some instances what may be called open education by some teachers may well be a very traditional, extremely structured approach operating in a physically open setting. To aid the concerned administrator and teacher in determining the authenticity of the observed programs the reader is referred to the Classroom Observation Rating Scale (Appendix J) developed by TDR Association, Inc., Newton, Massachusetts. By becoming familiar with the various characteristics of an open concept classroom listed in the previously mentioned rating scale, an administrator or teacher should be able to judge the quality of the observed program to a meaningful degree.

At the conclusion of research conducted, the involved administrator progresses to the first decision making juncture within the administrator model while the involved teacher at the conclusion of
research conducted likewise progresses to the corresponding decision juncture within the teacher model. With this in mind the writer will narratively discuss the administrator model first.

ADMINISTRATOR MODEL

A-1

At this point in the program model flow chart the administrator must (in view of the research conducted, the assessed needs and resources of the staff) determine if further research into the possibilities of a pilot program might be desirable. If, upon review of these factors, the administrative answer is "No," then the program is terminated as indicated by stage A-2 in the model. If on the other hand the administrator feels after reviewing the various factors that further considerations should be given to a possible pilot program, the administrator progresses to juncture A-3, Teacher Pre-Program Planning. It is important to reiterate at this time the importance of genuine administrative understanding of and support for, open education. Without a genuine belief in the possibilities of open education an interested administrator should certainly question further progress into the program model flow chart.

A-3

The following sub-flow chart will hopefully aid the reader in
recognizing and understanding the various steps which might be logically followed by an administrator in planning a program presentation to teachers.

A-3
Pre-Teacher Program Planning

A-3.1
Develop Newsletter

A-3.2
Provide Films

A-3.3
Provide Readings

A-3.4
Develop Workshops
At this point, juncture A-3, the administrator is striving to put together a total program that will, upon presentation, familiarize the individual teacher with the various facets of open education. Juncture A-3 then is an administrative planning stage.

A logical point of departure from juncture A-3 would be the development of a staff newsletter (A-3.1). The administrator at this stage in the program development must be aware of the fact that adequate knowledge of events is a necessary precondition for participation (Barth, 1972). The function of the newsletter is to keep the staff intuned to various happenings in the school, to publicize upcoming films, workshops, visitations, speakers, seminars, etc.
In planning how to initially present the concept of open education to a staff, an administrator might consider the use of certain films. A bibliography of relevant films has been compiled to aid administrators in this respect. The bibliographical listing of relevant films can be found in Appendix I. From this bibliographical listing an administrator might pick the films that best portray open education as it might relate to an individual staff.

The administrator anxious to present the concept of open education to a staff should also develop a bibliographical listing of relevant books and articles dealing with the subject. Every effort should also be made to obtain as many of these publications as possible to form the nucleus of a relevant faculty library. The administrator at this stage of program development might again find the bibliography appearing in Appendix H useful in terms of developing and acquiring a possible teacher reading list and library. Appendix H should give the concerned administrator a point of departure in terms of developing a meaningful and informative list of reading sources available.

In the writer's opinion, the importance of workshops as a continuing form of in-service training for staff cannot be over-emphasized. In terms of planning for workshops at this point (A-3.4) in the program development, the concerned administrator should recognize that workshops, to be a truly helpful form of in-service training, must be a continuous ongoing process, not just a beginning of school year
experience. Informal workshops where time, space, materials and demonstrations are available could hopefully help teachers directly influence their classroom environments (Garth, 1972). Secondly, the administrator planning to present the concept of open education to his staff should realize that workshops need to be activity oriented, i.e., teachers have been told previously the "why" of open education, workshops should provide the real "how" of implementation and maintenance. The in-service program should provide experiences that allow the involved teachers to learn from firsthand experimentation that children must actively do their own learning. What the in-service workshops must do is not to provide lectures about modern learning theory, but rather to provide the teacher with the chance to create exciting and challenging learning situations and environments for individual children to respond to.

A good example of this might be the workshop aimed at useful learning materials that can be easily obtained at very little cost and how these materials could be usefully incorporated into the classroom.

Administrators should also recognize that workshops can provide a good opportunity for curriculum specialists to demonstrate (with materials and games) alternative ways to approach the curriculum subjects. One example of this might be the science curriculum specialists who actively involve the faculty with some of the various kits in the Elementary Science Studies (ESS) program. The administrator should
also remember that administrator participation alongside teachers is often very helpful in providing for rewarding workshop experiences.

Arrangements for staff visitations to operating programs of open education should also be planned at this point by the administrator. It should be noted again that it is extremely important for the administrator to determine what advertised programs of open education are in fact genuine attempts, and which are programs in name only.

At this point in the planning stage (A-3.6) the administrator should also be accumulating a list of speakers who might provide meaningful presentations to the staff at a later time concerning topics relevant to open education. The list might include the principal and teachers from already operating open concept classrooms, university personnel, curriculum specialists and parents.

The last stage (A-3.7) under juncture A-3 provides for seminars. It must be noted that seminars should be a continually occurring process, thereby giving teachers, administration and parents a chance to openly discuss the possibilities of open education at any point in the program development. The wise administrator might well provide for a seminar after each of the developmental stages under juncture A-3, Pre-Teacher Program Planning.
It is hoped that the following sub-flow chart will visually demonstrate to the reader some of the steps that might logically be followed by an administrator presenting the concept of open education to a faculty.
Juncture A-4 represents that point in the program development when the involved administrator actually presents the various facets of the program previously planned at juncture A-3 to the staff. For instance, the newsletter planned at stage A-3.1 is now actually devised, printed and circulated conveying information about films, books and articles, workshops, visitations, speakers and seminars to the staff.

In developing and circulating the newsletter, it is important to remember that prior knowledge of events greatly increases participation by all concerned. It is also important in the presentation of the newsletter that educational jargon and needless fanfare be avoided. This is especially true when this newsletter is later circulated to parents informing them of upcoming events of importance. The information in the newsletter should be staged in a very matter-of-fact
In presenting films to the staff to acquaint them with open education it is important for the administrator to have previewed the films prior to showing. By previewing the films the administrator has an opportunity to formulate questions that will aid greatly in introducing and later in discussing the major points of the film. It is also important for the administrator to provide for seminars which allow the staff an opportunity to honestly discuss open education as it might apply to them. It also seems reasonable to suggest that the administrator try to correlate films with timely readings. For example, if the film Making Things to Learn (Education Development Center, Inc., Newton, Mass.) should be shown, it seems logical to follow the viewing with the book Found Spaces and Equipment for Children's Centers (Educational Facilities Lab, Inc., New York). In this way teacher enthusiasm and learning may be greatly enhanced.

The administrator anxious to discuss the possibilities of open education with a staff should also make every effort not only to compile a relevant bibliography but also to make every effort to procure as many of the publications as possible. The acquired books and articles should be displayed in a manner that allows for easy access by all concerned. The use of seminars to discuss controversial issues found in the reading should also be considered by the involved administration.
In actually presenting workshops in open education it is important that the administrator make every effort to actively involve the teachers in the learning process. One way of actively involving teachers might be to provide lumber, saws, hammers, nails, and the time to allow the involved teachers to actually construct various components of a classroom environment. By doing this the administrator is actually demonstrating one of the cardinal tenets of open education, i.e., meaningful learning is oftentimes active learning.

In establishing a visitation schedule for staff members it is important for the administrator to have previously visited the contacted school. In this way the administrator can alert staff members to certain ingredients of open education to be aware of in individual classrooms. By previously visiting the school the administrator can also make sure that the program is in fact a legitimate attempt at open education.

Speakers could also prove quite beneficial in presenting various aspects of open education and in answering faculty questions. Resource persons might include teachers and administrators from already existing programs of open education, university personnel familiar with the approach and parents knowledgeable about the concept.

As mentioned previously, seminars should certainly be an ongoing occurrence. A seminar might be quite profitable after each stage under juncture A-4. Seminars can provide a time and place for the staff to
discuss the progress being made and the problems or doubts being encountered.

A-5

At this point in the sequence of procedures, juncture A-5, the administrator must determine if a pilot program seems desirable and if so, by what individuals within the staff and to what degree. It should be pointed out that a program with only one teacher working for only a part of a period each day could constitute a minimal starting point in a pilot program.

It would seem necessary at this point to discuss quite honestly with the faculty the various possibilities of open education. The point should be made quite clear by the administration that regardless of the amount of administrative enthusiasm and zeal for the program, no teacher would be forced into such a program against their beliefs. The fact that teachers, just as children, are uniquely different themselves, and therefore some work best in one setting and some in another. What is comfortable and profitable for one teacher might be totally inappropriate for another. As a result of this recognition, a potential program in open education could be quite appealing to some, while to others it would certainly seem offensive.

At this point the administrator must assess the felt needs of the staff and make a decision concerning future program planning. In
assessing the commitment of the staff relative to the possibilities of open education, an administrator might ask those teachers interested in pursuing further the though of a pilot program to work in writing a program justification and program objectives. Without a legitimate program justification and well developed program objectives to coincide with the written justification the attempt at open education cannot progress to the next program juncture.

At this point it is time for the administrator to select the proper personnel to implement the pilot programs. To aid administrators in making these personnel decisions the writer has developed a set of interview questions that should aid an administrator familiar with the concept of open education in determining the compatibility of a prospective teacher with the program. For a list of these possible interview questions the reader is referred to Appendix K. To also aid the administrator in selecting the proper faculty for pilot program implementation the reader is referred to Appendix L where a list of assumptions concerning learning and knowledge developed by Roland S. Barth may be found. Barth (1971) maintained that teachers likely to be accepting and comfortable with an open classroom would mark the majority of statements in the strongly agree to agree columns.

If the involved administrator can respond at this point to the question "is a pilot program desirable?" in the affirmative, he thereby progresses to juncture A-9, Community Pre-Program Planning. If a
negative response is rendered at this point the question becomes whether the program should be terminated. If a positive response is rendered at this point to the preceding question, the program should be terminated as indicated at stage A-7. If the answer is "No" to the question "program terminated?" then new ideas can be generated and provided for in stage A-8 and recycled back through juncture A-3.

Assuming that the pilot program is desired by some staff members, juncture A-9, Community Pre-Program Planning, is reached.

A-9

Juncture A-9 represents that stage in program development where the staff interested in continuing with the possibilities of open education plan how to initially acquaint the community with the program in the most effective manner.

At this point in program development, planning for future public presentation should be somewhat dependent upon the assessed needs and enthusiasm of the various staff members. For example, if in a faculty of twenty only two teachers are interested in pursuing further the possibilities of open education, then it seems somewhat doubtful whether a full blown program description and justification to a PTA Open House is reasonable. In fact, such an attempt under those circumstances might be quite harmful to staff morale. This is a potentially harmful situation because such an attempt could tend to divide the staff into
those who are "open" and those who are "closed," or not open.

What might be justifiable under the preceding circumstances is a presentation and discussion by the involved teachers of their programs to concerned parents. It is quite important under these circumstances to get the parents into the classroom so they can actually see what the teacher is doing and hoping to do. It is one thing to tell parents how important it is for children to manipulate materials to introduce and reinforce abstract concepts and quite another thing to let them have the opportunity to become actively involved in learning as their children are.

On the other hand, if a majority of faculty might be knowledgeable and enthusiastic about open education then a more en masse attempt at program presentation might be tried quite successfully. For the purposes of model development the writer will assume that a majority of the faculty is knowledgeable of, and enthusiastic about, possible pilot programs in open education.

The following sub-flow chart will hopefully visually portray how a program description might logically be developed for community presentation.
A-9
Community
Pre-Program Planning

A-9.1
Develop
Program
Justification

A-9.2
Develop
Program
Objectives

A-9.3
Develop
Newsletter

A-9.4
Develop Film
and Reading
Bibliography

A-9.5
Develop
Workshops

A-9.6
Provide for
Visitations

A-9.7
Provide Parent-
Teacher Conference
In planning how to best present and justify potential programs of open education to the community, it is crucial that the perspective program participants (teachers and administrators) develop program objectives that coincide with the program justification. Without a defendable program justification and a definite set of program objectives any further planning is irrelevant. The program must be defendable to the public, both in theory and in intent. Delineating program objectives at this point is also crucial for later program evaluation.

For a program justification the reader is referred to the section in Chapter 3 of this thesis entitled "Theoretical Perspectives." A listing of appropriate program objectives can be found in Appendix M. It is important to remember that the written justifications and
described objectives referred to previously should be used as a starting point for further development and refinement by participating staff members.

The next factor to be handled successfully by participating staff members is the development of a newsletter (Stage A-10.3). The rationale behind the parents' newsletter is that knowledge of events is a prerequisite for attendance. The newsletter is used to acquaint and familiarize the community with occurrences in individual classrooms and in the school. The point of the newsletter should be to encourage parents to visit the school and individual classrooms to see what is being done to create a more relevant learning environment for their children.

When considering program presentation to the community, staff members should be aware of the important part that films can play in helping to explain just what the pilot programs hope to accomplish. In determining what films might be used with favorable results the staff might consider the film bibliography appearing in Appendix I. The point to be remembered here is that any film used should avoid the use of educational jargon and fanfare, rather it should strive to present open education in a very matter-of-fact way.

A reading bibliography should be established for community members who would like to pursue further the study of open education as it relates to their children and their school experience. It might be
wise at this point to have the bibliography compiled and ready for handout to interested parents. For a developed reading bibliography concerning open education the reader is again referred to Appendix H. Also, it may be quite appropriate at this point to have several articles of particular merit duplicated for handout to interested parents.

One of the integral parts of the planning phase of pre-community involvement concerns the development of workshops. Parent involvement in workshops can be quite worthwhile in program presentation and justification. Workshops should be planned by staff members to actively involve the parents in the process. One example of such a parent workshop could be the teacher who involves the parents in the ESS (Elementary Science Study) kit on pendulums. From such an involvement the parents should readily be able to see some of the applicability of open education to the elementary classrooms.

Visitations to already existing open classrooms should also be planned by the administration for interested parents. It is quite important for the administrator at this point to direct the interested parents to visit authentic open classrooms. The administrator or involved teachers should also discuss with parents who are going to visit other programs certain important characteristics to be aware of in the visited programs. Also, parents can be alerted to look for ideas or features that might be transferrable to individual classrooms.
in their own school.

In planning how to best present the concept of open education to the public, it is quite important to provide for individual conferences between parents and teachers. Such conferences give the teacher an opportunity to explain how the program can benefit an individual child as well as an opportunity to answer parent questions. Providing individual conferences between teacher and parent also provides an opportunity for the teacher to discuss program progress and individual student progress.

An administrator should also provide for speakers to discuss the implications of the open concept classroom on the education of students in such a program. A speaker can provide an outside source to answer some parental questions that have not yet been asked of the staff.

Seminars should also be planned for in presenting the program to the community. Seminars can provide an opportunity when program questioning can occur by concerned parents. Seminars should be an ongoing process responsive to the needs of those involved, i.e., whenever there is a need a seminar should be held.

With pre-community program planning completed, the staff proceeds to juncture A-10, Program Presentation to Community.
At this juncture in program development, Program Presentation to Community, a program designed to familiarize parents with the concept of open education will be presented and discussed. The following developed program might be presented to a PTA Open House.

The following sub-flow chart will hopefully demonstrate the manner in which the public might initially be introduced to the open classroom concept.
In introducing the topic of open education to the assembled parents at a PTA Open House, a speaker (Stage A-10.1) should present a justification for such an approach in elementary education. In justifying a program it would seem reasonable to deal with the characteristics of the healthy child and how these characteristics are provided for in open education; how the physical environment can influence children's learning; how active personal learning is oftentimes quite meaningful to the individual student; why and how students can be allowed to assume some responsibility for their own learning; and how the structured freedom found at times in an open concept classroom is diametrically opposed to permissiveness.

After briefly presenting the justification for open education programs, the viewing of the film by Alvin Fiering, *Children as People: The Fayerweather Street School* could visually and narratively restate
and reinforce the remarks made in the introduction of the concept. The possibilities of creating a genuine learning environment in a classroom are well documented in this film.

At the conclusion of the film a short question and answer session could follow to discuss any questions that parents might have at this point.

After the question and answer session the assembled parents could go to individual classrooms to see how the various teachers were constructing a learning environment, and how they planned to develop curriculum programs for the children. Individually conducted teacher workshops (Stage A-10.3) in which parents explore the materials that their children actually work with in class could be quite profitable at this point. After working in a math activity center with balancing rods, pulleys with weights, and cuisenaire rods, perhaps a parent would have a much greater insight into the student's remark, "I played with blocks all afternoon."

An opportunity for the parents to question individual teachers concerning various unanswered questions relating to open education is quite important. The opportunity for questioning could be accomplished in a rather informal seminar conducted by the individual teacher in each of the participating classrooms. Such an opportunity allows not just important questions to be asked but also provides an opportunity for the involved teacher to invite parents to come into the classroom.
on a regular basis, two or three at a time, and actually watch the classroom in operation. An informal seminar also provides a time to enlist interested parents in finding and making needed classroom materials, ranging from furniture to scrap material.

