SOME FACTORS THAT SERVE AS BARRIERS TO EFFECTIVE EDUCATIONAL CHANGE AS IDENTIFIED IN EDUCATIONAL LITERATURE AND AS PERCEIVED BY SELECTED EDUCATORS, LAYMEN, AND STUDENTS

by

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CHAPTER I

INTRODUCTION

Many conditions and factors are responsible for the clamor for educational changes; according to many authors the major ones seem to be the struggle for national survival, growing demands of an affluent society, growth in the production of knowledge, the sheer size and growth of the educational establishment, and investment increases by the federal government.

The implication of the great numbers of innovative changes is that " . . . increased clarity in our conceptualizations can lead to more intelligent control of change processes in education."[1] The meaning of Miles' statement is echoed often in educational writings concerning innovative changes. Most writings seem in agreement that if educators know more about educational innovation, the management of change as a planned process becomes more likely.

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[1]Matthew B. Miles, ed., Innovation in Education (New York: Bureau of Publications, Teachers College, Columbia University, 1964), Chapter I.

The validity of the study of change by educators, according to Crosby, is evidenced by:

> . . . a study conducted by the Educational Testing Service of Princeton, New Jersey, covering 38,000 students from more than 7,500 academic high schools who took the College Entrance Examination Board achievement tests during 1965-66, it was found that more important changes had occurred in secondary school curriculum and teaching methods during the previous ten years than in any earlier decade studied.[1]

That such a study of the management of change as a planned process is sorely needed is duscussed in a detailed way by Richard Graham, Director of the Teacher Corps, as he reasoned that:

> For many programs the changes sought are ill defined and the strategies for achieving them are only dimly perceived and seldom applied. There is no accepted methodology of change and no accepted means of measuring performance. Not surprisingly, the results are disappointing.[2]

Most often in the past, studies of change have looked at how it happens, not how to make it happen. In his classic study based on data collected in the thirties, forties, and fifties, Paul Mort concluded that it took fifty years to design and develop a solution to an educational problem and another fifty years for the diffusion

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[1]Mariel Crosby, "Who Changes the Curriculum and How?" Phi Delta Kappan, LI (March, 1970), 385-388.

[2]Richard A. Graham, "Educational Change and the Teacher Corps," Phi Delta Kappan, LI (February, 1970), 305-309.

of an educational innovation destined for general acceptance.[1]

Educators generally agree that this rate of change is no longer acceptable for the 1970's. The change process must be greatly accelerated. This has already happened in research and development, but increasing the speed of diffusion is more difficult.

Why is the pace of change in educational systems reputed to be so slow? Carlson feels that the slow pace of educational change is due to several barriers to change. He identified one such barrier when he stated:

> Part of the explanation of the slow rate of change in public schools, according to many students of organization change, lies with the absence of an institutional change agent position in public education.[2]

A change agent was described as a person who attempts to influence the adoption of decisions in a direction he feels is desirable. Carlson described him as a professional who has as his major function the advocacy and introduction of innovations into practice.[3] According to Carlson, it seems that, possibly by default of others, the change advocate role must be taken by the local school system

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[1] Ibid.

[2] Richard O. Carlson, "Barriers to Change in Public Schools," Change Processes in the Public Schools, ed. by Richard O. Carlson (Eugene, Oregon: University of Oregon, 1965), p. 4.

[3] Ibid.

through the office of the superintendent. This, however, makes for an obvious difficulty as the superintendent being in and of the organization, and a central part of the unit he must take as his change objective, must prescribe the change of his own practices. Carlson stated:

> Hence, it is clear that the problem of establishing a viable change avocacy function among the many levels in our system of education is one of extreme importance and one for which we should recruit our best minds.[1]

In addition to the lack of a change agent, Carlson felt that schools are also handicapped in change activities by the weakness of the knowledge base about new educational practices.[2] In contrast to the county extension agent in the agricultural field who is backed by extensive and practiced research, experiment, and development operations, the school superintendent as a change agent must attempt to judge educational innovations without the backing of solid research.

Speaking on this point, Carlson stated:

> The future may be brighter on this point: the school administrator may be relieved of some of the burdens of being both a county extension agent and an agricultural experiment station. The Federal government has within the last year established four large educational research and development centers (at the Universities of Oregon, Pittsburgh, Wisconsin, and at Harvard) and more centers will be established in the future.
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> These centers are charged with research, development, and dissemination responsibilities

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[1] *Ibid.*, p. 5.

[2] *Ibid.*

> and in this sense can be seen as emulating the U.S. agricultural experimental station. These centers have high potential and, given time to get into full operation, should have a large influence on public education. They should give school administrators a knowledge base about educational practices that is as firm as that from which the county extension agent operates.[1]

A third barrier to change, as viewed by Carlson,[2] has to do with organizational characteristics of schools and specifically with the relationship between the school as an organization and its clients. These service organizations have the power or can exercise the right to select its clients. Other service organizations, such as public schools, cannot select their clients. Carlson stated:

> The significance of the relationship with clients is implied in the label of "domesticated organization" which is given to organizations like the school which cannot select clients and where the client must accept the service. These organizations are domesticated in the sense that they are protected by the society they serve. The society sees the protection of these domesticated organizations as necessary to the maintenance of the social system and creates laws over and above those applying to organized action in general to care for these organizations.[3]

Hence, Carlson listed domestication of public schools as a third barrier to change due to, as he stated:

> . . . the consequence of domesticating organizations, as far as organizational change is

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[1]*Ibid.*, p. 6.

[2]*Ibid.*

[3]*Ibid.*, p. 7.

> concerned, is to restrict the need for, and interest in, change because the environment of the domesticated organization in many respects is more stable than it is in other types of organizations. When important elements of the environment are stable, as you know, the necessity for change is reduced.[1]

Hence, Carlson has suggested that the domestication of public schools, the lack of a change agent, and a weak knowledge base about educational innovations are three of the major barriers to effective educational change.

In making a concerned effort to study some of the important barriers to effective change and their effect upon change, implications must be made of more specific barriers than the three categorical ones as given by Carlson.

One such barrier or obstacle would be the rigid course of study[2] when it serves to present a rigid and traditional curriculum that conflicts with the life, needs, and interests of students. An inflexible course of study, in the manner described, is a real handicap to the attainment of a thoroughly democratic educational program.

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[1] Ibid.

[2] Joint Committee on Curriculum of the Department of Supervisors and Directors of Instruction and the Society for Curriculum Study, Report of the Committee, The Changing Curriculum (New York: Appleton-Century Co., 1937), p. 126.

Grades, promotion practices, and marking systems also serve as handicaps to educational change when, as fixed standards, they view the growth of students, not as continuous, but discontinuous and taking place on artificial levels.[1]

Two other barriers to effective educational change, as given by the Joint Committee, were authoritative administration and separation of school and community.[2]

The danger or harm of an authoritative pattern of educational operation, as stated by the Joint Committee, is that: ". . . neither teachers nor children have any real voice in shaping the life of the school."[3] In the same vein, schools that attempt to operate alone in carrying the educational burden, prevent effective educational change in that they ignore the necessary integration of a child's life.

The College Entrance Examination Board directed attention to the idea of integrating school experiences with those outside the school when they stated that schools must become aware that they

> . . . are confronted with the task of taking the school outside of the four walls of the school building into the community in an effort to utilize the educational resources of that community in their totality.[4]

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[1] Ibid., p. 131.

[2] Ibid., pp. 133-135.

[3] Ibid., p. 134.

[4] Ibid.

The College Entrance Examination Board also spoke to the idea of educational institution changes when they stated:

> Many educational institutions are forever involved in curriculum revision, and presumably, given enough time, most will adapt themselves to changing conditions, as they have done from time to time in the past. But the barriers that slow the process, though not new, are not easily overcome. One of the most formidable is probably what Thomas Mendenhall refers to as "the mechanical device of the course and the credit."[1]

The College Entrance Examination Board furthermore felt that ways must be found to help students to move along freely according to ability, unhindered by too strict requirements and rules, and sharing in the responsibility of giving their own education both depth and breadth. If schools do not do this, they feel, then what is offered is overstuffed courses that produce overworked students.[2]

The greatest barrier to change, as described by Sulkin, may be the faculty itself, even though it establishes the curriculum and meets often presumably to revise it.[3] Robert Byrnes[4] questions the wisdom of the school

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[1]College Entrance Examination Board, Report of the Board, The Challenge of Curricular Change (New York: College Entrance Examination Board, 1966), pp. xix-xx.

[2]Ibid.

[3]Ibid.

[4]Ibid.

that changes the curriculum and is still composed of the same faculty members. To keep pace with the new breed of student and the swiftly changing knowledge he brings with him, schools must sponsor renewal seminars and institutes for their teachers and must find ways to restore zest to teaching. In order for schools to find scholars committed to their disciplines and glad to teach, they will have to seek them and hire accordingly.[1]

This brief study of some of the literature concerning barriers to effective change indicated that many views of such barriers are held by each person concerned about education. To aid in the efforts to obtain a better synchronization between the needs of education and the programs of schools, it may be that a study of factors which tend to inhibit the generation and implementation of effective educational change, based on the best that is known in the field of research, and combined with perceptions of educators, laymen, and students in representative school systems, might result in the identification of some major barriers to effecting educational changes. The identification of such barriers might allow educators to delete or avoid them when effecting significant educational change.

Statement of the Problem

This study sought to explore and identify the perceptions of educators, laymen, and students concerning

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[1] *Ibid*.

factors that serve as barriers to effective educational change. This exploration was six fold:

1. To explore classroom teachers' perceptions of factors that inhibit change in the field of education.

2. To explore administrators' and supervisors' perceptions of barriers to effective educational change.

3. To explore the perceptions of high school seniors as to what the inhibitors of educational change are.

4. To explore the perceptions of laymen of barriers to effective educational change in the schools with which they have been familiar.

5. To explore the views of state department of education consultants of inhibitors to educational change.

6. To explore the perceptions of federal project coordinators of barriers to making changes in the field of education.

In addition to the factors identified by the survey of the perceptions of educators, laymen, and students; this study sought to identify barriers to educational change as identified by the educational literature.

Purpose of the Study

It was the purpose of this study to identify in educational literature and through the perceptions of laymen, educators, and students some of the major factors which tend to inhibit the generation and implementation of

effective educational change. The identification of such barriers might allow educators to delete or avoid them in the process of effecting educational change.

Methodology

It was suggested by this study and the review of the literature that the educational and experimental background of participants in this study, certain supportive and hindering factors present in their situations, the types of changes they have attempted to make or have observed, the strategies used to effect those changes, and the evaluation procedures employed in determining their successes would be influential in what they considered as barriers to effective educational change.

The procedures followed included an exhaustive research of the literature concerning barriers to change, and the implementation of a questionnaire to educators, laymen, and high school seniors of selected representative school systems, to obtain their perceptions of the degree to which each of the items in the questionnaire, and any additional ones they wished to list, represented barriers to effective change in the schools or school systems with which they are familiar.

The review of the literature in the field of education was used to provide a basis for comparing the perceptions of educators, laymen, and high school students of barriers to effective educational change with factors identified in the literature.

The study used a questionnaire to obtain the perceptions of the degree to which items given in the questionnaire were barriers to effective educational change of educators, laymen, and students in selected school systems in Alabama. Additional barriers to educational change as felt to be significant by respondents were taken from open ended questions within the questionnaire.

The school systems selected for this study were:

1. Dallas County
2. Decatur City
3. Etowah County
4. Jacksonville City
5. Jefferson County
6. Lamar County
7. Pickens County
8. Talladega City

Included in the people from these school systems who were asked to respond to the barriers to change instrument were samplings from the categories of:

1. Classroom Teacher
2. School Administrator or Supervisor
3. State Department Consultant (Elementary and Secondary Divisions)
4. Student
5. Federal Projects Coordinator (throughout the state)

Also included in this study were the perceptions of the following laymen:

1. Civil Club Members
2. Labor Union Members
3. P.T.A. Members

Participants in this study were asked to react to each statement of the questionnaire used for this study in terms of the extent to which they believed the statements represented barriers to effective educational change in the school or schools with which they were familiar. Each statement was reacted to by the participants as being a major influence, a minor influence, an insignificant influence, or no opinion as to its influence, as a barrier to effective change. Frequencies and percentages were obtained for each statement in order to determine the significance of each statement as judged to be a barrier to educational innovation and change.

The method of selecting school districts, participants, and the method of analyzing and tabulating the data are carefully delineated in Chapter III of the study.

Delimitations of the Study

The study was limited to a survey of the literature and an examination of the perceptions of educators, laymen, and students of the eight selected school districts, the federal projects coordinators throughout Alabama, and the consultants of the Elementary and Secondary Education Departments of the Alabama State Department of Education.

The respondents to the barriers to change questionnaire were selected on an all inclusive and/or a representative basis for each participating school district.

No definite conclusions can be drawn from this sampling. However, it is possible to make observations, in relation to the school districts sampled, concerning elements or patterns of elements which the respondents perceived as important barriers to effective educational change.

Definitions of Terms

Advocate.--A role concerned mainly with creating a climate conducive to acceptance.[1]

Authoritive administration.--Education based upon authoritive concepts of human relationships as often used in industrial and military practices. It acts as a regimentation of learning activity and the frustration of creative growth.[2]

Barrier.--A hindrance or inhibitor of an effective educational change.

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[1]Art Gallaher, Jr., "Direction Change in Formal Organizations: The School System," Change Processes in the Public School, ed. by Richard O. Carlson (Eugene, Oregon: University of Oregon, 1965), p. 41.

[2]Joint Committee on Curriculum, The Changing Curriculum, p. 133.

Change.--A complete or partial alteration, innovation, or variation in:

1. Teaching method--any procedure for presentation of instructional material and activities.

2. Attitude--feeling about any aspect of teaching.

3. Instructional materials--any devices, methods, or experiences used for teaching purposes.

4. Perception--awareness or consciousness; an intuitive cognition or judgment.[1]

Change agent.--A person who attempts to influence the adoption decisions in a direction he feels is desirable. He is a professional who has as his major function the advocacy and introduction of innovations into practice.[2]

Diffusion.--The process of dissemination or informing others of educational innovations.

Domesticated organizations.--These are organizations like the school which cannot select clients and where the client must accept the service.[3]

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[1]Billie Marvis Doughty, "Some Factors Affecting Innovation as Identified in Educational Literature and as Perceived by Selected Teachers" (unpublished Ed.D. dissertation, University of Alabama, 1966), p. 11.

[2]Carlson, "Barriers to Change in Public Schools," p. 4.

[3]Ibid., p. 6.

Innovation.--The process whereby a new element of culture or combination of elements is made available to a group.[1]

Organization of the Study

Organizationally, the study is composed of five chapters: Chapter I presents the introductory chapter; Chapter II provides a review of relevant literature; Chapter III provides a description of the instrument and procedures used; Chapter IV provides a compilation and analysis of the data collected; and Chapter V presents the summary, conclusions, and recommendations of the study.

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[1]Gallaher, "Direction Change in Formal Organizations: The School System," p. 133.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

A review of the related literature was an integral part of this study and is summarized in this chapter. It was recognized that this review of related literature could not reasonably include all the barriers to effective educational change. The major purpose was to attempt to direct attention to some of the most significant barriers to effective educational change rather than to attempt to list all barriers regardless of their importance.

The organizational structure of this chapter is based on categories reported in the literature as the most frequently cited barriers to effective educational change. Barriers to educational change have been reported according to the following general areas:

1. Finance
2. Restrictive Laws, Policies, and Regulations
3. Attitudes, Professional Personnel, and Leadership
4. Organization

5. Knowledge

6. Facilities and Materials

7. Environment

Finance

One of the most frequently cited categories of barriers to effective educational change was directly related to money, its inadequacy and restrictions placed on its uses. Educational literature perceived educational change as having a price tag higher than that attached to existing programs.

Morphet, Johns and Reller discussed the necessity of an adequate level of funding for program improvement when they stated:

> Studies that use appropriate measures for determining progress in attaining significant educational objective indicate clearly that increased expenditure almost always result in improvements in the educational program in schools in which the expenditure level is at or below the national average. There is a considerable presumptive evidence that the educational program may be improved when the expenditures are increased, even in school systems with a fairly high level of costs.[1]

Underlying the major barrier of inadequate funding for educational change are more minor barriers that help to create the major one of inadequate support. Such minor barriers are identified as: (1) inadequate local tax

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[1]Edgar L. Morphet, Roe L. Johns, and Theodore L. Reller, Educational Organization and Administration (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967), p. 501.

effort, (2) inadequate and antiquated tax structure, (3) inadequate state and federal tax structure, and (4) inadequate and restrictive uses of funds for such factors as differentiated salary schedules and over-expenditures for administration.[1]

Fusfeld described what he considered as the two great barriers to provision of adequate resources for education. One of these barriers he described as the prevalent attitude toward private wants and public needs. In an individualistic society we can expect resentment and resistenace to payment of taxes for financing of social needs requiring that people forego spending on their personal wants.[2]

Compounding this first barrier further is the fact that the tax payer pays the cost of education while the direct benefits are received primarily by non-taxpayers --the young go to school while people who already have their education pay the bills. "As long as this condition prevails, the attitudes toward education will mitigate against adequate financing."[3]

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[1]"Report of the Committee for Determining the 'Barriers to Educational Change' in Kentucky." Kentucky Chairman (unpublished report).

