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cooperative planning
for education
in 1980

COOPERATIVE PLANNING FOR EDUCATION

in 1980

Objectives, Procedures and Priorities

REPORTS PREPARED FOR

A CONFERENCE OF STATE REPRESENTATIVES

DESIGNING EDUCATION FOR THE FUTURE:

An Eight-State Project

Denver, Colorado
January, 1968

Edited by

Edgar L. Morphet and David L. Jesser

DESIGNING EDUCATION FOR THE FUTURE:
An Eight-State Project

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Note: The project supply of the first three reports — *Prospective Changes in Society by 1980, Implications for Education of Prospective Changes in Society,* and *Planning and Effecting Needed Changes in Education* — has been exhausted. However, each of these reports has been reprinted and copies may be obtained from Citation Press, Scholastic Magazines, Inc., 904 Sylvan Ave., Englewood Cliffs, New Jersey 97632.

FOREWORD

Nearly sixty million people—more than thirty percent of the population of this nation—are involved today in education as students, teachers, or administrators. Coupled with this involvement to a degree never before experienced in the history of the world is a growing interest and concern throughout our society about education. However, interest, involvement and concern are not sufficient; specific provision must be made for comprehensive planning which not only recognizes the inevitability of change and the need for determining its direction, but also exposes the identifiable problems of the future and develops alternatives for their solution.

DESIGNING EDUCATION FOR THE FUTURE: *An Eight-State Project* represents a serious attempt to assist people—educators, legislators and lay citizens—to see more clearly how interest, involvement, and concern can be translated into planning, and then into action.

> Byron W. Hansford
> *Chairman, Policy Board*

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Democracy stands for giving an equal opportunity to individuals for developing their unequal capacities. . . . There is a democracy of excellence as well as of talent. In a democratic society, a whole range of talent is necessary to make it work. Our society depends upon a highly diversified range of decision making.

A universal system of education is ultimately tested at its margins. What we do about those on the periphery, the gifted or the disadvantaged, is more likely to reveal the general quality of our entire educational enterprise and more likely to serve as a test of its viability than what we do for the great middle range. The ultimate goal is a quality integrated education for all our children. What is quality integrated education? It is an education . . . that teaches [the child] to judge individuals for what they are rather than by what group they belong to, that differences among peoples are not as great as similarities, and that difference is a source of richness and value rather than a thing to be feared and denied.

Ewald B. Nyquist, *Deputy*
Commissioner of Education,
New York State Department
of Education

CHAPTER 1

The Future In The Present:

Planning for Improvements in Education

EDGAR L. MORPHET *

With the Assistance of

DAVID L. JESSER **

The citizens of this country—and of each state and community in the nation—have been confronted continuously in one way or another with the question: *"How important is education?"* Overwhelmingly most of them have said or implied: *"It is very important."* However, their decisions and actions have not always been consistent with their verbal expressions.

The people in some states and communities have provided realistic moral and financial support for education; in others, the governors, many legislators, a majority of the voters, and sometimes even local school board members have again and again given clear-cut evidence that, in reality, they do not attach a high priority to education.

However, some recent studies and other developments may be providing a basis for beginning to narrow the all too common gap between our expressed aspirations for education and the actions—or even failures to take action—that are so inconsistent with these aspirations. Among these are the following:

1. Many leaders throughout the world have concluded, on the basis of careful studies, that the kind and quality of education provided for the citizens of a nation will have a direct bearing on the development and progress of that nation. In the underdeveloped nations little progress can be expected until more adequate education is provided. Moreover, the development of adequate programs of education for all will ultimately provide a sound basis for better governments and more vigorous economic growth as well as for relieving international tensions and reducing crises and conflicts.

2. During recent years many leading economists have concluded that, even in this country, expenditures for education constitute an *investment* that yields greater returns and contributes more to the growth of the economy than many other investments. Some studies have indicated that nearly 40 percent of the increase in the gross national product

can be explained only by the expenditures made for (the investment in) education.[1]

3. In an increasingly technological society, such as ours, a much larger percent of the people will have to be much better educated in the future than in the past if the economy is to function satisfactorily. Inappropriately or inadequately educated people can make little contribution to the evolving economy or even to national stability and security.

4. Society can no longer afford to provide inadequate education for the culturally and economically disadvantaged, for minorities, for the emotionally and physically handicapped, for those who are displaced by technological developments—in fact, for any member of the society; the ultimate social and economic costs of neglect or inadequacy are greater than the expenditures that would have been required if adequate provisions had been made at the proper time.

The above discussion should not be interpreted to mean, or even to imply, that greater expenditures for *any* kind or quality of education—even for the kind provided at present in some of the more progressive school systems, institutions of higher learning or states—will suffice to meet future needs. Indeed they will not. The issue is not merely, or perhaps primarily, one of money. It is much broader.

The mounting evidence indicates strongly that *even present day needs cannot be met* in most areas of the nation where the educational program or organization has one or more of the following characteristics: a curriculum including an instructional and appraisal plan based largely on the ability of students to memorize and feed back at the proper time numerous bits of often unrelated information; teaching (often lecturing to) large groups with inadequate attention to individual learning problems and progress; an often highly compartmentalized subject matter approach to teaching and learning; a tendency to discourage or "push out" students who do not do well with highly intellectualized tasks, and then to ignore them after they have dropped out—in other words, to orient the program largely to the presumed needs of students with college potential; an organization that provides largely for huge unwieldly districts in cities, separate districts with wide ranges in wealth in suburban areas and many districts in other areas that are too small to provide an effective program at any cost; a patchwork of expedient and often conflicting provisions and measures for attempting to deal with this unwieldly situation; provisions for financial support that often are inequitable, indefensible and clearly fail to meet the needs; and few state agencies for education that are organized or staffed to provide the leadership and services needed even to help school systems or institutions make the adjustments that would be required to meet present needs satisfactorily. Even this list is far from complete.

It should be apparent to all who are familiar with the current situation that, in most areas, education is not prepared to meet emerging needs —and cannot meet them realistically unless many significant changes are made within the next few years.

Moreover, the fact should be recognized that the next generation of citizens—who will be instrumental in determining the destiny of this nation during much of the remainder of the present century—are now engaged as students in some aspect of the educational enterprise. The kind and quality of learning experiences they have will be highly significant for the future of the nation. Thus, in many respects, the future of any nation will be found in—and to some extent determined by—the on-going present.

PLANNING FOR THE FUTURE

A few decades ago many people would have decried a proposal that we should attempt to plan for the future. Today, probably few would oppose the concept of planning but many apparently still believe we can make the adjustments we need as time moves on and see no particular need to devote time or effort to planning. These people may not recognize that the situation has changed at least in the following respects in addition to those noted earlier:

1. We know that *many changes will occur with or without planning*— such as population increases, continued depletion of certain natural resources, greater urbanization, etc. However, we also know that by planning we *can* keep the population from exceeding the food supply, prevent the wastage of vital resources and at least provide better living conditions for those who move to urban areas. In other words, by anticipating probable developments we can prepare to avoid or mitigate some that might be harmful to humanity.

2. Through planning *we can project alternative goals and courses of action* that would be appropriate to the attainment of those goals. By obtaining and analyzing pertinent information we will be in a more favorable position to use sound judgment in selecting goals and to bring to bear cost benefit information in choosing wisely among alternative courses of action to assure that the goals are attained at a reasonable cost.

3. *Through appropriate planning procedures we can identify maladjustments and deficiencies that are causing or likely to cause difficulties* and decide in advance what adjustments are needed, instead of making an adjustment (e.g., passing a new law) and waiting to see how it works out.

4. *We now have available many of the tools and skills needed to plan effectively* and also to recognize and avoid some of the previously unrecognized pitfalls in planning.

A major question still unresolved for many people potentially interested in planning is: How can we plan education for a world we cannot foresee? The dilemma apparently is not as serious as it may seem. One authority[2] has pointed out that those engaged in long-range planning need not try to predict the *exact* course of events. Instead, their purpose should be to make reasonable *assumptions* about the future based on the best evidence available. For example, two or more assumptions about any

trend or prospective development may be accepted as reasonable, and tentative plans developed for each feasible alternative. Thus, we can be much better prepared to meet the situation and needs than if we had not planned.

In other words, these assumptions should provide the bases for developing what some authorities call *guiding predictions*. These should not attempt to describe the world as it may be at any particular time in the future (e.g., 1980). Rather they should serve as guides for predicting, and for evaluating the consequences of, feasible alternative courses of action.[3]

ASSUMPTIONS RELATING TO SOCIETY

The evidence strongly indicates that such assumptions as the following relating to prospective developments during the next ten to twenty-five years seem defensible and may be used as background for planning:

1. Man, himself, is not likely to change significantly in basic respects. Some will tend to become selfish, ruthless and irrational—others will be kindly, considerate of others and relatively rational. Man's attributes and attitudes will depend increasingly on the kind and quality of his socio-economic environment and of his educational experiences. The lot of multitudes throughout the world and the progress of society can be enhanced by better planning and the provision of appropriate opportunities for progress.

2. While world tensions will continue and many crises will develop as a result of idealogical struggles and the cold war, the gravest problems are likely to arise from the increasing differences in economic level and social progress between the educationally and technologically more advanced nations and the underdeveloped (and generally poorly educated) countries and peoples. However, with better education for larger proportions of the people should come increased economic progress and greater stability.

3. Information—potentially available to all—will increase somewhat in geometric progression—will probably double every ten to fifteen years. But so will our ability to store and retrieve information. One of our problems in educational institutions and in society will be to select and utilize effectively the most pertinent and significant information in arriving at decisions, and to learn how to avoid being confused by the irrelevant or inconsequential.

4. In this country—largely because of the strong belief of a majority of the people that we should attempt to provide education for everyone, and of the progress that has been made in providing a relatively high quality program in many areas—our technological and economic superiority is likely to continue for some time; however, the extent of this superiority should gradually decrease. In the meantime, increasing urbanization, crime, air and water pollution, transportation congestion and other similar developments will continue to bring more complicated and troublesome problems that could result in retrogression or chaos in

many respects. However, recognition of the seriousness of such problems has already resulted in important attempts to plan for their solution and for the avoidance, if possible, of similar neglect of emerging major problems in the future.

In postulating the future we can be pessimists—and assume that all problems are so difficult and so nearly insoluble that we fail to make any serious effort to solve them—or such optimists that we assume the problems eventually will solve themselves with no serious effort on our part.

Fortunately, most Americans seem to be realists with a certain amount of optimism. We recognize that we are facing many serious problems, and that new ones are almost certain to emerge, but we know that—with the progress being made in science, in knowledge and in skills—we can solve such problems if we decide to do so and will plan as carefully as we have in our endeavor to land men on the moon in a few years. We have recognized the challenge and are beginning to respond to it.

ASSUMPTIONS RELATING TO EDUCATION

Similarly, on the basis of evidence already available, we can make a number of defensible assumptions about education that can be used as background for planning. Among these are the following:

1. During coming years provision will need to be made in every society to assure that, in so far as practicable, everyone is educated to the maximum of his potential as an individual and as a contributing member of society. This means that better provisions will need to be made to help each individual to recognize his potential and to continue his education formally or informally as long as he and society can benefit.

2. The formal and the informal educational programs and influences will need to be much better coordinated than at present. The environmental influences (home, peer groups, subcultures, other organizations that are concerned) should receive much more consideration in planning and conducting the formal educational program.

3. Much of the relatively unutilized information currently available about the learning process will need to be brought to bear to facilitate learning. Much additional information is accumulating every year. Thus, we should be able to do an increasingly better job of facilitating learning for all students.

4. Many prospective changes in society will require changes or adjustments in the educational program. To make these changes will require careful planning and frequent adjustments if the needs are to be met.

5. If education is to become more effective, as seems essential, goals will need to be stated more clearly and meaningfully, means (often cooperative) of achieving them must be carefully developed, and realistic measures of progress toward achieving each goal devised and utilized.

6. The emphasis will be on learning—not on "teaching" in the traditional sense. Much of the learning will probably be self learning, with appropriate counseling, involving much more extensive use of technology.

7. Major aspects of the curriculum will probably be much more oriented to occupations and professions—in contrast with the traditional college or academic orientation—as a means of helping to meet the needs of a substantial portion of the students that are not now being met realistically. The schools will be seeking to develop a "zero reject system" in connection with which dropouts will be recognized as resulting from failures of the schools to meet the needs.

8. Programs for the preparation of teachers, administrators and other school personnel will need to be significantly reoriented to enable them to provide effective leadership, participate constructively in planning for the future, learn how to help students prepare for change and to utilize the best information available to help to motivate students and to facilitate learning.

9. Local school systems, state agencies for education and even institutions of higher learning will need to develop an organization—often quite a different organization than at present—and methods of operating that are designed to meet changing needs. New insights will lead to and make necessary new patterns and procedures.

10. Plans and provisions for financing education will need to be based on carefully developed program budgets, supplemented by evidence regarding probable returns from expenditures. Rough measures of need, of ability, and of financial requirements of widely different kinds of programs will probably no longer be considered satisfactory.

THE PLANNING PROCESS

Some people may be concerned that planning for improvements in education may result in a planned society, or in an educational program blueprinted by planning experts who rely on automated machines that provide "the answers." However, there is a vast difference between a *planned society* and a *planning society*.

In the planning process there are appropriate—and inappropriate— roles and procedures for various kinds of experts and specialists, for educators and for lay citizens, and for the use of computers and other machines and their products. The planning experts and other appropriate specialists—utilizing any tools or machines they find helpful—may assemble and analyze data, make projections, identify feasible alternative goals and procedures and ascertain *the implications of each alternative.* However, they should not attempt to determine either the choices to be made or the basic actions to be taken. *These decisions must be made by the people or their representatives* who are responsible for determining the basic policies for education.

The *cooperative* approach to planning in education (involving, as

appropriate, laymen as well as educators, other competent people as well as planning experts, and aspects that are decentralized as well as those that need to be centralized) seems essential in this country and has many advantages. The planning procedures and outcomes must be the best that can be devised if education is to be prepared to meet present as well as emerging needs. In some of the technical areas or aspects, qualified educators—with appropriate assistance—can and should develop and implement plans. In terms of basic policy decisions that should be of concern to the citizens of a state or local school system, the people must reach substantial agreement before any such policy can be adopted or implemented. Bona fide cooperation in planning tends to facilitate understanding, wise decisions and effective implementation. However, the fact that a plan or any aspect of a plan has been approved does not mean, in a rapidly changing society, that any citizen can afford to become complacent. Any good plan includes provisions for evaluation and for revision when the evidence indicates that some change is needed. The planning process must be a *continuous process* and any plan that is approved should contain provisions for further study and modification as conditions change or new evidence becomes available.