In terms of follow-up activities the concerned administrator could urge involved teachers to provide for individual conferences with parents. Such a conference allows the parent to actually see how learning is occurring in the classroom and to ask pertinent questions. It is also important that the individual teacher maintain certain books and articles that may be shared with parents.

The follow-up seminar (Stage A-10.4) is also important to proper program presentation. After the initial program presentation it is important to get the parents back into the classroom at another time so that they can see how the learning environment is constantly changing to meet the needs of their children. A follow-up seminar also provides an opportunity for the teacher and parent to discuss future plans for classroom development. For interested parents visits to other open concept classrooms could be arranged. Such visits might be very helpful in allowing parents to become comfortable with the program.

At the conclusion of juncture A-10, Program Presentation to Community, the involved administrator progresses to the third decision making stage in the model; juncture A-11.
At this point in the program model flow chart the administrator must in view of the research conducted, the assessed needs and resources of staff and community determine if actual pilot programs in open education are desirable at this time. If the administrator responds at this point to the question "is a pilot program desired?" in the affirmative, then program development progresses to juncture A-15, Program Planning. If a negative response is rendered at this point by the administrator, the question becomes whether the program should be terminated. If a positive response is given at this point to the question "program termination?" the program should be ended as indicated by stage A-13. If the answer is "No" to the preceding question, then new ideas for community involvement can be generated and provided for in stage A-14 and recycled back through juncture A-9.

Assuming that the pilot program is desired at this time, juncture A-15, Program Planning, is reached.

At this stage in program development the administration has researched the concept of open education and found it compatible with the assessed needs and desires of staff and community members alike; the program has been presented to both staff and community with favorable results; program justification and corresponding objectives have
been developed; and teachers for the individual pilot programs have been selected. The administration at this point is planning how the pilot programs can best be provided for as they are implemented by the various teachers.

The following sub-flow chart will hopefully aid the reader in recognizing and understanding the logical procedures that might be found under program juncture A-15.

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A-15
Program Planning

A-15.1
Plan for Materials and Supplies

A-15.2
Adapt School Facilities

A-15.3
Provide Administrative Support
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Stage A-15.1 represents the need for concerned administrators to recognize the need to provide assistance to involved teachers in securing free and inexpensive materials to enrich the classroom environment. Teachers trying to develop an open concept classroom need a constant supply of materials and objects to create the proper learning environment. As a result of this need the administrator must strive to determine, acknowledge and satisfy these teacher needs. Barth (1972) maintained that the establishment of an "I Need Box" by the involved principal could help greatly in determining what materials individual teachers needed.

In looking at the total school facilities (Stage A-15.2) the
administrator anxious to provide the proper ingredients to aid in nurturing the pilot programs must realize that a great deal of meaningful learning takes place outside of the classroom. In recognition of this, the involved principal should make every effort to allow, and to encourage, the program teachers to make use of the resources of the total school. For example, the corridors, the playground, and the surrounding school grounds can be used very profitably as a legitimate extension of the classroom learning environment. By carrying this point a step further it is important that the principal make every effort to allow the involved teachers to get outside the school at times and into the surrounding learning environment of city and countryside. It is also important to recognize the need to bring interesting persons from the community into the classroom to provide another legitimate learning experience for the children. Perhaps a potter or a carpenter could be brought into the classroom to discuss and demonstrate their trade with the children.

The next stage under Program Planning is represented by A-15.3, Administrative Support. The need for administrative support for the teacher actively involved in working toward an open classroom is crucial for program success. Various means of providing the needed moral support to teachers are available to enthusiastic administrators. One means of providing moral support to the program teachers is by visiting the classroom on a regular basis. Writing a memo to the
involved teacher after a classroom observation and offering praise for a job well done and offering suggestions developed specifically for individual needs and capabilities is another means of providing administrative support. Arranging for outside resources or consultants in response to specific teacher needs and requests is another means of demonstrating genuine administrative support. Administrators could also demonstrate their support of the pilot programs by providing the involved teachers with planning periods sometime during the school day.

In planning how to best prepare for pilot programs in open education the involved administrator must provide for pre-service and in-service workshops. Pre-service workshops could be extremely helpful not only to teachers but also teacher-aides and community helpers as well. Such pre-service workshops could be developed toward orienting the participants to the philosophy and objectives of open education and in the various techniques for making it work. In-service training could be organized around teacher workshops in all of the curriculum areas as they relate to the open concept classroom.

Teacher seminars (Stage A-15.5) could also be planned by the administration at this time. Informal teacher-administrator seminars dealing with various organization and procedure could be quite profitable to all concerned.

With the Program Planning phase completed the administrator progresses to Program Implementation, juncture A-16.
The following sub-flow chart will hopefully illustrate the important stages an administrator should be aware of in assisting teachers in implementing various pilot programs in open education.
Program juncture A-16, Program Implementation, closely parallels the previously discussed Program Planning juncture A-15. In general, what was planned for in terms of specific factors necessary for a successful pilot program in juncture A-15 was provided for in program juncture A-16.

In establishing the proper physical environment that would be conducive to an open concept classroom the administrator anxious to aid involved teachers should be aware of materials that can be easily obtained from the community that can add greatly to the learning environment of the classroom. For a listing of some free and rather inexpensive materials that can be found in any community the reader is referred to Appendix 0. An administrator anxious to develop a realistic learning environment should also consult the following sources, not only for other materials that can be acquired easily, but for ideas of how to incorporate and develop exciting and challenging classroom and
school environments: 1) The Whole Earth Catalog, Portola Institute, Inc., 2) Farallones Scrapbook, Farallones Designs., 3) Found Spaces and Equipment for Children's Centers, Educational Facilities Lab., Inc. A complete biographical listing of the preceding three sources can be found in Appendix H.

In program implementation the concerned administrator should recognize the need for some type of para-professional help in the classroom for the involved teachers. One source of para-professional help that should be considered is community members. Oftentimes parents are more than willing to donate time to the classroom if there is a genuine need. Regardless of the source of para-professional help, it is the administrator's responsibility to conduct pre-service and in-service workshops to acquaint and familiarize the participants with the philosophy and objectives of open education.

Another factor that should be provided for by the administration if at all possible is a degree of planning time within the school day for teachers in the pilot programs. By wisely incorporating the use of para-professional help the administrator might well be able to free the individual teacher for a few minutes a day for planning.

Stage A-16.4 represents the definite need for administrative support to the involved teachers. As discussed previously this support should be of two kinds. In one instance the administrator should provide moral support for the involved teachers, and secondly the
administrator should stand ready to aid the individual teacher in any possible way in acquiring needed materials and objects for the learning environment.

The administrator, in working with teachers to implement pilot programs, must provide the necessary pre-service and in-service workshops required to orientate the staff adequately to the concept and later to provide workshop experience which provides the "how to" of successful implementation. The various workshop concepts have previously been discussed at several stages in program development throughout this chapter and do not need to be reiterated again here.

In actually implementing the various pilot programs the administrator should bear in mind, and provide for, informal teacher seminars. As mentioned previously, informal teacher seminars dealing with various aspects of children's learning and with resulting problems in proper classroom organization and procedure as they relate to open education can be quite profitable from those involved. It would seem beneficial to all concerned for the administration to provide for these informal teacher seminars.
With the various pilot programs in operation, juncture A-17, Program Evaluation is reached. The following sub-flow chart will hopefully visually describe an appropriate means of program evaluation.

Stage A-17.1 represents that part of program evaluation based upon "soft" data, i.e., subjective information. Teacher feelings and opinions about the individual pilot programs are extremely important here. The responses given by teachers to such questions as: What did open education do for the children? Did the children learn anything? Did the children profit from the experience? How do you feel
now about the place of open education in the elementary grades? Why is
open education better, or worse, than more traditional approaches? The
responses to these questions are important factors in evaluating the
pilot programs. Subjective internal evaluation is important because
without teacher belief in the program the attempt will fail regardless of objective evaluation results.

External program evaluation (Stage A-17.2) is also important at this point. This facet of program evaluation would be characterized by objective results utilizing "hard" data. The results here could be based upon standardized tests, teacher made tests, interviews, observations, surveys, etc., to determine how well the previously stated program objectives were met. Hopefully this objective data would allow the involved administrator to evaluate the pilot program in the most realistic manner to determine if in fact the program accomplished what it intended to accomplish. The point here is that through the use of external evaluative procedures the administrator can objectively document the effectiveness of the pilot programs in terms of meeting the previously defined (Stage A-9.2) program objectives.

The administrator at this point might also be concerned with the supervision of pilot programs for the improvement of curriculum offerings. By referring to Appendix N the reader will find a developed form that might prove beneficial in supervising the pilot programs for the improvement of instruction.
Decision juncture A-18 is reached at the conclusion of Program Evaluation. At this point the administrator is required to render a response to the question "is program effective?" The administrator can respond to the preceding question in the affirmative and thereby progress to juncture A-22, Program Maintenance and Refinement. If a negative response is rendered at this point, the question becomes whether the program should be terminated or reconstructed. If a positive response is given at this point to the question "program termination?" then the program should be ended as indicated by stage A-20. If the answer is "No" to the question "program termination?" then new ideas can be generated and provided for in stage A-21, Generate New Ideas, and recycled back through juncture A-15.

Assuming that the evaluated pilot programs are legitimate, juncture A-22, Program Maintenance and Refinement, is reached.

In providing for the maintenance and refinement of the various programs the establishment of an advisory service could provide the main impetus for continued positive growth in the various open education programs. The advisory service should be staffed with professionals who have experienced success with implementing open education in the elementary grades. Advisory personnel do not necessarily have to be
part of the involved school system, but their status and function must be understood, accepted and endorsed by the appropriate school authorities.

The advisor's way of working is based on commonly held beliefs with teachers and administrators concerning the way children should be educated. Within broad areas of agreement the advisor does not attempt to impose or force specific ideas on anyone; the advisor does not try to sell ready-made programs, or various curriculum packages. On the contrary, the advisor's job is to respond to the unique demands of the situation. The main function of an advisory service should be one of support. The advisor must be able to listen to constant anxieties and doubts from the involved teachers and resolve unsolved problems while offering support and encouragement continually. The advisor tries to extend what involved staff members are capable of doing, rather than telling them what they should or should not do (Armington, 1969). By referring to Appendix R the reader will gain an insight into some of the activities program advisors may be involved in. A refined set of program objectives based upon the implemented program might well be an integral of this juncture.

With the establishment of the advisory service to provide for program maintenance and refinement, and possible redefined program objectives, juncture A-23 is reached.
In the development of the program model flow chart juncture A-23 represents another decision making juncture. As in juncture A-18 the administrator is again asked "is program effective?" By employing the same criteria discussed previously under juncture A-17, Program Evaluation, the administrator at this point can now respond to the question "is program effective?" If the response to the preceding question is "Yes" the administrator then progresses to program juncture A-26, Disseminate Information. If the involved administrator should reply to the question "is program effective?" by responding in the negative, then decision juncture A-24 is reached. Program juncture A-24 asks the involved administrator to respond to the question "program termination?" at this time. If a positive response is given to the preceding question at this point, the program is ended as indicated by stage A-25. If the administrator replies "No" to the preceding question, then new ideas for program implementation can be generated and recycled back through stage A-21 and eventually back into stage A-15, Program Planning.

Assuming that the response to the question posed at decision juncture A-23 is positive, the involved administrator progresses to program juncture A-26, Disseminate Information.
The following sub-flow chart will hopefully visually describe some logical ways information might be disseminated to the public concerning the various pilot programs in open education.
Disseminating information concerning the various pilot programs is, of course, an extremely important component of the total developed program. Without adequate dissemination of information relative to the developed open classrooms, others interested in such a program cannot profit from the encountered problems and developed possible solutions.

One way of presenting the program results to the public is by the use of staff developed newsletters. Such a newsletter could alert area educators as well as lay people to the progress made in developing open concept classrooms. Articles discussing the philosophy and objectives inherent in the concept and the total program rationale could be presented in the newsletter. Perhaps one teacher could discuss what the transition toward an open concept classroom was like for her. The problems encountered by various teachers and possible solutions to the encountered obstacles could be another timely article to be found in such a newsletter.
Stage A-26.2 represents the possibility of staff participation in various educational conferences. Participation in such conferences could provide a means of sharing the problems and successes of the open classroom pilot programs with others. Some of the questions that could be answered by staff participation in various conferences could be some of the following: How do I start? What is the teacher's role? Will students learn the basic skills? What does an open concept classroom look like? How do I grade? How might parents react?

Visitation by other interested educators and parents should be encouraged and provided for by the involved project participants. The general format of the visit might be for the involved administrator to orient a small group of visitors to the aims and nature of open education prior to visiting the classrooms. The visitors could then be taken to those program classrooms that most closely corresponded to their interests. Teachers could answer visitor questions as time permitted during the classroom visit.

Stage A-26.4 represents the possibility of newspaper coverage concerning the successes of the pilot programs. Teachers could be asked to contribute articles dealing with various facets of open education. The students in open concept classrooms might also be asked to write articles dealing with their feelings toward the new approach. By inviting reporters into the school and explaining and showing the programs, worthwhile newspaper coverage may well result.
A video tape of an open concept classroom could also be quite useful in disseminating information about the pilot program. A segment of a regular classroom day could be taped and later edited and narrated by the classroom teacher to demonstrate the essential characteristics of open education (Johnson and Page, 1971).

Another means of disseminating information concerning the pilot programs could be an open line radio program. Staff members could discuss the salient characteristics of open education and be ready to respond to telephoned questions from listeners.

With the information disseminated to the public, the administrator reaches the last decision juncture in the program model, juncture A-28. At this time the administrator is required to respond to the question "continue program for second year?" A negative response at this point provides for program termination as indicated by Stage A-28. A positive response to the preceding question allows the administrator to generate new ideas (Stage A-29) for program development and recycle the program back through juncture A-15. Such a procedure allows for continual evaluation and refinement of the various pilot programs.
Formal entry into the teacher model is made after the interested teacher has successfully progressed through juncture B-1, Indication of Need, and juncture B-2, Research Program Possibilities. As mentioned in the introductory discussion to the administrator model, teachers as well as administrators, must first of all ascertain a definite need for an alternative approach to current educational practices from their perceptual field. Such a recognized need can of course vary from individual to individual, but the point is that something must make that individual teacher or administrator recognize the need to seek some type of alternative to the existing programs. Once this need has been recognized the teacher may turn toward open education as a possible answer. At this point the interested teacher is required to conduct research into the possibilities of the open concept classroom providing for the previously recognized need. A discussion of the means of conducting profitable research into the concept of open education was previously described at program stage B-2. It is at this point that the interested teacher formally enters the teacher model.

The first juncture in the teacher model, juncture T-1, requires the involved teacher to make a decision based upon the research conducted to the question, "Is a pilot program desired?" In answering this question the teacher is in fact deciding, based upon the research
conducted, if open education might be a means of providing for the previously recognized need. If the response to the previous question is negative, the attempt at program implementation is ended as indicated by stage T-2. On the other hand, if the interested teacher responds positively to the question, "Is pilot program desirable?", program juncture T-3, Pre-Program Planning, is reached.

T-3

The following sub-flow chart will hopefully visually describe a logical means of program planning for the involved teacher.
At this point (Stage T-3.1) it is imperative that the involved teacher develop a legitimate program justification and corresponding set of objectives. As mentioned previously in the administrator model, without a defendable program justification and corresponding set of program objectives, any further planning is wasted effort. Delineating
program objectives at this point is also crucial for later program evaluation.

Stage T-3.2 acknowledges the importance of providing the proper physical environment most conducive to open education. Heavy stress is placed on designing a classroom environment rich and varied in learning resources. Such a physical classroom environment is important since children learn from actively interacting with their environment. In justifying a rich and stimulating classroom environment, Barth (1972:23) stated that "active exploration in a rich environment, offering a wide array of manipulative materials facilitates children's learning." With the recognition by the individual teacher concerning the importance of creating such a learning environment, the next step is, of course, to go about actually constructing such an environment. Hopefully, the following discussion will help an interested teacher in constructing such a learning environment.

In exploring the possibilities of an open classroom the interested teacher is confronted oftentimes with two questions. The interested teacher first of all wonders what the classroom will look like physically as it begins to open up. The question is often heard, "But what will the room look like when I'm finished?" The second question often deals with the materials and supplies needed for a successful open concept classroom. Often teachers anxious to move toward open education are afraid of not being able to provide the
proper materials or objects to stimulate and reinforce learning properly.

The answer to the first question varies because the programs and the resulting physical environment are unique to each teacher and to her students. What one teacher feels comfortable with and deems an important component of open education, another may find not so important. However, some general characteristics of open education are fairly evident as one reviews the literature.