[2]Daniel R. Fusfeld, "Education and the Problem of Capital Investment," Designing Education for the Future No. 1, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), p. 214.

[3]Ibid.

The second barrier to the financing of education, as perceived by Fusfeld, lies in the ways that capital investments are made. Business firms must only show that the potential returns, taking risks into consideration, are greater than the rate of interest. They can then borrow the capital necessary for its operation. This is not true for education. Fusfeld described the factors that inhibit investment in education when he stated:

> In the first place, the potential gains are not easily measured. Secondly, those who benefit are not expected to repay directly the costs of their education. And finally, educational funds are obtained by a complex political process in which extraneous issues often impinge on a decision made in the emotional heat of politics. In short, the development of education is hampered by institutions which make capital investment difficult and erratic in contrast to the free access to capital enjoyed by business enterprise.
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> These two factors--attitudes and institutions --would indicate that our supply of educational services will lag behind the growing demand for them.[1]

Barnes discussed eight major obstacles to progress in education. Two of these dealt with the reasons for inadequate financing of education to the point that change for improvement becomes impossible.

The first obstacle, archaic school finance programs, has handicapped school systems for years. This has been due to finance programs based on unrealistic measures of educational need and of local effort. The second major obstacle, as perceived by Barnes, is that of public apathy

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[1] *Ibid.*, pp. 214-215.

toward school tax levies and appropriations. He advanced the following reasons as possible causes that may underly public apathy.

1. Too little demonstrable improvement in the quality and performance of public school teachers.

2. The similarity of the school programs to those the public experienced in an earlier and less costly era.

3. Frustration with federal taxes and programs over which the public has little or no control.

4. A reaction to federally inspired programs of racial mixing which bring the disfavor of large segments of votes.

5. The absence of effective methods of involving the citizens of school systems in the direction of school affairs.[1]

Closely related to any discussion of costs and provisions for adequate funding of schools is the question as to whether, or when does, increased funds mean that better educational change will take place. Miles discussed the relationships of innovativeness in school systems to financial factors when he stated:

> . . . innovativeness in school systems in the 1930's appears to have borne much more relationship to community (and thus financial)

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[1]Melvin W. Barnes, "Planning and Effecting Needed Changing in Urban and Metropolitan Areas," Designing Education for the Future No. 3, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), pp. 211-216.

> factors than to characteristics of administrators or teachers in local school systems. Community size and wealth appeared to exert the most powerful effects, of course, in the case of "visible" innovations. Some recent data, however, indicate that rate of innovation adoption within a county was not correlated with annual expenditure per school child. Thus money as such is not a sufficient predictor. Rather, community influence--as in the case of agricultural innovation--is exerted through traditional or innovative norms, which set lower and upper bounds for financial support, provide lattitude for teacher experimentation, and influence the selection and retention of educational personnel.[1]

Often emergent resistance forces may be created when factors in the situation which were unnoticed at the beginning of the change process turn out to be major obstacles to change. One such obstacle that often arises is that the cost of the change project in terms of money and time may turn out to be more than the client system can handle. Thus, the level of financial support may be inadequate for effective changes to occur. Mort discussed this thought when he stated, ". . . innovations that increase cost move more slowly than those that do not."[2]

In discussing why systems tend not to change, Miles gave one reason as being the addition of money and staff over and beyond that required for regular operations

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[1]Miles, Innovation in Education, p. 640.

[2]Paul R. Mort, "Studies in Educational Innovation from the Institute of Administrative Research: An Overview," Innovation in Education, ed. by Matthew B. Miles (New York: Teachers College, Columbia University, 1964), p. 325.

required by the development and implementation of new programs.[1] He further added:

> It seems likely that, in addition to basic motivation for change in the local system, other prior state factors must be considered which serve to define the limits of change, and/or to permit it to occur.
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> One of these appears to be financial resources. If we think of innovation as requiring extra system effort, it is not surprising to find, across many types of systems, that innovativeness varies directly with available money, though this is not, as we have seen, an invairant finding.[2]

Rogers discussed the implications between financial resources and innovativeness of a school system. He reitaterated:

> A high relationship has been found between the financial resources of a school system and its innovativeness. In fact, outstandingly innovative school systems are usually located in particularly wealthy communities. At the same time, however, it is important to remember that not all rich schools are innovators and that not all schools that innovate are rich. The community's attitude about providing support for the school's cost is obviously an important intervening variable between community wealth and school innovativeness.[3]

Saylor called attention to the restrictive nature of some educational funding as another major barrier to educational change when he discussed factors concerning

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[1]Miles, Innovation in Education, p. 644.

[2]Ibid., p. 646.

[3]Everett M. Rogers, "What are Innovators Like?" Change Processes in the Public Schools, ed. by Richard O. Carlson (Eugene, Oregon: University of Oregon, 1965), pp. 60-61.

educational programs and their funding that unduly hem in, restrict, and force compliance with unnecessary or even absurd guidelines and regulations. He found, from corresponding with a number of outstanding educators and leaders in the profession of educational administration, that the U.S. Office of Education often required school systems to conform to senseless deadlines as it administers federal funds for the support of education. He wrote as follows:

> The most serious changes of the restrictive and wasteful nature of the acts of the U.S. Office of Education in administering federal grants for education are as follows:
> 1. Extreme bias in determining the projects to be funded.
> 2. Uncertainty of approval, funding, and continuity.
> 3. Unwarrented requirements in preparing applications for funds.
> 4. Inproper emphasis in the total program of education.
> 5. Multiplicity of federal funding agencies and the ineptness of local community action agencies.
> 6. The establishment of regional offices of the U.S. Office of Education that would involve dictation and control, and would constitute a serious threat to the authority of the state departments of education.[1]

Saylor presented his alternatives and recommendations for removing the barriers presented here and stated that, "the whole question is related to the most effective methods of achieving the best things for the people through organized government."[2]

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[1]J. Galen Saylor, "Captive to Funded Projects," Educational Leadership, XXVI (January, 1969), 329-330.

[2]Ibid.

Restrictive Laws, Policies, and Regulations

A second frequently cited category of barriers to effective educational change was that of restrictive laws, policies, and regulations. Within this category, the restrictions determined by court decisions and legislative acts, as they regulate or effect public education, are often mentioned in recent educational literature. Many court decisions and legislative acts often place school administrators in a two-fold dilemma. Redfern pointed out such a dilemma when he stated:

> On the one hand, pressure grows out of the social mileu to alter established educational patterns and processes. School administrators recognize the need to act. The urgency to do so may seem compelling, yet certain countervailing forces may impede the action. Hesitancy often stems from a realization that ultimate and successful implementation of proposed changes may hinge upon a deliberate and prudent assessment of how to proceed when conflicting forces both promote and impede change.
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> Another facet of the dilemma may arise out of the intervention of legislatures and courts. They may mandate changes even to the extent of dictating courses of corrective action for alleged deficiencies. The school administrator is often compelled to yield to the provisions of law or to the prescriptions of judicial opinion even to the extent of preempting the authority of boards of education and school administrators to carry out their leadership responsibilities.[1]

Redfern did not argue that legislatures and courts should hesitate to intervene when injustices go uncorrected

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[1]George B. Redfern, "Court Decisions: The School Administrator's Dilemma," Educational Leadership, XXVI (December, 1968), 232.

or constitutional rights are flounted, for appropriate action is called for to correct such wrongs. However, he felt that the emphasis of judicial opinions should be upon a definition of the dimensions of deficiency rather than upon prescription of remedies.[1]

As school officials and other professional personnel exert time, energy, and resources for the implementation of dictated courses of action by courts and legislatures, the necessary ingredients for making many necessary and effective changes have been diverted. Hamilton and Mort discussed court decisions that serve as barriers to effective educational change when they stated:

> Since in many cases more than one interpretation is possible, the courts may in some situations find themselves in the position of establishing certain educational policies, although that is presumed to be the prerogative of the legislature and boards of education. Conservative courts by making conservative and strict interpretations of new laws may nullify the intent of the legislation and handicap the development of the educational program.[2]

Morphet, Johns, and Reller discussed restrictive legislative acts further when they stated:

> Laws originate in many different ways. Sometimes they grow out of careful studies by some appropriate group concerned with the conceptual design and needs and ways of meeting these needs. In other cases, some individual or group may become concerned because

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[1] Ibid.

[2] Robert R. Hamilton and Paul R. Mort, The Law and Public Education (2nd ed.; New York: Foundation Press, Inc., 1959), p. 23.

> school expenditures have increased rapidly, because some board has inaugurated a controversial type program, or for some other reason, and may seek legislation designed to prevent the schools from doing those things they consider undesirable. Ignorance, selfishness, and provincialism are likely to lead to bad legislation in any state. While there is probably no way to prevent some unwise or handicapping laws, there are some important safeguards. The most fundamental is widespread understanding of the role and significance of high-quality education by citizens and legislatures.[1]

Another barrier of the restrictive regulations type is often the role of the U.S. Office of Education. Due to the increase in the numerous categorical federal appropriations administered by the U.S. Office of Education, the organization of the office is being structured into a bureaucracy for administering federal acts rather than for providing leadership and services. Federal categorical appropriations contain substantial federal controls and the office administers the controls contained in those acts allocating funds to the office.[2] It is in the administering of the controls of such acts that the office can become a major barrier to effective educational change.

Statutory laws or regulations, of the restrictive regulations type, can become barriers to sound educational change as the legislature attempts to prescribe by law

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[1]Morphet, Johns, and Reller, Educational Organization and Administration, pp. 54-55.

[2]Ibid., p. 230.

the policies and standards needed for education. An important question that arises is the amount of responsibility or discretion that should be delegated to the state board of education. A generally recognized principle of law provides that limits or boundaries should be established for any discretionary authority that is granted. Thus the legislature should prescribe the basic policy and authorize the development of more specific policies, standards, or regulations by an appropriate, administrative agency, such as the state board of education.[1]

Unless a state board of education seriously considers the major functions it should be performing and properly designates the implementation of them to its chief state school officer and the department of education, its decisions regarding policies and regulations may tend to be highly restrictive and serve as barriers to effective educational change.

State and regional accrediting regulations are often identified as barriers to educational change. These regulations may serve as barriers to effective educational change when educators allow them to influence accreditation studies to the extent that they have the effect of reducing the range of efforts, and especially the range above the median.[2]

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[1] *Ibid.*, p. 247.

[2] *Ibid.*, p. 554.

Morphet, Johns, and Reller discussed the hindrances of accreditation regulations and guides further when they stated:

> Perhaps even more disturbing than the method of applying guides for accreditation purposes is the long-run effect of their use. Even if their immediate effect may be good because they bring shortcomings to attention and therefore stimulate action, their long-run effect may be unforunate. This is true whether self-evaluation or evaluation by visitors is employed. For the mere use of such forms may tend to narrow the range of approaches to a problem. True, they help the poor school more nearly to approach the better. But do such forms really cause the better schools --those enjoying more situational factors--to push ahead into new territory, or do they cause a type of complacency to develop? Isomorphism, the tendency of institutions to grow more alike and narrower in range, is particularly dangerous in a society in which conformity is highly valued. It would appear necessary for our society to seek variety of practice rather than conformity in education.[1]

It is when schools direct their attention mostly to the requirements or regulations of an accrediting agency that they aim for the minimum standards and do not pursue a course of action of greater iniative. If schools allow accrediting regulations to so restrict actions of accreditation studies, then they serve as inhibitors of educational change rather than help to initiate desirable change.

Other examples of possible inhibitors to educational change, of the restrictive regulations type, are

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[1]*Ibid*.

state course of study guides,[1] text book adoption regulations,[2] and local school board regulations,[3] when educators allow the use of them to severely restrict or regulate their actions.

Attitudes, Professional Personnel, and Leadership

Attitudes

Much of the educational literature describes forces that are assumed to be representations of motives, capacities, and situational factors which influence the attitudes and behaviors of people. These factors are usually described as resistance forces that include a general opposition to change, actual inability to change, opposition to a proposed change objective, and a desire to preserve existing satisfactions.[4]

Lippitt, Watson, and Westley[5] described some of the resistance forces that often occur within a client system when change is being made.

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[1]Van Miller and William B. Spalding, The Public Administration of American Schools (New York: World Book Company, 1958), p. 242.

[2]Ronald C. Doll, Curriculum Improvement: Decision-Making and Process (Boston: Allyn and Bacon, 1970), p. 274.

[3]Morphet, Johns, and Reller, Educational Organization and Administration, p. 304.

[4]Ronald Lippitt, Jeanne Watson, and Bruce Westley, The Dynamics of Planned Change (New York: Harcourt, Brace, and World, 1958), p. 89.

[5]Ibid., pp. 84-86.

1. Resistance which is most likely to occur at the beginning of the change process which is a general opposition to any kind of change.

2. Resistance against a proposed change objective that is judged as undesirable, irrelevant, or altogether impossible.

3. Resistance that is due to a client system clinging to existing satisfactions, having vested interests with the status quo, and the satisfaction of modeling present behavior on past traditions.

4. Resistance centered in the relationship between the client system and the change agent.

5. Resistance forces created when factors in the situation which were unnoticed or unimportant at the beginning of the change process turn out to be major obstacles to change.

Besides the resistance forces which might cause people not to make changes, as described by Lippitt, Watson, and Westley, Miles added that,

> It is also possible that certain ideological beliefs in the educational profession serve to block effective innovation by effectively insulating educational practitioners from reality.[1]

Bennis, Benne, and Chin described resistance forces that serve as barriers to change by inducing an

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[1]Miles, Innovation in Education, p. 634.

individual not to make the desired change. They looked at conditions conducive to resistance and made the following observations:

1. Resistance arises if the nature of the change is not made clear to the people who are going to be influenced by the change.

2. Different views of different people distort the meanings of the proposed change.

3. Resistance develops when those influenced are placed in a position between strong forces pushing them to make the change and strong forces deterring them from making the change.

4. Resistance may be expected to the extent that persons influenced by the change have pressure put upon them to make it, and will be decreased to the degree these same persons have participated in the decisions made regarding the direction of the change.

5. Resistance often arises if the change is made on personal grounds rather than impersonal requirements.

6. Resistance often arises if the change ignores the established institutions in the group.[1]

In addition to conditions in which resistance might occur, the literature describes motivational forces that often cause people to resist change. Coch and French

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[1]Warren G. Bennis, Kenneth D. Benne, and Robert Chin, The Planning of Change (New York: Holt, Rinehart, and Winston, 1961), pp. 544-546.

described some of these as being the following: "(1) the difficulty of the job; (2) a force corresponding to avoidance of strain; (3) a force corresponding to a group standard to restrict production to a given level."[1]

Eichholz discussed attitudes of teachers, when rejecting change, in the following way:

> The five different forms of rejection--ignorance, suspended judgment, situational, personal, and experimental--are the series of reasons developed on a continuum, for teacher rejection of an innovation.
>
> The first form, ignorance, indicates that the subject simply does not know about the proposed innovation. Once he gains further information, he may move to the next stage, suspended judgment: he is doubtful and concludes that it is better to be safe with traditional methods than to try an unknown. At stage 3 situational rejection, the subject is assured that the innovation is good, but he still has reservations about this use: he may compare it with other things that are "equally as good"; he may feel unable to carry it through because of the expenditure of time or money. Once these reasons have been dispelled, the subject may enter the next stage, personal rejection: he may feel anxious about his own ability to carry through the innovation; he may feel guilty about other commitments that he has; or he may feel alienated from his professional role as a teacher. The final stage of rejection is based on the teacher's actual experimentation with the innovation: he has tried it and is convinced that it doesn't work.[2]

Barnes identified lack of appropriate values, or a sense of commitment to values, as a major barrier to

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[1]Lester Coch and John R. P. French, Jr., "Overcoming Resistance to Change," Human Relations, I, No. 4 (August, 1948), 527.

[2]Gerhard C. Eichholz, "Why Do Teachers Reject Change?" Theory Into Practice, II, No. 5 (December, 1963), 264-265.

education change. He called this barrier a vestigial value system and further stated, "without a sense of values, projections of vital and significant goals are impossible . . . ."[1]

> Perhaps one of the most crucial barriers --one which is not mentioned by Carlson and is ignored by many other students of change --is the realization that behavioral changes by staff members can by no means be assessed on a rational basis alone. The emotional upheaval which is involved in any significant change is too often ignored by those who write about the change process. Most improvement involves changes in what the teacher must know and must do. This clearly attacks individual vested interests in the psychological sense and we should anticipate the high levels of anxiety which are normal.[2]

Professional Personnel

Factors associated with professional personnel as inhibitors to change was another area frequently cited by the literature concerning barriers to change. Carlson identified one such barrier when he stated:

> Part of the explanation of the slow rate of change in public schools, according to many students of organizational change, lies with the absence of an institutional change agent position in education.[3]

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[1]Barnes, "Planning and Effecting Needed Changes in Urban and Metropolitan Areas," p. 205.