Moreover, there is little benefit in engaging in planning unless the plans can be implemented—that is, are utilized to effect changes that are deemed beneficial and, also, to avoid those changes that would be considered harmful. One major purpose of planning is to determine what changes are needed and to attempt to assure that those changes are made promptly and rationally.

Planning for the future involves both the *identification and acceptance of appropriate long-range purposes and goals* and *the development of suitable steps and procedures for attaining those goals*. Seldom can all aspects of a comprehensive plan for education—or for any aspect of society—be implemented at one time. Thus, *priorities* need to be established. Often some changes need to be made before others become feasible, or some are considered more urgent than others. By planning for and taking certain feasible steps, progress can be made and the gains recognized, thus opening the way for further steps until the original goals have been achieved. In the meantime, new needs and goals, often resulting from changes in society, will have been recognized and the process of planning will need to be continued indefinitely into the future.

PLANNING AND CHANGE

Almost everyone in this country knows that many changes are occurring every year and that the pace of change is rapidly increasing. Some of these changes—such as breakthroughs in health—are highly significant; others may be relatively minor. Some have been carefully planned; others have not.

People react in various ways to change. A minority tends to resist almost every change. On the other hand, as John Gardner[4] has pointed out, many have almost a sentimental attitude toward change; they tend to welcome it without stopping to consider the implications. Probably a

majority tend to welcome those changes they consider advantageous or beneficial, and to oppose those which appear to be disadvantageous or harmful.

Since many changes in society have important implications for education, it should be apparent that numerous changes will need to be made during the coming years. Moreover, the fact that the education presently provided does not meet many current needs is being recognized by increasing numbers. If we do not plan effectively for change—plan to meet emerging needs as well as to eliminate present deficiences—the progress of the nation is almost certain to be handicapped and unresolved problems of society will multiply and become increasingly grave. But planning is not enough; the plans must be *implemented*—the desired changes must be made. We must pursue social change—actively seek defensible changes in education.

One observer has noted: "One of the most effective ways of pursuing social change is for men to imagine some future they would like to live within, and then to act in the *present* to create some part of that future, not merely to plead for its creation."[5]

While imagination is important, man cannot rely on imagination alone to identify and solve his problems. He must use all the tools at his command and rely on the best value judgments that can be devised in the effort to bring vaguely recognized problems into clear focus and develop the best possible solutions. All pertinent information must be assembled and analyzed, projections must be made, purposes agreed upon, goals established and appropriate means of achieving the goals decided upon and utilized effectively.

As plans for any one aspect of education are being developed, their implications for other aspects—and especially for student learning and the instructional program—need to be carefully considered from every point of view. All aspects of education are inter-related and have many important implications for society. Just as society tends to shape and determine the characteristics of the educational organization and program for each generation, education also tends to shape—or at least greatly influence—the society in which the ensuing generation will live.

Even then change will not come easily. There will be many constraints and obstacles ranging from financial support to people. In many instances the most serious will be people.

The basis for effecting changes in education can and should be built into certain aspects of the planning process. Pertinent information assembled in connection with the planning process, when properly interpreted, can help people become aware of emerging problems and their importance, of existing inadequacies, and of needs and ways of meeting the needs and solving the problems. Leading citizens need to be involved in the process of deciding on appropriate goals and means of achieving them—on the best ways of solving the problems—and they in turn can help to interpret the needs to the people and their representatives without whose support no major changes can be made.

Before there can be any significant change in education, substantial numbers of people must change their perceptions, points of view and attitudes. Some may support a change because leaders in whom they have confidence recommend it, but many will support it only when they are convinced that it will benefit them, their children or the society in which they live. In most cases they must first *become aware that there is some kind of a problem*—that there is "something wrong." They then may *become interested in seeking further information*—in trying to understand the situation. Once they become convinced that there is an important problem that needs serious attention, *many will want to become involved in helping to work out a solution and in seeing that the necessary steps are taken to implement the solution agreed upon.*

Thus, in the democratic process, many changes come slowly and painfully, and often lag behind the needs. This has usually been the case in education, partly because there has been little planning for change. Better and more deliberate planning in the future can help to assure that the education of tomorrow is more adequate and will be better adapted to the needs than the education provided in the past or even in the present.

DESIGNING EDUCATION FOR THE FUTURE

The major purpose of the project *Designing Education for the Future* is to encourage and assist each of the participating states to identify emerging needs in education during the next ten to fifteen years and to attempt to develop and begin to implement plans designed to meet those needs. One basic assumption has been that the state agency for education in each state must be organized and staffed to provide the leadership needed to assure adequate planning and appropriate services in the future, since this cannot be done on a state-wide basis by local school districts and should not be undertaken by the federal government. A second basic assumption has been that the kind and nature of leadership and services that should be provided by a state can best be determined after the design for all aspects of the educational program in the state for the future has begun to emerge and the implications determined.

To that end, each state has appointed a coordinator and established an advisory committee comprised of prominent laymen and educators responsible for providing guidance for the necessary studies and agreeing upon an appropriate design for education in the future. To assist the coordinator and advisory committee, each state has appointed a number of task force groups or study committees in four major areas: (1) the educational program; (2) local schools and school systems; (3) state educational organization, functions and relations; and (4) the economics and financing of education.

To assist the people in each state to become aware of, and concerned about, some of the existing inadequacies and emerging needs and about the importance of planning for change, three major conferences were held and reports published during the first year of the project on pertinent topics in the following areas: *Prospective Changes in Society by 1980;*

Implications for Education of Prospective Changes in Society; and *Planning and Effecting Needed Changes in Education*. These reports, which have been widely discussed in each state and in other areas as well, have been in such demand that the project supply was quickly exhausted and each has now been reprinted commercially.[6]

This report represents an attempt to help each state group to begin to focus attention on: (1) the prospective changes in society that are most likely to have *major* implications for education; (2) the *most important implications* for significant changes in education; and (3) the *basic concepts, strategies and procedures* that should be utilized in planning for and effecting needed changes in education. The papers included in this report are directed primarily to that end.

Some of the concepts in these papers were considered in tentative form by members of the advisory committee, coordinator and consultant for each state at a conference at Las Vegas, Nevada, October 9-10, 1967. The papers were then revised, supplemented and presented for consideration at a conference involving a delegation from each state including the governor, representatives from the legislature, the chief state school officer, representatives from the advisory committee and the state board, representative educators, and others. At this conference, held in Denver, Colorado, November 26-28, 1967, the delegation from each state attempted to identify and report on some emerging areas of agreement. This process will continue in each state during coming months.

As a basis for further stimulation and discussion, papers are being prepared by leading authorities on the *educational program* of the future, *local schools and school systems* in the future, the *state educational organization and functions* in the future, and on the *economics and financing of education* in the future. These papers will be considered at subsequent conferences and included in a future publication.

Footnote References

[1]See, for example, "The Grand Investment," *Kaiser Aluminum News, Number one/67 On Education*, p. 27.

[2]Frank S. Hopkins, "The Next Forty Years" as quoted in *The Futurist*, Vol. 1, No. 3 (June 1967), p. 39.

[3]Fred Charles Ilké, "Can Social Predictions Be Evaluated?" *Daedalus* (Journal of the American Academy of Arts and Sciences), Summer 1967, pp. 733-58.

[4]John Gardner, *Self-Renewal: The Individual and the Innovative Society* (New York: Harper & Row, Publishers, 1964), p. 107.

[5]Arthur I. Waskow, "The Education of Peace-Makers," *Saturday Review*, August 12, 1967, p. 12.

[6]Citation Press, Scholastic Magazines Inc., Englewood Cliffs, New Jersey, 1967.

CHAPTER 2

What Lies Ahead

LAURENCE D. HASKEW[*]

The citizens of America have exhibited great confidence in the power of education. They have assumed responsibility for developing it to serve the aspirations of this democracy and also for employing it to enhance the life of each individual. Plans and programs to accomplish these objectives are the basic responsibility of—and provide a challenging opportunity to—the people in each state. In times with great portent, discharge of this responsibility by designing and planning education for the future assumes critical significance.

Cause-and-effect relations always exist mutually between education and the times in which education is conducted. The times, in effect, furnish a context for education. By *context* is meant all those conditions and influences which surround educational endeavor, furnishing, as it were, the plasma in which education lives. Thus, education is always part of its context and the context, in turn, is affected by the kind and quality of education provided. Education, therefore, is bound up with the implications of the times.

Part 1: The Approaching Context

The portent of our own time is dramatically obvious. Whether citizens have planned it or not, education is undergoing the greatest change within memory. Frederick Shaw writes, "School curricula have changed more in the last ten years than in any other decade of our national history."[1] The context—societal, economic, ideational, cultural—of education is changing even more dramatically. Schools are bombarded with pressures, challenges, and problems originating in this context. They are responding in a variety of ways and are failing or refusing to respond in many other ways. Sensitivity and responsiveness of education to the context in which it is cast are traditional in America. But at no previous time has there been such a ground swell of popular demand that schools and education change because the context is changing, nor such frenetic efforts by those who control education to adapt to that context.

Education, however, possesses capacity *to be itself*—to influence as well as to be influenced, and to say "no" as well as "yes" to the forces in its environment. It is surely *creature* of its context. But it is *creator*

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as well. Its creatorship in our country is entrusted to relatively independent groups of people who are assigned the responsibilities for planning its systems and devising its programs. These representatives, or trustees, act at the behest of each state's citizens. Those citizens, in turn, act on and react to proposals made by their trustees. When the trustees and the other citizens of the states look together at the approaching context for education it becomes possible to *design* education for the future. The inevitable adaptations to be made can thus be subjected to forethoughted, carefully planned and considered strategies which, in turn, are guided by goals agreed upon in advance on the basis of informed choices between alternatives. Orderliness and control are thus introduced into what otherwise would tend to be a process of blind evolution.

Planning (or designing) education for the future is an imperative at any time. Schools are always bridges for use of the past to enlighten the present. America has attempted to make them serve additionally as thoroughfares interconnecting people with the present period in which life occurs. But schools are likewise civilizing probes toward the future. It is obvious that this last characteristic, in times such as these, takes on unprecedented priority.

Designing education for the future is essentially a matter of conceptualizing a model that will be adequate to meet foreseen as well as anticipated needs, and of developing plans and outlining procedures to move from the present model toward the one which is desired. It begins by taking thought to overcome deficiencies of the present. It must likewise move to remodel an existing structure—often a few steps at a time—in a manner that will make it possible to produce the structure needed by 1980. Another purpose of designing for the future is to plan and create new structures and arrangements and to provide for introducing them to replace obsolete ones. Since all three aspects of design are essentially resolutions between context and the purposes to be served, designing education for the future is to foresee as clearly as possible the context for education between now and 1980, to choose in light thereof the purposes to be served by a state's system for education and to develop strategies for achieving those purposes.

THE TIMES AHEAD

Let us consider briefly some of the salient characteristics of the approaching times.* Those which seem to have particular import for the designers of education have been selected for attention.

COMPETITION FOR MATERIAL AND HUMAN RESOURCES

America's gross national product—hence applicable fiscal resources—seems destined to reach unprecedented heights. The gross national manpower, measured in numbers and in competence, will likewise escalate,

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* The author has relied heavily for the following material upon papers incorporated in *Prospective Changes in Society by 1980*, upon discussions at the first and subsequent conferences of the Eight State Project, and upon special papers and working documents, many of which were assembled by the Project staff.

although not so impressively. But the increase in the competition for the deployment of these resources among objects accepted as desirable by the American people bids fair to outstrip both. Exploration of the planets, demanded triumphs over disease, efforts to achieve a stable world order, rescue of the major cities from a civilization-threatening debacle, providing formal and informal education to an extent never before even contemplated —these are only a few of the demands involving stupendous costs already in sight as powerful claimants upon America's resources.

The style of competition, by all indications, will become increasingly sophisticated, and the outcome increasingly resolved in national-level corporation and governmental circles as they "read" the will of the people—a will no longer left to accident by the competitors. Implications of this competition for educational planners are numerous, but one deserves special notice. The sum total of such competition will tend to make man himself merely a resource, unless some powerful voice speaks for man as *man* individual and singular. If education does not, who will?

PREOCCUPATION WITH CRITICAL WORLD SITUATIONS

Political leaders and societal analysts join in foreseeing a long, hard struggle before desperation in the world is reduced below explosive level. Most agree that America as a nation cannot soon, if at all, disengage itself from involvement with such situations. Modern communications media make it equally impossible for the individual American, wherever located, to live disengaged. On the contrary, scores of influences urge him to make world affairs a pressing personal concern. World crises, present and impending, seem destined to be as indigenous to American people and their concerns in the 1970's as was the Great Depression in the 1930's.

Again, implications for the content and posture of education are manifold. One immediate structural and design opportunity is especially brought out by many commentators—the continuing possibility that, almost overnight, the American economy may have to find new outlets for funds released by cessation of a given defense or military commitment. The adequacy of a state's design for education may well be tested by its ability to receive and employ those funds to productive ends already envisioned and arranged for.

RECOGNITION OF CHANGE AS BOTH MOOD AND ARTIFACT

The current mood of the American people is to expect change. This is a rising new folkway in our culture. Historically, insensibility to change and resistance to reconstruction have been significant in accounting for the design of school systems in this country. But never has a whole people been so educated toward change as a characteristic of an age as have Americans since 1960.

Awareness that alteration of almost every aspect of life impends, or is already in process, has been transferred from intellectual circles into the public domain. Mass media of communication are helping to make "change" almost a watchword of popular culture. The connotations of this

word are still vague, but are being increasingly built up by press, television, radio, common schools, institutions of higher education, and political leaders. Its emotional impact is already manifested to a visible extent.

In consequence, in the approaching decade there should be a degree of readiness and demand for change that will offer to designers of education both unprecedented opportunities and dangerous temptations. Innovations can be accepted, even welcomed, with alacrity by the public; but, in the words of President Henry Chauncey of the Educational Testing Service:

> "With so many engaged in educational innovation, the result may be chaos unless careful, coordinated planning and evaluation accompany the current enthusiasm for change and experimentation."[2]

Likewise, change itself—not as mood but as empirical fact—is almost universally forecast as a dominant characteristic of the times ahead. Dramatic change in the technological extension of man's capabilities is certain. But the sheer rate of change may be more significant than the absolute achievements themselves.

Technological change, as Kenneth Boulding points out, creates fundamental recastings in culture.[3] *When its rate is swift, frenzied or unanalyzed, cultural responses can easily warp if not disrupt for decades society's rational pursuit of the good life.* The sheer rate of technological change particularly concerns every social institution because at the same time change is imposing new demands upon such institutions, it is rendering obsolete the accumulated methodology and capacities of institutional personnel to cope with those demands. *Disjunction between what is possible and what is performed holds grave threat for any organization, and especially so for educational organizations.*

But it is in the humanological (to coin a word) dimensions of society that prospective change seems to be most significant. Some of this change is inevitable—for example, the startling age-redistribution of the population, governance and public opinion shaped by increasingly educated minds, control of state legislatures by urban and suburban constituencies, growing preoccupation with the problems of great cities, a huge working force with more waking time off than on the job, waxing individual economic and material affluence accompanied by strong enticements to use it for material ends.