The first characteristic often common to these classrooms is a degree of "openness," i.e., some desks have been moved, or removed to provide for learning, or interest centers. Each center is actually a mini-classroom designed to accommodate a particular interest of children, or a particular curriculum area. For example, the center devoted to science would contain various scientific apparatus, tables, display space, specimens, books, and other materials and supplies that would help children discover and investigate by themselves. Materials found in this center could include scales, ropes and pulleys, water tables, beakers, scissors, paper clips, magnets, batteries and numerous "other" materials. In such a classroom the reading center would be arranged to aid children cultivate a love of reading. The reading corner of the room might include a shaggy rug, a lamp, rockers and soft chairs, and an attractive and varied collection of books. The reading center is an inviting place to be, warm and cozy--the best place
room to enjoy a good book (Hertzberg and Stone, 1971).

Each learning center is set up in such a way that materials are readily available to the students. Small racks or bookshelves are combined wooden crates, shoe boxes, plastic containers and numerous other storage devices so that the children can have what they need close at hand for each learning activity. The flexibility and ingenuity with which the teacher arranges the room can also be seen in the use of various teaching materials. In the open concept classroom materials are readily available for children's use. Paints are not stored in a cupboard but within easy reach in a container close to the sink. Books are not put away by the teacher and reserved for use at specified times of the day, rather books are always available to children when they need them most (Hertzberg and Stone, 1971).

For a more detailed description of what an open concept classroom might look like the reader is referred to the following two books: Open Education, Joseph D. Hassett and Arline Weisberg, and The English Infant School and Informal Education, Lillian Weber.

Concerning materials, for the teacher in the open concept classroom, the problem is one of selection, for through the selection of materials the teacher influences the direction of the child's exploration, and hence his learning (Barth, 1972). Barth (1972) continues by suggesting five criteria which can guide the teacher's selection of classroom materials and which may help in reaching an optimal match
between children and materials. The criteria for material selection developed by Barth (1972) are presented in detail at this time by the writer to hopefully aid involved teachers in the selection of meaningful materials for their individual classrooms.

**Criterion 1:** Whenever possible, encourage and permit children to supply their own materials.

One way a teacher can be sure that the classroom contains materials capable of eliciting children's interest is to encourage children to bring items of interest to school with them. Since "given the opportunity, children may choose to engage in activities which will be of high interest to them," objects which children select from their real world are likely to encourage their exploration and learning.

**Criterion 2:** Whenever possible, encourage and permit children to explore the real world outside the classroom and outside the school.

When the notion of the teacher as the child's only source of knowledge is dismissed, the classroom is no longer sacrosanct. It is often justifiable for the teacher to release children from the rigid adherence to a five-hour-a-day schedule in the classroom, so that they may explore the environment outside the classroom. In this manner a whole world of possibilities opens up, and the total environment becomes the locus of the child's learning.

**Criterion 3:** The best materials for children are common ones, which are inexpensive, familiar, and easily available.
Common, less expensive materials, often have many advantages. In seeking them out, children and teachers often learn to be imaginative, inventive and resourceful. By seeking out interesting objects, children learn to master raw materials of the environment around them. Children learn to relate in-school materials and activities--animals, clay, sand, tree roots, water--to out-of-school activities. Children tend to respect and care for these inexpensive commonly found materials with a genuine zeal, whereas they often abuse more expensive school equipment. It seems that freedom and independence often surround the child's use of ordinary things, in contrast to the constraint, dependence and resentment often associated with more commercial materials. The freedom often found with these "homemade" materials makes learning more possible.

Criterion 4: Ambiguous, multiprogrammed materials which suggest to the child a wide number of possible paths of exploration are preferred.

Easily obtainable and common materials tend to be more ambiguous and less directive, and thus offer each child a greater place in determining their use. Many manufactured educational materials are designed to exclude all but one or two possible paths for the child's exploration and thinking. As a result of the designed structure found within these materials, the child often becomes dependent upon a source outside himself to initiate, sustain, and verify his own
learning.

**Criterion 5:** Select materials which have a high likelihood of initiating, sustaining, and extending exploration.

Because learning is a necessary consequence of active exploration in a rich environment, it is important for the teacher to select materials which will make active exploration likely. It cannot be assumed that all students will explore a random collection of materials. For this reason, the teacher must provide materials which will invite questions, examination and study.

The materials that a teacher might use with success depends of course upon the children and their interests and needs, but for a list of materials, supplies and objects that other teachers have found helpful in an open classroom, the reader is referred to Appendix 0. A description of how these various and sundry materials and supplies might be turned into an attractive and stimulating learning environment can be found in the following two publications: _Found Spaces and Equipment for Children's Centers_, Educational Facilities Lab., Inc., and _Farallones Scrapbook_, Farallones Designs.

With the recognition and understanding on the part of the involved teacher concerning the importance of creating the proper learning environment, the teacher interested in program development progresses to stage T-3.3, Determine Curriculum Area. While other possible means of initiating an open classroom exist, the writer feels
the use of a specified curriculum area offers the best avenue for success. At this stage the individual teacher should select the curriculum area in which they feel most comfortable, confident, competent and enthusiastic. The involved teachers should attempt to tailor the program to suit their own personality and interests. It is important for teachers to retain those elements of the conventional classroom which they need in order to feel secure (Johnson and Page, 1971). With the decision made concerning which curriculum area would most likely allow for a successful program, the involved teacher progresses to stage T-3.4, Develop Curriculum Area.

In developing a specified curriculum area (Stage T-3.4), the involved teacher should just look to the physical setting of the classroom and how physical facilities could best be adapted to meet the demands of the specified curriculum in an open setting. The movement of desks to provide for a learning center, the addition of storage and display facilities close at hand, and the addition of appropriate resource materials could all be dealt with in developing a curriculum area to coincide with the open concept. Again it is important to note that by only changing physical appearances to more closely resemble English open concept classrooms without understanding, accepting and believing in the rationale underlying, these changes will lead inevitably to failure and conflict among children, teachers, administrators, and parents (Barth, 1971).
It should be noted at this point that the individual teacher might be much better off and infinitely more successful by starting the move toward open education quite gradually. Perhaps only a degree of openness is desired in one curriculum area. Such a move is certainly justifiable. If the teacher is not comfortable with the approach, the rewards from the program to individual students are not likely to be very great.

Once the individual teacher has determined how the physical resources of the room might be best used, the next step is to determine what materials and supplies should be incorporated into the selected curriculum area. The reader is referred at this point to the previously discussed five criterion developed by Barth (1972) to aid teachers in appropriating appropriate material and to Appendix 0 where a listing of possible resource materials is available.

In supplying materials for the classroom learning environment, the task of the teacher is to select those materials which will provide multiple structures and then to encourage each child to use the full range of possibilities inherent in the material and in himself. Just like materials, people can be more or less directive, rigid and prescribing. What and how a teacher encourages children to do with materials has just as great an influence on the thinking and behavior of children as do the inherent properties of the various materials. Hopefully, all children will develop competence, confidence, and
resourcefulness when confronted with an unstructured and ambiguous situation (Barth, 1972).

With the first four stages of juncture T-3 completed successfully, the involved teacher arrives at stage T-3.5.

At this point in the program development (Stage T-3.5) the involved teacher should provide for informing the proper administrative personnel of the attempted program. In presenting the intended program it is extremely important that the teacher be able to legitimately justify such a program and to innumerate the objectives of such an attempt. As mentioned previously, without a program justification and corresponding set of objectives, it is doubtful whether many elementary administrators would be willing to license such an attempt. The teacher must be able to explain both the "why" and "how" of the concept.

In justifying such a program, the reader is referred to the discussion of the healthy child found in Chapter 3 of this thesis. In terms of a discussion of program objectives the reader might find the information included in Appendix M useful as a point of departure for individual program objectives.

T-4

When the involved teacher successfully completes the four stages within juncture T-3, program juncture T-4 is reached. Juncture
A-4 actually represents program initiation by an individual teacher. For discussions of how various curriculum areas might be successfully worked with, in terms of open education, the reader would find the following sources useful: *Teaching In The Early Years*, Bernard Spodek, *Teaching In The British Primary School*, Vincent Rogers, and *Schools Are For Children*, Alvin Hertzberg and Edward F. Stone.

To give the reader an idea of how a program in a certain curriculum area might be initiated, the reader is referred to Appendix P where a discussion of the various means and activities for implementing an art program in an open concept classroom are discussed.

**T-5**

With a pilot program actually in operation, the next stage in program development, program juncture T-5, calls for an evaluation of the existing program. At this point in program development, the called for evaluation is subjective in nature. The evaluation is actually a continuous assessment of individual teachers’ feelings, attitudes and beliefs concerning the existing pilot programs by those teachers. The assumption is made here that unless the involved teacher is relatively comfortable and compatible with the functioning program, the progress that can be expected is small indeed.

With a constant internal evaluation, the individual teacher must be evaluating the program in terms of how the stated objectives
relate to the program, and how, in turn, the program actually relates to the children. An ongoing evaluation of this sort leads naturally to the next decision juncture, T-6.

T-6

Decision juncture T-6 asks the involved teachers to respond to the question "is program successful?" It must be remembered at this point in program development that the teacher is responding in a very subjective manner. The answer to the question "is program successful?" should be based on the individual teacher's feelings toward the program. In evaluating the physical arrangement of the room as it relates to the total learning environment, the reader is referred to Appendix Q. If the teacher feels relatively comfortable with the program and believes that the involved children are profiting from the experience, the answer to the preceding question should be a positive one. If, on the other hand, the teacher feels either uncomfortable with the program personally, or that the program is not meeting the needs of the children, the proper response to the preceding question should, of course, be a negative one.

Should the teacher respond negatively to the question "is program effective?" the responding teacher is immediately faced with another decision juncture. At juncture T-7 the teacher is asked to respond to the question "program termination?" If "Yes" is the
response to this question, the pilot program is terminated as represented by stage T-8. On the other hand, if the involved teacher responds negatively to the question concerning possible program termination, a means of generating new ideas (Stage T-9) is provided whereby these new ideas can be recycled back through the program.

The teacher who responds positively to the previously stated question "is program effective?" progresses to program juncture T-10, Program Continuation.

T-10

Program Continuation provides for the involved teacher to continue to work toward refining and enlarging the existing open concept classroom. At this point, often the participating teacher is ready to attempt the program in another curriculum area. If the original attempt was made in math, perhaps now the involved teacher is ready to incorporate science into the program.

From program juncture T-10, Program Continuation, the involved teacher progresses to juncture T-11, Program Evaluation.

T-11

At this point in program development the evaluation of the total pilot program is called for. The evaluation being conducted at this juncture is somewhat more involved and objective than the evaluation procedure previously mentioned within juncture T-5. The following
sub-flow chart will hopefully aid in explaining the various components of the evaluation procedure at this point in program development.

Stage T-11.1 represents the internal subjective teacher evaluation of the pilot program. At this point the involved teacher must again evaluate the program in terms of individual feelings and beliefs toward the program. The teacher must decide how she feels about the program. Is the program meeting the needs of the children? Are the children learning the basic skills? Is the program congruent with the individual teacher's idea of what education should be and should do? These are some of the questions that involved teachers must ask themselves at this point. As stated previously, this form of evaluation is
based upon the assumption that for a program to be truly effective, the personality and philosophical orientation of the involved teacher to education must be compatible with the objectives of the program and comfortable with the processes used within the program to reach these objectives.

A more objective evaluation of the pilot programs is also demanded at this time (Stage T-11.2). If the pilot programs are not imparting the necessary skills, i.e., reading, writing and arithmetic, the program is, in the writer's opinion, unjustifiable. To answer these questions the individual teacher might ask for an outside evaluator to be used to aid in determining the effectiveness of the program. The outside evaluator hopefully could be a bit more objective in terms of reliably evaluating the program than the involved teacher.

In evaluating the various pilot programs, the evaluator must rely on "hard" data such as achievement test scores, teacher made tests, interviews, observations and surveys to determine if previously defined program objectives have been met. At this point in the evaluation process it may be necessary for the evaluator to develop, or incorporate other evaluative instruments for use in program evaluation. An example of this might well be the development or incorporation of an instrument to evaluate a student's desire to read.

In evaluating the total program it is extremely important to look at all facets of possible student growth in an objective manner.
The evaluator must look not only at the achievement test scores but also at the internal affective gain made by the individually involved student. Is the involved student more congruent with himself after participation in such a program? This is certainly a facet of program evaluation that should be dealt with in order to honestly evaluate the program.

At the conclusion of program juncture A-11, Program Evaluation, the teacher progresses to decision juncture A-12. At this point in program development the involved teacher must answer the question, "Is program effective?" based on both the internal and external evaluation procedures.

To aid the individual teacher in answering the preceding question, the following table is proposed. The table below is designed so that both an internal, subjective response, and an external, objective response are called for in reply to the question "is program effective?" For instance, in evaluating a pilot program the involved teacher must respond from a subjective standpoint whether the program has been effective from her standpoint. At the same time a more objective evaluation using "hard data" must be delivered.

The following chart is based on the assumptions that: 1) if a program cannot impart the necessary skills to students such as reading and writing it is unjustifiable, and 2) a teacher must be philosophically congruent, and personally compatible with the attempted program.
for it to reach its maximum potential.

**Figure 1**

**Internal Evaluation**
"Is Program Effective?"

<table>
<thead>
<tr>
<th>Yes (A-1)</th>
<th>No (A-2)</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>No (A-3)</td>
<td>No (A-4)</td>
<td>No</td>
</tr>
</tbody>
</table>

**External Evaluation**
"Is Program Effective?"

By responding in the negative to the question "Is program effective?", as represented by stages A-2, A-3, and A-4 in the preceding table, the involved teacher progresses to stage T-13. At this point the concerned teacher must render a response to the question "Program termination?" If the answer to this question is "Yes" the program is ended as represented by stage T-14. If the response to the preceding question is "No" the responding teacher progresses to juncture T-15 which allows for new ideas for program development to be generated and recycled back through program juncture T-3.

If, on the other hand, the responding teacher replies favorably
to the question, "Is program effective?" program juncture T-16 is reached. At this point in program development the involved teacher must decide if the pilot program is to be continued for another year. If the answer to the question "Continue program for second year?" is "No," the program is ended as shown at stage T-17. On the other hand, if the involved teacher responds favorably to the preceding question, program continuation is assured. The teacher responding favorably at this point progresses back to juncture T-9 where new ideas for the second year of the program can be generated and recycled through juncture T-3.

**SUMMARY**

The writer attempted in the preceding chapter to develop, present, and discuss an administrator and teacher model designed to aid those educators anxious to implement and maintain programs of open education in the elementary school. As mentioned previously the developed models do not represent a complete "package" or strict set of "blueprints," which if understood and adopted, would somehow solve every problem and provide an easy road to a successful program. Rather, the developed models are intended to provide guidelines that should give interested educators a sense of direction and purpose in working toward open education.

The developed administrator and teacher models were based on a
paradigm for program development presented by Throop (1972). The first major stage of program development was represented in the model flow charts as the conceptual stage. At this point an idea was formed and developed into a specific problem statement. The conceptual stage represented an individual's point of entry into the developed program model. In the developed models junctures B-1 and B-2 represented this stage of program development. At this point the involved teacher or administrator recognized an internal need to seek legitimate alternative approaches to current educational practices. From this point the teacher or administrator researched the possibilities of open education to provide for the previously recognized needs.

The planning stage was the second major stage in the paradigm for model development dealt with in the preceding developed administrator and teacher models. At this point the following questions were answered by those involved: why, what, who, when, where, and how. In the developed administrator model this stage of program development was represented by junctures A-3 through A-15. Correspondingly this stage of program development in the teacher model was represented by program juncture T-3.

The third major stage in the developed models was represented by the attempts at pilot programs. The pilot program stage was designed to allow for program implementation and to determine the effectiveness of a planned program on a limited basis. This stage also allowed for
program modification and refinement. In the developed models, program implementation using a pilot program was provided for at juncture A-16 in the administrator model, and juncture T-4 in the teacher model. Refinement and modification of the initiated pilot programs was provided for under juncture A-22 in the administrator model and juncture T-10 in the teacher model.

The process of evaluating the implemented pilot programs was the fourth major stage in model development. At this point in model development the effectiveness of the pilot program was evaluated. Evaluation of the implemented pilot programs was provided for in the preceding models by juncture A-18 in the administrator model, and juncture T-11 in the teacher model. The results from the program evaluation junctures served as a basis for program refinement or program termination.

The final division in the developed models dealt with the program maintenance and refinement stage. This stage was designed to permit needed modifications to the existing program to be provided for. This stage was provided for in the administrator model by juncture A-22 and juncture T-10 in the teacher model. Program refinement at this point in model development allowed for a continuous program assessment, and resulting program modification through junctures A-29 and A-15 in the administrator model, and junctures T-9 and T-3 in the teacher model.
The pilot programs, as a result of the refinement stage, are continually changing to meet the felt needs of those involved teachers and administrators.