[2]Roderick F. McPhee, "Planning and Effecting Needed Changes in Local School Systems," Designing Education for the Future No. 3, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), p. 185.

[3]Carlson, "Barriers to Change in Public Schools," p. 4.

Carlson described this person as a professional who has as his major function the advocacy and introduction of innovations into practice. The change advocate role, Carlson felt, must be taken by the local school system through the office of the superintendent.

A factor concerning professional personnel that often serves as an inhibitor of change is the long tenure of a school system's professional staff. Griffiths discussed this barrier when he stated:

> The number of innovations is inversely proportional to the tenure of the chief administrator. The longer an administrator stays in a position, the less likely he is to introduce change. The model indicates some reason for this. All of the processes which bring about the steady state have been given time to operate. Feedback channels have become fully established. Progressive segregation has set in; the sub-systems have become structured and have gained relative independence. Change is thus more difficult, because the frequency of interaction between sub-systems is decreased, and the chances for effective communication are diminished.[1]

Many changes in education are inhibited by professional personnel that are not convinced their decisions and recommendations will be implemented. Educational innovations operate most successfully when dedicated teachers do everything necessary to implement the change and make

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[1]Daniel E. Griffiths, "Administrative Theory and Change in Organizations," Innovation in Education, ed. by Matthew B. Miles (New York: Teachers College, Columbia University, 1964), p. 434.

it come alive in day-to-day teaching activities.[1] Voelz discussed this idea further when he stated as follows:

> Little is known of what inspires teachers to reach this level of performance, but four obstacles to efficient organization and positive teaching attitudes might be identified as having a detrimental effect. The list is by no means exhaustive:
>
> 1. The Rate of Change. Writing about the introduction of change, Yale psychologist S. B. Sarason has charged that the more things change on the surface in a school the more conditions remain basically the same. Such situations are apparently nurtured by the manner in which most changes or change attempts have been introduced to school staffs. Sarason holds that one of the major reasons for this self-defeating process is the tendency for change proposals to emanate from on high, without taking into account the feelings and opinions of the teachers who must implement the changes. This changing-more-now-but-enjoying-it-less cycle seems to imply the existance of a general staff immunity to change --which grows more pronounced with each unimplemented change proposal.[2]

Another factor concerning professional personnel that often serves as a barrier to effective educational change is that of the employment of specialists concerning book knowledge. Glines stated:

> The interviewing of teachers remains a barrier to improvement. Too much stress is still placed on their knowledge of content and not enough placed on point of view, on understanding of the learning process and on personality structure. Virgil Blanke has pointed out that to overcome barriers to

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[1]Stephen J. Voelz, "Changing Teachers' Attitudes Toward Change," Educational Technology, XIX (November, 1969), 75.

[2]Ibid.

> change, once teachers are employed, group cohesion is necessary.[1]

The factors concerning the single salary schedule that serve as barriers to educational change were discussed by the Committee for Economic Development. They stated as follows:

> The simple standardization of teacher classification, certification, and pay scales, which is common today, places everyone more or less in the same category and fails to recognize differences in competence, knowledge, and interest.
>
> Teacher salaries are commonly based on seniority and the accumulation of college credits. We regard this as a serious block to the recruitment and retention of countless competent teachers and to eliciting the best efforts of teaching staffs. The variety of talent, preparation, and competence required for effective and efficient teaching justifies differentiated pay scales, which would in our opinion overcome this block to improved instruction.[2]

The factors relating to professional personnel discussed here are by no means exhaustive, but do indicate some of the major barriers to effective educational changes from this category.

Leadership

Looking at the absence of proper leadership, as it constitutes a barrier to educational change, Johnson concluded:

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[1]Don E. Glines, "Planning and Effecting Needed Changes in Individual Schools," Designing Education for the Future No. 3, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), p. 171.

[2]Committee for Economic Development, Report of the Committee, Innovation in Education: New Directions for the American School (New York: Committee for Economic Development, 1968), p. 49.

> We still find people in education who are terrified by change. We still lack sufficient understanding of the change process and its components to break people away from personal and cultural imprints so that they can adapt to tomorrow's world. We still persist in organizing our educational institutions for control of the many and comfort of a few rather than for flexibility to adapt to changing needs and diverse individuals. We may not have the answers for freeing people to adopt in a world society that will rely heavily on adaptation for survival, but we have some hints about the kinds of people and the consequent organizations which will foster change. It seems crucial, then, that we start at a most influential market place, the educational establishment, and identify people who can tolerate change, while providing the climate in which others can change without fear. The climate, then, becomes one in which adaptation is a way of life, and problems are treated rather than symptoms.[1]

Goodlad mentioned a recent poll that suggested the lay public is at least as ready for change as the educators. But there always seems to be enough resistance on the part of vocal parents and entrenched professionals to cause undue caution on the part of administrators. This is an indication that administrators are not now joining the leadership needed for schools whose very reason for existence is experimentation and innovation.[2]

Resistance to change may often develop due to inadequate leadership. Willower noted that controls imposed

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[1]Homer M. Johnson, "Models for Adaptation--People and Processes," Educational Technology, IX (September, 1969), 67-68.

[2]John I. Goodlad, "The Educational Program to 1980 and Beyond," Designing Education for the Future No. 2, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), p. 51.

from the top of the hierarchy do not assure the co-operation of subordinates. There must be involvement from subordinates below which makes it possible for them to accept and initiate a certain amount of change themselves. Changes which are made too rapidly or are superimposed by authority meet with strong resistance. Errors are likely to be made in introducing a major change and the change may end abruptly if those at higher levels in the hierarchy do not support subordinates who make mistakes.[1]

Morphet, Johns, and Reller discussed the need for adequate leadership if educational improvement is to be made in education when they stated as follows:

> Whether needed improvements in the educational program (other than those required by laws or court decisions) can be made in a school system will be largely determined by the kind and quality of leadership that influences the decisions affecting education.[2]

Hansen described a barrier to change within organizations which exists when those who lead the organization want to change, but do not know how to go about it. Such ineffective leadership is also evident when the leaders of an organization have no vision of any other way

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[1]Donald J. Willower, "Barrier to Change in Educational Organizations," Theory Into Practice, II (December, 1963), 259.

[2]Morphet, Johns, and Reller, Educational Organization and Administration, p. 371.

to do things than the way they are being done now.[1]

Organization

In reviewing the literature concerning organizational type barriers to educational change, it was revealed that some factors of organizational structure were inherent barriers within the organization itself.

Griffiths discussed such inherent barriers when he presented his organizational propositions, as viewed in terms of system-theory. Three of his propositions, as they related to organizational barriers, were as follows:

> Proposition 6. The more hierarchical the structure of an organization, the less the possibility of change.
>
> Discussion. The system-theory model points out that a characteristic of open systems is progressive segregation, and this occurs as the system divides into a hierarchical order of subordinate systems which gain a degree of independence of each other. The more hierarchical the sub-systems become, the more independent the sub-systems, and the more difficult it is to introduce change.
>
> Proposition 7. When change in an organization does occur, it will tend to occur from the top down, not from the bottom up.
>
> Discussion. Using the same reasoning as in proposition 6, a hierarchical order would enable change to occur from the top down, but the relative independence of the sub-systems would tend to slow down the rate of change. The structure makes change from the bottom up very difficult; one would expect little if any change to be introduced in this way.

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[1]Kenneth H. Hansen, "Planning for Changes in Education," Designing Education for the Future No. 3, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), p. 26.

> Proposition 8. The more functional the dynamic interplay of sub-systems, the less the change in an organization.
>
> Discussion. As a system operates, the sub-systems develop methods of interacting in which conflict is at a minimum. Each of the sub-systems has a function to perform, and each does so in such a manner as to allow it to maintain a high degree of harmony with the others. Each says to the others, in effect, "if you don't rock the boat, I won't." Change is practically synonymous with conflict, since it means that the arrangements the sub-systems have worked out no longer held. Sub-systems resist conflict, and in the same manner resist change.[1]

Barnes described a major barrier to change within organizations as institutionalization. He stated:

> . . . the very qualities of an institution that help to make people secure also tend to mitigate against change. But we live in an age when change is increasingly adopted as a condition of progress. Not only has the organization of urban school systems become institutionalized, but professional practices have also become deeply rooted in tradition.[2]

Willower summarized comments by Lippitt, Blau, and Scott concerning resistance to change within organizations when he stated as follows:

> As Lippitt and his associates point out, "change forces and resistance forces are both operating in almost every situation." The sources of resistance to change in organizations are many.
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> An important source is found in the real or perceived threat that change poses to status. Blak and Scott observed that much of the resistance to change encountered in

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[1]Griffiths, "Administrative Theory and Change in Organizations," p. 435.

[2]Barnes, "Planning and Effecting Needed Changing in Urban and Metropolitan Areas," p. 206.

> organizations is due to the disturbance it would produce in the status structure.[1]

In almost every case, the informal organization is taken into consideration by the formal organization, and should be done so by instigators of change. It is most important that the change agent not lose sight of the informal organization within the formal organization, as he attempts to set the change process into motion. Wayland stated:

> Efforts at innovation which take only the formal organization into account are certain to meet resistance from the other type structures. But the lower visibility of these structures may prevent the innovator from understanding the nature of the resistance.[2]

Shephard described a problem of organizations to be that they have been designed to be innovation-resisting. Organizations which contain people have customarily been designed to do a narrowly prescribed assortment of things, and to do them reliably. To do this, the organization requires strong defenses against innovation. Hence, any change is likely to run counter to vested interests, and to violate certain territorial rights.[3]

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[1]Willower, "Barriers to Change in Educational Organizations," pp. 257-258.

[2]Sloan Wayland, "Structural Features of American Education as Basic Factors in Innovations," Innovations in Education, ed. by Matthew B. Miles (New York: Columbia University Press, 1964), p. 608.

[3]Herbert A. Shephard, "Innovation--Resisting and Innovation--Producing Organizations," The Planning of

Knowledge

One of the most often mentioned categories of factors that serve as barriers to effective educational change is that of lack of knowledge about educational changes and innovativeness. Shephard supported this when he said:

> In contrast to the county extension agent in the agricultural field who is backed by extensive and practiced research, experiment, and development operations, the school superintendent as a change agent must attempt to judge educational innovations without the backing of solid research.[1]

Kurland discussed the idea of bringing about orderly and organized change by developing a knowledge about how to manage the process of change when he stated as follows:

> The search for solutions to important educational problems should lead to changes in current practice directed to existing goals, or the change in goals and the adaption of new practices to achieve them.
>
> This kind of change begins with people--the administrator, the teacher, the parent, the community--generally working cooperatively to develop effective alternatives to present practices. But the idea of change frequently causes apprehension and resistance. Effective innovation will require development of mechanisms for dealing with these concerns so that all affected can discover how new solutions can result in improved methods for achieving their

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Change, ed. by Warren G. Bennis, Kenneth D. Benne, and Robert Chin (New York: Holt, Rinehart, and Winston, Inc., 1969), pp. 519-520.

[1]Carlson, "Barriers to Change in Public Schools," p. 5.

> goals. Projects that do not take into account the need to involve people affected are not likely to succeed.[1]

In discussing the types of knowledge necessary to handle efficiently the process of change, Kurland added:

> There is more to innovation than dreaming up and trying out a new idea in a special "one shot project." Innovation is a systematic process. It begins with the analysis of need, continues through the identification or invention of ways to meet the need and includes the installation of the new practice and its evaluation which, if positive, should result in the transformation of a "special project" into a "regular program," and generally results in the cessation of an "old practice."[2]

Goodlad was concerned with several of the barriers in regard to the slowness of development of innovative programs. He felt that a lack of clarity of aims of education was a barrier to the adoption of innovative programs and curriculum reform projects. He stated:

> Clearly, we have not defined the aims of education at any level of decision-making in America; curriculum reform projects thus come into a vacuum. We grow distraught about national assessment programs, about a national curriculum, about people making decisions at remote levels. But the real fault is that we have failed to take advantage of local control of education in seeking to define with vigor and precision what we are trying to do. Decisions made remotely sneak in back doors while we debate the issues of local versus federal control of education.[3]

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[1]Norman Kurland, "What is Innovation?" Educational Technology, XIX (February, 1969), 35.

[2]Ibid., pp. 35-36.

[3]John I. Goodlad, "Implications of Current Curricular Change," Educational Digest, XXXII (March, 1967), 14.

In regard to the lack of scientific research serving as a barrier to educational change, Pellegrin discussed some of the obstacles to be overcome before such research can provide the knowledge upon which policy, practice, and innovation can rest. He noted the principal obstacles as being the following: a widespread lack of appreciation for understanding of the nature and value of research; much existing research is low in quality, weak in the insight it imparts, and of dubious utility to the practitioner; the nature and functions of theory are poorly understood; there is considerable confusion about the relationship between empirical fact and values; and research on topics important to education cover a wide range and these topics are complex and difficult to investigate.[1]

The barrier of inappropriate reliance by schools upon achievement tests and other such hard data was discussed by Doll when he implied that perhaps the greatest handicap to performance of true evaluation is when teachers who are unfamiliar with standardized instruments attempt to use them without consulting a good general reference concerning evaluation.[2]

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[1]Roland J. Pellegrin, "The Place of Research in Planned Change," Change Processes in the Public Schools, ed. by Richard O. Carlson (Eugene, Oregon: University of Oregon Press, 1965), pp. 71-73.

[2]Doll, Curriculum Improvement: Decision-Making and Process, p. 339.

Miles felt that the diffusion rates in educational systems may be slower than those found in industrial, agricultural, or medical systems for several reasons, with the absence of valid scientific research findings being one of them.[1]

Educational literature concerning barriers to change often identifies lack of knowledge about proper communication as an inhibitor to effective educational change.

Doll felt that action for curriculum improvement, like many activities in educational supervision and administration, faces two major barriers to good communication. He identified these barriers as the manufacture and spread of rumor and the filtering of information conveyed by curriculum leaders and other persons.[2]

Doll defined rumor as ". . . a report without foundation or basis in fact."[3] He also defined filtering, the second major barrier to good communication, as ". . . the process of eliminating or screening out important information which should be passed along a given communication chain."[4]

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[1]Miles, Innovation in Education, p. 634.

[2]Doll, Curriculum Improvement: Decision-Making and Process, p. 310.

[3]Ibid.

[4]Ibid., p. 311.

Weathers described the barriers to effective communication as often being those of human inadequacy and language weaknesses. He stated:

> The major portion of a man's problem in communication is the result of human inadequacy. We "tighten the knot" and fail to communicate because of all sorts of psychological problems that we carry around within ourselves.[1]

Of serious concern to education is that most of our educational practices, based on the stimulus--response dichotomy, never allow thinking to become a truly involved process. So the educated mind grows up cold and armed against any new thinking by an internal labyrinth of refractory barriers, the educated mind moves from school to university and on into government, into administration, into the church, the law, the safer areas of business and commerce, or worst of all, back to school to discipline other minds in its own image or to universities to invent new barriers.[2]

Halpin discussed some of the barriers of communication that prevents change research from being communicated to the practitioners. The reasons for a lack of communication, Halpin felt, was that the scientist feels that it

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[1]Winston Weathers, "An Exemplary Theory of Communication in Modern Literature," Communication; Theory and Research, ed. by Lee Thayer (Springfield, Illinois: Charles C. Thomas, Publisher, 1967), pp. 150-151.

[2]George Z. F. Bereday and Joseph A. Lanwery, eds., The Yearbook of Education 1960 (Tarrytown, New York: World Book Company, 1960), p. 47.

is not his responsibility to communicate his ideas clearly to the ultimate consumer. On the other hand, the practitioner consoles himself with the knowledge that he is on the real firing line and that what he contributes to his school system is more important than any misty theory. This is why innovation is often so difficult.[1]

Hansen discussed the lack of a communication system that relays needed knowledge as a barrier to change when he stated as follows:

> Change may be delayed or prevented because many people who make the decisions for change in education lack exposure to--or fail to utilize--useful information. I have in mind the log jam of information derived from research that remains immobile because a communication system has not been devised, in most instances, to allow an adequate flow of information to educational decision makers.[2]

Facilities and Materials

Because teachers and children are more important than anything else about a school, concern in the past about the buildings, the equipment, and the total environment has often been left to architects or officials in charge of school plants. Such a lack of knowledge and concern about school facilities has served as a barrier to needed changes in the realm of education.[3]

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[1]Andrew Halpin, Theory and Research in Administration (New York: The Macmillan Company, 1966), pp. 13-14.