Other changes are prospective but not inevitable, since many are subject to modification by actions of various agencies of society. Current developments seem to indicate major upheavals in, if not destruction of, the existing social power structures in many communities. Acute shortages of manpower impend, releasing a vocational imperative which powerful voices in our society are seeking to lay upon the school and college system almost exclusively. Employment of mandatory procedures to bring about structural accommodations to the pursuit of civil rights bids fair to overturn many of our traditional arrangements for conducting society's business. The moral crisis of the sixties is projected by many into a societal catastrophe by century's end. It is not necessary at this point to catalog further.

Whether inevitable or portending, change in human affairs and relations is the order of the times before us. There will be change by new variations on old themes as well as change by introduction of fundamentally different new themes.

MASSIVE CONTRIVANCES TO GRAPPLE WITH PROBLEMS

The present social order—derived in turn from the orders preceding it in 1950, 1850, and so on through earlier centuries—constitutes a prime delineator of the approaching times. Its capability to maintain itself is reassuring. Americans can and will modify and transform the existing social order, but will not suddenly awaken to a science fiction world wiped clean of all social constructs. But the existing social order is already beset by turbulence as some perennial problems become more acute and as new problems are generated. In the years ahead, even more turbulence can be expected.

During recent years the social order has produced a new tool to combat causes of turbulence. It is called the *massive attack,* and is mounted through governmental channels—though typically with non-governmental alliances. The attack upon the lag in sciences (symbolized by the National Science Foundation) and the War on Poverty are two of several illustrations of this tool in action. Evaluation of the productiveness of that tool is not the present focus; however, the potential impact of it in shaping the times ahead is of concern. The indications are that the strategy of so-called massive attack will come into even greater prominence in the period immediately ahead. Moreover, this strategy has proven capability to affect greatly the current endeavors of established agencies, sharply modify their goals and preoccupations, and challenge the whole social order to provide new intervenors.

With such strategy in proliferating use, schools and colleges are obviously destined for major roles in responding to that strategy. Three appear likely: (1) as objects of one or more massive programs mounted to affect drastically the content and productivity of the instruction they undertake; (2) as potential contributors to massive attacks upon other problems not essentially educational (faith that schools can contribute to almost anything seems to be waxing, not waning); and, (3) as targets for reform in the pursuit of solutions to social ills such as urban decay and cultural disadvantagement. These are not new roles. The sixties accustomed those legally responsible for education to them—but largely as ancillary concerns. The seventies may dictate that this concern must move to a central position.

INCREASING IMPORTANCE OF POLITICAL AND COMMUNICATIVE METHODOLOGIES

Traditionally education has been viewed as being "above" political relations, and even aloof from employment of persuasion. That view largely vanished during the 1960's. In common with most embodiments of social enterprises seeking to "do good" and to be effective, the education establishment has learned that politics and communication increasingly

explain the dynamics of modern America. Great escalation in the decisiveness of the role played by these two methodologies is predicted by social analysts. In the times ahead it seems that society will move largely at the behest of political and communicative technology, and likewise will fail to move if it relies entirely on long-traditional methodologies.

The reality to which people react will become increasingly that which is communicated to them as reality—not that which they observe for themselves. More significantly, reactions themselves will be communicated by the selected or accidental form and substance included in the medium. That which does not reach the great and pervasive media of communication will become increasingly, for pragmatic purposes, non-existent.

At the same time, these media will be making the world to which the so-called ordinary citizen reacts one of boundless complexity. The use of these media, by the purveyor and by the consumer, is what we designate here the *methodology of communication*. It is a means which will shape the ends achieved by society in dominant degree. Its ascendance has serious import for almost every facet of what it will take to provide a system for education in the nineteen seventies.

Closely allied is the methodology of politics, broadly defined. The channels for social action are largely controlled by powers-that-be. Proponents of a given social action often do not have direct access to these channels. The *methodology of politics* consists largely of negotiating with the controllers of these channels in order to advance the action desired. In our time, the powers-that-be are becoming increasingly organizations and agencies and their representatives—not individuals nor "the citizenry." Also, increasingly, the channels of government are used to implement social action. It is not enough in such times simply to have a program for desirable action and to seek to communicate its desirability to the people. The political methodology will become almost a *sine qua non* for translating plans into action in the seventies.

UNPRECEDENTED ATTENTION TO FORMAL EDUCATION

The movement of education toward center-stage in American society was a differentiating characteristic of the decade between 1957 and 1967. No evidence indicates this movement has reached its zenith. Some of the attention takes the form of elevated expectations—not only as opinions about what is possible, but also as organized power-packed drives to produce certain results by specified interventions. Attention also takes the form of advocacy for prolific expansion of role and scope and of demands for structural changes only remotely related to performance of the instructional function. This latter demand is increasingly made by use of the more aggressive tools of social protest. Also evident—although only modestly so far—is the attention expressed as taxpayer and donor willingness to devote increasing proportions of the gross national product to the financial support of the school and college system. Moreover, "to secure and use an education" is clearly emerging as a tenet in the code of life by which most Americans will live in the decade ahead.

To be genuinely attended to, to be cast in a starring rather than a supporting role, is an unaccustomed experience for those responsible for formal education. In the seventies it can become frustrating, or unusually gratifying, because of a new ingredient entering the context of the times—the ingredient of *plans*. The requirement for a "comprehensive plan" or "long-range plan" or "state-adopted plan" is a repeated fixture of recent federal legislation. States, metropolitan areas, and multiple other "areas" or "regions" are getting into the plan-making act with mounting zeal. It is said by many that the United States has left behind its postwar aversion to social planning, and is now entering a new era when planning (at least as a word) will be enshrined—and especially so when modified by the term, "master" or "comprehensive". The current emphasis upon *"plans"* is one testimony to this trend—a development which, on the one hand, almost forces education into conjunction if not fraternity with other societal endeavors and, on the other, enhances the importance of making plans for education. This new type of attention tends to focus the spotlights on the performance of directors or leaders of various aspects of education.

SOCIETAL INGREDIENTS OF THE SEVENTIES

Turning from pervasive moods and dynamics of the next decade, let us now sketch the particular shape of some of the key ingredients of the societal context ahead for education. However, some words of caution are in order. First, the projections set forth usually have a national, regional or state reference; localized deviations therefrom are to be expected and in some instances may have such significance that special care should be given to predicting them. Second, most statements of what "will" occur are projections, and hence subject to all the inaccuracies of that procedure.

THE PEOPLE

Some 45 to 50 million more people will live in the United States in 1980 than in 1965. Some three million of these will live in the mountain and basin states, resulting in a 40 percent increase over the 1965 figure. While total school and college enrollments will not increase in the same proportions as during recent years, significant increases at the high school —and especially at the college—level are in prospect. Between 1965 and 1980, the total enrollment is projected to increase by only about 18 percent —in marked contrast to the 78 percent increase recorded between 1950 and 1965.

The most striking population development in prospect is a 55 percent increase in the number of persons in the 20 to 35 age group, giving a youthful cast to America, which may turn out to be the most powerful factor in shaping our total civilization. Migration toward cities seems destined to continue; cities in the North and West may well experience increased in-migration of Negroes. But in sum, the population picture is one of orderly, modest expansion.

NATURAL RESOURCES

Those with high faith in the further development of technology foresee no raw material crisis in reaching a Gross National Product (GNP) such

as that generally envisioned for 1980, and are encouraging about the availability of water, crop land and urban land sufficient to support an economy and life style implied by such GNP.

However, strong arguments are made that we are depleting some basic natural resources below safety levels, and devoting others to uses which may bring grave danger. Urbanization brings a sharp increase in the demand for recreation land, and also gravely disturbs ecologists concerned about nature's balance. Forests for lumber and forests for enjoyment are on a collision course. Water supplies loom as a major problem, pitting region against region. Minerals production will depend increasingly, it seems, upon advanced and high-cost technology, which may seriously threaten some regions. These and similar indications point to a decade in which public policy toward natural resources will be a major concern, even though immediate crises may be avoided.

ECONOMIC DEVELOPMENT

Prophecies and projections of economic development in the seventies are myriad and diverse. Perhaps the most accurate and concise predictive model is our economic activity between 1950 and 1965. Obviously, it does not approach perfection as an indicator for the future, but its dynamics bid to be the dynamics of the seventies. Apocalyptic visions abound, and some may prove true, but the weight of opinion favors more conservative projections. Forecast most often are these characteristics:

- A Gross National Product some sixty per cent larger in 1980 than in 1965, but only modestly advancing each year.

- Steadily rising dollar income for individuals, tending to rise more rapidly in the middle range than in the lowest and highest ranges.

- Employment approaching full capacity, with fluctuations reduced but with sporadic dips in some sectors of activity and in some geographic regions. Gradual, although not revolutionary, inroads on the existence of non-employed and marginally-employed segments of the working force. Continued shortening of the work week.

- Business activity cast increasingly in the technological mold, supported by heavy capital investments, surely but not explosively increasing productivity of consumer goods.

- Further ascendance of the mammoth corporations—relatively few in number—as the arbiters of our economic environment.

- Appearance of new industrial echelons with effects analogous to those being produced by the knowledge industry and the computer science industry in the late sixties. The health services and participatory recreation services are frequently nominated as likely candidates.

- Continued growth of the centrality of federal government decisions, enterprises, and devices in determining the yearly shape of the economic enterprise—its focal points, its distribution among regions of

the country, its ability to develop and exploit technology, and its dynamics.

• Elevation of the employees, acting collectively through groups, into stronger components of the power structures directing our enterprises. Group bargaining, it is predicted, will become generalized over all organizations, governmental and non-governmental. Decisions for those organizations—many of them far removed from the traditional subjects of employee compensation and working conditions—will be bargained out. Employees bargaining through groups will increasingly include professionals, technologists, para-professionals, and white collar workers.

• Automation as a still-mounting phenomenon—but accompanied by a greater industrial stake in the abilities of workers procurable than ever before, leading to heightened dependence upon pre-employment and mid-employment education and training.

HUMAN DEVELOPMENT

The normal span of life will continue its increase over the decade ahead. The prospect for healthfulness of the individual during that span is mixed. On the one hand we shall undoubtedly pursue expansion of medical knowledge with unprecedented investments of mindpower and money, and do the same in provisions for institutionalized health care. Striking advances on both fronts can be expected. But on the other hand, we shall apparently multiply the unhealthful components of the environment in which man lives, producing new hazards—especially to man's mental health—as rapidly as we overcome older ones.

Also, it is clear that mere expansion of knowledge is not enough. It is in changing the behaviors of people, of economic interests and of bodies politic that the great health problems are located in the seventies. Therefore progress toward abounding healthfulness will be slow even if the greatest possible efforts are focused upon making it possible, and can easily constitute a net negative by 1980 if less than full effort is expended.

The prospect for growth in the stature of the human being *as a human* is seldom envisioned except in the most pessimistic terms by current critics of culture. If present trends in American culture continue, they contend, the humanistic, humanitarian, freedom-desiring, individualistic, and aesthetic capacities of the person will suffer further atrophy in the seventies. *The person,* they hold, is what society is all about; atrophy in humanistic personhood is the greatest tragedy which can be visited upon a people.

Even though we are impressed by these dire prophecies, we cannot ignore the rising manifestations of revolt against dehumanization nor the waxing entry of activists into service of the humanities and the arts during the past few years. Neither can we ignore the latent powers which education —prospectively reinvigorated—can bring to bear in behalf of the person. In brief, the prospect for a humanistic culture is open-ended, dependent upon the effectiveness of what is done to produce it.

Individual character can be defined in amoral terms, but until quite recently America was built upon the assumption that the character of an individual embodied moral anchors. That enough individuals possessed similar moral allegiances was the expectation upon which we erected a social system. Part of that social system was a deliberate, relatively non-permissive, inculcation of moralities and compulsory exercise to strengthen their display. Inculcation and exercise failed often in achieving their objective, but were successful enough to maintain a life rooted in mutual confidence. This methodology began to erode early in the present century; replacement methodologies appeared. By the mid-fifties we began to develop a consternating suspicion that our system had insufficient moral rootage in individual character; by the mid-sixties that suspicion was confirmed in the minds of many.

What our pundits call "the new morality", it is said, is only covering up amorality of individual character. This conclusion may not be justified. But the evidence upon which it is based seems sufficient to support the proposition that *nothing is more significant in the approaching context than the question of whether the moral sinews of individual character can be developed—rebuilt—to sustain our social systems.*

DEVELOPMENT IN LIFE STYLE

By 1980, America will be largely urbania. Less than one-fifth of our people will live at sufficient distances from cities to follow a style of life and culture distinctively different from that in the metropolis. Even these people will be in metropolitan fields of force which will severely affect what they can undertake and accomplish. The present rate of physical movement by people into and among cities seems destined to continue or perhaps increase.

The ideational and cultural movement will be more significant. While it is true that certain regions of the country will not experience sufficient total population growth to produce numerous giant metropolitan centers or areas, the manifestations of urbanism will be as striking in almost any state as in any other.

Urbania will not be paradise in this century, if ever. In the seventies, preoccupation with giant problems of transportation, physical reconstruction, air pollution, poverty, crime control, finance, government and manifold other desperations is inevitable. Bafflements in the social realm, so dramatically evident at present, are not likely to end. Communication within the community for the purpose of making common cause may deteriorate no further, but encouraging upturn in success has yet to be fashioned. Neither do we yet have social organizations or provisions to perform the roles in community-formation of such long-trusted—but now increasingly impotent—structures as the family, the church, the common-interest group, the friendly gathering, "civic leaders," and "the business community."

Our problems in the seventies would not be so great perhaps if we were not bent upon realizing through our communal life something we

call the American Dream; we feel bound to make that dream applicable to Americans dwelling *en masse*. The easily-discerned discrepancies between dream and reality, and the widespread dissatisfaction with progress made toward reducing those discrepancies, should not mislead. The sixties did produce progress and also started lines of thought and action promising even greater progress in dealing with urbania during the seventies. Technological additions to America's tools for coping with city-living were numerous, with many more in immediate prospect. Social and governmental constructs began to develop, and many have survived the testing period. Increasing numbers of topflight brains were attracted into preoccupying concern with urban affairs. Most important of all, some of the great advantages of urban life were exploited sufficiently to show that the inevitable urban style confronting Americans is not necessarily a dire and dismal prospect.