The next chapter will deal with the summary, recommendations, and conclusions reached by the writer in conducting this study.
Chapter 7

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In this chapter the writer will present a general thesis summary, delineate various conclusions reached, and present recommendations made as a result of this study.

SUMMARY

This dissertation dealt with the problem of developing a teacher model and an administrator model to aid involved educators in implementing a program of open education in elementary schools. It was hoped that in developing these models, the various obstacles in the paths of American educators and possible strategies for overcoming these obstructions would be dealt with in detail.

In developing these teacher and administrator models, the writer hoped to answer the following questions:

1. What change factors must be recognized and understood if planned organizational change is to be successful?

2. What are the major obstacles in the paths of American educators anxious to implement open education?

3. What are the various strategies that might be followed that would culminate in the establishment and continuation of an open classroom?

4. What might be considered a primary and secondary reading and film bibliography?
5. What are the primary materials that might prove valuable in such a classroom, and how might they be made or obtained?

6. How can the program best be introduced to the public?

7. What methods can be used in selecting proper teachers for the program.

8. How might such a program logically be introduced by an individual teacher or administrator in an elementary school?

9. How can the necessary continuing support for teachers involved in such a program be best provided?

10. What is the best means of supervising a program of open education for the improvement of instruction?

11. How can a program of open education be evaluated in terms of determining the authenticity of the program?

In order to answer the preceding questions and complete the study, the following procedures were followed:

1. Establishment of a working definition of open education for the purposes of this study.

2. Documentary research. The researcher conducted an intensive and thorough review of the literature in the following areas:

   a. Theoretical Background. This section dealt with the theoretical principles which support the educational philosophy that guides the open education approach to elementary education. The various educationists who have made contributions to the theoretical foundations were discussed here. The various beliefs about human growth and development which support the open education approach were also dealt with in this section.

   b. Historical Perspectives. In this section an attempt was made to give the reader some feel for the historical development of open education in Great Britain. The recent spread of the movement to this country within the past ten years was also reviewed in this section.
c. **Obstacles to Implementation.** To determine the various obstructions to implementation, the writer relied basically upon documentary research. Additional obstacles likely to be encountered by teachers and administrators resulted from a mailed questionnaire and personal interviews with experienced educators in the field.

d. **Strategies for Implementation.** This section dealt with the various strategies and suggestions for successful implementation that have been researched by the author. Once again, the research was based upon three sources of information: 1) documentary research, 2) results from a mailed questionnaire, 3) results of personal interviews with experienced educators in the field. By combining obstacles to implementation with strategies for successful implementation, the writer developed a basis for model construction.

e. **Change.** This section dealt with the various aspects of change that must be recognized and understood by those involved if a program of open education is to be initiated and maintained in elementary schools.

3. Questionnaires were developed and submitted to involved teachers and administrators to determine some of the problems, and possible solutions, often encountered in striving to implement and maintain a program of open education in the elementary grades.

4. Personal interviews were held with some educators who had firsthand knowledge and experience with initiating a program of open education. To accomplish this, trips were made to:

   a. Mountain View School, Great Falls, Montana
   b. Skyline School, Great Falls, Montana
   c. Longfellow School, Great Falls, Montana
   d. The Daly School, Hamilton, Montana
   e. Primary School, Whitefish, Montana
   f. Irving School, Bozeman, Montana
5. Actual models were developed which hopefully would prove useful to educators interested and anxious to implement such a program.

This study was limited in the following ways:

1. Less effort and time were devoted to the historical perspectives, theoretical background, and change factors necessary for meaningful change to occur, in this thesis, since these areas are more than adequately discussed in other publications.

2. This was a theoretical study only. The actual field implementation and evaluation of the strategies found in the devised models will not be tested at this time.

3. Only a randomly selected group of educators and researchers were contacted for assistance in gathering data.

4. The models developed in this study do not suggest a cure-all for the various problems often encountered in striving to implement such a program. The models do not represent a complete "package" or strict set of "blueprints," which if understood and adopted, would somehow solve every problem and provide an easy road to a successful program. Rather, the developed models do provide a set of procedures that give the individual teacher and administrator a sense of direction and purpose in working to implement a program of open education in the elementary grades.

5. The majority of sources considered in the development of this paper were from the Montana State University Library, a personal library that included over forty titles dealing with various facets of open education, other libraries through inter-library loans, and extensive use of ERIC resources.

6. A cost analysis of the various aspects and phases of the models for implementation and maintenance of such a program were not dealt with.

The review of literature attempted to justify and aid future model development by providing answers to the following questions:
1. What are the basic assumptions and theoretical principles which support open education?

2. Can open education be justified on the basis of these assumptions and theoretical principles?

3. What practical lessons for successful program implementation can be learned from reviewing the historical development of open education in England, and more recently in the United States?

4. What are some of the obstacles often encountered by teachers and principals as they move toward programs of open education?

5. What are some of the suggestions that have been advanced for implementing and maintaining programs of open education successfully?

6. What are the various aspects of change that must be recognized and understood by those involved in open education if the programs are to be successful?

In answer to question 1, the various assumptions concerning children, and learning that form an integral part of the foundation of open education were presented and documented.

The point that children are by nature very curious beings, as a result they will explore their environment in a meaningful way without adult intervention was discussed in this section. This natural curiosity of children grows and blooms just as a plant grows and blooms in the proper environment, but in a hostile environment, i.e., one that threatens this natural drive, the spirit of curiosity will soon wither due to a lack of proper nutrients just as a plant will cease to grow if it is not provided with the proper nutrients.
The importance of play as the child's means of living and learning about life was also presented and documented. The point that significant learning on the part of the child is often acquired through actively "doing" was established. Play was also viewed as quite important to children because often it provides the means which children can reconcile their inner lives with external reality.

The fact that active exploration in rich and varied environments, offering a wide array of manipulative materials greatly facilitates children's learning was also documented. The importance of the interaction (both verbal and physical) found between the child and the surrounding environment was stressed in this section. The point was documented that the source of motivation resides not wholly in the child, nor in the external world, but in the interaction of one with another.

Concerning the intellectual development of children the view was presented in related literature that children need time to learn; that they go through various developmental stages, each in their own way at their own pace; and that their thinking progresses in sequence from concrete to abstract.

In answer to question 2, some of the natural characteristics of the "healthy child" were presented and documented. The term healthy child referred to the child who is psychologically and spiritually alive with life; the child who has not yet conceded the natural tendencies
of life to a modern society; the child who is comfortable, content and spontaneous with himself and the world. The characteristics of the healthy child included curiosity, spontaneity, creativity, and the striving for self-realization. From this point the writer attempted to document that the natural characteristics of the healthy child were certainly recognized and provided for in the basic assumptions, theoretical principles, and philosophical beliefs which support open education. In fact, the maintenance and enhancement of the characteristics of the healthy child are congruent with the assumptions and principles upon which open education is based.

In answer to question 3, literature was reviewed to determine what practical lessons might be learned from the historical development of open education in Great Britain and the United States for others interested in implementing such a program.

In reviewing the historical development of open education in Great Britain and the United States, it seemed apparent that the movement toward open education must be made by educators who are knowledgeable and enthusiastic about the program, and who recognize that attempts at instant reform can only end in chaos for all.

In reviewing the literature for obstacles often encountered by involved teachers and administrators in the move toward programs of open education, the problems concerning the label "open education" were dealt with first.
The problems inherent in accurately and adequately labeling the approach were found to be several. It was found that as with any label the term "open education" has a certain degree of ambiguity associated with it. The term is fairly ambiguous because of the various frames of reference brought to bear upon it. The term open means many different things to various people.

Another problem encountered in trying to label the approach is that as a descriptive term, "open education" can be relatively meaningless. What is to be defined as open and consequently what is to be considered closed? As a result, openness must be considered as a relative term; one that must be described accurately and thoroughly in each instance if it is to convey the proper meaning. A polarization within a faculty can also be due to the faulty use of labels. If a classroom becomes known as an "open classroom," what are the others to be called? The misuse of labels can also limit a teacher's flexibility of response because labels often dictate accompanying stereotypes.

While discussing the obstacles inherent in labeling the writer also discovered that labeling can be beneficial. With proper use, labels can call to mind on the part of the reader certain relevant characteristics commonly associated with a specific label.

The attempt by some teachers and administrators to achieve instant reform in the classroom or school is another often encountered obstacle to legitimate programs of open education. Another commonly
encountered obstacle in the move toward more open classrooms has been the attempt by some to change only the physical appearance of the classroom or school to correspond to the numerous descriptions found in the literature of open classrooms and schools.

The various roles assigned to the American principal as opposed to his counterpart--the English head teacher--also seemed to generate certain obstacles to the proper implementation of programs of open education in this country. School size is another factor which may account in part for the difference in the two roles. The majority of English head teachers work in a school of about 250 students, while the American elementary principal usually works with at least double that number. With the difference in school size it is of course easier for the head teacher to work with the staff for curriculum improvement. Another factor responsible for the difference in roles was found in the presence or absence of certain community pressures. The English head teacher seemed much freer to explore, to try things out, to work with various teaching methods and organizational patterns than his American counterpart.

In attempting to answer question 5 the literature was reviewed for possible suggestions that had been previously advanced by various authors for ways of successfully implementing and maintaining programs of open education.

Suggestions for important factors to be understood and reckoned
with by those moving toward open education included the importance of preparing the entire community adequately for the program. The point that the program should be presented in a very "matter of fact" manner, avoiding fanfare with premature exposure, and the use of boring educational jargon in presenting the program to the public was documented. The importance of using the correct procedures for selecting teachers for the program was also stressed in the literature reviewed. The writer also reviewed a number of writings that pointed out that participation on the part of teachers must be voluntary. The suggestion was also made in the literature reviewed that a principal might start the program with a pair of knowledgeable and willing teachers who can provide support and reinforcement for each other.

In terms of actually getting a program of open education started by an individual teacher, several suggestions were found in reviewing the literature. The importance of individual teachers tailoring the proposed program to fit their own personality and classroom style was recognized as an important ingredient in a successful attempt. Another suggestion made to teachers anxious to start moving toward an open classroom was the importance of picking a starting point in a curriculum area that is comfortable and expand gradually into the other curriculum areas. The review of literature also reinforced the importance that the physical arrangement, and the physical objects found within the classroom, can have on the degree of meaningful interaction between student
and the surrounding classroom environment.

It was found in reviewing the literature that a principal anxious to initiate a program of open education under his supervision should strive to create a building climate conducive to change and growth. A staff might initially be involved in pertinent readings and discussions concerning the merits and demerits of open education and its applicability to existing situations. In looking toward such a program an elementary principal must be extremely careful not to force any teacher into such a program against his will, participation must be voluntary. Once a program has been started it is crucial for the principal to provide genuine interest, support, and encouragement to those involved teachers.

In terms of maintaining and enhancing already existing programs of open education the review of literature indicated the importance of providing in-service training for involved teachers. The type of in-service program suggested would be a continuous program that provided experiences which allowed teachers to develop needed new competencies and programs that allowed the teachers to learn from firsthand experimentation that children must actively do their own learning. The orientation of such an in-service program would be upon the active involvement of all those participating.

The importance of involving principals in all facets of the in-service program in an active way was also stressed in the
literature. The review of literature also described the important role that might be assumed by a consultant to programs of open education. The consultant could provide much needed support and help to the involved teachers by giving demonstrations, conducting orientation courses, and maintaining open lines of communication between teachers and administrators.

In the section dealing with planned organizational change, some of the major works in the area were reviewed with the hope of gleaning bits of information that might prove useful to educators striving to implement programs of open education in the elementary grades.

In terms of obstacles to change the writer found that often members of the organization would rather maintain the status-quo, regardless of the degree of uncomfortability associated with it, because to change would mean to venture into an unknown area that to many would be much more threatening and disturbing than the discomfort associated with the present status-quo. The review of literature also pointed out many barriers to change are found in the minds of people rather than in any external arrangements. Examples of these internal barriers to change would be the habits, attitudes, precedents, and belief systems of the involved individuals. It was also found that people often become rather nostalgic about the "good old days." This feeling of nostalgia, of course, hampers any movement for successful change. Laziness was another barrier to successful change found in
reviewing the literature. It was also found in reviewing the literature that vested interest among individuals, or subgroups, within the organization tend to stifle the movement towards successful change because these individuals profit from the maintenance of the status-quo.

The review of literature pointed out that some of the factors often conducive to successful organizational change included a past history of change within the organization which accounted for an atmosphere appropriate for change. A certain internal tension, or dissatisfaction, which caused a searching for various means of eliminating the unrest within the individual or organization was also viewed as often being necessary in many instances for successful change to occur.

The review of literature also pointed out that another extremely important antecedent to successful change is oftentimes a change agent; a person with a positive image who intervenes at the top to initiate the change deemed as necessary. In working to achieve meaningful change in an organization there are various stages through which a change agent must successfully pass. These stages are: (1) development of a viable relationship with the prospective client or clients; (2) determination if the client is aware of his own needs and if the client has been able to define and articulate these needs as problem statements; (3) identify and obtain resources related to possible solutions; (4) generation of a range of alternatives, and determination of a potential solution; (5) adapting and reshaping the proposed solution to meet the unique
needs of the client; and (6) the development on the part of the client of an internal capability to maintain the arrived at change and continue appropriate use without outside help.

The review of literature also pointed out the basic components of a systematic process for providing and allowing for successful change in an organization. The six steps that a school administrator might follow to improve the school's program are: (1) diagnosing the problem, (2) formulating objectives and criteria of effectiveness, (3) identifying constraints and needed resources, (4) selecting potential solutions, (5) evaluating these alternatives, and (6) implementing the selected alternatives within the school system.

The next step in this study was to use teacher and administrator questionnaires to develop a greater understanding of what problems and resulting possible solutions have been encountered by educators in the field working toward programs of open education. The findings of these questionnaires were used in the later development of teacher and administrator models for implementing and maintaining programs of open education in elementary schools.

The responses to Question 1 on the Teacher Questionnaire pointed out what the individual teachers considered the major characteristics of their attempts at programs of open education. The most frequently mentioned characteristics included: (1) individualized instruction, (2) greater flexibility in meeting needs of children,
(3) team teaching, (4) self directed learning, (5) multi-age, family grouping, (6) continuous progress, and (7) learning centers.

The responses to Question 2 of the Teacher Questionnaire touched upon some very crucial problems that must be successfully reckoned with if an attempted program of open education is to be realized. The responding teachers mentioned a "lack of:" (1) adequate planning time, (2) necessary materials and supplies, (3) administrative support, (4) professional help in the classroom, and (5) community support as very real problems that are often faced by teachers as they move toward open concept classrooms.

In replying to Question 3, possible solutions to often encountered problems, the responding teachers often referred back to the factors mentioned in Question 2. The possible solutions that seemingly answered the problems often mentioned in Question 2 included: (1) para-professional help, (2) a community orientation program, (3) adequate planning time, (4) adequate materials and supplies, and (5) administrative support and leadership. In addition the responding teachers mentioned the need for gradual program implementation, and the need for continuous in-service training for those involved.

In replying to Question 4 concerning the most important factors that must be recognized and dealt successfully with the responding teachers replied that the most important factor for a successful program was the enthusiasm and total commitment of those concerned. Other
factors mentioned as important ingredients of a successful attempt included: (1) slow progression into the program, (2) need for additional resource material, and (3) good public relations.

The replies to Question 1, Administrator Questionnaire, pointed out what the responding administrators considered the major characteristics of their programs of open education. Of the responding administrators, 50.0 percent replied the individualization of instruction was the major characteristic of their attempts at open education. Other characteristics each listed by 18.8 percent of the responding administrators included: (1) team teaching, (2) child centered curriculum, (3) interests centers, (4) freedom of choice within curriculum areas, and (5) freedom of movement within the classroom.

In answer to Question 2, the responding administrators mentioned poor community preparation as a problem often encountered in moving toward open education. The importance of gaining community understanding and support was a theme struck numerous times by both teachers and administrators in responding to various aspects of the questionnaire. In response to this question the administrators who responded also mentioned the attempt by some to move too far too fast, and the lack oftentimes of those involved of a real understanding of the basic principles of open education.

Question 3 asked administrators to mention possible solutions to the often encountered problems previously mentioned in Question 2.
As might be expected the most frequently mentioned possible solutions included: (1) greater community involvement, (2) in-service programs, and (3) a gradual move into the program.

In answer to Question 4, concerning the major factors that must be recognized and dealt with successfully, the responding administrators again mentioned the need for an informed and supportive public as a crucial factor for a successful program. Other important factors of a successful program mentioned by the responding administrators included: (1) proper selection of personnel, (2) in-service training, (3) adequate physical facilities, (4) attitude of participants, (5) adequate planning time, and (6) administrative support.

The writer then conducted personal interviews and observations with various educators experienced in implementing such programs.