[2]Hansen, "Planning for Changes in Education," p. 36.

[3]Harold B. Gores, "Schoolhouse in Transition," The Changing American School (Chicago: The University of Chicago Press, 1966), p. 135.

Agreement with Gore's ideas was expressed by Morphet, Johns, and Reller when they discussed how often factors concerned with facilities act as barriers to educational improvement. They stated:

> In many instances the organization of schools has been greatly influenced by the available school buildings. The junior high school was given an important push in many communities by the fact that it was an appealing way to relieve overcrowding in both the elementary schools and senior high school. Similarly, the kindergarten-primary unit has been favored in some communities in recent years because of its ability to relieve elementary schools in areas where remaining sites were few, not primarily because of belief in its educational potential. Action based upon building expendiency, rather than upon thorough consideration of educational purposes, may be one explanation of the failure of many junior high schools to develop in accord with the professed educational goals of such schools.[1]

Inadequate facilities can inhibit the newer innovations within a school for the current wave of reform and innovation in education demands new approaches to the design of school buildings. Facility planners must aim at the need to design school buildings to accommodate the new teaching patterns and technology then being tried, and to be adaptable to unknown future changes in educational patterns.[2] This thinking was supported by Abelson and

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[1]Morphet, Johns, and Reller, Educational Organization and Administration, p. 439.

[2]James J. Morrison, "Educational Facilities Laboratory--Catalyst for Innovation," Educational Screen, Audio-Visual Guide, XLVIII (October, 1969), 16.

Berenson[1] when they discussed the role of facility planning in support of proper school environment.

Lack of and/or inadequacy of necessary equipment and materials often serve as barriers to effective educational change. Miles pointed out some of the factors concerning technology that serve as inhibitors to adoption. Small technical decisions may have a strongly blocking effect on the development of a particular device, and the opinions of a relatively small technological elite may exert disproportionate influence. Also, devices which rely on associated materials (such as film projections) may be hampered by a chicken-or-egg problem, since producers of materials are reluctant to produce them if no device for using them exists, and vice-versa. Other features of technological innovations that influence the adoption rate include feasibility, ease of availability when use is desired, and convenience of use.[2]

Materials inhibit diffusion of educational innovations considerably when they are not easily designed and altered to fit the demands of teaching situations, are not easily reproduced and distributed, and they do not retain substantial integrity when used by a wide variety of teachers in different situations.[3]

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[1]Alan Abelson and Bert Berenson, "Facilities Must Support, Not Stiffle," Nation's Schools LXXXIV (October, 1969), 65.

[2]Miles, Innovation in Education, p. 636.

[3]Ibid.

Concerning the necessity of adequate facilities and instructional materials in effecting educational improvements, Doll stated:

> A third method for effecting curriculum improvement in the individual school involves introducing new teaching-learning materials and facilities and the changed methods which are necessarily associated with them.[1]

Other studies of working conditions in schools have revealed the satisfaction teachers feel in having varieties of usable instructional materials at hand and in understanding how to use them. When materials and equipment accord with the requirements of the instructional program, and when the persons who use materials and equipment have a main part in choosing them, the usefulness of these resources is assured.[2]

Environment

Educational improvement is often hindered or blocked by barriers related to what might be called environmental conditions. Society, the culture, and our American system of values have an effect on efforts to improve the curriculum.[3] In regard to these type barriers, Doll stated as follows:

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[1]Doll, Curriculum Improvement: Decision-Making and Process, p. 337.

[2]Ibid., p. 175.

[3]William M. Alexander, Changing Curriculum Content (Washington: Association for Supervision and Curriculum Development, 1963), p. 67.

> The society at large affects curriculum improvement in four major ways: by inhibiting change through the power of tradition; by speeding change which stems in turn from broader social and cultural changes; by creating problems which result from value conflicts within our society, and by applying pressures that originate in major segments of American society and culture.[1]

Wheaton discussed public attitudes as often being barriers to change when he stated:

> Growth also requires a willingness to accept change--change in the social order; change in business activity; change in public services; change in political values. To the extent that the public does not believe in the future and is unwilling to accept change and its costs, we face serious impediments to growth.[2]

Often the barrier of resistance to change that exists outside the school creates additional ones within the school itself. Cunningham identified some of these when he stated as follows:

> The sustained press from the outside upon the schools has led to, in many instances, defensive behavior on the part of teachers, administrators, and school board members. There has been a gradual tightening of the boundaries of school organization, and the creation (probably unknown to school officials) of an isolation of the school system itself from the constituency it was designed to serve. The sensitivity of school officials in many places has reached the point where innocent requests for information are interpreted as real or imagined attacks upon school. Many

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[1]Doll, Curriculum Improvement: Decision-Making and Process, p. 67.

[2]William L. C. Wheaton, "Urban and Metropolitan Development," Designing Education for the Future No. 1, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), p. 142.

> school personnel are extraordinarily cautious and communicate a hostility to the publics which they are professionally committed to serve.[1]

Such situations, of course, lead to lay citizens and school officials frequently separating themselves into two camps and making communication between them difficult. As social problems apart from the schools tend to intensify, pressures on the school will become greater. Therefore, thoughtful leaders in education must give time to the examination of the relationships between institutional sectors in the society and the influence of those interactions upon social affairs.[2]

Davis commented about history or tradition serving as a barrier to change when he stated thusly:

> Obviously, however, the previous and present environment greatly influence man's decision making process. Family, religion, superiors, job, and associates limit his outlook toward change. Likewise, history is a restrictive influence. Our society places great value on continuing what has proven successful in the past. Therefore, many times we are bound by limiting our planning to copying old patterns of change.[3]

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[1]Lavern L. Cunningham, "Leadership and Control of Education," Designing Education for the Future No. 2, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), p. 182.

[2]Ibid., pp. 182-183.

[3]J. Clark Davis, "Planning for Educational Change," Designing Education for the Future No. 2, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), pp. 34-35.

Lippitt discussed a type of interference to educational change that originates in the enviornment or in the relation of a client-system to its environment. He stated:

> A client system may be willing and able to undertake a change project and still be prevented from doing so by an intractable environment. Intractability might take the form of the absence of necessary resources and particularly of change agents, of rigorous demands or restraints which leave the client system little energy for its own use, or of such severe opposition to change that the risks involved for the client system would outweigh the potential benefits.[1]

Glines discussed environmental barriers to change in regard to the flow of communication. He stated:

> As a new era of dissatisfaction develops in the schools, the barriers to improvement will become more obvious. The informal and formal structures in a community will take on new significance. The nature of the communication between school leaders and teachers, and between school and community leaders often becomes a critical factor in determining whether innovative school projects become acceptable.[2]

Summary

There exists a genuine concern for effective educational innovation in our schools today. This is indicated in the way people are writing in the literature concerning educational change and the rate of change. Schools are

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[1]Lippitt, Watson, and Westley, The Dynamics of Planned Change, pp. 87-88.

[2]Glines, "Planning and Effecting Needed Changes in Individual Schools," p. 170.

being encouraged to develop models or examples of new programs as ways to influence change. Emphasis is being given in the literature to the dissemination and communication of research ideas concerning change to educators who may influence the change process in their schools. Even more evidence of this is the amount of funding from the United States Office of Education that is provided for new and innovative programs designed to bring about changes.

The literature reveals much concern about barriers to effective educational change. Studies of time lag are illustrative of the barriers facing education. Rogers[1] has indicated that 2.5 percent of the schools are innovators; 13.5 percent are early adopters; 34.0 percent follow somewhat later; 34.0 follow much latter; and 16.0 percent are notorious laggards. Unfortunately, it may take fifty years for the laggard school district to eventually adopt an idea begun by one of the innovative schools. Much has been written about defining as sharply as possibly the problems or barriers that must be overcome if a faster pace of change is to be made. The definition of the barriers must be made before educators can attempt to select the most effective methods at hand to attack each barrier to effective educational change.

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[1]Everett Rogers, Bibliography on the Diffusion of Innovations (East Lansing: Department of Communication, Michigan State University, 1966), pp. 56-57.

The major purpose of this study was to direct attention to some of the most significant barriers to effective educational change rather than attempt to list all barriers regardless of their importance. By knowing what barriers often impede improvements in education, educators might be able to avoid or delete them as they effect educational changes.

The categorical areas used for discussing the barriers that were identified were conveniently grouped under seven main headings. The categories were: finance; restrictive laws, policies, and regulations; attitudes, professional personnel, and leadership; organization; knowledge; facilities and materials; and environment. Some overlapping exists, but this was inevitable because of multiple causes and manifestations of certain barriers listed. The relative importance of each of the categories varies with time and place, and with a host of factors.

CHAPTER III

PROCEDURES AND INSTRUMENT USED

The study was designed to explore the perceptions of educators, laymen, and students regarding the extent that selected factors are considered as barriers to effective educational change. A questionnaire was used to obtain the perceptions of selected educators, laymen, and students. The methods and procedures used are described more specifically in the following pages.

Use of Opinion Polls

The use of opinion and attitude measurement in education has become very widespread. Several writers in the educational field endorse the use of opinion polls or questionnaires as a valid and effective means of gathering data about a particular idea or problem. Francis stated:

> . . . the opinionnaire permits the researcher to collect data from sources otherwise inaccessible to him by either the observation or interview method. It is relatively inexpensive in terms of time and money.[1]

The use of opinionnaires or opinion polls is a procedure for studying schools and school systems that is

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[1]Rammel J. Francis, An Introduction to Research Procedures in Education (New York: Harper and Brothers, 1958), p. 147.

relatively quick and informal. Doll described the procedure when he stated as follows:

> It consists of asking people within and outside the schools what they think of various aspects of schooling. The purpose of opinion polls is usually to discover agreement regarding strengths and weaknesses of school curricula. Polls have certain public relations value, and they may set the stage for curriculum improvement. Teachers and administrators often use opinion polls to identify points along the educational front at which gains can be made with maximum public support.[1]

Smith, Stanley, and Shores supported the opinionnaire technique when they concluded as follows:

> Survey techniques can be used to bring together the opinions of different groups of persons bearing on a particular question. The amount of agreement and disagreement among individuals of varying perspectives can then be ascertained by tabulating and comparing the responses. Three techniques can be adapted to this purpose: questionnaires, interviews, and recordings.[2]

Smith, Stanley, and Shores further added:

> Inventories based on master lists of life problems allow the responses of students, parents, teachers, and recent graduates to be readily compared. This makes it possible to discover whether or not a concensus exists among these groups with respect to a given problem and to find out how much difference there is and between whom the difference exists.[3]

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[1]Doll, Curriculum Improvement: Decision-Making and Process, p. 369.

[2]B. Othanel Smith, William O. Stanley, and J. Harlon Shores, Fundamentals of Curriculum Development (New York: World Book Co., 1957), p. 506.

[3]Ibid., p. 509.

French discussed the significance of the responses to the opinionnaire as follows:

> . . . by tabulating the results of the independent ratings of the teachers, laymen, and senior students, interesting agreements can be discovered and a basis for curriculum discussion, study, and improvement created.[1]

However, before looking at the implications of responses to questionnaires or opinionnaires, educators should look at some of the fundamental assumptions concerning perceptions as revealed by the literature.

A report by the association for Supervision and Curriculum Development discussed the perceptual view of human behavior as follows:

> The perceptual view of human behavior holds that the behavior of an individual is a function of his ways of perceiving.
> . . . . . .
> People behave in terms of the personal meanings (perceptions) existing for them at the moment of action.
> There is a vast difference between facts and meanings.[2]

The ASCD report further pointed out that it is easy for educators to deal with facts. These can be gathered and presented in hundreds of ways. However, meanings lie inside of people and cannot be directly

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[1]Will French and Associates, Behavioral Goals of General Education in High School (New York: Russell Sage Foundation, 1957), p. 215.

[2]Association for Supervision and Curriculum Development, Report of the Association, Perceiving Behaving Becoming (Washington: Association for Supervision and Curriculum Development, 1962), pp. 67-68.

manipulated and controlled. Also, since perceptions are within the individual they will not be brought out unless the climate outside is safe for them. They are exposed only when the perceiver feels that he wants them to be presented.[1]

Howsam discussed behavior determined by one's own perceptions. He reiterated that we behave according to what we believe to be real. Changing a person's idea of what is real is anything but easy. Hence, the educational innovator has as his major task changing behaviors that are deep-rooted in the views of reality held by pupils, parents, and educators. The traditional educational device of "telling" is not likely to effect much behaviorial change. Only great insight and powerful means are likely to work.[2]

In short, the literature points out that even though the perceptions of people may not always represent the facts, they are what the people believe the facts to be. Thusly, the perceptions held by people serve as facts to them.

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[1]Ibid., pp. 68-70.

[2]Robert B. Howsam, "Effecting Needed Changes in Education," Designing Education for the Future No. 3, ed. by Edgar L. Morphet and Charles O. Ryan (New York: Citation Press, 1967), pp. 70-71.

Selection of Participants

School systems were selected for use in the study that seemed to be representative of the various school systems in Alabama. Each of the participating school systems cooperated in selecting and getting respondents within their systems to respond to the survey questionnaire. The selected groups of respondents were chosen as being representative of the total system population for that category of respondents.

In selecting the systems an attempt was made to obtain representatives from rural areas, small cities, and large industrial areas of the state. Participants selected included educators, laymen, and students. The rationale for using these three groups and the factors used in their selection are discussed in the following paragraphs of this section.

Educators

The category of educators consisted of classroom teachers, school administrators and supervisors, state department of education personnel, and local federal project coordinators.

The perceptions of classroom teachers were considered an important part of the study inasmuch as changes successfully implemented depend on dedicated teachers implementing the change in day-to-day activities. Doll

confirmed this reasoning when he stated:

> . . . regardless of grandiose curriculum plans, when the classroom door is closed, the insight and skill of the teacher determines in large measure the quality of learners' experiences.[1]

Each participating school system in the study included at least one school faculty. Most of the school systems involved two or more of its faculties. The total number of classroom teachers that responded to the questionnaire was 824.

The second group of educators whose perceptions was felt to be a necessary part of the study was the administrative and supervisory personnel of the school systems participating in the study. The perceptions of this group of educators were considered important and necessary because most educational change requires commitment from the top of the organizational structure if it is to be successfully implemented. Doll discussed the roles of this group of educators when he stated as follows:

> Administrators and supervisors of school programs have very special roles to fill. Though they administer the curriculum remotely, the impetus they provide has an important effect in making programs succeed. Evidence has been accumulating that the power of money in stimulating curriculum improvement has its definite limits. When additional money, expanded for a variety of purposes, no longer makes any real difference, forward movement can be had chiefly by bringing new and effective leadership personnel to the task. Truly effective administrators and supervisors know teaching-learning processes, have an understanding of

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[1]Doll, Curriculum Improvement: Decision-Making and Process, p. 285.

> learners and of the intellectual disciplines, and possess knowledge and skill as educational engineers.[1]

Due to their experience and constant involvement in individual and program changes, generally administrators and supervisors were thought to be knowledgeable about any inhibitors to educational change within the schools and school systems with which they were familiar. A total of seventy administrators and supervisors responded to the questionnaire from the systems included in the study.

State department of education consultants were included in the study because of their constant involvement with individuals and groups in making educational change throughout the state. Johns discussed the role of state department of education personnel as follows:

> The most important relevant new development emerging from these times is the rapidly increasing demand for educational leadership from state department of education personnel. There are a number of areas in which leadership is being sought. The demands of local school boards for consultant help in developing the types of educational programs required for receiving federal grants are numerous indeed. But probably the most important leadership function now being requested of the state department of education is that it provides a linkage between innovators and local school systems. State department of education personnel are now expected to serve as "change agents" in spreading desirable innovations, developed not only by universities but also by innovative local school systems throughout the nation.[2]

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[1] Ibid., pp. 282-283.

[2] R. L. Johns, "State Organization and Responsibilities for Education," Designing Education for the

The state department of education consultants involved in the study represented a somewhat statewide look at barriers to educational changes. The perceptions of these respondents were thought to be an important part of the study, because the consultants are often involved in attempting to help make educational changes and should be knowledgeable of problems concerning education changes within the state. A total of twenty-nine state department of education personnel participated in the study.

Also involved in the study were local federal project coordinators in school systems in the state. This group of educators constituted a valuable group of respondents who are often involved in helping to make program and instructional changes on a school or school system level. In their performance of these duties, it was felt that they would be knowledgeable concerning factors that affected the projects and programs in their school system. One hundred-eight local federal project coordinators throughout the state responded to the questionnaire.