While the urban setting is the prime factor cited by analysts as influencing the future style of life, there are other influences at work simultaneously. As pointed out previously, great mass media of communication will increasingly constitute the "real" world to which people react. Provincialism will wane, cosmopolitanism wax. Americans, their goods and their services, will be mobile in new degree in time and space, but not without accompanying travail and heavy investments of capital to produce new systems of transportation. This is not to imply that the new systems can be physically completed in appreciable degree within the next decade, but the prospect of their development is already significant in shaping outlook and planning.

As we enter the seventies, every career undertaking is becoming subject to sweeping transformation, if not revolutionary re-casting, by extensions of human capacity — through information systems, computer programs, outpourings of knowledge ready for professional application, new potentialities of media for influencing human behavior, and other marvels. Additional extensions are certain to come rapidly. The style of life for most workers, and especially for professionals and executives, seems destined to be one of constant pursuit of command of these extensions as a means of adding to their career competency. Continued learning, at least in career-related areas, is expected to characterize adult life in the next decade as never before.

KNOWLEDGE DEVELOPMENT

Invention of hyperboles to describe the accretion of new knowledge will continue to occupy publicists in the seventies. But the major concern of inventors must be for methodologies to capitalize more fully upon that accretion. To be expected are further technological advances in applying the capacities of computers and computer programs to exploit the burgeoning knowledge pool. But a world of instantly-available, pre-synthesized, pre-evaluated, and custom-packaged knowledge—as so freely predicted by enthusiasts—is not the one in which most living will be done between now and 1980. We shall live with increasing numbers of limited forerunners of such a world, and almost certainly will be postured toward its

arrival. Nevertheless, we shall be dealing with knowledge chiefly by extensions and improvements of our accustomed utilizations of manpower to store it and to retrieve it.

Education's three major concerns with knowledge in the next decade are likely to be projections of present quandaries. *What knowledge has priority? How can transmission of knowledge be escalated? What can be done through formal education to establish behaviors and life postures which will equip individuals to deal with accruing knowledge?*

These quandaries will be much more pressing, in the absolute sense, in the approaching context than in the present one. Prediction of what will occur as responses to them is impossible, however, because the nub of the matter is whether they will be realistically present in the minds and actions of those who design and execute formal education. If ignored, quandaries are only paper tigers and possible responses are only academic chit-chat. This is especially true of one aspect of the third quandary listed. To deal with accruing knowledge requires the individual, and groups of individuals, to have some allegiance to the pursuit of humane values. The current distribution of emphases in the realm of knowledge is not calculated to produce such allegiance. This is only one illustration in a great company demonstrating that the approaching context has no component more pregnant with implications and imperatives for education than the erupting field of knowledge.

DEVELOPMENT IN GOVERNANCE

Long a nation, America moves into the seventies to be governed as one—and also as one among many trying to establish some kind of partnership for governance of the world as a whole. Although it seems impossible that governance by national action could show a greater increase in the seventies than it has shown in the sixties, such is the prediction of most political scientists.

The sixties have demonstrated conclusively that determinative influence upon governance can be exercised by non-government organizations, and that nationalization rides strongly on this phenomenon. Predictions are that the approaching decade will witness additional increments of power to national non-government organizations, at least partially due to waxing alliances between them and government.

There are also indications that governance of all people by the nation will be advanced by increasing intensification and deployments of the federal government. But state government and local government are on the nationalization path also—in the sense of increasing assumption of "on behalf of the national welfare" roles and of responding to the demands of nationwide competition.

"The American Partnership" is the optimistic title of a paper by Daniel J. Elazar dealing with prospects for intergovernment relations in the next decade.[4] While some political figures see the approaching partnership best represented by a whale with two perches swimming tandem,

developments in the sixties hold forth prospects of more constructive allocations of roles and resources between the partners than have yet been achieved. Some observers foresee the seventies as a decade in which local government—and especially the dangling special-district variety—will experience widespread re-constitution and consolidation. Others, while agreeing with the conclusion that the emerging times necessitate such moves, believe that only scattered changes will actually occur.

The organizational efficiency of government may reach a new low during the seventies. No organization is slower to adopt and exploit managerial technology than the government apparatus. And the government apparatus (notably the organizations for conducting schools and colleges) during the seventies will undoubtedly be forced to adapt to increased introduction of collective bargaining into the decision making process—a new and preoccupying experience for governmental managers.

But the two factors just named are not the reason for projecting the possibility of some decline in efficiency. That reason lies in a prediction that manifold new programs and sweeping revisions in barely shaken-down programs will be attempted by government at all levels, straining the legislative process to pre-formulate the programs and disheveling the executive establishment as it seeks to interpret, implement, and operate the programs upon crash bases. The approaching decade bids fair to test our traditional belief that public administration is a catch-as-catch-can activity as that belief has never been tested before.

In Conclusion

The broad outlines of the context within which formal education will take (or make) its shape in the approaching decade produce little to terrify, but much to indicate an existence involving many problems, as well as a great deal to promise unprecedented opportunity. From this context emerge many implications of primary tasks facing the designers of education. To some of those implications we now turn.

Part 2: Emerging Challenges To Education

The attempt to forecast the context for education in the seventies was made with a frankly utilitarian purpose in view—to extract major implications for education. Some of those implications take the form of challenges to education. Others appear as indicated tangible responses to challenges. This part of the chapter deals with some challenges; the next with tangible responses.

Increasing the Basic Strength of the System

The basic strength of the educational system will be tested as never before. The focus here is upon the system itself—the arrangements made and the flow of sustenance to those arrangements. Longstanding, as well as more recent, deprivations in that system are common. Understaffing, quantitatively and qualitatively, has seriously weakened some agencies

(for example, local school districts and schools in those districts, special service centers, school program elements such as curriculum supervision, and state departments of education) in many cases to points of near-inundation. Arrangements for fiscal support in some instances are wasteful of tax resources, markedly nonproductive in comparison with modernized approaches, and tend to perpetuate a condition of chronic malnutrition for educational enterprises.

The educational programs offered in some localities (and in some segments of the program endeavor in nearly all localities in some states) are but pale shadows of healthy offerings when compared with recognized standards in the sixties or, in some cases, even in the forties. During the sixties, nothing has been more impressive than the upgrading in compe-tence of school personnel by self-effort and by formal education enter-prises, but there still exist numerous components of the school system—and particularly of the college system—that are struggling along with seriously incompetent personnel ranging from building custodians to ac-countants, to administrators and to teachers.

It is not necessary to catalog further. The point being made is that the seventies will apparently bring stresses, strains, opportunities, and im-peratives for the educational system far greater in force and magnitude than any previous decade has produced. To cope with these, *the system as a whole will have to be expanded and strengthened in many new dimensions. But all such additions will multiply the effects of flaws in the basic structure.* What is tolerated with groans in the sixties may cause the whole structure to collapse in the seventies. The conclusion is clear: some planning may have to be addressed toward crash action to over-come basic deficiencies in parts of the system with which education enters the seventies.

What has been said about deficiencies, however, should not be inter-preted as a judgment that the systems for education now prevailing are weak in any total sense. The evidence is to the contrary, in this observer's opinion. But the total is always algebraic, in which certain negatives are compensated for in some degree by certain positives. The conclusion to be stressed is that the approaching times bid fair to make such compensa-tion less possible and less tolerable.

MEETING NEW DIMENSIONS OF CUSTOMER DEMAND

Customer capacity of the educational system will be confronted by new dimensions of customer demand. Many factors are at work to guaran-tee that this will occur. Perhaps most dramatic is the approaching surge of high school and college graduates who will be seeking higher educa-tion. Customers now in sight for community or junior and senior colleges indicate that, as a minimum, the 1967 capacity of such institutions should double by 1980. Seekers of post-baccalaureate professional degrees can well quadruple in the same period. Students desiring to pursue Ph.D. and post-doctoral study will do the same, it appears. In brief, the proportion by which customer demand for elementary and secondary school services

expanded in the fifties and sixties seems to be the minimum outlook for the demanded expansion in higher education customer capacity during the seventies.

At the same time, additional customers for the traditional elementary-secondary school system are also forecast—as the total population increases, migration continues, and society insists in tangible ways that practically all children and youth stay in school through high school graduation and probably through the end of the 14th year. Universal schooling for four- and five-year-olds is being advocated as a necessity in respected quarters, with evidence mounting that large contingents of these younger children should become regular customers of the school system.

There is burgeoning advocacy likewise of sharply-expanded opportunities for customers bent on post-secondary vocational preparation for technical and semi-technical fields. Another large contingent of additional customers looms among adults who require educative assistance to overcome their previous disadvantagement or to recover from occupational obsolescence. Predictions of the approaching demand—by employers as well as by workers—for continuing education have particular import for the capacity of institutions of higher education, as well as for a wide variety of non-school educational endeavors.

Not to be overlooked are the corporate "customers" of higher education who do not seek instruction primarily, but direct service in such forms as contracted research, leadership for urban redevelopment, management of long-range planning projects, direction of studies precedent to public policy formulation, and scores of kindred endeavors.

While the sheer quantitative aspects of this challenge are tremendous, they need not be dismaying. The education systems of this country have repeatedly undertaken expansions in customer service of magnitudes similar to those forecast for the seventies. The degree of success has varied, but the system itself has not been overwhelmed.

Of much greater moment are *qualitative* aspects of the challenge. *Expansion of capacity always tends to distract attention and divert resources from crucial needs for program improvement.* In the past, periods of great enrollment increase have brought temporary, but often serious, declines in the quality of service offered to all students. In the seventies this experience could be repeated, particularly in higher education, if states fail to make advance preparation to receive the customers sure to come. For example, in spite of the obvious need to produce large numbers of college instructors promptly, very few state universities in the late sixties have been geared up to perform this task. A dismaying shortage now looms.

A second qualitative challenge is directed toward decision making with respect to *what* customer demands are to be met. The natural tendency is to accord priority for expansion to contingents of students already represented, thus in effect deciding to postpone or ignore new types of students. In the seventies, such decisions can be most unwise. For ex-

ample, to ignore the young child or the professional worker seeking continuing education can have grave consequences. However, there is another side to this coin. Customer "demand" for educative services is not an infallible guide to what schools and colleges should undertake. Some demands, if met, can subvert basic commitments of the educational system. Many leading educators, for example, view with alarm the prevailing tendency of schools and colleges to accept increasing numbers of customers bent upon training for a specific job. They argue that this is spurious and obsolete goal-setting for education.

It is also true that some customer demands are for services that schools and colleges are ill-fitted to offer. Some call upon education to serve purposes or objects for which educative implementations—such as curriculum content and methodologies—are not available. Corporate customers, such as government agencies wanting a project to be directed, are often seeking managerial or prestige-adding—rather than educational—services. Often, advocates of new customer services are mistaken about the existence of patrons for the service; educational history is replete with stories of expensive efforts to serve customers who failed to show up or to stick with the undertaking.

Decision makers for the educational system are faced, therefore, not alone with a challenge to respond creatively to burgeoning customer demands but also *with a mandate to be selectively astute in choosing to serve demands which are of constructive and apparently essential import.*

But most customer demand will very likely be judged to have essential import, and citizens made aware of that import will move to see that it is met. At least, such is the story of American education to this point in time. Still remaining, however, is the reopened question of what agencies or systems will be used to serve the expanded flow of customers. Although most contributors to the volume *Implications for Education of Prospective Changes in Society* assumed repetition of the traditional answer to this question, other students of public admini ation see a need for reexamination of that assumption. Our traditional answer is the "public" educational system supported largely by taxation and/or philanthropy, with two primary operating units. One is a comprehensive local school system. The other is a comprehensive college-university. Most customer service is designed, provided, and managed by these units.

This generally accepted arrangement will be sorely tested by the customer expansion advocated as necessary in the seventies. Already burgeoning comprehensiveness is overloading both units, threatening the adequacy of their performance of the fundamental program functions for which they are best suited. Alternatives to this bicameral educational system may have to be explored as states plan to serve increased variety in customer demand. Comprehensiveness in control-and-direction units, with its purported advantages in coordination and resource-allocation, requires evaluation against the results obtainable through several parallel operating units, each concentrating its attention, developmental devotions, and types of customer service within manageable limits. Hence, it is ar-

gued, planners for the seventies need to realize that the approaching customer demand is a challenge to the structure for educative service as well as a challenge to quantitative capacity.

INCREASING CRUCIALITY OF OLD MANDATES

Long-standing mandates pertaining to the program of elementary and secondary schools will take on added cruciality. The appearance of new dimensions for our common aspects of life during the seventies presents mandates of new order for our foundational, universal school programs. But this fact should not obscure the new degree of importance attaching to achievement of many classic purposes of foundation schooling if the approaching social order is to be served. One such purpose is to enable all young people to be able to communicate effectively. Another is to prepare and encourage them to pursue further education. A third is commonly stated as "teaching students how to think". A fourth is to assist them to develop value-commitments fit to live by. This listing is only illustrative, and is intended to focus the attention of planners upon the necessary continuity between the *intents* of schools in the sixties and their intents in the seventies.

As Goodlad[5] has pointed out, the challenge here is not one to preserve the customary against onslaughts of the new. It is to produce more effective responses to the long-standing mandates than have been customary. In the past, purpose-setting for foundational education programs has too often been interpreted to imply merely that broad mandates will be restated in the language of goals. The result has been *a great gap between what schools seek and what they do,* tangibly and concretely, to implement what they seek. It is this latter which should concern planners now. That is, *broad mandates need to be turned into specific purposes.* Those purposes have to be consonant with current and future definitions —of what it means to communicate, for example. Most important of all, those purposes have to be tooled up with the best methodologies and materials it is possible to produce. It is not the persistence of the mandate to teach pupils how to think which constitutes a noteworthy challenge for the seventies, but instead it is the added cruciality of translating that mandate into truly effective programmatic arrangements.

EFFECTING SIGNIFICANT CHANGES IN INSTRUCTIONAL PROGRAMS

Significant changes in the instructional programs of schools and colleges appear to be essential. Here we consider what it is that schools and colleges attempt to teach, in the broadest sense of that term, and how they try to do it. The approaching challenge to the instructional program has cutting edges not readily apparent in the rather trite topic sentence used above. Let us elaborate upon some of those.

First, let us consider briefly the matter of the knowledges and understandings which we expect the schools to transmit. These are aimed at giving the student command of the nature of the world in which he lives and will live. Two facts are inescapable: (1) knowledge is being produced

at an unprecedented rate, and much of it makes obsolete either the accuracy or the pertinence of what has been the knowledge domain of the school and college curriculum; and (2) the very structure of knowledge itself is being recast—that is, the explanatory outlines and concepts which should furnish the framework for the courses of study used by the schools are being transformed dramatically at shorter and shorter intervals. These conditions of change are not new, but their acceleration is of increasing moment.