In discussing the sometimes encountered problems in the move toward open education the interviewed administrators mentioned several problems likely to be incurred by others making the change to open education. One of the problems mentioned concerned staff members who were uncomfortable, or incompatible philosophically, with the program. The point that necessary provisions must be made for these staff members to function in classrooms where they do feel comfortable, both physically and philosophically, was made by each of the administrators. Another problem encountered by three of the interviewed administrators concerned problems caused by other educators within the system who were
either not in basic philosophical agreement with the approach, or afraid of the change that might be thrust upon them if the various programs in open education proved successful.

A problem experienced by another administrator concerned poor communications between school and parents relative to the pending movement toward open education. The failure to provide adequate pre-service and in-service training programs was also mentioned as possible problems by several of the interviewed administrators. Problems were also encountered by some of the interviewed administrators because the various educational terms employed were not adequately defined to the public.

In terms of possible solutions to these often encountered problems the interviewed administrators responded with several suggestions which might greatly aid others in the movement toward open education. The importance of actually getting the parents into the schools, and the various classrooms, so that the programs can actually be seen was stressed by all those interviewed. All of the interviewed administrators saw the parent-teacher conference as a valuable means of presenting and justifying the move toward open education. Parent-teacher visits to already existing programs of open education was another possible solution advocated by some administrators.

The need for pre-service and in-service programs and workshops was stressed by every contacted administrator as possible solutions to
often encountered problems. Both pre-service and in-service workshops and programs were viewed by the interviewed administrators as necessary devices to adequately prepare, and later maintain, teachers in an open concept classroom. The interviewed administrators all stressed the need to provide an out for the teacher who felt uncomfortable in the open concept classroom.

The developed teacher and administrator models were developed, presented and discussed in Chapter 6. As mentioned previously, the developed models do not represent a complete "package" or strict set of "blueprints," which if understood and adopted, would somehow solve every problem and provide an easy road to a successful program. Rather, the developed models are intended to provide guidelines that should give interested educators a sense of direction and purpose in working toward an open education.

The developed administrator and teacher models were based on a paradigm for program development presented by Throop (1972). The first major stage of program development was represented in the model flow charts as the conceptual stage. At this point an idea was formed and developed into a specific problem statement. The conceptual stage represented an individual's point of entry into the developed program model. In the developed models junctures B-1 and B-2 represented this stage of program development. At this point the involved teacher or administrator recognized an internal need to seek legitimate alternative
approaches to current educational practices. From this point the teacher or administrator researched the possibilities of open education to provide for the previously recognized needs.

The planning stage was the second major stage in the paradigm for model development dealt with in the preceding developed administrator and teacher models. At this point the following questions were answered by those involved: why, what, who, when, where, and how. In the developed administrator model this stage of program development was represented by junctures A-3 through A-15. Correspondingly this stage of program development in the teacher model was represented by program juncture T-3.

The third major stage in the developed models was represented by the attempts at pilot programs. The pilot program stage was designed to allow for program implementation and to determine the effectiveness of a planned program on a limited basis. This stage also allowed for program modification and refinement. In the developed models, program implementation using a pilot program was provided for at juncture A-16 in the administrator model, and juncture T-4 in the teacher model. Refinement and modification of the initiated pilot programs was provided for under juncture A-22 in the administrator model and juncture T-10 in the teacher model.

The process of evaluating the implemented pilot programs was the fourth major stage in model development. At this point in model
development the effectiveness of the pilot program was evaluated. Evaluation of the implemented pilot programs was provided for in the preceding models by juncture A-18 in the administrator model, and juncture T-11 in the teacher model. The results from the program evaluation junctures served as a basis for program refinement or program termination.

The final division in the developed models dealt with the program maintenance and refinement stage. This stage was designed to permit needed modifications to the existing program to be provided for. This stage was provided for in the administrator model by juncture A-22 and juncture T-10 in the teacher model. Program refinement at this point in model development allowed for a continuous program assessment, and resulting program modification through junctures A-29 and A-15 in the administrator model, and junctures T-9 and T-3 in the teacher model. The pilot programs, as a result of the refinement stage, must be considered to be continually changing to meet the felt needs of those involved teachers and administrators.

CONCLUSIONS

Based upon this study the following were concluded:

1. "Open education" is a very emotive term which tends to be quite anxiety-provoking to some people.

2. The characteristics of the "healthy child" were found to be: curiosity, spontaneity, creativity, and a striving for
self-realization.

3. The maintenance and enhancement of the characteristics of the healthy child are congruent with the basic assumptions and principles upon which open education is based.

4. Freedom is diametrically opposed to permissiveness.

5. Spontaneity is the basis of good mental health.

6. Most young children naturally display a fantastic curiosity about their environment which in turn provokes them to explore and ask numerous questions concerning their surroundings.

7. The psychologically healthy child maintains a powerful internal force which strives continually for self-realization.

8. The best preparation for adulthood is to live childhood fully.

9. Education is not a thing apart from life, but life itself.

10. Genuine interaction between children is a legitimate means of promoting learning.

11. Teachers need to provide social and physical situations that allow children to interact with various facets of their environment in a meaningful way.

12. Only if the child respects himself will he be able to assume the responsibility for his own learning.

13. Rich and varied materials, and the opportunity to interact with them, can spark and maintain a child's natural curiosity and desire to learn.

14. Play, in the sense of involvement as opposed to a lack of involvement, is the child's means of living and learning about life.

15. The natural language of childhood is play.
16. Meaningful learning, as opposed to superficial learning, can oftentimes only be achieved through active participation on the part of the student.

17. The natural curiosity of children grows and blooms just as a plant grows and blooms in the proper environment, but in a hostile environment the spirit of curiosity will soon wither due to a lack of proper nutrients, just as a plant will cease to grow if it is not provided with the proper nutrients.

18. A student is not motivated in a vacuum, he must have something or someone to interact with and be motivated about.

19. The physical arrangement of the classroom, and the physical objects found within the classroom can have important implications on the degree, and quality, of the interactions between the student and the classroom learning environment.

20. No one should be forced into programs of open education, either administrator, teacher, or student. Participation must be voluntary, with alternatives provided for those who feel uncomfortable with, or incompatible toward the program.

21. Once a program of open education has been started it is crucial for the principal to provide genuine interest, support and encouragement to the involved teachers.

22. Individual teachers should tailor the program to fit their own personalities and classroom styles.

23. In-service training programs for those involved in programs of open education must be a continually on-going process.

24. In-service programs should offer teachers new and needed competencies--skills in teaching children things they want to learn.

25. In-service programs should provide experiences that allow the involved teachers to learn from firsthand experimentation that children must actively do their own learning.
26. Principals working with programs of open education should be involved in all facets of in-service programs in an active way.

27. The spectre of the unknown and the potentially destructive forces associated with change are often strong deterrents to change in many people.

28. Often the failure on the part of teachers to try something new is due to the negative responses of fellow teachers.

29. Many barriers to change are found in the minds of people rather than in any external arrangements.

30. Vested interests among individuals, or subgroups, within the organization tend to stifle the movement towards successful change because these individuals profit from the maintenance of the status-quo.

31. One obstacle often encountered in moving toward programs of open education is the attempt by some to achieve instant reform in the classroom.

32. The various roles assigned to the American principal as opposed to his counterpart—the English head teacher—have also generated certain obstacles to the proper implementation of programs of open education in this country.

33. In presenting the concept of open education to the public, it is important to present the concept in a "matter of fact" manner avoiding the use of boring educational jargonese.

34. Before a move toward open education is attempted, a legitimate program justification must be developed by those involved.

35. The movement toward open education must be made by educators who are knowledgeable and enthusiastic about the program, and who recognize that attempts at instant reform can only end in chaos for all.

36. Educators anxious to implement programs of open education must be extremely careful to adequately define the program to all those concerned. Teachers and administrators must
know where they are going, and why, when embarking upon the path toward open education.

RECOMMENDATIONS

Based upon this study, the following are recommended:

1. The models actually developed in this study should be field tested by teachers and administrators anxious to implement and maintain programs of open education.

2. Based upon the attempts at implementation, using the developed models as guides, further revision should be made of both models as a result of participant feedback.

3. Further research should be conducted into the characteristics of the "healthy child" and how these natural characteristics are congruent with the basic assumptions and principles which form the theoretical base for open education.

4. There should be a movement away from such terms as open education and a resulting enlistment of concerned educators in a move toward "quality education."

5. Colleges of education should develop meaningful and relevant in-service training programs to be offered to schools interested in implementing open education.

6. Involved teachers and administrators in programs of open education should be provided experiences and opportunities to become more congruent with themselves, for only through interactions with genuine people can children discover their true selves.


Dear Teacher:

Realizing that "Open Education" is becoming one of the fastest growing trends in Elementary Education and realizing at the same time that some attempts at Open Education are failing after a brief period of time, a research project has been undertaken by the College of Education, Montana State University, to analyze the subject. This study will attempt to determine some of the problems often encountered in trying to move toward a program of Open Education and propose solutions to involved administrators and teachers to surmount these encountered obstacles.

You were chosen by your principal as a teacher with experience in a program of Open Education.

You will note that the attached questionnaire is divided into two sections. The first section asks for needed background information. The second section of the questionnaire consists of four open-ended questions. Your experience and expertise would be greatly appreciated in answering these critical questions.

The four open-ended questions call for an individually-written response to each. Space for responses has been provided on the questionnaire. If you find that you need additional space to respond, please feel free to use the back of the paper or add additional sheets, if necessary. Open-ended questions are used in this questionnaire, although they are much more time consuming for the responder, because it is felt that more meaningful information can be obtained in this way.

If you wish to receive a copy of this section of the completed study, check in the appropriate space below. This study should be completed and mailed to you by June 15, 1973.

Your help and cooperation will be genuinely appreciated.

Respectfully,

Tom Crumbaugh
Research Coordinator

Yes, I would like a copy of this section of the completed study.

Name: ____________________________________________________________

Address: __________________________________________________________
APPENDIX B

TEACHER QUESTIONNAIRE.

SECTION I

Please respond in the space provided below each question.

1. Number of students in your classroom?

2. Is additional para-professional help available to you as a teacher in an Open Education program? If yes, to what degree?

3. Number of years in working in a program of Open Education?

4. How did you originally become involved in Open Education? (check appropriate spaces)
   _____University courses  _____Involved administrators
   _____In-Service programs  _____Involved teachers
   _____Books and articles  _____Other (specify)

SECTION II

Please respond freely to the following questions.

1. What do you feel are the major characteristics of your program of Open Education?
SECTION II (continued)

2. What problems do you feel are often encountered in trying to implement and maintain a program of Open Education in the elementary classroom?

3. What are some possible solutions to these encountered problems?

4. What are the most important factors to be recognized and dealt with in attempting to initiate and maintain such a program of Open Education in the elementary classroom?
Realizing that "Open Education" is becoming one of the fastest growing trends in Elementary Education and realizing at the same time that some attempts at Open Education are failing after a brief period of time, a research project has been undertaken by the College of Education, Montana State University, to analyze the subject. This study will attempt to determine some of the problems often encountered in trying to move toward a program of Open Education and propose solutions to involved administrators and teachers to surmount these encountered obstacles.

Your name was obtained by writing the State Superintendent of Public Instruction and asking for a list of elementary principals with experience in administering programs of Open Education in the elementary grades.

You will note that the attached questionnaire is divided into two sections. The first section asks for needed background information. The second section of the questionnaire consists of four open-ended questions. Your experience and expertise would be greatly appreciated in answering these critical questions concerning Open Education.

The four open-ended questions call for an individually-written response to each. Space for responses has been provided on the questionnaire. If you find that you need additional space to respond, please feel free to use the back of the paper or add additional sheets if necessary. Open-ended questions are used in this questionnaire, although they are much more time consuming for the responder, because it is felt that more meaningful information can be obtained in this way.

Included you will find, in addition to the administrator's questionnaire, five teacher questionnaires. If you would randomly select five teachers who have experience with a program of Open Education to complete these and return them in the individual envelopes, I will be very grateful. A cover letter of explanation for teachers is included.
If you wish to receive a copy of this section of the completed study, check in the appropriate space below. This study should be completed and mailed to you by June 15, 1973.

Your help and cooperation will be genuinely appreciated.

Respectfully,

Tom Crumbaugh
Research Coordinator

Attach.

Yes, I would like a copy of this section of the completed study.

Name: _______________________________________________________

Address: _____________________________________________________

_____________________________________________________________

_____________________________________________________________
ADMINISTRATOR QUESTIONNAIRE

SECTION I

Please respond in the space provided below each question.

1. Total number of teachers under your supervision?

2. How many of these teachers are involved in programs of Open Education?

3. How long have these programs been in operation?

4. Number of students in your school?

5. Percentage of student body involved in programs of Open Education?

6. Generally, my school serves students from:
   _____Low socio-economic areas
   _____Middle class socio-economic areas
   _____Upper class socio-economic areas

SECTION II

Please respond freely to the following questions.

1. What do you feel are the major characteristics of your program of Open Education?
SECTION II (continued)

2. What problems do you feel are often encountered in trying to implement and maintain a program of Open Education in the elementary school?

3. What are some possible solutions to these encountered problems?

4. What are the most important factors to be recognized and dealt with in attempting to initiate and maintain such a program of Open Education in the elementary school?
Approximately a week ago you should have received a packet containing questionnaires for administrators and teachers concerning Open Education from the College of Education, Montana State University.

I am taking this opportunity to contact and encourage you to complete the questionnaire at your earliest convenience. If any questions have arisen, please feel free to call me collect at 1-406-587-4128 for possible answers.

Your experience and expertise in this area is greatly needed to complete a worthwhile study.

Thank you again for your time and assistance.

Respectfully,

Tom Crumbaugh
Research Coordinator
# APPENDIX F

## TEACHER QUESTIONNAIRE RESULTS

### SECTION II

1. What do you feel are the major characteristics of your program of Open Education?

<table>
<thead>
<tr>
<th>Stated characteristics</th>
<th>Number of responses per stated characteristic</th>
<th>Percentage of teachers responding per characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Individualized instruction</td>
<td>28</td>
<td>35.0</td>
</tr>
<tr>
<td>(2) Greater flexibility in meeting needs of children</td>
<td>24</td>
<td>30.0</td>
</tr>
<tr>
<td>(3) Team teaching</td>
<td>22</td>
<td>27.5</td>
</tr>
<tr>
<td>(4) Self-directed learning</td>
<td>14</td>
<td>17.5</td>
</tr>
<tr>
<td>(5) Multi-age, family grouping</td>
<td>14</td>
<td>17.5</td>
</tr>
<tr>
<td>(6) Continuous progress</td>
<td>12</td>
<td>15.0</td>
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<tr>
<td>(7) Learning centers</td>
<td>12</td>
<td>15.0</td>
</tr>
<tr>
<td>(8) Small group instruction</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>(9) Independent work in small groups</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>(10) Creative and humane classroom atmosphere</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td>(11) Learning by discovery</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td>(12) Ease with which children move from one area to another</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>(13) Provide for development of creative abilities</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>(14) Children free to move and converse with one another</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>(15) Encouragement of independent study</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>(16) Students included in planning</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>(17) Administrative cooperation</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>(18) Variety of learning methods and procedures</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>(19) Para-professional help</td>
<td>5</td>
<td>6.3</td>
</tr>
<tr>
<td>(20) Parental involvement</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>Stated characteristics</td>
<td>Number of responses per stated characteristic</td>
<td>Percentage of teachers responding per characteristic</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>------------------------------------------------------</td>
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<tr>
<td>(21) Acceptance of students as individuals</td>
<td>5</td>
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<tr>
<td>(22) One to one student/teacher conferences</td>
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</tr>
<tr>
<td>(23) Physical openness</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>(24) Supplementary materials</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>(25) Children learning from one another</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>(26) Physical arrangement of room</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>(27) Community as a classroom</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>(28) Variety of possible activities</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(29) Large blocks of time</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(30) Lower student/teacher ratio</td>
<td>2</td>
<td>2.5</td>
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<tr>
<td>(31) Beneficial use of students' spare time</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(32) Deemphasis of grades</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(33) Increased student self-responsibility</td>
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<td>2.5</td>
</tr>
<tr>
<td>(34) More freedom to engage in enjoyable activities</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(35) Shared learning experience</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(36) Provide for individual differences</td>
<td>2</td>
<td>2.5</td>
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<tr>
<td>(37) Self-selected activities</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(38) More student independence</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(39) Utilization of school facilities</td>
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<td>1.3</td>
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<tr>
<td>(40) Better teacher preparedness</td>
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<td>1.3</td>
</tr>
<tr>
<td>(41) Greater self-discipline</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(42) More groups</td>
<td>1</td>
<td>1.3</td>
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</table>
2. What problems do you feel are often encountered in trying to implement and maintain a program of Open Education in the elementary classroom?