Students

Seniors from each of the participating school districts were represented in the study. High school seniors were considered a valuable part of the survey for several reasons. A high school senior would be mature enough to take a look at his high school experiences and program, and make conclusions as to which factors he felt

to be barriers to educational change in it. On this point, Wiles stated:

> Evidence can be secured concerning the success of instructional procedures and the value of content used if the judgments of pupils perceive it to be, not what adults expect or hope. To know what the curriculum is like for pupils means that they should have an opportunity to evaluate freely, without fear of reprisal if their opinion happens to disagree with that of the staff.[1]

Doll added further:

> At times, pupils may be requested to fill out questionnaires, or to engage in group discussions of curriculum proposals, or to subject themselves to intensive interviews. The older the pupil, the more formal and sophisticated his participation may become.[2]

Also, the high school seniors' perceptions were thought to provide a look at barriers to educational change within the classrooms and schools themselves, as viewed by the potential recipients of the intended changes being planned and implemented.

The method used to acquire the perceptions of high school seniors within each participating school system was for at least one senior class homeroom in each of the selected high schools to respond to the questionnaire. A total of 457 seniors from eight school systems responded to the questionnaire.

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[1]Kimball Wiles, The Changing Curriculum of the American High School (Englewood Cliffs: Prentice-Hall, Inc., 1963), p. 235.

[2]Doll, Curriculum Improvement: Decision-Making and Process, p. 286.

Laymen

The final category of participants involved in the study was that of the laymen. The views of laymen, as represented by P.T.A. members, organized labor union members, and a variety of civic club members were included in the study.

It was felt that the laymen selected represented the lay group that would be the most informed, interested, and involved in school-community affairs. Remmers supported the use of laymen in studies of this type when he responded as follows:

> The "public," always an important factor to be considered by the leaders of the public school system, can now be consulted by means of opinion measuring devices. Their reactions to many important aspects of education can now be heard, and, what is more important, evaluated. The results have been to increase the avenues of communication between the "public" and the public school . . . .[1]

In addition, the inclusion of the lay group in the study made it much broader in scope and added another dimension to the study than would have a study involving only educators and students. It was felt that laymen in the study represented a somewhat outside look at the topic of the study.

In order to include an adequate sampling of laymen in the study each school system involved agreed to have at

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[1]H. H. Remmers, Introduction to Opinion and Attitude Measurement (New York: Harper and Brothers, 1954), p. 396.

least one civic club or one P.T.A. group within its school district respond to the survey questionnaire. All participating systems except two were able to implement the questionnaire to a civic club. All systems were able to survey a P.T.A. group. A total of seven civic clubs and seven P.T.A. groups were surveyed in the study. In addition to the civic club members and the P.T.A. groups surveyed, one system included a labor union group in its survey. Another system included a few labor union members, business executives, ministers, college professors, college students, and curriculum specialists in its survey. The total number of participants within the laymen group was 410.

The totals for the study were: 1,031 educators--824 classroom teachers, 70 local administrators and supervisors, 108 local federal project coordinators, and 29 state department of education personnel; 457 high school seniors; and 410 laymen. There was a total of 1,898 participants in the study.

The Survey Questionnaire

The survey questionnaire entitled "Barriers to Effective Educational Change," contained in the Appendix, informed the participants in the study that its purpose was to obtain their perceptions of the degree to which each of the statements in it identified major barriers to effective educational change. The statements within

the questionnaire were derived from a thorough search of educational literature for identification of factors that often serve as barriers to effective educational change. The factors identified from a search of the literature were those identified by writers in the educational field as reflected by their ideas and opinions based on experience and bibliographical material, and those identified by reports of previous studies in the area of educational change.

The Alabama Committee for Determining the Barriers to Educational Change, a sub-committee of the Southern States' Work Conference's Committee on Planning and Organizing Innovative Programs for School Improvement, reviewed the statements prepared from the search of the literature before the questionnaire was distributed to the respondents in the study.

The statements within the questionnaire concerned factors related to the general areas of finance; restrictive laws, policies, and regulations; attitudes, professional personnel, and leadership; organization; knowledge; facilities and materials; and environment. Also, space was provided for respondents to list any barriers they wished to identify in addition to those contained in the questionnaire.

Collection and Analysis of the Data

Responses made to the items within the questionnaire were placed on a 509 IBM answer sheet. After the

answer sheets from participating school systems were collected, the data were transposed from them to IBM data cards. The data cards were processed by computer techniques at the University of Alabama Computer Center and computer printout sheets containing the tabulated data in frequencies and percentages of each response for the population surveyed were produced.

A presentation of each statement within the questionnaire and the percentage of responses made by each group of respondents--educators, laymen, and seniors--were written and recorded in narrative and tabular form in order to compare the perceptions of the three groups.

The ten most frequently identified statements by the total group of respondents were presented in tabular and narrative form.

Comments upon the comparisons of the educators, laymen, and students' perceptions of factors that often serve as barriers to effective change in the field of education, regarding agreement, disagreement, and frequency of identification, were presented.

Suggestions for further study were included which could add to the usefulness of such information as this study may reveal concerning major barriers to effective educational change.

Summary

The perceptions of educators, laymen, and high school seniors were explored in an effort to identify

factors that were perceived as being barriers to effective change in the field of education. A selection of educators, laymen, and high school seniors from each of eight representative school systems, personnel from the Alabama State Department of Education, and local federal project coordinators throughout the state of Alabama were surveyed for their perceptions of the major barriers to change in the schools and school systems with which they were familiar. This afforded 1,898 respondents to the survey questionnaire used in the study. Responses were processed by computer techniques and analyzed in percentage form so that observations could be made in relation to respondents' perceptions of various factors that serve as barriers in effecting educational change.

CHAPTER IV

COMPILATION AND ANALYSIS OF DATA

This study was concerned with the perceptions of educators, laymen, and students regarding factors that serve as barriers to effective educational change. Descriptive data were gathered concerning the composition of the respondents involved in the study. The first three tables present the data which describe the composition of the participants in this study. The respondents' perceptions of various barriers related to the seven general areas--finance; restrictive laws, policies, and regulations; attitudes, professional personnel and leadership; knowledge; organization; facilities and materials; and environment--were also secured. These data were presented in tabular and narrative form. The top ten barriers as perceived by the total responding group and be each of the individual groups of respondents were also presented.

The survey questionnaire used in this study can be found in the Appendix. The percentages contained in each table throughout this study will not always equal to 100 percent because all the participants did not respond to all statements.

Respondent Population

The 1,898 respondents in the study represented educators, laymen, and high school seniors. Table 1 shows the number and percentage of respondents within each of the three categories.

TABLE 1

COMPOSITION OF THE RESPONDENTS INVOLVED IN THE STUDY

Population Classification	Number	Percentage
Educators	1,031	54
Laymen	410	22
Seniors	457	24
Total	1,898	100

Of the 1,031 educators who responded to the survey questionnaire, 29 were state department of education consultants, 108 were local federal project coordinators throughout the state, 70 were local school system administrators and supervisors from eleven selected school districts, and 824 were classroom teachers from nine selected school districts. Table 2 summarizes the composition of the educator group of respondents.

The laymen and high school senior participants represented seven school districts involved in the study.

TABLE 2

EDUCATOR POPULATION

Population Classification	Number	Percentage
State department of education consultants	29	3
Local federal project coordinators	108	10
Local administrators and supervisors	70	7
Classroom teachers	824	80
Total	1,031	100

The laymen group of respondents was composed of P.T.A. members, organized union members, and members of various civic clubs. Table 3 summarizes the composition of the laymen respondents.

TABLE 3

LAYMEN POPULATION

Population Classification	Number	Percentage
Civic club members	195	48
Labor union members	32	7
P.T.A. members	183	45
Total	410	100

Respondents' Perceptions of Factors in Seven General Areas as They Serve as Barriers to Effective Educational Change

The respondents' perceptions of factors related to the seven general areas of finance; restrictive laws, policies, and regulations; attitudes, professional personnel, and leadership; knowledge; organization; facilities and materials; and environment; as they relate to barriers to effective educational change, are presented in percentage form.

Inadequate Financial Resources

Only one statement was listed in the questionnaire that related directly to the area of finance. This statement dealt with the barrier of inadequate financial resources. Other factors related to finance help to create the major barrier of inadequate financial resources. These factors concern causes for financial inadequacy and the restrictions placed on the use of financial resources. As pointed out in Chapter II, the most frequently cited financial barriers to change are such factors as: inadequate local tax effort; inadequate and antiquated tax structure; inadequate state and federal tax structure; totally inadequate levels of financial support; and inadequate and restrictive uses of funds.

The respondents felt the barrier of inadequate financial resources, for the most part, to be a major

inhibitor to effective educational change. Table 4 summarizes the perceptions of the participating educators, laymen, and seniors regarding the influence of this factor.

TABLE 4

PERCENTAGES OF RESPONSES INDICATING INADEQUATE FINANCIAL RESOURCES AS BARRIERS TO CHANGE

Group	Major Influence	Minor Influence	Insignificant Influence	No Opinion
Educators	69	18	9	4
Laymen	62	19	16	2
Seniors	62	18	11	9

In expressing their perceptions of inadequate financial resources as a barrier to effective educational change, all three groups of respondents marked the statement a major influence by more than 60 percent.

Specifically, 69 percent of the educators, 62 percent of the laymen, and 62 percent of the seniors marked the statement in Table 4 as a major influence. Only 9 percent of the educators, 16 percent of the laymen, and 11 percent of the seniors marked the statement as an insignificant influence. Thus, the respondents felt that inadequate financial resources are a significant barrier to effective educational change.

Restrictive Laws, Policies, and Regulations

Participants in the study were asked to respond to several factors relating to restrictive laws, policies, and regulations that often serve as barriers to educational change. Table 5 presents the responses, in percentage form, of the participants as to the influence of each of the statements as representing a barrier to effective educational change.

Textbook adoption regulations.--Thirty-five percent of the educators, 25 percent of the laymen, and 20 percent of the seniors marked this statement as a major influence. All three groups by more than 25 percent, marked the statement as an insignificant influence.

Interestingly, there was very little variation among the three groups concerning textbook adoption regulations. Also a significant percentage of the respondents--12 percent of the educators, 16 percent of the laymen, and 18 percent of the seniors had no opinion as to the influence of the statement.

State course of study guide.--The state course of study guide was thought to be a minor or insignificant influence by a majority of the persons in all three responding groups. Thirty-six percent of the educators, 32 percent of the laymen, and 24 percent of the seniors

TABLE 5

PERCENTAGES OF RESPONSES INDICATING RESTRICTIVE LAWS, POLICIES, AND REGULATIONS AS MAJOR BARRIERS TO CHANGE

Statements	Educators				Laymen				Seniors			
	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion
1. Textbook adoption regulations.	35	27	26	12	25	28	30	16	29	24	29	18
2. State course of study guide.	21	29	36	14	18	27	32	23	23	31	24	22
3. Local school board regulations.	22	27	37	14	22	27	40	11	41	30	16	13
4. State Board of Education regulations.	21	30	34	14	24	25	37	14	35	28	15	22
5. State and regional accrediting regulations.	20	29	36	15	24	25	34	16	24	27	32	17
6. Court decisions.	38	20	28	13	53	19	18	9	38	17	21	24
7. U.S. Office of Education regulations.	30	22	27	20	45	21	17	15	33	22	19	26
8. Statutory laws or regulations (Alabama School Code).	17	26	33	22	21	29	25	23	36	22	16	25

[a]All percentages contained in this table have been rounded to the nearest whole number.

marked this statement as an insignificant influence. Also, 14 percent of the educators, 23 percent of the laymen, and 22 percent of the seniors marked no opinion concerning this statement.

Local school board regulations.--Local school board regulations were thought to be barriers to effective educational change by a higher percentage of the seniors than by the educators or laymen. The three groups were about equal in agreement that local school board regulations are of minor significance as barriers to change. There was a marked difference between the seniors and the adult respondents concerning this statement. Forty-one percent of the seniors marked the statement as a major influence while only 22 percent of the educators and laymen marked it as a major influence.

State board of education regulations.--The two adult groups, educators and laymen, marked this statement as an insignificant influence by 34 percent and 37 percent respectively, while 15 percent of the seniors marked it as an insignificant influence.

Twenty-one percent of the educators, 24 percent of the laymen, and 35 percent of the seniors indicated they felt state board of education regulations serve as major barriers to change. Fourteen percent of the educators, 14 percent of the laymen, and 22 percent of the seniors marked this statement with a no opinion response.

State and regional accrediting regulations.--There was general agreement among the three responding broups concerning this statement as indicated by the responses given.

Twenty percent of the educators, 24 percent of the laymen, and 24 percent of the seniors marked this statement as representing a major barrier to change.

Twenty-nine percent of the educators, 25 percent of the laymen, and 27 percent of the seniors felt this statement to represent a minor barrier to change.

Court decisions.--Over half of the laymen group, 53 percent, felt that court decisions often serve as major barriers to effective educational change. Thirty-eight percent of the educators and seniors marked this statement as a major influence.

Nine percent of the laymen respondents had no opinion regarding the statement. Thirteen percent of the educators and 24 percent of the seniors had no opinion regarding the statement.

U.S. Office of Education regulations.--The U.S. Office of Education regulations were thought to be major barriers to effective educational change by the laymen respondents.

Thirty percent of the educators, 45 percent of the laymen, and 33 percent of the seniors marked this statement as a major influence.

One-fourth of the seniors had no opinion regarding the U.S. Office of Education regulations statement, while 20 percent of the educators and 15 percent of the laymen indicated no opinion regarding the statement.

Statutory laws or regulations.--Over one-third of the seniors marked this statement as a major influence, while fewer than one-fifth of the educators and one-fourth of the laymen marked it as a major influence.

Almost one-fourth of all three groups of respondents marked the statement as no opinion.

Attitudes, Professional Personnel, and Leadership

Several factors listed in the questionnaire related to attitudes, professional personnel, and leadership that often serve as barriers to effective educational change.

Table 6 summarizes the responses of the participants to statements that dealt with factors related to attitudes, professional personnel, and leadership.

Absence of a designated change agent.--A low percentage of all three responding groups felt the absence of a designated change agent to be a major barrier to educational change. Twenty-one percent of the educators, 14 percent of the laymen, and 16 percent of the seniors marked this statement as a major influence.

TABLE 6

PERCENTAGES OF RESPONSES INDICATING FACTORS RELATED TO ATTITUDES, PROFESSIONAL PERSONNEL, AND LEADERSHIP AS MAJOR BARRIERS TO CHANGE

Statements	Educators				Laymen				Seniors			
	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion
1. Absence of a designated change.	21	23	27	28	14	20	33	32	16	21	28	34
2. Fear of criticism by others.	23	30	40	6	22	30	39	8	36	29	28	7
3. Long tenure of professional staff.	23	32	35	9	27	29	34	8	31	23	26	20
4. Poor morale among faculty members.	25	29	35	10	26	18	42	14	35	24	27	14
5. Internal faculty conflicts.	13	28	46	13	16	29	36	19	24	31	27	18
6. Fear of failure.	14	27	46	13	14	25	48	13	32	30	29	9
7. Lack of self-confidence.	17	33	40	10	17	27	43	12	31	35	27	7
8. Single salary schedule (payment of teachers according to years of experience and amount of training).	23	28	35	14	24	27	34	15	21	23	25	30
9. Lack of adequate leadership.	36	25	30	8	35	20	39	5	45	26	23	6
10. Inadequate participation of faculty in determining change.	40	33	21	6	29	28	31	12	42	28	17	13
11. Indifference of teachers and administrators.	38	30	24	8	30	22	37	10	47	24	19	10
12. Lack of administrative support.	30	25	32	12	27	22	43	8	41	25	23	11
13. Lack of an effective in-service education program.	33	24	31	11	28	26	29	16	27	26	25	22

[a]All percentages contained in this table have been rounded to the nearest whole number.

A much higher percentage of the respondents marked this statement as an insignificant influence or had no opinion regarding its influence. Twenty-seven percent of the educators marked the statement as an insignificant influence and 28 percent had no opinion regarding its significance.

Thirty-three percent of the laymen marked this statement as an insignificant influence and 32 percent had no opinion regarding the absence of a designated change agent.

Twenty-eight percent of the seniors felt the absence of a designated change agent to be an insignificant influence and 28 percent had no opinion regarding its significance.

Thirty-three percent of the laymen marked this statement as an insignificant influence and 32 percent had no opinion regarding the absence of a designated change agent.

Twenty-eight percent of the seniors felt the absence of a designated change agent to be an insignificant barrier to change, while 34 percent had no opinion.

Fear of criticism by others.--There was general agreement by all three groups concerning this factor. Twenty-three percent of the educators, 22 percent of the laymen, and 36 percent of the seniors marked this statement as a major barrier to effective educational change.

The response of the highest percentage of respondents was the insignificant influence response. Forty percent of the educators, 39 percent of the laymen, and 28 percent of the seniors thought this statement to be an insignificant influence.

Long tenure of professional staff.--There was general agreement concerning this statement by all three groups of respondents. The most difference regarding any of the possible responses was in the no opinion response. Nine percent of the educators and 8 percent of the laymen expressed no opinion regarding the influence of this statement, while 20 percent of the seniors expressed no opinion.