No one seriously assumes anymore that students can be given knowledges and understandings while in school that will match the world they will need to know ten years thereafter. But some baffling disjunctions can be avoided through constant incorporation of recency into the subject matter the schools undertake to provide. The sixties saw great efforts to do this, but planners must remember that the most-publicized "modernizations" of the current decade are already far behind the world that is, to say nothing about the aspects of the world we can safely predict for two decades hence.

Second, let us consider the matter of tutelage (instruction) itself. If schools do not work great change in their ability to adjust instruction to the learning styles and potentials of highly-variant students we are headed for mammoth, and perhaps disastrous, wastage. The basic rationale of instructional programs is still that of expecting all students to conform to, and hence learn from, a monolithic scheme. That scheme is modified from time to time and from place to place. It becomes increasingly apparent, however, that the approaching rationale is to adjust instruction to the needs of the learner.

In some respects, schooling is being cast in the role of a profit-making enterprise—the profit being calculated in terms of genuine and comprehensive benefit to the learners, whoever they are, and through them to society. Knowledge and ideas about how to conform instruction in all its impacts to the disparities among learners are accumulating, and apparently will continue to do so. They already clearly indicate that applications within school programs will require great shifts in the traditional composition of instruction during the next fifteen years.

Third, let us look at the matter of attribute development. When Bebell[6] examined implications of societal change for the educational program he attached high significance to the cultivation of attributes such as appreciations, attitudes, ways of tackling problems, self-command of effective procedures for acquiring information and understanding, dispositions to seek continuous enlightenment, and adherences to well-chosen scales of values. The same conclusion has been reached by many others. With knowledge in such constant transition and with academic and operational skills so quickly subject to obsolescence, *the influence of education seems destined to depend increasingly upon its success in producing personal attributes which transcend ingestion of subject matter.*

Statements of goals for education have always included the aspiration to produce some such attributes; planners will find need to give

additional attributes primacy in their statements. More importantly, past instructional programs of schools have seldom distinguished themselves by the provisions made and actions taken to implement goals of attribute development. They have relied to great degree upon the evangelistic pronouncements of teachers and principals. That should no longer be the case. The warp and woof of instructional programs will have to carry attribute development and, if that occurs, the changes required in standard practice will be significant indeed.

Fourth, let us take the matter of methods, instruments, and materials. Of course, this matter is involved in each of the three already presented. Yet, the rapid developments in this field exert pressures of their own. Effective utilization of television as a medium of educational communication, for example, requires marked departures from accustomed school and college *mores.* Placing computers on the instructional line makes the line itself vastly different. Nongraded school organization is essentially as exacting attempt to conform to student disparity, and should place new styles of loading upon every participant in the instructional process.

It must be remembered that the new technology of educative endeavor that is attracting attention in the sixties is only precursor to extended developments in the seventies. At least, such appears as an essential consideration for planners, since so much of what schools must add to their accomplishments in the approaching decade obviously depends upon technological advances which are adopted into practice. This development argues for much greater devotion of the education establishment to the production of technology. It also argues for constant endeavors to exploit—where teaching is attempted—the potentials of technology. Both of these call for impressive changes in what we now know as the instructional program.

But there is another matter which exceeds these four in depicting the import of the simple statement that significant changes in the instructional programs of schools and colleges appear to be essential. This has to do with what change is interpreted to mean. *The educational system is particularly vulnerable to substitution of change in appearance for change in substance.* It is also constitutionally timid about proposing sweeping change. The "significant change" stated as essential is not in accord with these two characteristics.

Widespread adoption of a device—such as flexible scheduling for high schools, or cluster colleges in large institutions of higher education, or technical education divisions in junior colleges—is not the essential referent of "change" for the seventies. Each of these devices illustrates a structural implementation for executing a fundamental and valuable reorientation of what an educational organization seeks to do and of how it conducts that effort. Each structure may be very valuable, if not absolutely necessary, in expediting the substantive achievement sought. But *it is not the structure which constitutes the achievement. It is what transpires within that structure.* Even so, reluctance to make *sweeping* changes frequently betrays the structure's potential to assist achievement; for ex-

ample, the tag of "nongraded" is attached to only minor modifications in what is essentially the same old graded structure. But *even with bold new structures, change has only become possible.* The exacting, hard task of capitalizing upon that structure with creative, fully-exploitative actions to carry out the concept remains.

Repeatedly in the past we have shown almost infinite capacity to erode and debilitate the most pregnant concepts for educational reform, due to substitution of formalities for realities. Only with grave danger can this be permitted to continue in the future. The changes apparently necessary are real ones.

CONTENT AS A MAJOR ISSUE OF PUBLIC POLICY

Content of the common education for all citizens is becoming a major issue of public policy. In view here is that subject matter and those desired attributes which compose the common core of what everyone encounters in going through school. The challenge to that content is separately pointed out chiefly because it penetrates so directly to the posture assumed by the public, in contradistinction to the formative actions of educators.

If schools and colleges give attention to the nature of approaching society, it is clear that *the content of the common core of education must be thoroughly overhauled.* Granting that considerably larger volumes of content-inclusion can be made possible by improved technology in utilizing the time available, the evidence is clear that much *traditional content will be in competition with high-priority new content.* Distributions of emphasis between categories of content—the social sciences compared with the natural sciences—will likewise continue as highly competitive matters. Specializations—academic, professional, and vocational—will become increasingly constrictive upon the time-and-space dimensions of the common education in spite of the obvious societal requirement that commonalty of intelligent concern be greatly expanded. The contention here is that these, and similar, matters are no longer academic concerns alone but are challenges to the public. This is because what the public will permit, and tangibly encourage, will have such great directive influence upon the solutions educators can, or will, seek.

Perhaps the character of this challenge can be delineated sufficiently through a single illustration. It appears that there is almost unanimous agreement among analysts that citizens of the future must wrestle with grave problems of urbanism as a way of life. Quickly, it appears, a generation of young adults with understanding of the anatomy of urban civilization and of the strategy of social action should be produced. But the present content of common education in our schools and colleges is of meager assistance in this direction. Particularly absent is significant attention to the realities of societal perplexities produced by strong differences in opinion and fundamental stances of sectors of the public. This lack is due in significant measure, one concludes, to an assumption by educators that their publics will not permit students to examine contro-

versy nor to be exposed to conflicting points of view. Also, to make room for urban studies in the common core of education, educators must overcome strong inertial pressures to hold on to "what has always been considered essential for a sound education." Again, they assume most of these pressures have strong backing from the public, and that the cause of urban studies does not have such backing. In this context only modest, sporadic bows toward the imperative of urbanism are likely to be made.

The foregoing illustration is a parable of what is likely to occur with respect to other clearly-demonstrated immediate imperatives, such as, for a humanistic revival, for orientation to an international world, for cultivation of concern with America's purposes and loyalties thereto. The moral here is *not* that the public must be made the architects of the content of common education. Instead, the challenge is addressed to planners. Can plans be made which will result in more thoughtful, specific, and potent mandates from the public to their architects?

STAFFING PRESENTS NEW DIMENSIONS

A different story of staffing the educational organization has to be written into history. That story will undoubtedly contain some long-familiar subplots—such as yeoman and perhaps original efforts to overcome quantitative discrepancies between demand and supply, attempts to meet the competition of other organizations for the services of those desired, frantic searches for specialists, massive forays at retraining and updating employees in service, and similar variations upon persistent themes. But the major movement of the story may have to constitute a sharp break with tradition.

Tradition holds that school and college performance is essentially a symposium of comprehensive individual performances. A teacher with a given number of students in a classroom—with that teacher almost solely responsible for what his students experience as formal education—is the symbol of educative endeavor. Effectiveness of the total performance of the organization thus depends upon the loosely coordinated virtuosity of largely autonomous artisans. Under this tradition, staffing is chiefly a problem of producing and securing the services of more and more virtuosos, with the wishful assumption that the virtuosity of each will be superb. But what has been forecast as the approaching context for formal education implies a total, and well coordinated, demand for virtuosity on the part of schools and colleges far exceeding that previously contemplated even for the paragons described—though rarely found—as requisite carriers of the educative mission.

Many students of educational organization believe that the capacity of the present conception of how to instruct is inadequate to meet this demand. Further, they contend, it is an outmoded means for capitalizing upon the educative technology already available and certainly cannot exploit the technology to become available. Therefore, it is proposed, schools and colleges should place increasing reliance upon *systems* of instruction, and should seek to staff for systems approaches.

This means staff preparation and procurement to provide workers representing a wide range of levels in professinal development, possessing highly variant competencies, and performing specialized functions. To be certain, all analysts forecast the necessity for increasing sharply the total number of workers in the educational enterprise. But the cutting edge of the challenge, as they see it, resides in a new concept of who these workers should be.

Again, an illustration is used to further delineate the nature of what can lie ahead. Heretofore, the search for technology for education and for its dissemination in practice has been largely hit-or-miss, and has come to rest primarily upon the already overburdened shoulders of the classroom teacher. The systems approach implies this will no longer be true. Specialists will carry most of that burden. They have to be produced, chiefly by self-education on the part of workers already employed, and to be provided by the system with roles to be performed in compatibility with the roles of others in the system. Requisite preparation for workers assigned to conduct face-to-face contacts with students also becomes different as they are equipped and disposed to utilize effectively the roles of specialists. In each institution, staffing becomes much less a matter of relying upon outsiders somewhere and somehow to provide bountiful supplies of paragons who can be recruited into service. Instead, it becomes chiefly a matter of school system and institutional action to train and place its own personnel in systematic performance relationships. One might quail at the prospect of this drastic change if American industry had not already demonstrated the workability of this bootstrap approach.

PERPLEXITIES IN PLANNING EDUCATION FOR WORKERS

The imperative of education for work is inescapable, but fraught with grave perplexities for educational planners. The existence of unprecedented need for occupational competence in ever-changing variety in the seventies is extremely well-documented by the predicted shape of the approaching society. That this need will be the subject of concrete, powerfully vocalized and strongly promoted demands for worker-serving education is also certain. It is doubtful that any state can respond to these demands in the same manner as in the past, and equally questionable that it should do so if it could. The weight of the forthcoming demand will, it appears, support the proposition that the regular establishment for education should be geared up to make worker education a prime commitment and engagement.

The sixties produced a wide variety of developments, impressive in total, that are aimed toward education for work. These developments, however, underline the perplexities in long-range—as contrasted with emergency—planning. For example, observation of those developments has caused many influential educators to question, once again, the propriety and feasibility of using public education for narrow vocational ends. More viable perhaps is the issue, freshly demonstrated, of the priority position to be accorded worker education in a state's total scheme of fiscal

support and operational provisions for all education. Recent developments have manifestly occurred chiefly as afterthoughts or "extras," and the presence of earmarked funds has been highly determinative of what is or is not undertaken. While school and colleges have embraced without quibble obligations to educate certain varieties of professional workers, equal treatment for all occupations is viewed with visible reservations.

Another perplexity is produced by our use of the federal government and national foundations as the chief originators and promoters of worker education—whether it be for the health and education professions or manpower redevelopment. State plans for education reflect few long-term provisions for the occupational sector other than an open basket to receive what federal government sources formulate and promote.

Amply demonstrated likewise has been the perplexity of how to make prearrangements for the unpredictable appearance of new jobs in great volume—such as the job of Headstart teacher. Then, operational results in several varieties of worker training are causing many to question the efficacy of local school systems and colleges as managers, promoters, formulators, and proponents of this sector of endeavor. Advocated anew in some quarters is a separation of the management for vocational education from the management of other education.

While it is clear that education for work is a necessary component of general education—that is, of education common to all persons—it is not so clear where schools and colleges should make a distinction between *education for work* and *training for a particular occupation*. Also, we are still faced with the perplexity of how to get American youth to choose vocational preparation in preference to academic routing toward a college degree. This is one reason for doubting that the establishment of separate vocational-technical institutes is calculated to meet, over the long range, the demand for workers in technical pursuits. The American youth with the capacity to pursue technical preparation are not yet choosing to attend such institutions in sufficient proportions to meet the need which prompted the establishment of technical institutes. Thus we demonstrate another serious perplexity.

Finally, we now see more clearly than ever the unresolved question of how educative approaches to the need for workers can be made truly effective in serving the purposes they are supposed to serve. While "successes" in meeting a given labor-shortage or in producing employability for clients can be cited for some new activities of the sixties, evidence that education *per se* was the essential factor or that the training itself was on the beam of what is needed is still scarce. There is also the persistent problem of what constitutes vocational education of high quality, and of how high quality education for workers can be staffed and provided. If planners for a state's long-range involvement with education decide that the voiced imperative for worker education is to be heeded in the seventies, they can hardly be content with mere projection of more of the old motions labeled as vocational education.

Modifying the Educational Structure

Serious questions of fitness confront the organizational structure and management of education enterprises. In structure, our systems of education employ a basic framework produced to serve the American society of a century ago. This framework has stood us in reasonably good stead, and has aroused much rational as well as sentimental allegiance to its basic features.

Each decade has confronted that structure with tasks for which it was at least partially unfitted. Remodelings and additions have resulted. Impressive shifts have occurred in the roles performed by various units in the structure. But structural change has been gradual, at least partially because each generation of planners has been disposed to conceptualize undertakings in terms of the existing organizational structure modestly modified.

Many of those who view the approaching context for educational endeavor, however, perceive unfitnesses in current organizational structure which may require more drastic reconstitution in the seventies than in any previous decade. A few of the reasons for such conclusions will be listed to make clear the sweeping nature of the emerging challenges.

Our present structure uses the classroom as its basic locale for presiding over the business of purveying education and of displaying initiative in changing education. But *the educative technology developing during the sixties cannot be classroom bound.* Neither can the content demanded for education be comprehended within the capacity of the classroom as substation, nor can the necessary management of the child's instruction be done by the teacher presiding over "Section 3 of the Fourth Grade in Room 113." Already we see school buildings which reflect these facts, and educational programs being conducted by organizational structures transcending the classroom—television teams, diagnostic centers, computer-assisted independent study programs, and many others. But these agencies often find themselves treated as adjuncts to the classroom, eating at second table after classrooms are traditionally fed, and at the mercy of decisions and actions sacrosanct to the classroom. It may be that the classroom unit has reached the limits of its adaptability for the performance of necessary instruction as well as for the determination of the support needed to conduct an adequate foundation program.

In existing structure, the execution of education—almost all of it—is entrusted to one of two operational units. One of these is a local school system. The other is an individual institution of higher (or special ed) education. All the other structural units exist chiefly to provide resources to these two units, and to try to influence what these autonomous executors undertake and do.

Two features of the approaching context may demand decided modifications in organizational reliance upon these two executive units. Many of the educative services thought to be necessary and possible—for example, computer-assisted instruction systems, evaluative-diagnostic studies,

and information storage and retrieval services—are hardly compatible with district-by-district or institution-by-institution fragmentation.