<table>
<thead>
<tr>
<th>Encountered problems</th>
<th>Number of responses per encountered problem</th>
<th>Percentage of teachers responding per problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of adequate planning time</td>
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<td>47.5</td>
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<tr>
<td>Lack of needed materials and supplies</td>
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<td>37.5</td>
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<tr>
<td>Lack of administrative support</td>
<td>19</td>
<td>23.8</td>
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<tr>
<td>Not enough professional help</td>
<td>19</td>
<td>23.8</td>
</tr>
<tr>
<td>Lack of community understanding</td>
<td>15</td>
<td>18.8</td>
</tr>
<tr>
<td>Lack of compatibility and cooperation among teachers</td>
<td>12</td>
<td>15.0</td>
</tr>
<tr>
<td>Lack of in-service training</td>
<td>11</td>
<td>13.8</td>
</tr>
<tr>
<td>Noise level</td>
<td>10</td>
<td>12.5</td>
</tr>
<tr>
<td>Class size</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>Trying to move too fast too soon</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>Inability of students to handle new found &quot;freedom&quot;</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>Determining proper objectives</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td>Lack of knowledge concerning open education concepts</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td>Community equating open education with permissiveness of free school movement</td>
<td>6</td>
<td>7.5</td>
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<tr>
<td>Fear of trying something new</td>
<td>6</td>
<td>7.5</td>
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<tr>
<td>Inaccurate assessment of pupil progress</td>
<td>4</td>
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</tr>
<tr>
<td>Lack of professional training in open education</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>Keeping track of students in building</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>Lack of time for proper record keeping</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>Teachers forced into open education</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>Untrained personnel</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>Encountered problems</td>
<td>Number of responses per encountered problem</td>
<td>Percentage of teachers responding per problem</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>(22) Control and discipline</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(23) Community opposition</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(24) Teachers who confuse humanness with permissiveness</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(25) Too much student freedom</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(26) Attempt to instill self-discipline among students</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(27) Lack of time for individual pupil/teacher conferences</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(28) Teachers giving in at first obstacle</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(29) Teacher unwillingness to relinquish some responsibility for learning to students</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(30) Difficulty in recognizing and meeting individual needs</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(31) Movement of students from one area to another</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(32) Non-creative teacher education courses</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(33) Difficulty with students at many different levels</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(34) Grouping children</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(35) Poor introduction of concept</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(36) Improper preparation of all concerned</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(37) Teacher inconsistency in enforcing rules</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(38) Children distracted by other activities</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(39) Inadequate means of measuring achievement</td>
<td>1</td>
<td>1.3</td>
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</table>
3. What are some possible solutions to these encountered problems?

<table>
<thead>
<tr>
<th>Possible solutions</th>
<th>Number of responses per possible solution</th>
<th>Percentage of teachers responding per solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>( 1) Para-professional help</td>
<td>28</td>
<td>35.0</td>
</tr>
<tr>
<td>( 2) Community orientation program</td>
<td>24</td>
<td>30.0</td>
</tr>
<tr>
<td>( 3) Adequate planning time</td>
<td>19</td>
<td>23.8</td>
</tr>
<tr>
<td>( 4) Adequate materials and supplies</td>
<td>16</td>
<td>20.0</td>
</tr>
<tr>
<td>( 5) In-service training</td>
<td>15</td>
<td>18.8</td>
</tr>
<tr>
<td>( 6) Start program gradually</td>
<td>14</td>
<td>17.5</td>
</tr>
<tr>
<td>( 7) Administrative support and leadership</td>
<td>13</td>
<td>16.3</td>
</tr>
<tr>
<td>( 8) Advisory service</td>
<td>9</td>
<td>11.3</td>
</tr>
<tr>
<td>( 9) Smaller pupil/teacher ratio</td>
<td>9</td>
<td>11.3</td>
</tr>
<tr>
<td>(10) Adequate teacher pre-training</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>(11) Appropriate procedures for selecting personnel</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>(12) Proper physical facilities</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td>(13) Teacher compatibility</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>(14) Updated university courses</td>
<td>4</td>
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<tr>
<td>(15) Visitations to other programs of open education</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>(16) Maintenance of reasonable noise level</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>(17) Realistic goals</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>(18) Start program in kindergarten</td>
<td>3</td>
<td>3.8</td>
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<tr>
<td>(19) &quot;I wish I knew&quot;</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(20) Teacher flexibility</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(21) Uniform system of record keeping</td>
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<td>2.5</td>
</tr>
<tr>
<td>(22) Establishment of minimum requirements for teachers</td>
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</tr>
<tr>
<td>(23) Integration of theory and practice in college courses</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(24) Additional consideration for teachers in program</td>
<td>1</td>
<td>1.3</td>
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<tr>
<td>(25) Careful planning for budgetary requests</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(26) Start with &quot;tight ship&quot; and ease up gradually</td>
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</tr>
<tr>
<td>Possible solutions</td>
<td>Number of responses per possible solution</td>
<td>Percentage of teachers responding per solution</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>(27) Professional library for teacher use</td>
<td>1</td>
<td>1.3</td>
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<tr>
<td>(28) Planning cards written with children</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(29) Parent/teacher conference</td>
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<td>1.3</td>
</tr>
<tr>
<td>(30) Individual conferences with students</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(31) Appropriate use of placement test</td>
<td>1</td>
<td>1.3</td>
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<tr>
<td>(32) Honest discussion of problems encountered by teachers</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(33) More individual assessment by students</td>
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</table>
4. What are the most important factors to be recognized and dealt with in attempting to initiate and maintain such a program of Open Education in the elementary classroom?

<table>
<thead>
<tr>
<th>Important factors</th>
<th>Number of responses per important factor</th>
<th>Percentage of teachers responding per factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Enthusiasm and total commitment of all concerned</td>
<td>22</td>
<td>27.5</td>
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<tr>
<td>(2) Progress slowly into program</td>
<td>20</td>
<td>25.0</td>
</tr>
<tr>
<td>(3) Need for additional resource material</td>
<td>16</td>
<td>20.0</td>
</tr>
<tr>
<td>(4) Good public relations</td>
<td>14</td>
<td>17.5</td>
</tr>
<tr>
<td>(5) Administrative support</td>
<td>11</td>
<td>13.7</td>
</tr>
<tr>
<td>(6) In-service training</td>
<td>10</td>
<td>12.5</td>
</tr>
<tr>
<td>(7) Carefully chosen personnel</td>
<td>8</td>
<td>10.0</td>
</tr>
<tr>
<td>(8) Suitable physical facilities</td>
<td>7</td>
<td>8.8</td>
</tr>
<tr>
<td>(9) Establishment of realistic goals</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>(10) Common philosophical base among teachers</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>(11) Thorough pre-service training for all personnel</td>
<td>4</td>
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<tr>
<td>(12) Cooperation among involved teachers</td>
<td>4</td>
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<tr>
<td>(13) Involvement of parents</td>
<td>4</td>
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<tr>
<td>(14) Provide teachers with visits to other programs</td>
<td>4</td>
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</tr>
<tr>
<td>(15) Constant evaluation of program</td>
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<tr>
<td>(16) Planning with children</td>
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<tr>
<td>(17) Teachers open to change</td>
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<tr>
<td>(18) Small pupil/teacher ratio</td>
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<tr>
<td>(19) Teacher self-confidence</td>
<td>4</td>
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</tr>
<tr>
<td>(20) Para-professional help</td>
<td>4</td>
<td>5.0</td>
</tr>
<tr>
<td>(21) Maintaining a degree of structure</td>
<td>4</td>
<td>5.0</td>
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<tr>
<td>(22) Sufficient time to establish proper objectives prior to implementation</td>
<td>3</td>
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<tr>
<td>(23) Stress individual responsibility in students</td>
<td>2</td>
<td>2.5</td>
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<tr>
<td>Important factors</td>
<td>Number of responses per factor</td>
<td>Percentage of teachers responding per factor</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>(24) Staff meetings for planning and problem solving</td>
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<td>2.5</td>
</tr>
<tr>
<td>(25) Main emphasis on child's needs</td>
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</tr>
<tr>
<td>(26) Advisory service</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(27) Proper preparation of students</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(28) Parent/teacher conferences for evaluative purposes</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(29) Experienced teachers</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(30) Cooperation among teachers</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(31) Recognition of students as individuals</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(32) Realization that all students do not function well in a program of open education</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(33) Teachers relating well with students</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(34) Follow through program</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>(35) Adequate funding</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(36) Development of classroom to fit individual needs</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(37) Additional certified personnel</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(38) Abolishment of letter grades</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(39) Additional planning</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(40) Frequent contact with parents</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(41) Flexible scheduling</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(42) Interests centers</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>(43) Establishment of proper goals</td>
<td>1</td>
<td>1.3</td>
</tr>
</tbody>
</table>
APPENDIX G
ADMINISTRATOR QUESTIONNAIRE RESULTS

SECTION II

1. What do you feel are the major characteristics of your program of Open Education?

<table>
<thead>
<tr>
<th>Stated characteristics</th>
<th>Number of responses per stated characteristic</th>
<th>Percentage of administrators responding per characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Individualized instruction</td>
<td>8</td>
<td>50.0</td>
</tr>
<tr>
<td>(2) Team teaching</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(3) Child centered curriculum</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(4) Interest centers</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(5) Freedom of choice within curriculum areas</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(6) Freedom of movement in the classroom</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(7) Physical openness in school plant</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(8) Para-professional help</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(9) Multi-age grouping</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(10) Recognizing individual uniqueness</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(11) Children able to develop own interests</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(12) Greater flexibility in scheduling</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(13) Bringing school and community members together</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(14) Use of community people as resource persons</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(15) Development of mini-courses</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(16) Resource centers</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(17) Non-graded curriculum areas</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(18) Changed attitude toward how children learn</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(19) Proper placement of students</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(20) Teacher/pupil conferences</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(21) Elimination of ABCD grades</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>Stated characteristics</td>
<td>Number of responses per stated characteristic</td>
<td>Percentage of administrators responding per characteristic</td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>(22) Narrative recording of pupil progress</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(23) Pupil tutoring and peer teaching</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(24) School based on trust</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(25) Quiet areas for students</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(26) Creativity in the classroom</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(27) Numerous student options</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(28) Humane atmosphere</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(29) Temporary grouping determined by task</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(30) Emphasize cooperation not competition</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(31) Environment conducive to developing a positive self-image</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(32) Development of independence among students</td>
<td>1</td>
<td>6.3</td>
</tr>
</tbody>
</table>
2. What problems do you feel are often encountered in trying to implement and maintain a program of Open Education in the elementary grades?

<table>
<thead>
<tr>
<th>Encountered problems</th>
<th>Number of responses per encountered problem</th>
<th>Percentage of administrators responding per problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Poor community preparation</td>
<td>5</td>
<td>31.3</td>
</tr>
<tr>
<td>(2) Attempting to move too fast</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>(3) Lack of real understanding of open education</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>(4) Poor teacher preparation</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(5) Lack of sufficient planning time</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(6) Reluctance of some teachers to change</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(7) Lack of necessary materials</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(8) Lack of adequate para-professional help</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(9) Failure to properly explain program</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(10) Lack of community support</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(11) Teachers want varying degrees of openness</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(12) Community pressure against change</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(13) Uncomfortability associated by some teachers with open education</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(14) Staff conflicts</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(15) Convincing parents learning will occur with open education</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(16) Poor use of physical facilities</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(17) Open education is a threat to some</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(18) Belief that open education is a cure all</td>
<td>1</td>
<td>6.3</td>
</tr>
</tbody>
</table>
3. What are some possible solutions to these encountered problems?

<table>
<thead>
<tr>
<th>Possible solutions</th>
<th>Number of responses per possible solution</th>
<th>Percentage of administrators responding per solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Greater community involvement</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td>(2) In-service programs</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td>(3) Move slowly into program</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(4) Careful selection of teachers</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(5) Provide needed materials</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(6) Better understanding of underlying philosophy</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(7) Visitations to other programs</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(8) Workshops in use of materials</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(9) Adequate physical facilities</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(10) Continuous evaluation</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(11) Parent/teacher conferences</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(12) Lower pupil/teacher ratio</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(13) Administrative support</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(14) Pre-service training for those involved</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(15) Honest discussion of problems by staff</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(16) Good planning</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(17) Teachers not forced into programs</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(18) Be patient</td>
<td>1</td>
<td>6.3</td>
</tr>
</tbody>
</table>
4. What are the most important factors to be recognized and dealt with in attempting to initiate and maintain such a program of Open Education in the elementary grades?

<table>
<thead>
<tr>
<th>Important factors</th>
<th>Number of responses per important factor</th>
<th>Percentage of administrators responding per factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Informed and supportive public</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>(2) Adequate materials</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>(3) Proper selection of personnel</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(4) In-service training</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(5) Adequate physical facilities</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(6) Attitude of participants</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(7) Adequate planning time for teachers</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(8) Administrative support</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>(9) Staff acceptance of concept</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(10) Program initiated by enthusiastic teachers</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(11) Staff committed to appropriate philosophy</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>(12) Do not equate open with good and traditional with bad</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(13) If theory is sound approach can work</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(14) Do not become easily discouraged</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(15) Orientation of student body</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(16) Involvement of parents</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(17) Adequate definition of program</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(18) Constant review of philosophy underlying program</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(19) Positive approach to all problems</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(20) Allowing teachers to profit from mistakes</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(21) Staff visits to other programs</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(22) Principal serving as instructional leader</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(23) Well defined set of goals</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(24) Well planned set of procedures for starting</td>
<td>1</td>
<td>6.3</td>
</tr>
<tr>
<td>(25) Alternative classroom for those who feel uncomfortable</td>
<td>1</td>
<td>6.3</td>
</tr>
</tbody>
</table>
APPENDIX H
PRIMARY READING BIBLIOGRAPHY


APPENDIX I

FILM BIBLIOGRAPHY

British Broadcasting Corporation. Discovery and Experience (film). 10 films, 30 min. each, 16mm, sound, black and white. Available in the U.S. through Time-Life Films.

Early Childhood Education Study. I Ain't Playin' No More (film). Newton, Mass.: Education Development Center, Inc. 61 min., 16mm, sound, black and white. Available from EDC Film Library.

Early Childhood Education Study/Allan Leitman. I Am Here Today (film). Newton, Mass.: Education Development Center, Inc. 43 min., 16mm, sound, black and white. Available from EDC Film Library.

Early Childhood Education Study/Allan Leitman. Making Things to Learn (film). Newton, Mass.: Education Development Center, Inc. 11 min., 16mm, sound, black and white. Available from EDC Film Library.

Early Childhood Education Study/Allan Leitman. They Can Do It (film). Newton, Mass.: Education Development, Inc. 34 min., 16mm, sound, black and white. Available from EDC Film Library.

Elementary Science Study. Another Way To Learn (film). Newton, Mass.: Education Development Center, Inc. 11:34 min., 16mm, sound, black and white. Available from the EDC Film Library.

Felt, Henry. Battling Brook Primary School (Four Days in September) (film). Newton, Mass.: Education Development Center, Inc. 23 min., 16mm, sound, black and white. Available from the EDC Film Library.


I/D/E/A. Primary Education in England: The English Infant School (film). 17 min., 16mm, sound, color. Available from Information and Services Division at the Institute for Development of Educational Activities, Inc.
## APPENDIX J

### OBSERVATION RATING SCALE*

<table>
<thead>
<tr>
<th>No.</th>
<th>Category</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Texts and materials are supplied in class sets so that children may have their own.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Each child has a space for his personal storage and the major part of the classroom is organized for common use.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Materials are kept out of the way until they are distributed or used under the teacher's direction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Many different activities go on simultaneously.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Children are expected to do their own work without getting help from other children.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Manipulative materials are supplied in great diversity and range, with little replication.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Day is divided into large blocks of time within which children, with the teacher's help, determine their own routine.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Children work individually and in small groups at various activities.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
<th>Occasional</th>
<th>Strong</th>
<th>Frequent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Children are not supposed to move about the room without asking permission.

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
<th>Occasional</th>
<th>Strong</th>
<th>Frequent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Desks are arranged so that every child can see the blackboard or teacher from his desk.

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
<th>Occasional</th>
<th>Strong</th>
<th>Frequent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. The environment includes materials developed by the teacher.

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
<th>Occasional</th>
<th>Strong</th>
<th>Frequent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Common environmental materials are provided.

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
<th>Occasional</th>
<th>Strong</th>
<th>Frequent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. Children may voluntarily make use of other areas of the building and school yard as part of their school time.

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
<th>Occasional</th>
<th>Strong</th>
<th>Frequent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. The program includes use of the neighborhood.

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
<th>Occasional</th>
<th>Strong</th>
<th>Frequent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Children use "books" written by their classmates as part of their reading and reference materials.

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
<th>Occasional</th>
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</table>

17. Teacher prefers that children not talk when they are supposed to be working.

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
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<th>Strong</th>
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</table>

18. Children voluntarily group and regroup themselves.

<table>
<thead>
<tr>
<th>Evidence</th>
<th>No</th>
<th>Weak</th>
<th>Infrequent</th>
<th>Moderate</th>
<th>Occasional</th>
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</tbody>
</table>
19. The environment includes materials developed or supplied by the children.  