The response drawing the most overall responses was that of an insignificant influence. Long tenure of professional staff was rated as an insignificant influence by 35 percent of the educators, by 34 percent of the laymen, and 26 percent of the seniors.

Poor morale among faculty members.--About one-fourth of the educators and laymen felt that poor morale among faculty members was a major barrier to educational change, while only one-third of the seniors indicated that this factor was of major importance.

Thirty-five percent of the educators marked this statement as an insignificant influence as did 42 percent

of the laymen, while 27 percent of the seniors marked it as an insignificant influence.

Internal faculty conflicts.--Internal faculty conflicts was not felt to be a major barrier by most of the respondents.

Only 13 percent of the educators, 16 percent of the laymen, and 24 percent of the seniors marked the statement concerning internal faculty conflicts as a major influence.

Nearly one-half of the educators, over one-third of the laymen, and less than one-third of the seniors felt this statement to be of insignificant influence as a barrier to change.

Fear of failure.--Fear of failure was evaluated by each group of respondents in almost identical fashion.

Fewer than one-fifth of the laymen and educators marked this statement as a major influence. A little less than one-third of the seniors marked it as a major influence.

A little more than 40 percent of the educators and laymen marked the statement as an insignificant influence, while fewer than 30 percent of the seniors rated it as an insignificant influence.

Lack of self-confidence.--Seventeen percent of the educators and laymen, and 31 percent of the seniors rated this barrier as a major one.

Thirty-three percent of the educators, 27 percent of the laymen, and 35 percent of the seniors felt this statement to represent a minor barrier to change.

Single salary schedule.--All three groups responded about the same to this statement regarding its significance as a major, minor, and insignificant influence. The largest number of all three groups marked it as an insignificant influence.

Lack of adequate leadership.--A lack of adequate leadership was thought to be a major or minor barrier to change by a majority of each of the three responding groups of participants in the study.

Specifically, 36 percent of the educators, 35 percent of the laymen, and 45 percent of the seniors felt that a lack of adequate leadership was a major barrier to educational change. This was the highest percentage of responses made to this statement by the educators and seniors.

Twenty-five percent of the educators, 20 percent of the laymen, and 26 percent of the seniors rated lack of adequate leadership as a minor influence. Hence, 61 percent of the educators, 55 percent of the laymen, and 61 percent of the seniors felt that a lack of adequate leadership was representative of a significant barrier to effective educational change.

Inadequate participation of faculty in determining change.--Forty percent of the educators and 42 percent of the seniors marked this statement as a major influence. Thirty-three percent of the educators and 28 percent of the seniors marked the statement as a minor influence, giving a total of 73 percent of the educators and 70 percent of the seniors who felt that inadequate participation of faculty in determining change serves as a significant barrier to effecting educational change.

The laymen respondents were about equally divided in their responses to the statement as to whether it was a major, minor, or insignificant influence.

Indifference of teachers and administrators to change.--The highest percentage of responses made by each of the three groups to this statement were as follows: 38 percent of the educators marked the statement as a major influence; 37 percent of the laymen marked it as an insignificant influence; and 47 percent of the seniors marked it as a major influence.

Lack of administrative support.--The educators were about equally divided in their responses to this statement. Thirty percent of the educators marked this statement as a major barrier, 25 percent as a minor barrier, and 32 percent as an insignificant barrier.

A higher percentage of the laymen, 43 percent, felt that lack of administrative support serves as an

insignificant barrier than it does as a major one, 27 percent, or a minor one, 22 percent.

Forty-one percent of the seniors felt this statement represented a major barrier to change, 25 percent marked it a minor barrier, and 23 percent as an insignificant barrier.

Lack of an effective in-service education program.--Thirty-three percent of the educators, 28 percent of the laymen, and 27 percent of the seniors felt this statement represented a major barrier to change.

Twenty-four percent, 26 percent, and 26 percent of the educators, laymen, and seniors respectively felt this factor to serve as a minor barrier to change.

Knowledge

Participants in the study were asked to respond to statements related to factors that dealt with the area of knowledge necessary to bring about innovative changes. Table 7 summarizes the data gathered concerning factors related to the area of knowledge that often serve as barriers to effective educational change.

Lack of clarity of purposes of the school.--The three groups of respondents were about equal in their agreement that this statement represented either a major or minor barrier. Thirty percent of the educators, 28 percent of the laymen, and 30 percent of the seniors felt

TABLE 7

PERCENTAGES OF RESPONSES INDICATING FACTORS RELATED TO KNOWLEDGE AS MAJOR BARRIERS TO CHANGE

Statements	Educators				Laymen				Seniors			
	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion
1. Lack of clarity of purposes of the school.	30	36	26	7	28	28	33	11	30	30	22	17
2. Insufficient knowledge of new practices.	39	31	24	5	38	26	31	5	44	29	19	8
3. Inappropriate reliance by school on results of achievement tests.	15	30	38	17	11	31	37	20	18	27	32	23
4. Lack of prior training in new subject matter, new methods, and new techniques.	43	30	20	7	41	22	31	5	50	26	16	8
5. Insufficient emphasis in college preparation programs on recent development in education.	30	31	27	11	28	23	34	14	41	27	22	10
6. Absence of valid scientific research findings.	20	26	33	20	15	27	36	22	20	32	25	23
7. Belief that teachers are autonomous in the classroom.	20	31	32	16	17	28	38	16	34	26	22	18
8. Confused role expectancy of teachers.	31	33	24	11	23	32	30	14	31	28	20	20

[a]All percentages contained in this table have been rounded to the nearest whole number.

that lack of clarity of purposes of the school is a major barrier to change. Similarly, 36 percent of the educators, 28 percent of the laymen, and 30 percent of the seniors marked this statement as a minor influence.

Almost a third of each group marked the statement as an insignificant influence, while 17 percent of the seniors, 11 percent of the laymen, and 7 percent of the educators had no opinion of the significance of the statement.

Insufficient knowledge of new practices.--Insufficient knowledge of new practices was thought by each of the responding groups to be a major barrier to educational change. This was evidenced when 39 percent of the educators, 38 percent of the laymen and 44 percent of the seniors marked the statement as a major influence.

Thirty-one percent of the educators, 26 percent of the laymen, and 29 percent of the seniors marked the statement as a minor influence. This meant that over 60 percent of each group of respondents thought insufficient knowledge of new practices to have a major or minor influence as a barrier to educational change.

Inappropriate reliance by schools on results of achievement tests.--A low percentage of the respondents, 15 percent of the educators, 11 percent of the laymen, and 13 percent of the seniors marked this statement as a major influence.

The highest rating by the respondents concerning this statement was to the insignificant influence response. Thirty-eight percent of the educators, 37 percent of the laymen, and 32 percent of the seniors marked this statement as an insignificant influence.

Some indecision concerning the significance or meaning of the statement was indicated when about one-fifth of the respondents--17 percent of the educators, 20 percent of the laymen, and 23 percent of the seniors--had no opinion regarding the inappropriate reliance by schools on results of achievement tests as being a barrier to change.

Lack of prior training in new subject matter, new methods, and new techniques.--Forty-three percent of the educators, 41 percent of the laymen, and 50 percent of the seniors felt this statement represented a major barrier to change.

Twenty-seven percent of the educators, 36 percent of the laymen, and 24 percent of the seniors either marked the statement as an insignificant influence or had no opinion as to its influence. In short, this statement was thought to represent a major barrier to effective educational change by a higher percentage of the respondents than any other statement in Table 7.

Insufficient emphasis in college preparation programs on recent developments in education.--The educator

and laymen groups divided their responses to this statement about equally among the major influence, minor influence, and insignificant influence responses. About 30 percent of both groups marked the statement as a major influence.

The seniors, 41 percent, felt the statement represented a major barrier to educational change. Twenty-seven percent marked the statement as a minor influence, leaving 22 percent of the seniors who felt the statement represented an insignificant influence.

Absence of valid scientific research findings.--The absence of valid scientific research findings was not felt to be a major barrier by the respondents, as evidenced by this statement.

Twenty percent of the educators, 15 percent of the laymen, and 20 percent of the seniors marked the statement as a major influence.

The highest percentage of responses to this statement by the adult respondents was made in marking it as an insignificant influence. Thirty-three percent of the educators, and 36 percent of the laymen marked the statement as an insignificant influence.

The highest percentage of responses by the seniors to the statement identified it as a minor influence. Thirty-two percent of the seniors regarded the statement as a minor influence, 25 percent as an insignificant influence, and 23 percent expressed no opinion.

Belief that teachers are autonomous in the classroom.--Twenty percent of the educators, 17 percent of the laymen, and 34 percent of the seniors felt this factor to serve as a major barrier to educational change.

Thirty-one percent of the educators, 28 percent of the laymen, and 26 percent of the seniors marked this statement as representing a minor barrier to change.

Confused role expectancy of teachers.--Thirty-one percent of the educators, 23 percent of the laymen, and 31 percent of the seniors marked this statement as a major influence.

Thirty-three percent of the educators and 32 percent of the laymen felt that confused role expectancy of teachers serves as a minor barrier to educational change.

Organization

Table 8 summarizes the data regarding organizational barriers to educational change.

Inadequate time for planning and program development.--A large percentage of each of the responding groups felt this statement to represent a major barrier to change, as they marked it as follows: 55 percent of the educators, 43 percent of the laymen, and 41 percent of the seniors marked the statement as a major influence.

Combining the responses made by the participants to the major influence and minor influence responses of the

TABLE 8

PERCENTAGES OF RESPONSES INDICATING FACTORS RELATED TO ORGANIZATION AS MAJOR BARRIERS TO CHANGE

Statements	Educators				Laymen				Seniors			
	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion
1. Inadequate time for planning and program development.	55	28	13	4	43	29	21	7	41	39	12	9
2. Large classes.	60	23	14	3	57	19	21	2	50	25	19	6
3. College entrance requirements.	16	29	38	16	20	31	38	11	29	30	30	11

[a]All percentages contained in this table have been rounded to the nearest whole number.

statement yielded convincing totals. Eighty-three percent of the educators, 72 percent of the laymen, and 80 percent of the seniors marked this statement as a major or minor influence.

Large classes.--A high percentage of the educators, 60 percent, marked this statement as a major influence, while 23 percent marked it as a minor influence. Fourteen percent of the educator group marked this statement as insignificant influence.

Fifty-seven percent of the laymen marked the statement as a major influence, 19 percent as a minor influence, and 21 percent as an insignificant influence.

Fifty percent of the seniors felt large classes to be a major barrier to change, 25 percent a minor barrier, and 19 percent felt it to be an insignificant barrier to change.

College entrance requirements.--A low percentage of respondents regarded this barrier as a major one. Sixteen percent of the educators, 20 percent of the laymen, and 29 percent of the seniors marked this statement as a major influence.

The three responding groups were about equally divided in evaluating the statement as a minor influence and an insignificant influence.

Facilities and Materials

The respondents' opinions concerning inappropriate and inadequate facilities and materials that serve as barriers to educational change are summarized in Table 9.

Inadequacy of necessary instructional materials.--Half of the seniors felt this statement to represent a major influence, while almost half of the educators, 47 percent, and 39 percent of the laymen felt it represented a major influence.

Only 19 percent of the educators and 14 percent of the seniors marked this statement as in insignificant influence while 31 percent of the laymen marked it as an insignificant influence.

Inappropriate plant facilities.--The laymen and seniors did not feel that inappropriate plant facilities serves as a major barrier to educational change as much as the educators did. Forty-five percent of the educators marked this statement as a major influence compared to 37 percent of the laymen and 33 percent of the seniors.

Eighteen percent of the educators felt that the statement represented an insignificant influence, while 29 percent of the laymen and 29 percent of the seniors felt it represented an insignificant influence.

A much higher percentage of seniors expressed no opinion regarding the statement than did the educators and

TABLE 9

PERCENTAGES OF RESPONSES INDICATING FACILITIES AND MATERIALS AS MAJOR BARRIERS TO CHANGE

Statements	Educators				Laymen				Seniors			
	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion
1. Inadequacy of necessary instructional materials.	47	29	19	4	39	23	31	7	50	26	14	10
2. Inappropriate plant facilities.	45	28	18	9	37	24	29	10	33	20	26	21
3. Inadequate equipment and materials.	51	27	18	3	46	23	27	4	57	21	15	7

[a]All percentages contained in this table have been rounded to the nearest whole number.

laymen. Twenty-one percent of the seniors, 9 percent of the educators, and 10 percent of the laymen expressed no opinion regarding inappropriate plant facilities as a barrier to educational change.

Inadequate equipment and materials.--Fifty-one percent of the educators, 46 percent of the laymen, and 57 percent of the seniors marked this statement as a major influence, while less than one-fifth of the educators and seniors, and approximately one-fourth of the laymen marked it as an insignificant influence.

Environment

Table 10 summarizes the respondents' opinion regarding barriers related to the general area of environment and/or societal barriers to educational change.

Local school traditions.--Forty-two percent of the educators, 30 percent of the laymen, and 39 percent of the seniors marked this statement as a major influence.

Thirty-four percent of the educators, 30 percent of the laymen, and 31 percent of the seniors felt that local school traditions serve as minor barriers to change.

Conservatism in the school community.--Thirty-one percent of the educators, 25 percent of the laymen, and 33 percent of the seniors felt this statement represented a major barrier to change.

TABLE 10

PERCENTAGES OF RESPONSES INDICATING FACTORS RELATED TO THE ENVIRONMENT AS MAJOR BARRIERS TO CHANGE

Statements	Educators				Laymen				Seniors			
	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion	Major Influence	Minor Influence	Insignificant Influence	No Opinion
1. Traditions existing in local school.	42	34	21	3	30	30	34	6	39	31	20	10
2. Conservatism in school community.	31	32	26	10	25	31	30	14	33	27	23	17
3. Resistance in the community to change.	39	30	24	6	30	33	31	5	45	26	19	10
4. Inadequate community support.	44	28	23	5	39	28	28	5	43	26	22	9

[a]All percentages contained in this table have been rounded to the nearest whole number.

It was felt to represent a minor barrier to change by 32 percent of the educators, 31 percent of the laymen, and 27 percent of the seniors.

Resistance in the community to change.--Resistance in the community to change was thought by a significant percentage of the educators and laymen to be a major barrier to change. Specifically, 39 percent of the educators and 45 percent of the seniors marked this statement as a major influence. Twenty-four percent of the laymen marked the statement as an insignificant influence while 19 percent of the seniors felt it to be an insignificant influence.

The laymen respondents divided their responses about equally between the major, minor, and insignificant influence responses.

Inadequate community support.--All three groups of respondents marked this statement highest as a major influence. Specifically, 44 percent of educators, 39 percent of the laymen, and 43 percent of the seniors marked the statement as a major influence.

In addition, all three groups of participants of the study marked the statement lowest as an insignificant influence.

A small percentage of respondents expressed no opinion regarding the significance of this statement. The

no opinion responses were: educators 5 percent, laymen 5 percent, and seniors 9 percent.

Presentation of Data Regarding the Opinions of the Total Group of Respondents

Table 11 presents the top ten statements most frequently identified by the total group of respondents of this study as representing major barriers to change. These barriers are presented in rank order as to the percentage of respondents who felt them to be major barriers to effective educational change.

Top Ten Barriers as Identified by the Total Group of Respondents

Inadequate financial resources.--Sixty-six percent of the respondents of this study felt that inadequate financial resources serve as a major barrier to effective educational change. Eighteen percent of the respondents felt that inadequate financial resources serve as a minor barrier to effective educational change while 11 percent felt it to be an insignificant barrier.

Large classes.--The second most often identified barrier to change by the respondents of this study was that of too large classes.

Fifty-seven percent of the respondents felt that large classes inhibit change to the extent that they serve as a major barrier to educational change.

TABLE 11

TOP TEN MOST FREQUENTLY IDENTIFIED BARRIERS BY THE TOTAL GROUP OF RESPONDENTS

Statements	Responses[a]			
Desirable educational change is restricted because of:	Major Influence	Minor Influence	Insignif-icant Influence	No Opinion
1. Inadequate financial resources.	66	18	11	5
2. Large classes.	57	23	17	3
3. Inadequate equipment and materials	51	25	19	5
4. Inadequate time for planning and program development.	49	31	15	5
5. Inadequacy of necessary instructional materials.	46	27	20	6
6. Lack of prior training in new subject matter, new methods, and new techniques.	44	27	21	7
7. Inadequate community support.	43	27	24	6
8. Court decisions.	41	19	24	15
9. Inappropriate plant facilities.	41	25	22	12
10. Insufficient knowledge of new practices.	40	29	24	6

[a]All percentages contained in this table have been rounded to the nearest whole number.

Twenty-three percent of the respondents marked this statement as a minor influence and only 17 percent marked it as an insignificant influence.