At present, 90 percent or more of the funds made available for the provision of educative services go to the traditional two units; in the future states may find it more efficient to obtain services to a more significant degree through other units. Also, the approaching context brings a new degree of compulsion to fill up the ravines of educational opportunity, to achieve more universally than ever before the maximum in return from our investment in education. While autonomous localism in determination of educational policy and action has, in some instances, shown itself recently to be capable of impressive responses to such compulsions, it is still doubtful that all necessary execution of change can be comprehended by the localistic framework now existing. Undoubtedly, some of the inadequacies of this framework stem from the size and nature of the local units themselves.

Long plagued with problems arising from the smallness and fiscal weakness of some units, we now are adding problems at the other end of the scale—the gargantuan city unit or state university. Other inadequacies, however, may be incipient in the very roles assigned to local units *vis a vis* other possible arrangements for performing some of these roles better.

The emergence of the federal government as a major educational entrepreneur is another reason cited as revealing unfitnesses in our organizational structure for education. It is obvious that previous role-definitions for the three governmental partners—local, state, and federal—in conducting education are being strained, if not shattered, by the wide-ranging activity of the federal partner. But is is also true that the federal government itself is inadequately organized to carry out what it is attempting to do. The existence in most states of dual operations—the "regular program" and "the federal programs"—is testimony that changed structures are demanded. The present impotence of the local and state partners in influencing the policies and decisions of the fedeal partner is hardly a healthy condition. These are only a few of the many evidences that the traditional machinery of the educational system is not geared to incorporate effectively and wholesomely an active federal government into educational affairs.

Most of the accepted descriptions of our educational system begin, "Education is primarily a responsibility of the respective states." As just indicated, emerging developments appear to challenge that concept itself. But even for those who support the soundness of this principle, the prospects of the future cause trepidation about the adequacy of present in-state arrangements to discharge such responsibility. For example, almost every state still has inappropriate or less-than-effective arrangements for collecting the taxes to support statewide education, or for distributing centrally-collected funds to get a statewide job done well. In some states, this situation is grave. But approaching conditions herald new dimensions of urgency for appropriateness and effectiveness for which existing fiscal organization may prove tragically unfit.

However, the gravest organizational concern troubling those most dedicated to the principle of primary state responsibility has to do with state government agencies. That is, they see approaching necessities demanding the services of agencies at the state level that will give impetus and direction to the total programs of education. All states have a state department of education to attend to some matters related to pre-college education, and some states are adopting similar structures for higher education. The open question is whether such agencies shall be cast in truly definitive roles for shaping a state's educational endeavors.

To make an affirmative answer means, in most states, that organizational arrangements would have to undergo sharp change, that unprecedented attention and support would have to be given to staffing and financing such endeavors, and that new orders of relationships would have to be created between such agencies and state legislatures, on the one hand, and operational units on the other hand. Proponents of such change point to the performance of a few state departments of education where the total organizational effort has taken this direction. Yet, others see limited usefulness and potency for state executive agencies in the approaching redistribution of power to call the shots on the shape and performances of education. Almost all agree, however, that the future ability of a state to be "primarily responsible" for education will call for some internal organizational arrangements more suitable than those most states now have.

As a final example of the reasons why organizational structure is viewed as facing marked unfitness, the emerging perplexities of non-government educational endeavor are cited. The so-called private sector of our educational system is of such size and usefulness few can contemplate a future in which it does not remain strong and uniquely productive. Yet, such continuance is fraught with grave difficulties.

Recent developments have seen new lines of thinking and action resulting in the use of tax funds to shore up financial support for the private sector of education. Also visible are marked accommodations of private educational endeavor to government-produced expectations and programmatic desires. These tendencies are viewed with strong negativism by some and with trepidation by many, but the observer of social trends is impelled to conclude that government interaction with non-governmental educative endeavor is likely to increase. Existing organizational structure, it is held, is not sufficient to cope with that development.

But any organizational structure is dependent upon the proper exercise of management for its practical effectiveness. We speak here not of management of education itself, but of management for the system aspects of the education enterprise. And those aspects are of such impending orders of magnitude and complexity as to strain the capacities of the best managerial science likely to be available. The application of such science to what has traditionally been known as educational administration is already taking place, of course, but the horizons ahead are far beyond what the public—and even the professionals—have been willing to contemplate as possibilities for the education enterprise.

One can anticipate increasing expectations that management in education must exhibit attainments paralleling those in industrial enterprises. To do this is not simply a matter of upgrading the competencies of a restricted cadre of administrative officers. It is a matter of extended staffing with specialized personnel and of equipping educational enterprises with hardware and systems capable of handling the information and decision making essential to modern management. The crucial challenge, however, is not to subject the education enterprise to something called modern management simply because it *is* modern, but to make it possible for organizational structure to deliver on time the service demanded in the seventies and beyond.

MORE ADEQUATE FINANCIAL SUPPORT

The proportion of the Gross National Product currently devoted to the support of education is likely to prove insufficient to meet the needs ahead. More specifically, almost every state faces the prospect of providing more funding for education than simple projections of present proportionate efforts will provide. Documentation of these statements is hardly necessary. It is implicit in what has gone before. However, the need for limitless amounts of money for education is not forecast. Instead, it appears possible for almost every state to make significant strides toward meeting the challenges of the seventies within reasonably-possible elevations of fiscal support. Hence, it is suggested that the real challenge here lies not so much in dollars, but in mapping the strategic plans for actions designed to produce increased financial support on the basis of demonstrated need and effectiveness.

INSTITUTIONAL INTERRELATIONSHIPS AND FUNCTIONS

Every institution, as well as the total system of education, will be a servant with multiple "masters." Keith Goldhammer has identified, as a characteristic of our age, a society in rebellion against paternalism.[7] This is not a monolothic, but a segmented, revolt against the separation in determining what is good for people from the people whom the good is for. While the use of rebellion as the word to designate the situation faced by education may imply more negative attitudes toward what seems destined to transpire than are justified, the presence of multiple groups powerfully seeking to be active partners in the directive, decision producing, and policy making processes of the education system is certain.

Some of these groups will reside in the system—militant students, organized employees, and special-interest associations of professionals. But the system and the institution will also be dealing with external "publics" possessing high levels of educational attainments and capable of identifying rather clearly what they want as well as of formulating how they propose to get it. Other "publics" may know only vaguely what they want but be capable of using paralyzing methods to secure attention and consideration for their demands.

The point here is that the traditional degree of autonomy enjoyed by "The Establishment" for education is no longer a sound model upon

which to base expectations for administering education in the seventies.
The importance of readiness for negotiation, of provisions for conflict-
resolution, of channels for open-minded communication, and of careful
procedures for formulating and pretesting policies will be enhanced. The
load upon governing boards is entering new dimensions of size and com-
plexity. Perhaps most of all, the challenge to our stilted notions of what
constitutes public and employee and student relations for education is
tremendous—not because paternalism must be rescued but because plural
concern for the control of education must be capitalized upon.

Part 3: Emerging Responses To The Challenges

Considered now are tangible things people can do in education because
education is challenged by the approaching context. This is what is meant
by "responses". It must be remembered that many of the forms of response
which should characterize the seventies have yet to be formulated, tested,
and introduced. When we speak of "emerging responses" at any given
point in time we deal chiefly with the projection of present experience and
present reasoning into the future. Even then, in a brief discussion, many
promising ideas and cutting edges of practice are lost from view because of
the exigencies of condensation.* Hence, "emerging responses" are at best
only a limited collection of suggestions to assist those who are interested
in planning for the future with the task of initial design.

The first point to be made is that the current scene in education is
clearly characterized by efforts and undertakings to become different. The
focus here is not upon the *calls* to be different—they too are myriad—but
upon *efforts* to be different. These efforts are made partially, of course,
"to keep up with the Joneses" and are often far more imitative than
adaptive. But, in origin, most of them are spawned by strong desires to
respond constructively to the challenges in today's context for education.
That context naturally includes strong elements of the future as presently
foreseen. Hence it is inevitable that when people speak and think in terms
of what responses education should make to challenges in the seventies
they draw largely upon responses that are current or are talked about in the
latter half of the sixties. For example, those imbued with the vision of the
"school park" in the sixties can be counted upon to propose that device as
a bright hope for the seventies. Thus, while planners may not draw upon
current emergences in concrete responses to the imperatives of our time
with assurance that those responses fit the challenges of the future, they
may be relatively sure that copious, volunteer, disparate, and potentially
frenetic efforts to respond are the natural outcomes from the perception of
challenge.

THE LOCUS OF RESPONSE

Responsive efforts are taking many forms. New corporate actors are
working at roles formerly assumed almost exclusively by local school dis-

* The author wishes to stress this point. Contributors to the volume entitled *Implications for
Education of Prospective Changes in Society* have depicted trenchant challenges and emerging
responses which are not adequately considered in Parts 1 and 2 of this chapter. It is hoped,
therefore, that the present treatment will stimulate—not substitute for—study of the antecedent
volume.

tricts, state departments of education, and individual colleges and universities. New strategies for hastening the adoption of at least the semblance of change have made their appearance. Older strategies have been beefed up. Agencies outside the executive units for education have had the scope and nature of their endeavors expanded. Structural modifications have been effected. Fiscal leverage has been used in ways which depart from accustomed patterns.

But the form to which special attention is drawn takes the shape of innovations within local school districts and individual colleges. The volume and geographic distribution of this type of response are impressive when measured against any previous norms. There can be little doubt that an appreciable percentage of local units have demonstrated strong validity for continued reliance upon the localization of educational control for the production of responses to new demands and possibilities. Some of our most promising leads toward constructive responses to the times ahead have their origins in free-wheeling inventiveness and initiative in local operating units.

However, most analysts of the current educational scene point to features of localized responsiveness in the mid-sixties which result in a less than sanguine appraisal of the trust safely to be placed in innovation principally through localization. Significant local efforts have characterized only a minority of all operating units. Development of new programs of service introduced from outside—under Title I of The Elementary and Secondary Education Act of 1965 (ESEA), for example—has preponderantly taken the form of following directions and recommendations. Vigorous and creative seizure of opportunities afforded by the availability of funds to invest in creativity has been disturbingly spotted. The supposition that numerous operating units are too pervasively weak to seize upon any opportunity to stir around has received additional supporting evidence, but presumably strong units have been highly variant in their degrees of responsiveness to challenge toward renewal. While one of the great phenomena of the past decade has been the relatively voluntary opening up of local units to outside influences and programmatic developments, an equally significant experience has been widespread loss of the potentials in such introductions at the point where outsiders let go and local effort takes over the necessary—and critical—responsibility for adding body to a skeleton.

To continue such recital further would risk distortion of the total picture of response through localization, by allowing highly constructive contributions of local units to be overshadowed by apparent shortcomings. Three conclusions are derivable from what has transpired on the local front in the sixties: (1) the local unit can be counted upon as a major entrepreneur in working out concrete responses to the challenges emerging; (2) the capacities and role-performances of a high proportion of local units are ill-adapted to work wonders, and the penetrating power of exhortations and even dollars to do so has proved disturbingly innocuous; and (3) the efforts achieving most widespread results are preponderantly ones which

transcend local unit boundary lines, or which are obviously wasteful of money and energy when conducted unit by unit. The inadequate performance of local units in the current scene has been dealt with at some length because this performance lies back of so many of the specific vehicles for response now to be described.

VEHICLES FOR RESPONSE

To treat vehicles for change ahead of the cargo of changes sought is thought necessary as an exposition device by this author, but it may be dangerous. Vehicles expedite, but a man bound for New York may not gain appreciably by taking a jet plane in the wrong direction instead of a train in the right direction. Vehicles make possible the acceptance of high-priority cargo, but automated handling of the mail does not assure the end of junk missives. Vehicles, however, affect what cargo can be delivered. John Dewey was neither the first nor the last to point out the inseparability of means and ends. We now describe some emerging vehicular responses.

RESIZING THE LOCAL UNIT

For local districts, size includes both population and tax base. Several states have announced, or are moving toward, another concerted effort to combine small districts into or with larger ones. The idea is that size correlates positively with strength and with economy of expenditures. However, these projections are along traditional lines—consolidation only with the consent of the consolidated, slow-acting impulsions to consolidate, and targets for size set so low that the new consolidated districts are likely to be as unsuitable ten years hence as the smallest districts of today. Yet, strong arguments are heard that such temporizing is no longer necessary. Some are proposing that it is both politically feasible and educationally desirable for any state, by state level action, to place almost immediately all, or practically all, children in local school districts that are adequate in size to meet modern needs.

Districting for metropolitan areas presents an especially grave problem. Merger of all districts serving a given area has been advocated, and undertaken in a few instances. However, most authorities have serious doubt about the wisdom of this proposal. They see size of population and resulting complexity of organizational machinery as the prime barrier to schools that will meet the needs of people. Hence, smaller districts-for-action (operating districts) are proposed, either as relatively autonomous units under an umbrella master district or as legally independent entities. Either way, the total metropolitan area would become the provider of the local tax support required by all districts. The obvious political and technological difficulties involved in fully effectuating such proposals should not, in the opinion of this observer, obscure the possibility of moving in the directions indicated. To do this will require new legislative implementations in most states.

In many sections of the nation, great open spaces with sparse population likewise present great problems connected with attendance areas.

However, experiences over recent years have shown that *these are not problems of districting* as such. In fact, the most notable advances in providing adequate education for widely-scattered children have come from situations when such areas are parts of districts which have urban components also. Geographical distance is rapidly vanishing as a pertinent factor in determining district boundaries.

For local units in higher and other post-secondary education, size refers chiefly to numerical student population—not to the fiscal capacity of some taxing unit. To be sure, in most states the arrangements for public junior and community colleges (and in some, for technical institutes) require significant tax support by a district. This significance is enhanced by the fact that, until recently, in many states most of the costs for all educational offerings which could not be transferred to senior colleges as baccalaureate credit had to be borne by district taxation. Further, high reliance upon geographically local initiative coupled with low minimums for the required size to start a public junior college resulted often in states "being stuck with" too-weak institutions serving too-small contingents of students, while metropolitan areas where need was greatest remained fallow. Corrective trends are apparent in the recent responses by states to the community or junior college imperative. Agencies of state government are being created or endowed with power to master plan the state for junior college districts. Such agencies are also being charged with some responsibility to exercise initiative and promotion in the provision of junior college services, and legislation is being passed to establish statewide, planned systems of such institutions. Thus, the present trend is toward establishing the public junior college as a part of the state's system of public higher education. However, there are some who argue strongly for unique and separate status for the system of institutions of this character.