20. Teacher plans and schedules the children's activities through the day.  

21. Teacher makes sure children use materials only instructed.  

22. Teacher groups children for lessons directed at specific needs.  

23. Children work directly with manipulative materials.  

24. Materials are readily accessible to children.  

25. Teacher promotes a purposeful atmosphere by expecting and enabling children to use time productively and to value their work and learning.  

26. Teacher uses test results to group children for reading and/or math.  

27. Children expect the teacher to correct all their work.  

28. Teacher bases her instruction on each individual child and his interaction with materials and equipment.  

29. Teacher gives children tests to find out what they know.
### 30. The emotional climate is warm and accepting.

- No evidence: 1
- Weak evidence: 2
- Infrequent: 3
- Occasional: 4

### 31. The work children do is divided into subject matter areas.

- No evidence: 1
- Weak evidence: 2
- Infrequent: 3
- Occasional: 4

### 32. The teacher's lessons and assignments are given to the class as a whole.

- No evidence: 1
- Weak evidence: 2
- Infrequent: 3
- Occasional: 4

### 33. To obtain diagnostic information, the teacher closely observes the specific work or concern of a child and asks immediate, experience-based questions.

- No evidence: 1
- Weak evidence: 2
- Infrequent: 3
- Occasional: 4

### 34. Teacher bases her instruction on curriculum guides or textbooks for the grade level she teaches.

- No evidence: 1
- Weak evidence: 2
- Infrequent: 3
- Occasional: 4

### 35. Teacher keeps notes and writes individual histories of each child's intellectual, emotional, physical development.

- No evidence: 1
- Weak evidence: 2
- Infrequent: 3
- Occasional: 4

### 36. Teacher has children for a period of just one year.

- No evidence: 1
- Weak evidence: 2
- Infrequent: 3
- Occasional: 4

### 37. The class operates within clear guidelines made explicit.

- No evidence: 1
- Weak evidence: 2
- Infrequent: 3
- Occasional: 4

### 38. Teacher takes care of dealing with conflicts and disruptive behavior without involving the group.

- No evidence: 1
- Weak evidence: 2
- Infrequent: 3
- Occasional: 4
<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>No. evidence</th>
<th>Weak evidence</th>
<th>Infrequent evidence</th>
<th>Moderate evidence</th>
<th>Occasional evidence</th>
<th>Strong evidence</th>
<th>Frequent evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>39.</td>
<td>Children's activities, products, and ideas are reflected abundantly about the classroom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>40.</td>
<td>The teacher is in charge.</td>
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<tr>
<td>41.</td>
<td>Before suggesting any extension or redirection of activity, teacher gives diagnostic attention to the particular child and his particular activity.</td>
<td>1</td>
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</tr>
<tr>
<td>42.</td>
<td>The children spontaneously look at and discuss each other's work.</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>43.</td>
<td>Teacher uses tests to evaluate children and rate them in comparison to their peers.</td>
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<td>2</td>
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<tr>
<td>44.</td>
<td>Teacher uses the assistance of someone in a supportive, advisory capacity.</td>
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<tr>
<td>45.</td>
<td>Teacher tries to keep all children within her sight so that she can make sure they are doing what they are supposed to do.</td>
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<td>2</td>
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<tr>
<td>46.</td>
<td>Teacher has helpful colleagues with whom she discusses teaching.</td>
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<td>2</td>
<td>3</td>
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</tr>
<tr>
<td>47.</td>
<td>Teacher keeps a collection of each child's work for use in evaluating his development.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
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</tr>
<tr>
<td>48.</td>
<td>Teacher views evaluation as information to guide her instruction and provision for the classroom.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tbody>
</table>
49. Academic achievement is the teacher's top priority for the children.

50. Children are deeply involved in what they are doing.

*Observation rating scale originally developed for The Pilot Communities Program, Education Development Center, Newton, Massachusetts by TDR Associates, Inc., Newton, Massachusetts.
APPENDIX K

POSSIBLE TEACHER INTERVIEW QUESTIONS

1. How important is the physical environment as a learning stimulant in the elementary classroom?

2. What outside physical resources might you bring into your classroom?

3. What would your room look like six months after school started?

4. How important are, and how would you use, school adopted textbooks in your class?

5. How important are personal feelings in the elementary classroom?

6. How would you describe the healthy first grader (physically, intellectually, and spiritually)?

7. How might you maintain and provide for the enhancement of these natural characteristics?

8. How might you teach the various subjects?

9. Is the affective environment important in the elementary classroom? How do you provide for this environment?

10. If it is important to extend learning beyond the classroom, how would you accomplish this?

11. What degree of importance do you attach to art and music in the elementary curriculum?

12. How would you provide for art and music in your classroom?
13. Should children at some point be allowed to assume some responsibility for their own learning?

14. How might a teacher provide for students assuming some of the responsibility for their own learning?

15. Is there a body of knowledge that must be dispensed to all children.

16. Which is more important in elementary education, the cognitive or the affective domain?

17. What should elementary education be doing for our children?

18. In the final analysis, who does this school belong to?

19. What does open education mean to you?

20. How would you move toward an open classroom?
APPENDIX L

ASSUMPTIONS ABOUT LEARNING AND KNOWLEDGE*

I. ASSUMPTIONS ABOUT CHILDREN'S LEARNING

Motivation

Assumption 1: Children are innately curious and will explore their environment without adult intervention.

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<thead>
<tr>
<th>strongly agree</th>
<th>agree</th>
<th>no strong feeling</th>
<th>disagree</th>
<th>strongly disagree</th>
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</thead>
</table>

Assumption 2: Exploratory behavior is self-perpetuating.

<table>
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<tr>
<th>strongly agree</th>
<th>agree</th>
<th>no strong feeling</th>
<th>disagree</th>
<th>strongly disagree</th>
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</table>

Conditions for Learning

Assumption 3: The child will display natural exploratory behavior if he is not threatened.

<table>
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<tr>
<th>strongly agree</th>
<th>agree</th>
<th>no strong feeling</th>
<th>disagree</th>
<th>strongly disagree</th>
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</table>

Assumption 4: Confidence in self is highly related to capacity for learning and for making important choices affecting one's learning.

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<th>strongly agree</th>
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<th>no strong feeling</th>
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</thead>
</table>
Assumption 5: Active exploration in a rich environment, offering a wide array of manipulative materials, will facilitate children's learning.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |

Assumption 6: Play is not distinguished from work as the predominant mode of learning in early childhood.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |

Assumption 7: Children have both the competence and the right to make significant decisions concerning their own learning.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |

Assumption 8: Children will be likely to learn if they are given considerable choice in the selection of the materials they wish to work with and in the choice of questions they wish to pursue with respect to those materials.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |

Assumption 9: Given the opportunity, children will choose to engage in activities which will be of high interest to them.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |
Assumption 10: If a child is fully involved in and is having fun with an activity, learning is taking place.

| strongly agree | no strong feeling | disagree | strongly disagree |

Social Learning

Assumption 11: When two or more children are interested in exploring the same problem or the same materials, they will often choose to collaborate in some way.

| strongly agree | no strong feeling | disagree | strongly disagree |

Assumption 12: When a child learns something which is important to him, he will wish to share it with others.

| strongly agree | no strong feeling | disagree | strongly disagree |

Intellectual Development

Assumption 13: Concept formation proceeds very slowly.

| strongly agree | no strong feeling | disagree | strongly disagree |

Assumption 14: Children learn and develop intellectually not only at their own rate but in their own style.

| strongly agree | no strong feeling | disagree | strongly disagree |
Assumption 15: Children pass through similar stages of intellectual development, each in his own way and at his own rate.

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<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>No strong feeling</th>
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Assumption 16: Intellectual growth and development take place through a sequence of concrete experiences followed by abstractions.

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<th>Strongly agree</th>
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<th>No strong feeling</th>
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Assumption 17: Verbal abstractions should follow direct experience with objects and ideas, not precede them or substitute for them.

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<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>No strong feeling</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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</table>

Evaluation

Assumption 18: The preferred source of verification for a child's solution to a problem comes through the materials he is working with.

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<tr>
<th>Strongly agree</th>
<th>Agree</th>
<th>No strong feeling</th>
<th>Disagree</th>
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Assumption 19: Errors are necessarily a part of the learning process; they are to be expected and even desired, for they contain information essential for further learning.

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<tr>
<th>Strongly agree</th>
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<th>No strong feeling</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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</table>
Assumption 20: Those qualities of a person's learning which can be carefully measured are not necessarily the most important.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |

Assumption 21: Objective measures of performance may have a negative effect upon learning.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |

Assumption 22: Learning is best assessed intuitively, by direct observation.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |

Assumption 23: The best way of evaluating the effect of the school experience on the child is to observe him over a long period of time.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |

Assumption 24: The best measure of a child's work is his work.

| strongly agree | agree | no strong feeling | disagree | strongly disagree |
II. ASSUMPTIONS ABOUT KNOWLEDGE

Assumption 25: The quality of being is more important than the quality of knowing; knowledge is a means of education, not its end. The final test of an education is what a man is, not what he knows.

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<th>strongly agree</th>
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Assumption 26: Knowledge is a function of one's personal integration of experience and therefore does not fall into neatly separate categories or "disciplines."

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Assumption 27: The structure of knowledge is personal and idiosyncratic; it is a function of the synthesis of each individual's experience with the world.

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<th>disagree</th>
<th>strongly disagree</th>
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</table>

Assumption 28: Little or no knowledge exists which it is essential for everyone to acquire.

<table>
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<tr>
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</table>
Assumption 29: It is possible, even likely, that an individual may learn and possess knowledge of a phenomenon and yet be unable to display it publicly. Knowledge resides with the knower, not in its public expression.

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POSSIBLE PROGRAM OBJECTIVES

The following objectives were developed by the Campus Laboratory School, Minot State College, to delineate the goals and procedures of an open classroom into manageable form:

I. Develop procedures patterned after the family and the modes of the prevailing culture.

A. Promote interaction between several age groups to achieve individual and group goals.

B. Develop an attitude that the school environment is the common responsibility of all people in the school. These include fabricating learning materials, housekeeping, good cheer, and a helpful attitude.

C. Implement a natural consequence philosophy for child behavior.

D. Expect and demand child responsibility for purposeful activity in rooms and premises.

II. Focus upon individual needs of the student.

A. Individually conferencing children to develop insight and commitment to the unique developmental pattern of every child.

B. Use of individual conference for understanding, evaluating, and motivating the child as well as for planning curriculum.

C. Student tasks determine the time allocation.

D. Staff assumes responsibility for outcomes. Covering materials in class or using a particular method does not discharge instructional responsibility.
III. Develop a grouping procedure that is temporary and determined by task.

A. Small groups of three to ten are the primary instructional organization.

B. Large group activity is for orientation to some skills, for discussion of common problems, and for social and physical activities.

C. Individual student planned and implemented learning projects are encouraged.

IV. Emphasize cooperation rather than competition.

A. Seek to eliminate the standard curve as a tool when dealing with people; - little or big.

B. Encourage activity planning and problem solving in groups or teams.

C. De-emphasize hierarchical structures, such as grade levels.

D. Evaluate and report to student and parents by means which do not rate student on the basis of how many of his peers he out-performs.

E. Provide a cooperative model.

F. Organize material and supplies in the room so that their use does not emphasize grade level.

G. Provide an environment in which personal status is not dependent upon successful competition with peers.

H. Provide opportunities to feel the satisfaction of helping others.

V. Develop appreciation of the differences in people as a necessity of the culture.

A. Grouping in multi-ages, multi-interest, and multi-ability.

B. Emphasize the worthiness of every contribution to an ongoing project.
VI. Provide an environment conducive to developing a positive self-image.

A. Provide every child with opportunities for success.
B. Provide every child with opportunities for failure without recrimination.
C. Provide every child with opportunities to display successes to peers and significant people.

VII. Adapt use of material and equipment to individual and small group instruction.

A. Redirect book purchases from single level series to multi-level, multi-subject books.
B. Rely heavily upon library sources (learning materials center).
C. Use individual and small group audio visual equipment.
D. Use teacher made and commercial programmed material.
E. Record keeping assumes a variety of forms.
F. Share responsibilities for distribution, use, and evaluation of materials.

VIII. Develop active searching learner with a commitment to continuing intellectual growth.

A. Encourage most any kind of exploration that is not harmful to self, other people, or property.
B. Encourage participation in planning.
C. Provide opportunity for satisfaction from self-directed tasks.
D. Develop attention span by encouraging any reasonable time allocation necessary for the completion of task.
E. The responsibility of the student is focused to the task. Intermediate steps are loosely guided with room provided for student to devise his own steps.
F. Skill goals in communication, mathematics, abstract thinking and coping with technologies of the culture are determined by teachers. Procedure for acquisition are jointly planned by students and teacher.

IX. Develop independence of student.

A. Include the child in planning activities to develop self direction.

B. Teach the child to find alternatives to the teacher as sources of assistance in learning projects. (Such as other children, interest centers, materials, library, etc.)

C. Give the child the responsibility to determine his time and space allocations for the completion of tasks.

X. Organize curriculum to adequately challenge and encourage every aptitude, interest, and intellectual level.

A. Individual conferences are the significant factor in determining appropriate curriculum.

B. Encourage projects and activities which challenge yet provide prospect of success.

C. Provide materials and supplies that encompass the total range of interest and ability in the classroom.

XI. Develop patterns of efficient and cooperative use of space, supplies, material and equipment.

A. All spaces in the building (such as corridors, stair landings, kitchen) are learning areas for every student. An area is never the exclusive domain of one group or class.

B. Learning centers (such as math, science, art, etc.) are combined on the floor for use by all children.

C. Physical barriers are reduced wherever possible to encourage cooperative use of space. Tables, chairs, etc., become spaces shared with others as convenience and need dictate.
D. Supplies, materials, and equipment are shared in the learning centers.

E. Personal materials are kept in boxes or other areas separate from the seating and learning spaces within the room.
APPENDIX N
SUPERVISION FORM

1. How did the teacher provide for individual student differences?
   Comments

   Suggestions

2. How was the physical environment used, or arranged, to provide more, meaningful learning experiences for the children?
   Comments

   Suggestions
3. Diagram the physical arrangement of the room if it was conducive to learning—if not, diagram a room arrangement that would be more conducive to real learning.

4. How did the teacher use materials to foster and stimulate learning experiences for the children?
   
   **Comments**

   **Suggestions**

5. What techniques (methods) of instruction were employed by the observed teacher?
   
   **Comments**

   **Suggestions**
6. What was the affective environment like? What kind of teacher-student, student-student, relationship was observed?

Comments

Suggestions

7. Unique features of the lesson, or classroom that should be specifically noted.
APPENDIX O
MATERIALS*

PART I. SCROUNGE LIST

This list contains some suggestions for materials available free from local merchants to use in classrooms. They represent only a sample of the many resources you will find in your area. Many of these materials are normally discarded; if you contact local businesses, shops or factories, and make your intentions known, they are quite often willing to save them for you.

Contractors and Building Supply Companies

lumber, pipes and wire, wallpaper, linoleum, tiles, molding wood, sawdust, wood curls.

You can make arrangements to go to a construction site when they are finishing a job; they will let you collect the scrap building materials.

Plastics Company

trimmings, cuttings, tubing, scrap plastic and plexiglass

Electronics Manufacturers

styrofoam packing, printed circuit boards, discarded components.

Lumber Supply Companies and Furniture Factories

scrap wood, damaged bricks, concrete blocks, doweling, sawdust, wood curls, wood scraps for carving

Hardware Stores

sample hardware books, sample tile charts, linoleum samples

Rug Companies

sample swatches, end pieces from rugs
Supermarkets and Outdoor Markets

carton, packing materials, fruit crates, large cardboards and materials from displays, discarded cardboard display racks, styrofoam fruit trays.

Department Stores

fabric swatches (drapery and upholstery samples), rug swatches, corrugated packing cardboard, sample food cans and boxes, packing boxes from appliances such as washing machines, refrigerators, etc.

Phone Company (call their Public Relations Department)

excess colored wires; telephones (on loan)

Electric Power Company (call their Public Relations Department)

telephone poles, wooden cross arms, steel ground rods, wire, large spools that can be used for tables, assorted packing materials.

Garment Factories and Button Manufacturers

a great source for accumulating a wide variety of materials--yarn, buttons, scraps, decorative tape.

Camera Manufacturers

camera (on loan)

Leather Manufacturers and Leather Craft Companies

Pocketbook, Belt and Shoe Manufacturers

scrap pieces of leather and lacings

Billboard Companies

pieces of billboard to use as posters, wall coverings

Ice-Cream Stores

3-gallon ice cream containers
Airlines

plastic cups

Container Companies

large cardboard sheets

Architectural Firms, Upholsterers, Textile Companies, Floor Covering Firms, Kitchen Counter and Cabinet Makers, Wallpaper and Paint Stores

color samples; wood, linoleum and tile samples, formica squares, wallpaper books and scraps of all sizes.