Inadequate equipment and materials.--The third greatest barrier to change, as perceived by the respondents of this study, was that of inadequate equipment and materials.

Fifty-one percent of the respondents identified inadequate equipment and materials as a major barrier to educational change. One-fourth of the respondents thought it to be a minor barrier, while 19 percent felt it to be an insignificant barrier to change.

Inadequate time for planning and program development.--Forty-nine percent of the respondents marked this statement as a major influence, 31 percent marked it as a minor influence, 15 percent marked it as an insignificant influence, and 5 percent of the respondents expressed no opinion regarding its influence.

Inadequacy of necessary instructional materials.--The fifth most frequently mentioned major barrier to change was that of inadequacy of necessary instructional materials.

Forty-six percent of the respondents felt this statement represented a major barrier to educational change. Twenty-seven percent of the respondents judged

this statement as representing a minor barrier and 20 percent as an insignificant one.

Lack of prior training in new subject matter, new methods, and new techniques.--Lack of prior training in new subject matter, new methods, and new techniques was the sixth most frequently identified major barrier to change by the respondents of this study.

Forty-four percent of the respondents marked the statement as representing a major barrier, 27 percent felt it to represent a minor barrier, 21 percent felt it to represent an insignificant barrier, and 7 percent expressed no opinion.

Inadequate community support.--Forty-three percent of the respondents of this study felt that inadequate community support served as a major barrier to effective educational change. Twenty-seven percent of the respondents marked this statement as a minor influence, 24 percent as an insignificant influence, and 6 percent of them expressed no opinion regarding its influence.

Court decisions.--Court decisions was the eighth most frequently identified barrier to effective educational change by the respondents of this study.

Forty-one percent of the respondents judged court decisions to be major barriers to effective educational

change, 19 percent felt them to serve as minor barriers, 24 percent felt them to be insignificant as barriers to change, and 15 percent of the respondents expressed no opinion.

Inappropriate plant facilities.--Forty-one percent of the respondents felt that inappropriate plant facilities serve as a major barrier to effective educational change and 25 percent felt this factor to be a minor barrier to change.

Insufficient knowledge of new practices.--The tenth most frequently identified barrier to change, as perceived by the respondents of this study, was that of insufficient knowledge of new practices.

Forty percent of the total respondents considered insufficient knowledge of new practices as a major barrier to educational change and 29 percent considered this factor to be a minor barrier.

Presentation of Data Regarding the Opinions of Administrators and Supervisors

The top ten barriers identified by the administrator and supervisor respondents of this study are listed in rank order in Table 12. A total of 207 local administrators and supervisors participated in this study.

TABLE 12

TOP TEN MAJOR BARRIERS AS IDENTIFIED BY LOCAL SCHOOL ADMINISTRATORS AND SUPERVISORS

Statements	Responses[a]			
Desirable educational change is restricted because of:	Major Influence	Minor Influence	Insignif-icant Influence	No Opinion
1. Inadequate financial resources.	69	19	10	1
2. Inadequate time for planning and program development.	61	25	13	1
3. Lack of prior training in new subject matter, new methods, and new techniques.	57	30	11	2
4. Lack of an effective in-service education program.	54	24	15	4
5. Traditions existing in lccal school.	52	37	9	1
6. Indifference of teachers and administrators to change.	51	29	16	4
7. Court decisions.	48	23	23	5
8. Lack of adequate leadership.	46	30	19	4
9. Insufficient knowledge of new practices.	45	32	19	3
10. Inadequate participation of faculty in determining change.	44	37	16	2

[a]All percentages contained in this table have been rounded to the nearest whole number.

Top Ten Barriers as Identified by Local Administrators and Supervisors

Inadequate financial resources.--Inadequate financial resources was ranked highest by the responding administrators and supervisors.

Sixty-nine percent of the administrators and supervisors felt inadequate financial resources to serve as a major barrier to effective educational change while 19 percent felt it to serve as a minor barrier.

Inadequate time for planning and program development.--Sixty-one percent of the administrators and supervisors felt that this statement represented a major barrier to educational change. Twenty-five percent of them rated it as a minor barrier.

Lack of prior training in new subject matter, new methods, and new techniques.--Fifty-seven percent of the administrators and supervisors felt this statement to represent a major barrier to change. Thirty percent identified it as representing a minor barrier.

Lack of an effective in-service education program.--The fourth most frequently identified major barrier to change by administrators and supervisors was that of lack of an effective in-service education program.

Fifty-four percent of the administrators and supervisors marked this statement as representing a major barrier

to change while 24 percent of them felt it to represent a minor barrier.

Traditions existing in local school.--Fifty-two percent of the administrators and supervisors felt that local school traditions serve as major barriers to change and 37 percent of them felt that local school traditions serve as minor barriers to change.

Indifference of teachers and administrators to change.--The sixth most frequently identified major barrier to change as identified by administrators and supervisors was concerned with the attitude of indifference by teachers and administrators to change.

Fifty-one percent of the administrator and supervisor respondents felt this barrier to be a major one and 29 percent felt it to be a minor one.

Court decisions.--This statement was judged by 48 percent of the administrators and supervisors to represent a major barrier to change and by 23 percent as a minor barrier, and 23 percent as an insignificant barrier to change.

Lack of adequate leadership.--Forty-six percent of the administrator and supervisor respondents felt that lack of adequate leadership often serves as a major barrier to change. Thirty percent of the respondents felt this

statement represents a minor barrier and 19 percent felt it to represent an insignificant barrier to change.

Insufficient knowledge of new practices.--This statement was ranked by 45 percent of the administrators and supervisors as representing a major barrier to change while 32 percent of them felt it represented a minor barrier.

Inadequate participation of faculty in determining change.--The tenth most frequently identified major barrier to educational change by administrators and supervisors was that of inadequate participation of faculty in determining change.

The administrator and supervisor respondents felt this barrier to be a major one by 44 percent, a minor one by 37 percent, and an insignificant one by 16 percent.

Presentation of Data Regarding the Opinions of Classroom Teachers

The opinions of classroom teachers who participated in this study regarding major barriers to change are presented in Table 13.

The top ten barriers, as identified by the teacher respondents of this study, are listed in rank order in Table 13.

TABLE 13

TOP TEN BARRIERS AS IDENTIFIED BY CLASSROOM TEACHERS

Statements	Responses[a]			
Desirable educational change is restricted because of:	Major Influence	Minor Influence	Insignif-icant Influence	No Opinion
1. Inadequate financial resources.	69	17	9	5
2. Large classes.	66	20	12	2
3. Inadequate time for planning and program development.	54	29	12	5
4. Inadequate equipment and materials.	54	26	16	3
5. Inadequacy of necessary instructional materials.	50	28	18	3
6. Inappropriate plant facilities.	46	25	18	10
7. Inadequate community support.	45	27	23	5
8. Resistance in the community to change.	42	28	22	7
9. Traditions existing in local school.	39	32	24	3
10. Lack of prior training in new subject matter, new methods, and new techniques.	39	30	23	8

[a]All percentages contained in this table have been rounded to the nearest whole number.

Top Ten Barriers as Identified by Classroom Teachers

Inadequate financial resources.--The greatest barrier to educational change that was identified by the teacher respondents of this study was that of inadequate financial resources.

Sixty-nine percent of the classroom teachers ranked this barrier as a major one, 17 percent as a minor one, and 9 percent of the teachers felt it to serve as an insignificant barrier.

Large classes.--The second most frequently identified major barrier to change by the classroom teachers was that of too large classes.

Sixty-six percent of the teachers felt that large classes serve as major barriers to effective educational change and 20 percent of them felt large classes to serve as minor barriers.

Inadequate time for planning and program development.--Fifty-four percent of the classroom teachers identified inadequate time for planning and program development as a major barrier to effective educational change. Twenty-nine percent of the teachers rated this barrier as a minor one.

Inadequate equipment and materials.--Fifty-four percent of the teachers ranked inadequate equipment and

materials as major barriers to change and 26 percent ranked them as minor barriers to change.

Inadequacy of necessary instructional materials.--The fifth most frequently identified barrier to change by the classroom teachers was that of inadequacy of necessary instructional materials.

Half of the teachers marked this statement as representing a major barrier to change and 28 percent felt it to represent a minor barrier.

Inappropriate plant facilities.--Forty-six percent of the classroom teachers felt that inappropriate plant facilities serve as a major barrier to educational change. Twenty-five percent of the teachers ranked this barrier as a minor one and 18 percent ranked it as an insignificant one.

Inadequate community support.--The seventh most frequently identified major barrier to change by the teacher respondents was that of inadequate community support.

Forty-five percent of the classroom teachers felt that this statement represented a major barrier to change, 27 percent felt it represented a minor barrier, and 23 percent perceived it as representing an insignificant barrier.

Resistance in the community to change.--This statement was felt by 42 percent of the classroom teachers to represent a major barrier to change. Twenty-eight and 22 percent of the teachers respectively felt that this statement represented minor and insignificant barriers to effective educational change.

Traditions existing in local school.--Thirty-nine percent of the teachers identified existing traditions within local schools as a major barrier to change. Thirty-two percent of the teachers felt this barrier to serve as a minor one and 24 percent felt it to serve as an insignificant barrier to change.

Lack of prior training in new subject matter, new methods, and new techniques.--The tenth most frequently identified major barrier to change perceived by the classroom teacher respondents of this study was that of lack of prior training in new subject matter, new methods, and new techniques.

Thirty-nine percent of the teachers felt this barrier to serve as a major one to educational change, 30 percent felt it to serve as a minor one, and 23 percent felt that it serves as an insignificant barrier to change.

Presentation of Data Regarding the Opinions of High School Seniors

Table 14 presents the data concerning opinions of high school seniors regarding the ten most frequently identified major barriers to change.

TABLE 14

TOP TEN BARRIERS AS IDENTIFIED BY HIGH SCHOOL SENIORS

Statements	Responses[a]			
Desirable educational change is restricted because of:	Major Influence	Insignif-icant Influence	Insignif-icant Influence	No Opinion
1. Inadequate financial resources.	62	18	11	9
2. Inadequate equipment and materials.	57	21	15	7
3. Lack of prior training in new subject matter, new methods, and new techniques.	50	26	16	8
4. Inadequacy of necessary instructional materials.	50	26	14	10
5. Large classes.	50	25	19	6
6. Indifference of teachers and administrators to change.	47	24	19	10
7. Lack of adequate leadership.	45	26	23	6
8. Resistance in the community to change.	45	26	19	10
9. Insufficient knowledge of new practices.	44	29	19	8
10. Inadequate community support.	43	26	22	9

[a]All percentages contained in this table have been rounded to the nearest whole number.

Top Ten Barriers as Identified by High School Seniors

Inadequate financial resources.--The high school seniors identified inadequate financial resources as the greatest barrier to change.

Sixty-two percent of the seniors felt this barrier to serve as a major one and 18 percent felt it serves as a minor barrier to educational change.

Inadequate equipment and materials.--Fifty-seven percent of the high school seniors identified inadequate equipment and materials as a major barrier to educational change and 21 percent identified this barrier as a minor one.

Lack of prior training in new subject matter, new methods, and new techniques.--Fifty percent of the seniors ranked this barrier as a major one and 26 percent as a minor one.

Inadequacy of necessary instructional materials.--Half of the seniors identified inadequacy of necessary instructional materials as a major barrier to change and 26 percent felt that it serves as a minor barrier to change.

Large classes. Again, half of the high school senior respondents marked this statement as representing a major barrier to effective educational change. One-fourth

of the seniors felt this statement to represent a minor barrier to change.

Indifference of teachers and administrators to change.--The sixth most frequently identified barrier by the high school seniors was that of indifference of teachers and administrators to change.

Forty-seven percent of the seniors marked this statement as representing a major barrier to change and 24 percent felt it represented a minor barrier.

Lack of adequate leadership.--Forty-five percent of the seniors ranked this barrier as a major one and 26 percent as a minor one. Twenty-three percent of the seniors felt this barrier serves as an insignificant one.

Resistance in the community to change.--This statement was judged by the high school seniors as representing major and minor barriers to change by 45 percent and 26 percent respectively.

Insufficient knowledge of new practices.--The ninth most frequently identified major barrier to effective educational change was judged by the seniors to be insufficient knowledge of new practices.

Forty-four percent of the seniors ranked this barrier as a major one and 29 percent as a minor one.

Inadequate community support.--The high school seniors identified inadequate community support as the tenth most frequently identified major barrier to change.

Forty-three percent of the seniors felt this factor serves as a major barrier to change and 26 percent judged it to serve as a minor barrier.

Presentation of Data Regarding the Opinions of Laymen

Table 15 summarizes the data concerning opinions of the laymen regarding the ten most frequently identified major barriers to change. The laymen groups was composed of civic club members, P.T.A. members, and organized labor union members. A total of 410 laymen responded to the study.

Top Ten Barriers as Identified by Laymen

Inadequate financial resources.--The most frequently identified major barrier to educational change by the laymen respondents was that of inadequate financial resources.

Sixty-two percent of the laymen felt this barrier serves as a major one and 19 percent felt it serves as a minor one.

Large classes.--Fifty-seven percent of the laymen felt that this statement represented a major barrier to change and 19 percent felt it represented a minor barrier.

TABLE 15

TOP TEN MAJOR BARRIERS AS IDENTIFIED BY LAYMEN

Statements	Responses[a]			
Desirable educational change is restricted because of:	Major Influence	Minor Influence	Insignif-icant Influence	No Opinion
1. Inadequate financial resources.	62	19	16	2
2. Large classes.	57	19	21	2
3. Court decisions.	53	19	18	9
4. Inadequate equipment and materials.	46	23	27	4
5. U.S. Office of Education regulations.	45	21	17	15
6. Inadequate time for planning and program development.	43	29	21	7
7. Lack of prior training in new subject matter, new methods, and new techniques.	41	22	31	5
8. Inadequacy of necessary instructional materials.	39	23	31	7
9. Inadequate community support.	39	28	28	5
10. Insufficient knowledge of new practices.	38	26	31	5

[a]All percentages contained in this table have been rounded to the nearest whole number.

Court decisions.--The laymen respondents identified court decisions as the third greatest barrier to educational change.

This barrier was identified by 53 percent of the laymen as a major one to change and by 19 percent as a minor one.

Inadequate equipment and materials.--This statement was perceived by 46 percent of the laymen respondents as representing a major barrier to change and by 23 percent as a minor one.

U.S. Office of Education regulations.--The fifth most frequently identified barrier to change as perceived by the laymen was that of U.S. Office of Education regulations.

Forty-five percent of the laymen respondents felt this barrier to serve as a major one and 21 percent as a minor one.

Inadequate time for planning and program development.--Forty-three percent of the laymen felt this factor serves as a major barrier to change and 29 percent as a minor barrier. About a fifth of the laymen rated this barrier as an insignificant one.

Lack of prior training in new subject matter, new methods, and new techniques.--The seventh most frequently

identified major barrier to change was judged by the laymen to be a lack of prior training in new subject matter, new methods, and new techniques.

Forty-one percent of the laymen felt this factor serves as a major barrier to change and 22 percent felt it to serve as a minor barrier. Thirty-one percent of the laymen ranked this factor as an insignificant barrier.

Inadequacy of necessary instructional materials.--Thirty-nine percent of the laymen respondents felt this statement represented a major benefit to change and 23 percent as a minor barrier. Thirty-one percent of the laymen judged this factor to serve as an insignificant barrier.

Inadequate community support.--This statement was judged by 39 percent of the laymen to represent a major barrier to change and by 28 percent of them as minor and insignificant ones.

Insufficient knowledge of new practices.--The tenth most frequently identified major barrier to change by the laymen was that of insufficient knowledge of new practices.

This factor was judged by 38 percent of the laymen to serve as a major inhibitor to change, 26 percent as a minor one, and 31 percent as an insignificant one.

Presentation of Data Regarding the Opinions of Federal Project Coordinators

The data concerning the opinions of federal project coordinators who participated in this study are summarized by Table 16. The data presented by Table 16 gives the top ten barriers as identified by the 108 federal project coordinators.

Top Ten Barriers as Identified by Federal Project Coordinators

Inadequate financial resources.--The greatest barrier to change as perceived by the participating federal project coordinators was that of inadequate financial resources.

Seventy percent of the federal project coordinators ranked this barrier as a major one and 19 percent as a minor one.

Inadequate time for planning and program development.--Fifty-six percent of the federal project coordinators judged this statement as representing a major barrier to change, 27 percent as a minor barrier, and 16 percent as an insignificant barrier.

Lack of prior training in new subject matter, new methods, and new techniques.--Fifty-five percent of the project coordinators ranked this barrier as a major one and 33 percent as a minor one.