The recent popularity of the junior college movement is due chiefly to the numerical demand for higher education. This same demand confronts some states with difficult decisions regarding the maximum size for existing colleges and universities, and with a companion concern as to whether new public institutions should be opened up. Alternative "answers" to these puzzlements are too well known to require delineation here. This author has neither the evidence nor the temerity to say that one response is emerging more clearly than others. However, one approach to working out the response is becoming highly visible among the various states. This is the establishment of some type of coordinating board for higher education to assist and advise state legislatures concerning what to do about institutional size and about providing for the establishment of new institutions.

FOSTERING ASSOCIATIONS OF UNITS

One way to magnify the effectiveness, to conserve fiscal outlays and to capitalize upon unique resources of each of several operating units is for them to associate themselves to conduct given endeavors—ranging from purchase of supplies to affording a doctoral program in a specified field. Long talked about and attempted, such cooperatives have received considerable impetus of late. Of particular promise are some councils of

school districts which cover a metropolitan area and engage in joint planning for that area. Also, some very interesting cooperatives have developed between colleges and universities in instructional and research endeavors.

Two weaknesses have made this type of endeavor fall short of the potential it appears to have. One weakness arises from the lack of promotional and executive machinery to bring such associations into existence and of legal provisions to get them established on a sound footing without cumbersome red tape or doubtful authority. The second weakness lies in the necessity of almost exclusive reliance upon financial contributions for basic operating costs to come from the budgets of participants. Few of these make advance provisions for such enterprises—resulting in the necessity to rob Peter to pay Paul. These weaknesses are mentioned because it appears possible that states could plan arrangements to overcome both, and thus utilize to a greater extent a very promising device.

COMPLEMENTING THE STAFFS OF LOCAL UNITS

One vehicle has been employed with striking success in local units whose responsiveness to recent context has been notable. This is the addition of staff members with targeted assignments focused upon adaptation within the organization. While small in relation to the total investment in staff, expenditures for what is commonly called "facilitating" personnel seem to have produced significant dividends in changes effected. Unfortunately, such action is open to few local operating units. The traditional patterns for allocating foundation program or other support dollars to local school districts, for example, seldom contemplate more than a bare minimum of staffing in facilitating positions. The same is true of provisions in legislative appropriations to many state-supported colleges and universities. Numerous other conditions make it difficult for the individual unit to contemplate, or afford, such upgradings of capacity. However, if this development is a desirable one it should be possible for states to devise arrangements to overcome some of the deterrent conditions.

Perhaps one type of staff supplementation for local units deserves special mention here. This is the addition of services from people outside the unit. For example, while in many instances college and university personnel are already overextended in rendering specialized services within local school districts, in most states there still exists a considerable reservoir of unused talent of this character. But suitable advance arrangements for facilitating and properly exploiting such opportunity may be missing. Similarly, scores of colleges and universities make only the most meager use of "outsiders" who could enrich or help reformulate their programs. The pool of talent engaged in industry, public service, and other fields of endeavor is only partially drawn upon at present. Those units that use outsiders are reporting significant contributions, and further implementation of the possibilities here may be in order for state planning.

INTERPOSING TRANS-LOCAL SERVICE UNITS

Scores of new entities have been established in the past five years to accelerate, implement, and/or direct the response of education to the

new times. The Regional Educational Laboratories formed through the United States Office of Education, the Educational Service Centers created in Texas and several other states, a great variety of special capital-letter centers at least temporarily made corporate under Title III of the Elementary and Secondary Education Act, and regional or area media service centers are representative models of this vehicle. Although lineal descendants, one supposes, of the intermediate unit long championed by some educators, they exhibit important differences from their ancestor. The idea is to incorporate a means to penetrate local operating units with changes deemed desirable, to hasten, as it were, the adoption of the necessary and possible in education. Some are conceived as producers of such necessities, others as jobbers, and others as marketers. More often, a single corporation is supposed to specialize in all three and, at the same time, provide and manage centralized services for schools or colleges in its area. Many view with trepidation the proliferation of such creations, and opinions as to what they can contribute differ widely. Many issues of structure, composition, and organizational status remain unsettled. Nevertheless, the yeastiness and obvious pertinence of this movement seem to argue that we have here an idea to be weighed seriously in laying plans for the future.

PROVIDING SPECIALTY PRODUCTION CENTERS

Several states have activated unified operations to produce, and provide a network of, instructional television. Many see this as illustrating a vehicle which has wide applicability and usefulness. While several school systems as well as colleges and universities in a state can be expected to tackle the production of materials and programs for computer-assisted instruction, a major, centralized, and specialized production center for the whole state (or several allied states) might shorten by decades the usual experience with attempting to elevate education by shoestrings. Already visible efforts in many fields—management data, test scoring, pupil data banks, and media production to name a few—give strong support to the hypothesis that concentrated speciality production units hold promise worth exploring more fully.

INCREASING STATE-OPERATED INSTRUCTIONAL CENTERS

In almost every state, some single state agency directs and operates a set of special-character schools or services. Some see in recent developments a tendency to expand the use of this vehicle as a means to (a) relieve local units of some responsibilities, (b) enhance the effectiveness of programs and methodologies required to meet special needs, and (c) speed up the process of responding to challenges such as manpower development. Whether such tendency exists or not, discussion of the possibility is prevalent. In weighing the suitability of this vehicle planners can hardly ignore previous experience in securing financial support, adequate staffing, and vigorous leadership for state-agency institutions. Nevertheless, the retarding conditions which existed in the past may be superseded in the changed times ahead, and some such "state schools" or special service units may have a decided contribution to make.

EXTENDING STRATEGIC UTILIZATION OF FINANCING

The late sixties have produced, as the prime fiscal response to per-
ceived challenges, a significant boost in the total dollars available for
educative expenditures. Without doubt this same type of response will be
demonstrably necessary in the years ahead. But of equal if not greater
significance to planners may be the experience and leads developing in the
instrumental use of financing. By instrumental is meant the strategic use
of additional funds in producing desired programmatic advances. The
great adapter and inventor of strategic devices has been the federal govern-
ment, but the program-focused or quality-focused employment of funding
as a vehicle to carry particular advancements has reappeared in many state
plans for school finance. This brief discussion merely suggests that
approaches have emerged or are emerging which warrant careful study
by planners. Specifically, some emerging approaches employed by the
federal government may require modification or even erasure; others may
be strong adjuncts to state strategy. Another important observation is that
the leverages exerted by state school finance programs do not have to
remain basically the same as they have been for years.

IMPROVING THE STATE-LEVEL IMPACT ON EDUCATION

Astute Use of the Political Process. Three categories of emerging ap-
proaches will be treated here. The first consists of arrangements to use the
political process more astutely and more effectively to open roads for
educational advancement. A dozen or more very productive efforts are
engaging members of the executive and legislative branches as serious
students of education—the annual Legislative Work-Conferences of the
Southern Regional Education Board furnishing one classic example. It is
significant to observe that state officers and legislators are making these
efforts succeed by eager desire to be studious about education. Within
states, some very promising new departures in government-sponsored com-
mittee and commission studies have appeared. More and more, legislatures
are having the opportunity to consider "educational programs" produced
by careful, collaborative endeavor involving many groups, and bearing
the power of organized backing so necessary in the way we have adopted
to get most things done in America. Other examples could be cited.

It would be a mistake to leave the impression that such developments
in the political implementation of educational aspirations have occurred as
the result of some predesigned master political strategy for an "education
party." Designers for the future hardly face that as a possibility. But
perhaps there are more modest avenues open to advance conjunction
between the educational and the political. It is from such conjunction that
the framework for most education emerges.

Strengthening State Departments of Education. The second category
of approaches consists of what states are doing about their state depart-
ments of education—a term used here to refer to the state-level agency
usually devoted primarily to elementary, secondary and vocational educa-
tion and involving a state board of education, a chief state school officer and

a department staff. Some states are doing nothing, and thereby are making a far-reaching decision—a decision *not* to rely to any significant degree upon state-level executive and developmental leadership, and to rely primarily upon the local units and national influences. Other states are encouraging state departments of education to go as far as they can in rendering new services, provided federal funds defray most of the cost and federal programs furnish the rationale for most new activities. There are chief state school officers who have proved extremely agile in linking federal programs with state interests. But there are also observers who prophesy that, in light of such developments, the state department of education is destined for a career as an executive branch of the "Federal Establishment" for education.

In marked contrast to both of these types of response are the efforts in a majority of the states. Here we find strong, and in many instances original and creative, efforts to develop a state department of education which will exert increased and more constructive influence upon the nature of *all* educational endeavor. These approaches embody some different organization, roles and functions for state departments of education; some marked enhancements of older functions, especially those categorized as leadership, development, and influential dissemination; and lessened emphases upon functions falling in the category of regulation and enforcement of compliance. Several such state departments are operating in a veritable plasma of widely-based participation in shaping directions and arriving at decisions, to such an extent that most school districts are in effect employing personnel to help shape state action in education. And, in these departments, the mid-Victorian image of the kind of personnel— and hence the wages to be paid them—is being superseded by patterns of staffing at least approaching those in the stronger school districts of the state. Obviously, developments such as these are signals of far-reaching policy commitments by the people of a state.

One can understand why some states can conclude that such commitments are not for them; those who have seen only a one-horse shay can hardly envision the possibilities in a fleet of modern transports. They cannot, however, overlook the necessity for some other arrangements to render the services needed. To most states, in the opinion of this reporter, the emergences of the sixties recommend the vitalized and potent state department of education—endowed with mandates and new provisions to effect change—as an object of plans. What cannot be recommended on the basis of recent experience is a choice to stay half-way between the two extremes.

Coordinating State Agencies for Higher Education. The third category of responses contains those occurring with respect to state-level agencies for higher education. Omitting description of prior—and still basic— structural arrangements, attention is directed to three recently emerging responses. One is with respect to the public junior college—entitled, preferably by some, the community college. The past five years have seen develop a fair-haired status for this type of institution as a major reliance

for discharging a state's desires with respect to post-secondary education. More than 100 new institutions have come into being and that many more are, in effect, on the drawing boards. Technical and vocational education has been cited as one of the strong components for the junior college, but this has not precluded birth of many separately-standing technical institutes.

High variability is encountered in appraisals of the extent to which the junior college has actually demonstrated its fitness for meeting the alleged demand for workers. But no one can doubt its effectiveness in enrolling students to pursue the first two years of baccalaureate preparation. This is coming to mean, in effect, that the junior colleges of many states constitute collectively 40 percent or more of that state's total provision for the lower division of baccalaureate education. This trend led to a pronounced tendency to treat a state's public junior colleges as composing a single system in which state agencies—as contrasted with the local junior college districts—call determinative signals for programs and performances. There has also been an accompanying trend to appropriate state funds for baccalaureate-transfer courses on the same formulas as those prevailing for four-year institutions.

In several states the most recent performance with respect to junior colleges has been to establish some of them as strictly state institutions—in support and in control—usually with some form of localized advice. This development heightens the problem of what state agency if any, other than the legislature, should perform master-planning, coordinative, direction-setting, and oversight functions. One response is to establish a separate board and professional staff for this purpose. By and large, junior college protagonists favor this choice. Another response is to complete the transition of the junior college into the sphere of higher education by assigning the functions enumerated above to the coordinating board for colleges and universities, treated in the next paragraph. Both responses require special liaison or other arrangements with respect to vocational-technical education, for which the traditionally responsible agency is the state department of education. This latter dilemma may be subject to better resolution than the traditional accommodations, but none seems to be currently emergent.

Establishment of state-level coordinating agencies for higher education antedated the sixties, but the past five years have witnessed a great upsurge in adoption of this structure. The statutory functions and wishful hopes delivered to recently-created agencies are rather uniform; producing a master plan for higher education development in the state, recommending with regard to the establishment of new institutions, defining role, scope and size for each state supported institution, recommending (by formula or budget review) the distribution of state appropriations between individual units, approving "new program" additions, serving as "the state agency for higher education" for federal legislation purposes, producing coordination and conservation of resources (whatever that means) in program endeavors among the institutions, establishing liaison between private institutions and the state system, and a few others.

Performance of most of these functions resides in concurrence by the state legislature with recommendations—and sometimes even with the operating policies—of the coordinating board. In a majority of the states, legislatures have concurred—and this bestows power on the coordinator. At times, legislatures have ignored or overridden recommendations or ministerial action, with resultant loss of effectiveness by the coordinator. Actually, sufficient time has not elapsed to test the hypothesis that coordinators can be agents for innovation and adaptive change in the educational programs of colleges and universities. Few have had opportunity in the midst of trying to set existing houses in order—that is, order as perceived by the coordinator—to get around to trying to do this.

Increasingly, the governing boards and administrations of individual institutions are coming around to the position that state-supported higher education, overall, will be better off with a state coordinator than without. The adjustments required in the processes of institutional leadership are major ones. This discussion should not terminate without reporting a considerable volume of skepticism that the coordinating board device, as presently operating, merits the popularity accorded it in many states.

Another state-level response with focus on higher education is in financing schemes. Adoption of the formula method for determining relative financial need among institutions has spread significantly. The very life and thrust of a state's great research-and-doctorate university depends often upon the formula recognition accorded doctoral semester hours, while collegiate universities have great stake in how well they can affect formula-makers in giving heavy weight to undergraduate credits—thus moving an old tension to a new arena. The formula approach is not viewed unanimously as a great contribution to the higher education scene; many defects and miscarriages are cited, but it is a prevailing response, whatever that signifies, and perhaps the task for the future is to "debug" it more completely.

The really impressive change in financing patterns occurring recently, however, is in sheer elevation of state appropriations to higher education. A 50 percent increase within the span of two years is about the average, far outstripping the growth predictable from enrollment increases and resulting, among other things, in much higher salaries for faculty members.

MOVING THE PROFESSION INTO THE GOVERNANCE OF EDUCATION

Reference here is to the emergence of "the" organization of professionals who are employees in the education enterprise as a potent shaper of the directions and performances of that institution. One exhibition of this power is chiefly a significant elevation of something long displayed. This increased power lies in shaping curricula, methodologies, materials, attentions and attitudes of individual practitioners; in changing the emphasis given to securing certain outcomes; in presiding over a considerable part of the continued education for workers. Associations of professionals have long been engaged in these controlling and governing actions toward education and the fact that few have realized the extent and determinative

effects of such actions does not make them minor. In recent years almost every semi-permanent instructional program innovation, introduction, or change in emphasis has the factor of professional association activity to thank for part or all of its status. This type of power exercise has been viewed with general approbation and accepted as normal.

But a second type is producing some consternation, considerable concern, and obvious challenge. It is called professional negotiations, collective negotiations, collective bargaining, and, in some quarters, unionization. Too well known to require description here, this route of action constitutes more than merely another pressure channel to plague the governors of education. It is a vehicle which will have, by all indications, significant effects upon the cargo which will be transported into the education enterprises of the future as well as upon how transport of any cargo can occur. Unfortunately, great segments of those holding current trusteeships seem to think that if they look the other way this phenomenon will go away. Indications are that it will not. An increasing coterie of educators thinks it should not. It may, they say, hold significant promise for otherwise unattainable advancements in education.