Bottling Firms

bottle caps, large cardboard tubes.

Window, Storm Door and Siding Companies; Soft Drink Manufacturers

aluminum scraps

Cleaners and Tailors

buttons, hangers, scrap material

Restaurant

ice cream containers, corks, boxes and cartons

Large Food, Candy and Soap Manufacturers

sample cans and boxes

Plumbers and Plumbing Supply Companies

wires, pipes, tile scraps, linoleum

Tile and Ceramics Companies

scraps of ceramic and mosaic tile; tile by the pound (inexpensive)
Paper Companies

unusual kinds of paper are often available free in the form of samples, end cuts, or damaged sheets. Paper is delivered to paper companies in large cardboard tubes which are usually discarded. These make good chairs, tables, cubbies, etc. (See Building with Tubes, a publication of the Early Childhood Education Study.)

Metal Spinning Companies

shavings and scrap pieces

Junk Yard and Scrap Metal Yards

unlimited possibilities! Wheels of all shapes and sizes, all kinds of gears and moving parts from clocks, radios, fans, cars, irons, toasters, etc. Handles from doors, cars; knobs; broomsticks; hinges and fittings.

Note: Be on the lookout for packing materials wherever you go. Depending on the nature of the factory or business, they come in an infinite variety of materials, shapes and sizes.

PART II. FREE AND INEXPENSIVE MATERIALS

Construction, Sewing, and Woodworking

1. Boxes of all kinds - egg cartons, milk cartons, cookie trays, vegetable cartons and trays, match boxes
2. Plastic bottles, boxes and jugs - bleach bottles, ice cream cartons, detergent bottles, cheese containers, margarine containers.
3. Cardboard tubing from toilet paper, paper towels, wrapping paper
4. Broom handles, spools, bottle caps, lids, pipe cleaners, elastic bands
5. Elmer's glue, paste, Scotch tape, masking tape, paper clips, staples, string, rope, wire, brass paper fasteners
6. Wallpaper, swatches of rug and drapery material, tiles, linoleum
7. Scrap metal and pipe, wheels
8. Gears from clocks, radios, fans, cars, irons, toasters; handles, knobs, hinges and fittings of all kinds
9. Scrap wood, fruit crates, large cartons, barrels
10. Nuts, bolts, nails, washers, screws
11. Cloth - various textures and colors: silk, lace, organdy, net, nylon, wool, corduroy, velvet, burlap, felt, cotton, taffeta
12. Yarn, ribbon, rick-rack, fringing, decorative tape, lace edging, thread, embroidery floss
13. Buttons, beads, sequins, buckles, snaps, zippers
14. Needles, pins, knitting needles

Playgrounds

1. Large cartons, fruit crates, barrels
2. Concrete blocks, bricks, large stones
3. Large spools from telephone wire - check phone company
4. Ladders, sewage pipes, ropes
5. Bicycle tires, automobile tires, saw horses, tree trunks, planks
6. Targets painted on boards or on the concrete
7. Wooden structure for a clubhouse

House Corner, Dramatic Play, Shops

1. Old dresses, paints, shirts, blouses
2. Hats: men's women's, cowboy, baseball, baker, bride's veil, crowns, helmets
3. Shoes: ladies' heels, boots, slippers, men's shoes and sandals, etc.
4. Shawls, coats, capes, scarves
5. Beads, earrings, bracelets, pins, belts
6. Material to use as saris, turbans, trains, capes
7. Fans, glasses, gloves, handbags, wallets, aprons
8. White coats for doctors, nurses, bakers, etc.
9. Hand mirror, compacts, long mirror, clothes rack, coat hangers
10. Old televisions, radios, record players, irons, toasters
11. Old dolls, doll's clothes and furniture, stuffed toys
12. Telephone - perhaps from phone company
13. Brooms, dust pans, brushes
14. Tub for washing clothes, soap powder
15. Fruit and vegetable crates, saw horses, baskets, grocery carts, shopping bags
16. Play money or units for exchanging - pegs, golf tees, popsicle sticks, etc.
Sand and Water

1. Plastic jugs, bottles, cups, etc. - all in varying sizes
2. Old teapots, coffee pots, watering cans, garden hoses
3. Bottles, jars with lids, tin cans
4. Wood, cork, stones, shells, sponges, styrofoam, marbles
5. Rubber balls, balloons, bubble pipes
6. Hand towels, mops, aprons
7. Food coloring, soap, flour, string, wire, rubber bands

Wet Sand

8. Wood, stones, bricks, planks, twigs
9. Shovels, spoons, pails, scoops, rakes
10. Molds, muffin tins, cake tins, paper cups, shells, tin cans, plastic boxes, jars, jugs

Dry Sand

11. Dustpans, brushes, brooms
12. Sugar, salt, coffee, tea, spices, seeds
13. Bags - paper and plastic
14. Straws
15. Cone-shaped paper cups
16. String
17. Net material
18. Cornstarch

(Materials may be interchanged in 3 categories above)

Balancing

1. Plastic containers for storage - labeled
2. Spoons, scoops, funnels, sieves
3. String, wire, paper plates, paper cups, paper paint buckets, paper clips, plasticine, nails, cup hooks
4. Milk cartons, baby food jars, juice cans, plastic bags, paper bags
5. Materials for weighing and balancing: -- spools, bottle caps, clothes, pins, stones, shells, buttons, styrofoam, sponge rubber, corks, blocks, washers, nuts and bolts, rubber balls; rice flour, sugar noodles, coffee, tea, bran, kidney beans, dried peas, nuts, chestnuts, pine cones,
sawdust; soap flakes, small cans of food, rolls of life savers, sugar cubes (for making weights), packages made up to exact weights

Math

1. Materials for counting, sorting, grouping, ordering, and pattern making: --:
   shells, stones, golf tees, marbles, tooth picks, straws, washers, bottle caps, buttons, beads and lacing, spools, pipe cleaners, lengths of ribbon, colored sticks, popsicle sticks, cancelled stamps; string, rope, hoops for enclosures
2. Playing cards, dominoes, checkers, dice
3. Old clocks, egg timers, stop watches, wrist watches, metronome, cash register, scales, adding machines
4. Curtain rod with hooks
5. Calendars, train, bus and plane schedules, maps
6. Tape measure, yard sticks, rulers, canes, doweling, unmarked wood, lengths of ribbon and string, straws, paper streamers

Free and Inexpensive - Art Materials

Collage Tray

1. Yarn, thread, ribbon, lace, stones, shells, bottle caps, broom straws, straws, toothpicks, pipe cleaners, twigs
2. Materials - all varieties
3. Scrap paper - all varieties
4. Wood chips, feathers, sawdust, sand, macaroni, rice, excelsior, packing paper, beads, sequins, buttons, foam rubber, cork, scrap rubber
5. Seaweed, leaves, pine needles, seed, wax, chalk, wire, string

Painting

6. Muffin tins, empty plastic squeeze bottles, jars with lids, tin cans
7. Sheets of plastic, newspaper, apron
8. Sponges, string, rope, clothesline and pins for hanging papers
9. Straws, sticks, twigs, toothpicks to be used as brushes, paper towels
Graphics

10. Tin cans, cardboard tubing, rolling pins, pencils, hair curlers, candles to be used as rollers in printing
11. Paper towels - folded to make print pads
12. Objects for printing:-- forks, spoons, potato mashers, buttons, corks, jar lids, blocks, clay, corrugated board, vegetables, rubber bands, paper clips, string, and material

Clay Work

13. Plastic bags and covered tins for storage
14. Plastic material
15. Tools for modeling - pencils, feathers, twigs, forks, knives, spoons, rolling pins, pebbles, shells, leaves, toothpicks

Sculpture

16. Scrap wood and cardboard
17. String, wire, nails
18. Toothpicks, pipe cleaners, straws
19. Sticks
20. Cardboard, tin foil
21. Assorted paper
22. Elmer's glue

*The preceding list of materials was originally developed by the Early Childhood Education Study, Education Development Center, Newton, Massachusetts.
Below are some suggestions for an elementary art program that are consistent with the spirit of an open classroom.

1. Give children the opportunity to paint with powdered paints. Give them large brushes. Have them paint directly on newspaper, on large sheets of newsprint, on colored construction paper, on oaktag, etc. Let children choose from a variety of papers. Encourage children to mix colors. What colors result from mixing of the powdered paints? What hues? What textures are possible that cannot be obtained with tempera? What effects can you get when you build colors, one on top of another? Encourage experimentation, discovery, finding out, trying out, inventiveness.

2. Give children the opportunity to paint and draw with a variety of other media: crayon, pastel, watercolor, india inks, colored inks, ballpoint pens, pencils, colored pencils, charcoal, tempera, acrylics. Encourage them to find out what it is they can do with the material at hand. Encourage them to try out the medium on various sizes and shapes of different papers so that they discover something about the relatedness of form, function, material, and style.

3. Create an Available Table. Ask the children to help you collect shoeboxes for your table. Fill each shoebox with materials that will be constantly available for children's use. Here are examples of what can go into the shoeboxes, but you can think of many more.

<table>
<thead>
<tr>
<th>Art Materials</th>
<th>Art Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>colored chalk</td>
<td>scissors</td>
</tr>
<tr>
<td>magic markers</td>
<td>glues</td>
</tr>
<tr>
<td>india inks</td>
<td>colored string</td>
</tr>
<tr>
<td>pens</td>
<td>yarn</td>
</tr>
<tr>
<td>ordinary pencils</td>
<td>macaroni</td>
</tr>
<tr>
<td>colored pencils</td>
<td>beads</td>
</tr>
<tr>
<td>watercolors</td>
<td>doilies</td>
</tr>
<tr>
<td>tongue depressors</td>
<td>scotch tape</td>
</tr>
<tr>
<td>toothpicks</td>
<td>masking tape</td>
</tr>
<tr>
<td>paper cups</td>
<td>cotton</td>
</tr>
<tr>
<td>scraps of cloth</td>
<td>scraps of colored paper</td>
</tr>
</tbody>
</table>
4. Work with the children to develop charts that suggest ideas for painting. Help children to know that their own ideas come from a range of experiences. Encourage children to keep suggesting painting ideas as stimulation for others. One such chart might read:

**IDEAS FOR PAINTING**

- myself  
- my teacher  
- my school  
- my home  
- my neighborhood

Another chart might read:

**COLOR IDEAS**

- happy colors  
- sad colors  
- bright colors  
- scary colors

5. Encourage children to create mosaics. They can work individually on designs, figures, landscapes, etc. They can work as a team or in small groups. They can create small or large murals or wall decorations for the classroom. Mosaic pieces or "tiles" can be created from almost anything. Squares can be cut from colored construction paper, from magazines, newspapers, tissue paper, fabric, typing paper, wallpaper, Christmas cards, cereal boxes, and so on. Scissors and paste are all that they need to transform random scraps into exciting pictures, abstractions, and designs. Glue can be used for sturdier tiles. Again, encourage children to use their imaginations as to what they might use on the mosaic: glass, stone, seeds, straw, feathers, macaroni, dried fruits, flowers, shells, grass, fur, buttons, string, bark, bottle caps, sponge pieces, wood shavings, wood chips, styrofoam chips, plastic, cellophane, pebbles, steel wool, dried seaweed, netting, etc.

6. Encourage children to bring in a variety of found objects and to create beauty through their own inventiveness. Help children to know that beauty can be found in many places and created in a variety of ways through observing, planning, arranging, rearranging, combining, and altering. Help children set up imaginative displays of:
waste and junk materials such as egg cartons, hardware, excelsior, cardboard cartons, shoeboxes, paper bags, plastic bags, shoelaces, tin cans, bottles, floor tiles, rug scraps, wheels, pill bottles, packing crates, old toys, book jackets, a broken radio, a discarded typewriter, a worn-out dog collar.

natural materials such as driftwood, shells, soil, nests, leaves, dried leaves, acorns, flowers, roots, chestnuts, twigs, stones, pine cones, vegetables, fruits.

products of technology such as plastics, tape reels, film, film rolls, gears, skate wheels, steel cable, wire, eyeglass frames, electrical plugs, sockets, typewriter-ribbon spools, screening, old phonograph records, toothbrushes, batteries, paper clips.

Help children to observe all these materials and to feel them. What can they learn about shape, design, and texture? How can objects like these be arranged in beautiful ways?

7. Encourage children to further beautify the school environment with art. Display children's art work in a dignified and tasteful way. Decorate walls with children's murals. Stretch corrugated cardboard along walls to create additional bulletin board space. Plan with children how they might contribute to beautifying the school environment outside the classroom. What can be done with the halls, the office, the entrance, the lunchroom, the yard, and so on?

8. Encourage children to find out more about texture, textiles, fabrics, patterns, designs, symmetry, and color through experiences with needlework. Children can work with colored yarns, colored thread, string, shoelaces, rope, roving, etc. They can cut, shape, match, stitch, sew, embroider, patch, weave, and knit. The range of work can be from simple embroidery, through book covers, to highly decorative needlework and tapestries. Establish needlework areas where materials are constantly available.

*From Schools Are For Children, Alvin Hertzberg and Edward F. Stone.
APPENDIX Q

CLASSROOM ARRANGEMENT*

Appropriate organization of space and materials in a classroom can help create a desirable atmosphere, that of a children's workshop and laboratory. There is no "right" way to arrange your room. In practice the physical arrangements will evolve in ways that reflect the children's interests and your objectives. The use of activity areas is appropriate for six and seven year olds as well as for younger children, and at all times your environment must make provision for a wide range of interests and abilities. Here are some questions that may help you get started planning for your room.

SPACE.

Is there space for large groups of children or the whole class to assemble?

Are there quiet nooks in which two or three children can work together or read?

Is space for quiet activity separated from space for noisy and more active activity?

Have you provided uncluttered flat surfaces both at sit down and stand up level on which to make things, build with small blocks or write?

Is there horizontal and vertical display space?

Are there comfortable places to sit or relax?

ORGANIZATION.

Are materials stored in clearly marked containers accessible to the children and near the space where they are to be used?

Are procedures for the use of materials made clear to the children?

Are people responsible for sorting and clearing away materials they use?
Do the children understand the distinction between the flexible rules of procedure and the more rigid rules involving safety and the rights of others?

Are activities which might involve fixed facilities (blackboards, bulletin boards, light source) located near them?

**AESTHETIC APPEAL.**

Is the room attractive?

Is there a balance of children's work and teacher originated display?

When things in the room begin to be unnoticed do you change the display and the arrangement?

Does your room look lived in without being cluttered?

Are you and the children comfortable in the room?

*From Follow Through Project, Education Development Center, Newton, Massachusetts.*
APPENDIX R

ADVISORY ACTIVITIES*

Mentioned below are some possible activities that advisors to open classrooms might be involved in.

1. Conducting teacher workshops in reading, mathematics, science, and art within the context of the open education classroom.

2. Conducting seminars for teacher-aides and community helpers.

3. Conducting evening programs for parents, including film and slide presentations, and classroom workshops in which the parents have a chance to explore, understand and contribute to the learning materials available for their children.

4. Arranging for outside consultant services in response to specific needs and requests.

5. Carrying on a continuing dialogue with individual teachers about their own situations, working out with each one some appropriate next steps for the development of her classroom.

6. Writing letters to teachers as follow-up to oral discussions. Such letters typically contain suggestions custom-tailored to individual needs and capabilities.

7. Providing books, pamphlets, and articles in response to general need and as part of continuing in-service education.

8. Providing special curriculum materials on a custom-tailored basis.

9. Providing assistance to teachers in securing free and inexpensive materials to enrich the classroom environment.

10. Developing learning materials, often in response to particular classroom needs, and often from ideas that originate in the classroom.

11. Developing prototypes of various kinds of instructional equipment and attempting to arrange for their replication in quantities needed for classroom use.
12. Providing the facilities of a design laboratory so that a teacher's promising idea for a piece of classroom equipment can be developed.

13. Trying to arrange for adequate discretionary funds to be made available to teachers, so that small purchases of materials can be made in response to needs as they arise. A teacher should not need to pay for the "extras" out of her own pocket, since these "extras" are so often essential.

14. Arranging for teachers to visit each other's classes, both within and between school systems.

15. Developing a communications system based on printed material: for example, classroom vignettes of children's learning; brief commentaries on the use of learning materials; monographs dealing with learning and curriculum; and extracts from worthy books and articles on education.

16. Trying to find out from the appropriate school administrators why certain classroom materials might not have been ordered or, if ordered, why not delivered.

17. Maintaining communication with appropriate administrators, bringing to their attention ways in which they can lend further support to teachers and to the program in general.

*From "A Plan For Continuing Growth," Education Development Center, Newton, Massachusetts.*
Crumbaugh, Thomas L.
The development of models to aid teachers and administrators...