TABLE 16

TOP TEN MAJOR BARRIERS AS IDENTIFIED BY THE FEDERAL PROJECT COORDINATOR RESPONDENTS OF THIS STUDY

Statements	Responses[a]			
Desirable educational change is restricted because of:	Major Influence	Minor Influence	Insignif-icant Influence	No Opinion
1. Inadequate financial resources.	70	19	8	1
2. Inadequate time for planning and program development.	56	27	16	1
3. Lack of prior training in new subject matter, new methods, and new techniques.	55	33	11	1
4. Lack of an effective in-service education program.	54	22	17	3
5. Court decisions.	49	21	25	5
6. Traditions existing in local school.	48	42	8	2
7. Indifference of teachers and administrators to change.	47	35	13	4
8. U.S. Office of Education regulations.	47	22	18	8
9. Inappropriate plant facilities.	45	40	13	2
10. Lack of adequate leadership.	43	30	22	4

[a]All percentages contained in this table have been rounded to the nearest whole number.

Lack of an effective in-service education program.--This factor was the fourth most frequently identified major barrier to change by the federal project coordinators.

Fifty-four percent of the federal project coordinators ranked lack of an effective in-service education program as a major barrier to change and 22 percent as a minor barrier.

Court decisions.--This factor was the fifth most frequently identified one by the federal project coordinators to be a major barrier to effective educational change.

Court decisions were perceived by 49 percent of the federal project coordinators to serve as major barriers to change, by 21 percent as a minor barrier, and 25 percent as an insignificant barrier.

Traditions existing in local school.--Forty-eight percent of the federal project coordinators felt that local school traditions serve as major barriers to effective educational change. Forty-two percent of the coordinators perceived this factor as a minor barrier.

Indifference of teachers and administrators to change.--Forty-seven percent of the project coordinator respondents considered this statement as representing a major inhibitor to change and 35 percent as a minor barrier.

U.S. Office of Education regulations.--The federal project coordinators felt that U.S. Office of Education regulations often serve as barriers to change.

Forty-seven percent of the coordinators rated this factor as a major barrier, 22 percent as a minor barrier, and 18 percent as a minor barrier.

Inappropriate plant facilities.--This factor was considered by 45 percent of the federal project coordinators to serve as a major inhibitor to change by 40 percent of the coordinators as a minor inhibitor, and by 13 percent of them as an insignificant inhibitor.

Lack of adequate leadership.--The tenth most frequently identified barrier to change by the federal project coordinators was that of lack of adequate leadership.

This barrier was judged by 43 percent of the coordinators to be a major one, by 30 percent of them as a minor one, and by 22 percent of them as an insignificant one.

Presentation of Data Regarding the Opinions of the State Department of Education Personnel

Table 17 summarizes the data regarding the top ten barriers to change as identified by state department of education personnel. Twenty-nine respondents from the state department of education were involved in this study.

TABLE 17

TOP TEN BARRIERS AS IDENTIFIED BY STATE DEPARTMENT OF EDUCATION PERSONNEL

Statements	Responses[a]			
Desirable educational change is restricted because of:	Major Influence	Minor Influence	Insignif-icant Influence	No Opinion
1. Inadequate financial resources.	69	17	14	0
2. Lack of adequate leadership.	69	24	6	1
3. Indifference of teachers and administrators to change.	69	21	10	0
4. Inadequate time for planning and program development.	66	17	17	0
5. Lack of an effective in-service education program.	66	27	6	1
6. Inadequate equipment and materials.	59	20	20	1
7. Inadequate participation of faculty in determining change.	59	37	4	0
8. Lack of administrative support.	55	31	10	0
9. Court decisions.	55	17	27	1
10. Insufficient emphasis in college preparation programs on recent developments in education.	52	27	13	7

[a]All percentages contained in this table have been rounded to the nearest whole number.

Top Ten Barriers as Identified by State Department of Education Personnel

Inadequate financial resources.--One of the three factors that was ranked highest by state department of education personnel was inadequate financial resources.

Sixty-nine percent of the state department of education personnel ranked inadequate financial resources as a major barrier to change and 17 percent as a minor barrier.

Lack of adequate leadership.--Sixty-nine percent of the state department personnel also ranked lack of adequate leadership as a major barrier to effective educational change.

Twenty-four percent of these respondents felt this factor to serve as a minor barrier.

Indifference of teachers and administrators to change.--The third barrier that was judged by 69 percent of the state department of education personnel as being a major one was that of indifference of teachers and administrators to change.

Twenty-one percent of these respondents judged indifference of teachers and administrators to change to be a minor barrier to change.

Inadequate time for planning and program development.--One of the two factors that was judged by 66 percent

of the state department of education personnel to be a major barrier to change was inadequate time for planning and program development.

Seventeen percent of the respondents felt this factor to serve as a minor barrier to change.

Lack of an effective in-service education program.--The second factor that was judged by 66 percent of the state department of education personnel to serve as a major barrier to change was that of lack of an effective in-service education program.

Twenty-seven percent of these respondents ranked this barrier as a major one.

Inadequate equipment and materials.--Fifty-nine percent of the state department of education respondents felt that inadequate equipment and materials was a major barrier to effective educational change.

Twenty percent of these respondents marked this statement as representing a minor barrier to change and 20 percent as an insignificant barrier to change.

Inadequate participation of faculty in determining change.--This factor was also considered by 59 percent of the state department of education respondents to serve as a major inhibitor of change.

Thirty-seven percent of the respondents ranked inadequate participation of faculty in determining change as a minor barrier to change.

Lack of administrative support.--This inhibitor to change was thought to be a major one by 55 percent of the state department of education personnel.

Thirty-one percent of the state department of education respondents considered lack of administrative support to be a minor barrier to change.

Court decisions.--Fifty-five percent of the state department of education respondents also ranked court decisions to be a major inhibitor of effective educational change.

Seventeen percent of these respondents felt court decisions to serve as a minor barrier to change and 27 percent as an insignificant barrier.

Insufficient emphasis in college preparation programs on recent developments in education.--The tenth most frequently identified major barrier to change by the state department of education respondents concerned college preparation programs.

Fifty-two percent of these respondents felt that insufficient emphasis in college preparation programs on recent developments in education serves as a major barrier to change, 27 percent felt this to be a minor barrier to change, and 13 percent judged this factor as an insignificant barrier to change.

All of the top ten barriers as perceived by state department of education personnel were ranked as major ones by more than 50 percent of the respondents.

Summary

An analysis of the data gathered from 1,898 respondents was presented through the use of narrative and tabular descriptions. The chapter was divided into seven major divisions relevant to the barriers to change examined in this study.

After a description of the respondent population, a careful analysis was made of the factors that were most frequently perceived as serving as major barriers to effective educational change. This analysis included presenting data concerning the top ten major barriers to changes as perceived by (1) the total group of respondents, (2) local school administrators and supervisors, (3) classroom teachers, (4) high school seniors, (5) laymen, (6) federal project coordinators, and (7) state department of education personnel.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine factors which serve as barriers to effective educational change as discussed in the literature and as perceived by educators, laymen, and high school seniors. After identifying some factors in the literature which seemed often to serve as major barriers to educational change, an attempt was made to investigate the perceptions of selected educators, laymen, and students of factors that serve as barriers to effective educational change.

Data for this study were obtained in the following manner: by reviewing the related literature and by administering a questionnaire based on the literature to selected groups of respondents to obtain their perceptions of factors that serve as significant barriers to effective educational change. The data obtained from the questionnaire were computer tabulated in terms of the number and percentage of responses to each of the choices provided in the instrument. These data were treated in a tabular and narrative manner and were presented in Chapter IV. The remaining

portion of this study summarizes the data and suggests recommendations based on them.

Findings in this chapter are organized along conceptual patterns similar to those used in Chapter II and Chapter IV. The first section deals with barriers to effective educational change as identified by the review of related literature while the second section presents a brief summary of the data gathered from responses to the questionnaire.

Barriers to Change as Identified by a Review of the Literature

The organizational structure used in Chapter II was based on categories reported in the literature as the most frequently cited barriers to effective educational change. Barriers to educational change have been reported according to the following general areas:

1. Finance
2. Restrictive Laws, Policies, and Regulations
3. Attitudes, Professional Personnel, and Leadership
4. Organization
5. Knowledge
6. Facilities and Materials
7. Environment

Major Barriers to Change as Identified by the Respondents of This Study

This section presents a summary of the responses of the 1,898 respondents to the survey questionnaire. Particular emphasis was given to the most frequently identified barriers to educational change by the total group of respondents of this study.

Finance

The only statement related directly to the general area of finance was the most frequently idengified one for the study. The respondents of this study felt inadequate financial resources to be a major barrier to educational change. Sixty-six percent of the respondents identified inadequate financial resources to be a major barrier to change.

Restrictive Laws, Policies, and Regulations

Two of the eight statements grouped as representing restrictive laws, policies, and regulations were identified by more than a third of the respondents of this study. These barriers were court decisions and U.S. Office of Education regulations.

Court decisions were identified as a major barrier by 41 percent of the respondents and U.S. Office of Education regulations by 34 percent of the respondents.

Attitudes, Professional Personnel and Leadership

Three of the statements grouped as attitudes, professional personnel, and leadership barriers to educational change were identified by more than a third of the respondents as major barriers. Lack of adequate leadership, inadequate participation of faculty in determining change, and indifference of teachers and administrators to change were the three people related barriers that were judged by at least a third of the respondents that serve as major ones. Thirty-eight percent of the respondents identified each of these three statements as representing major barriers to change.

Organization

Large classes and inadequate time for planning and program development were the organizational type barriers that were identified as being major ones by a third or more of the respondents of this study. Fifty-seven percent of the respondents identified large classes as a major barrier to change and 49 percent rated inadequate time for planning and program development as a major barrier.

Knowledge

Two of the eight factors listed as barriers related to the general area of knowledge were identified as major barriers by a third or more of the respondents.

Insufficient knowledge of new practices was identified by 40 percent of the respondents as a major barrier to change and lack of prior training in new subject matter, new methods, and new techniques was identified by 44 percent of the respondents as a major barrier to change.

Facilities and Materials

All three statements categorized as barriers related to facilities and materials were among the most frequently identified barriers of the study.

These three major barriers to change that were identified by a third or more of the respondents of this study were the following: inadequacy of necessary instructional materials--46 percent; inappropriate plant facilities--41 percent; and inadequate equipment and materials--51 percent.

Environment

Traditions existing in local school, resistance in the community to change, and inadequate community support were three of the four statements listed as representing environmental barriers to educational change and were identified as representing major barriers by a third or more of the respondents of the study.

Specifically, 39 percent, 39 percent, and 43 percent of the respondents identified these three statements respectively as major barriers to change.

No additional barriers were identified by a significant percentage of the respondents from the open-ended responses that were not already contained in the questionnaire.

Conclusions

The findings presented in the study led to certain conclusions regarding barriers to effective education change:

1. Educators, laymen, and high school seniors perceive educational change as having a cost higher than that attached to existing programs. Consequently, respondents cited inadequate financial resources as the major barrier to educational change.

2. Support services serve as barriers to educational change. This conclusion was reached due to the respondents' citing limitations placed on possible educational change by such support services as (a) facilities, (b) equipment, and (c) materials.

3. Factors related to school organization often serve as major change barriers. Respondents of the study indicated a major concern with the following: (a) inadequate time for planning and program development, and (b) large classes.

4. Educational knowledge was seen as a barrier to effecting changes in education. Insufficient knowledge of new practices and lack of prior training in subject matter, new methods, and new techniques were cited.

5. Restrictive laws, policies, and regulations serve as major change barriers at times. Court decisions and U.S. Office of Education regulations were perceived by the respondents as major barriers.

6. Certain factors related to the general area of environment ofter serve as major barriers to effective educational change. Such factors as traditions existing in local schools, resistance in communities to change, and inadequate community support were cited.

7. Leadership factors often serve as major barriers to effective educational change. This conclusion was based on the respondents' perceptions of major change barriers as being a lack of adequate leadership, indifference of teachers and administrators to change, and inadequate participation of faculty in determining change.

8. Essentially, the perceptions of educators, laymen, and high school seniors of major barriers to effective educational change are in agreement with the barriers described in the literature.

9. People tend to identify factors as major barriers to effective educational change that do not indicate that they themselves are responsible for failure to bring about needed changes. This conclusion was based on respondents' perceptions of major barriers to change. Often a category of respondents would name as major barriers to effective educational change factors that were

physical in nature--money, facilities, equipment, materials, etc.--or were related to other peoples' responsibilities. Indicative of this conclusion were the findings of this study, that of the eight statements grouped under the general area of professional personnel, none were rated by a third or more of the respondents as a major barrier to change.

10. There seemed to be some degree of general agreement among classroom teachers, laymen, and seniors regarding factors that serve as major barriers to educational change. This was concluded because of the ten barriers identified most frequently by each of these groups, seven were common to all three groups.

Also, there seemed to be general agreement among the local administrators and supervisors, federal project coordinators, and state department of education personnel. Of the ten barriers identified most frequently by each of these groups, six were common to all three groups.

In conclusion, major change barriers, as identified by both the literature and the respondents of this study were related to the following general areas: finance; restrictive laws, policies, and regulations; leadership, organization; knowledge, facilities, equipment, and materials; and environment. Barriers relating to professional personnel were identified in the literature but not by a third or more of the respondents.

Recommendations

As a result of the data obtained in this study, the following recommendations seem appropriate.

1. A study or studies could be conducted which would attempt to develop strategies for removing and/or avoiding the barriers that were most frequently identified by the respondents of this study.

2. A similar study, taking one of the seven general areas of this study, might be warranted. The findings of such a study could be used to guide a more thorough investigation into some of the responses of the selected area.

3. A study of preventative and/or motivational factors related to the acceptance and application of research findings by classroom teachers and school administrators would be valuable. Such a study might accelerate educators' efforts to obtain a better synchronization between the needs of education and the programs of schools. As indicated by this study, some educators do not seem to see their personal role in educational change.

4. A study to identify the most effective ways for the diffusion of change knowledge to educators, laymen, and students could be helpful. Barriers to communication and dissemination of educational research warrants further study, as pointed out by this study.

APPENDIX

Barriers to Effective Educational Change

QUESTIONNAIRE

Barriers to Effective Educational Change

The purpose of this questionnaire is to obtain your perceptions of the degree to which each of the following items represent barriers to effective educational change.

Directions: The responses to this questionnaire are to be placed on the attached IBM answer sheet. Do not place your name or fill out any of spaces at the top part of the answer sheet. Begin your responses with number 1, which is immediately below the "Sample" on the answer sheet. (In marking the answer sheet the numbers go across the page from left to right). Be sure the number on the questionnaire corresponds to the number on the answer sheet. A #2 lead pencil to blacken the appropriate space on the answer sheet should be used.

A. Personal Information

1. Position

   1. Classroom Teacher
   2. School Administrator or Supervisor
   3. State Department Consultant
   4. Student
   5. Federal Projects Coordinator

2. Position (Cont'd)

   1. Civic Club Member
   2. Labor Union Member
   3. P.T.A. Member
   4. Other (Specify) _____

3. Sex

   1. Male
   2. Female

B. Please read the following statements and react to them in terms of the extent to which you believe the statement represents a barrier to effective educational change in the school or schools with which you are familiar.

If you consider the statement as:

1. A major influence, mark 1 on the answer sheet.
2. A minor influence, mark 2 on the answer sheet.
3. An insignificant influence, mark 3 on the answer sheet.
4. If no opinion, mark 4 on the answer sheet.

Statements

Desirable educational change is restricted because of:

4. Inadequate time for planning and program development
5. Lack of clarity of purposes of the school
6. Absence of a designated change agent
7. Insufficient knowledge of new practices
8. Fear of criticism by others
9. Inadequate financial resources
10. Traditions existing in local school
11. Long tenure of professional staff
12. Lack of adequate leadership
13. Poor morale among faculty members
14. Inadequate participation of faculty in determining change
15. Inappropriate reliance by school on results of achievement tests
16. Lack of prior training in new subject matter, new methods, and new techniques
17. Large classes
18. Internal faculty conflicts

19. Fear of failure

20. Lack of self-confidence

21. Inadequacy of necessary instructional materials

22. Single salary schedule (payment of teachers according to years of experience and amount of training)

23. Textbook adoption regulations

24. State course of study guide

25. Indifference of teachers and administrators to change

26. Lack of administrative support

27. Insufficient emphasis in college preparation programs on recent developments in education

28. Inappropriate plant facilities

29. Inadequate equipment and materials

30. College entrance requirements

31. Conservatism in school community

32. Resistance in the community to change

33. Absence of valid scientific research findings

34. Local school board regulations

35. State Board of Education regulations

36. State and regional accrediting regulations

37. Inadequate community support

38. Belief that teachers are autonomous in the classroom

39. Confused role expectancy of teachers

40. Court decisions

41. U.S. Office of Education regulations

42. Lack of an effective in-service education program

43. Statutory laws or regulations (Alabama School Code)

C. In the space below list other items which you believe interfere with desirable change in education.

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