RECONSTRUCTING THE EDUCATION OF TEACHERS

It may seem strange to classify the education for teachers as a vehicle. The point will not be argued except to call attention to the fact that the education of teachers is obviously, whatever else it is, a means to an end. Teacher education—in all its horizontal aspects and its vertical-time involvements—has in recent years partaken of the ferment characterizing all education. Efforts toward its partial or sweeping reconstruction have certainly been as common and varied as in any other aspect of education. To identify what responses are sufficiently emergent and sufficiently pertinent to those who are concerned with planning is difficult. Clearly, the major burden of educating teachers is shifting to the post-entrance years, to what we used to call inservice education but what is now more appropriately denominated as continuous preparation. Also, rather clearly, the task of paying most of the cost of continuous education is rapidly shifting to employers, to the state tax system, and to the federal government.

Unfortunately, most of the burden of staffing what is now viewed as the really crucial part of teacher education is carried by overworked, harried, and woefully traveled college professors and a few staff members from local school districts and state departments of education. This is most unfortunate. Some rather significant and catchy innovations for continuous preparation have appeared, but far too few—and those which have appeared soon lose their punch in the hands of weary purveyors. Certainly, almost every conceivable organization is getting into the act of "sponsoring" workshops, seminars, short courses, institutes, and so on. All too prevalently, however, all are using the same people—most of whom are held primarily responsible by their employers for another job. This is no way to run even a branch line railroad, and continuous preparation is now the main line.

The employers of educators have been slow to adopt the approaches employed by industry in developing their leadership, change-agent, and management personnel. However, several very promising and—with limited numbers of patrons—apparently successful programs modeled after industrial training assignments and Executive Development Programs have appeared. This may constitute a lead for some planners.

The greatest new foray of teacher education is into high-volume spot preparation programs, such as those conducted for recruits as Headstart teachers. This is mentioned not so much because some very interesting styles of offerings have been developed to exploit short-term, intensive, and highly-motivated situations, but chiefly because spot-preparation rather clearly constitutes a continuing feature of professional worker education in the foreseeable future. Few states have any plans to assist their institutions and other agencies in gearing up to meet this need adequately.

For the undergraduate student preparing to teach, the most prominent emergence is mandated expansion of academic undergirdings. Taking the form chiefly of regulations requiring more semester hours in fields of academic specialization, these mandates have seldom done much to shape the content of specialization and to date no indicative appraisals of their results under the skins of prospective teachers are available. Also, several state governments have undertaken some direct financial support for student teaching, one among many motives being to enable private institutions to fare better in conducting this costly endeavor. Perhaps the most dramatic recent change has occurred in the elevating of the sheer caliber of many of the institutions upon which we rely for beginning teachers. The rigidity of certification and accreditation requirements—spawned in an era when forcing compliance with minimum expectations was a real problem—may be outmoded in an era when most institutions are capable of undertaking some well-grounded departures and when close alliances between professional associations and teacher educating institutions are growing. At least, some current approaches point in that direction.

Apparently, education in the future will be in the hands of a wide array of workers—not just the "teacher" to whom we have become accustomed. Some of these may require almost no preparation measurable in collegiate semester hours. Certainly, a wide variety of specializations will be both appropriate and necessary. A few efforts to meet this new look of the staff for education have been made in teacher education circles. But the emergence of statewide plans to define the approaching new look in terms of workers foreseen, and to develop the requisite training programs as needed is not yet a striking phenomenon, although one would think it should be.

CONTENT FOR RESPONSE

Now we shall devote brief attention to the substantive content of some of the emerging responses. It can be brief because illustrations already used in discussing challenges and vehicular responses afford a considerable overview of emerging concentrations in reshaping the actual educative programming of school and college endeavors.

REFURBISHED CONTENT FOR SUBJECT AREAS

Not all subject areas have received the sweeping overhaul given to the natural sciences in the past decade, but many have experienced considerable transformation. A common trend is to attempt reconstitution upon the basis of concepts to be developed, with the chosen concepts receiving developmental attention at each school level. The methodology used in developing such content increasingly features centralized efforts within a large territory—often national in scope—in contrast to the units formerly developed by local unit enterprises. Disciplinary scholars are now prominent in the reconstitution team. This approach has limitations and significant side-effects requiring thoughtful attention, as Goodlad[6] has pointed out. But it has achieved results which recommend it to planners. For them three points should be made: (1) the refurbishing of some areas in the sixties is not permanent—as already shown, it should occur over and over; (2) changes in society and other developments create the necessity for establishment of mechanisms for constant renewal, and particularly for mechanisms which are trans-local in nature; and (3) there is strong agreement that the social sciences should be the immediate subject for reconstitutive endeavor.

INTRODUCTION OF NEW SUBJECT CONTENT

Some of the introduction of content is in new school subjects made visible by title, such as sex education. Much more appears as new units under old subjects—urban life being a case in point. Still more appears not as didactic subject-content in the traditional sense but as directions given "classroom" endeavors, such as deliberate cultivation of motivations "to be somebody" for groups of alienated youth or such as searching the literature for values worth living by.

It should be clear that in this latter realm lies the most valuable "new" education demanded by the approaching times. Here is where concerted enterprises for curriculum development, equipped with creative and highly expert brainpower, may pay the richest dividends since it is apparent that reliance for these crucial outcomes upon teacher-by-teacher inventions and attentions has been relatively ineffective.

REVAMPED INSTRUCTIONAL PROCESSES AND SYSTEMS

It would be comforting to be able to say that recent developments demonstrate that the universal adoption of nongraded schools and team teaching would solve most of our problems of how to teach in the years ahead. They do not so demonstrate, of course, but these particular devices —and many others—do indicate that devoted and rigorous application of some approaches can move schools much nearer to constructive individualization of instruction and to the employment of *instructional systems* as contrasted with inspired—but often impoverished—endeavors to conduct *teaching acts*. Here is where the utilization of modern media holds great promise, if the results already secured in some locations mean what they appear to mean. Here is where independent study and inquiry is making significant contributions. The least that planners can do is to try to assure

a framework for schooling which will not inhibit further developments. The best they can do might be to design both framework and machinery to accelerate such developments. But it must be pointed out that such actions will play hob with our long accepted notions that school-to-school uniformity is next to Godliness.

Perceptive Diagnostic Evaluation

A cynic could say that the sixties produced more sophisticated talk about the necessity of evaluation, more technology for securing and processing trivia—with little advance in evaluation itself or in its usage. There is enough on the record, however, to cause this observer to be optimistic rather than cynical. We have a long way to go, but some thrusts in apparently profitable directions are evident. Because evaluation holds such a prominent position in any list of "musts" for the approaching decade, every little step is a triumph but big steps must be of prime concern to designers. What is urgently needed is more invigorated and perceptive diagnostic evaluation of the results of schooling and of the system conducting it.

Research

It is difficult to find either verb or adjective to go with the research into education conducted in the sixties. There was, in fact, far more research than in any twenty preceding years. Yet, in comparative scope and significance it is typically rated as miniscule. Also, its financing is typically viewed as a responsibility of the federal government. In these two views great danger lies. The pay-off from research is slow; great breakthroughs occur only after long and unspectacular laying of strong foundations in science and scientists; the size and significance of the job is too great for the federal government alone to undertake. It is probable that the educational research undertaken between now and 1980 will not enlighten appreciably the educational endeavors in that same period, but the real question is whether the post-1980 ages in education will remain dark because we did not tool up and develop a truly large research endeavor in our time. For designers of a state's educational thrust toward the future what they do to mount research can prove to be the greatest test of their statesmanship.

In Conclusion

This entire presentation has focused upon what lies ahead, with intent to assist those who will help to plan education for the future. It is with the *processes* of planning and executing that the challenge of the future will be met in deeds. While change desired and processes employed can hardly be separable in real life, it is indeed well that a look ahead is now to be followed by a serious look at planning itself and a serious effort to plan realistically for the future.

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CHAPTER 3

Planning and Change:

Design ⟶ Decision ⟶ Action

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What is the future to be like? How will we live? How *can* and how *should* we alter the conditions of living in that future? Such questions have held fascination for mankind and challenged his speculative fancy as far back as recorded history runs. Man has never ceased to wonder about how he can understand and affect his own future, and what he needs to do to prepare himself and his children for it.

Looking into the immediate future of our own society—the 1980's— is a challenging and perplexing venture. Many have seriously attempted to project this future, and one such look has been undertaken by this project in *Prospective Changes in Society by 1980*.[1] Deriving implications for education in this new world into which we are venturing is another necessary and exciting step. This, too, has been attempted by this project, as well as by others. (For example, see *Implications for Education of Prospective Changes in Society*[2]). Analyzing and describing the various ways that these implications for education in a new society can be translated into positive action for desirable change forms a third step in the process of designing education for the future; this also has been undertaken by many individuals and groups. (For example, see *Planning and Effecting Needed Changes in Education*[3]).

Now, what do we do next? How do we who constitute our society and shape its future (citizens at large, political decision makers, and professional educators) take what we know about this inevitably changing society—with each social change having in it implicit demands upon education, and each of these implications in turn demanding analysis and insight and action—and translate all of this new knowledge into programs that actually will beneficially shape the educational system and the total society of the future?

These are not empty rhetorical questions; they are urgent and practical questions which urgently demand practical answers. The answers to these questions cannot simply be promulgated; they must be searched out and worked out. And in order to find our way toward the answers to these questions—in order actually to bring about changes in education

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that will make it possible to meet the challenges of the new society—we must look at the five factors discussed on the following pages:

1. The social-cultural matrix in which we will be operating;

2. How to organize our educational planning for change;

3. How to utilize the most effective change processes;

4. How to employ our value systems in deciding what action to take; and

5. How to translate these decisions into action at each level of school organization.

THE CHANGING CULTURAL MATRIX

It would be both presumptuous and feeble to attempt to review and compress into this brief paper all that has been written about the changes that are taking place in our society.[4] But it is helpful to look quickly at a few of these changes which have promise of producing the most significant and profound effects on the process of planning for educational change, making decisions about these changes, and translating these changes into positive action.

SHIFT OF POWER IN DECISION MAKING

Not only in education, but in all facets of our national life, there has been a swift and seemingly inexorable shift of power in many aspects of decision making from the directness (and, in all candor, diffuseness) of local decision making toward the more centralized state level, and from the state level toward the federal level. Our historically cherished idea of *local* control in a *state* educational system may not actually have become a "myth," as some of the observers of the present American scene have said, but dramatic changes have taken place. Wynn[5], after commenting optimistically that "States still have plenary power over educational policy making; local districts still function as the operating agencies of the states; the classroom teacher still enjoys a high degree of autonomy in determining the scope of his instruction and his method," still cautions that "national enterprises tend to supersede state and local efforts."

No one who has studied the course of education for the past two or three decades can deny that many decisions that used to be made by the local citizenry through its local board of education are now pretty well locked into state-level decision making processes through legislation or administrative organization and practice. The states have—through their laws, their educational and governmental organization, and their appropriations—reasserted with force and vigor the historic constitutional position that education is primarily a state—not a local—function.

Even more dramatically at the national level (however much we may be inclined to discount the occasional self-righteous and self-protective cries of those who claim to have been oppressed by the federal bureaucracy and inundated by the flood of United States Office of Education (USOE) paper work—in a word, "federal control") there has been a marked in-

crease in federal participation in and even direction of educational decision making. For example, Masters[6] has pointed out that the federal government is now definitely and directly shaping national educational policies by setting national priorities in education (as expressed in legislation and appropriations and the constrictive if not restrictive guidelines that go with these federal interventions); through using new educational structures such as the Community Action Programs which bypass, supplement, or replace existing education institutions; and through attempting to define and assess educational objectives on an essentially quantitative basis, as in the program-planning-budgeting system (PPBS) now incorporated as a fundamental part of federal educational policy.

THE INCREASING IMPORTANCE OF PEOPLE

Of far more importance than how our society is organized (for educational decision making or for any other purpose) is the question of how we regard *people* and the place they play in that society. The most noticeable—if perhaps not the most momentous—change in the nature of the American society of people is the staggering increase in *numbers* of people whom we can confidently expect to be living in our country by the time we find ourselves in the 1980's. The substantial population growth will have obviously explosive effects on the educational and social systems: more people to be educated, more people demanding their share of the resources of the country; more people to claim a voice in educational decision making; more people to use—or to find inadequate—the education which they have received. Although the number of people who will in some way or another interact with the educational process is fairly predictable, the *results* of this rapid increase in the total population are almost beyond anything we can imagine. The problems stemming from the size of the population, however, are relatively minor compared with the problems which the changing characteristics of the population will bring.

For example, the school systems will be dealing with a much *younger* population—with half of the population under the age of twenty-five by 1970, and at the same time with an expanding segment of *older* population as the science of geriatrics is advanced and life expectancy increases. More emphasis on both early childhood education and adult education is clearly indicated.

And these people—the younger and the older and those in between—will obviously be doing different things and having different needs as changes take place in our increasingly technological society. They will need to be taught better use of leisure for the hours when they are not working and, at the same time to be taught and retaught a sequence and cycle of increasingly complex occupational skills that will enable them to adapt to the changing technology.

Not only will the total size of the population increase, with both more younger and more older people to be the concern of the educational system, but the special characteristics of these age groups will call for reappraisal of educational values and educational programs. As Campbell[7]

has commented, "There is a new crowd out there with whom we must talk."

And this new crowd, particularly, doesn't just want to be talked *to*; *they want to be involved*. The era of the last decade of "alienation" seems pretty well past. There is an extreme passion on the part of many for involvement in planning, decision making, and carrying out these decisions. The disadvantaged are demanding a voice in the planning and operation of programs for their own benefit; students are demanding a voice on faculty committees; teachers are demanding a voice in every facet of educational decision making in the schools. Though some may wince at the bluntness of these demands, and quail at the militant vigor with which these demands are pursued, no one can reasonably deny that the American people will become more and more involved in planning and deciding, not only in education but in all other facets of our complex society.

Moreover, the new American is not only talking more and demanding more, but also is thinking differently. There is a new value system—or what some might call in despair, a new non-value system—which transcends mere changes in population size, behavior characteristics, or other simple demographic features.

CHANGING VALUES

We live with and face increasingly a complex and paradoxical shift of traditional values that displays at once a growing realism and a growing idealism.

What might be called a more realistic outlook—which definitely affects educational planning and programming—is illustrated by the growing realization that we live in a real wo: , of cause-and-effect which wishful thinking will not change. For example, we are coming to realize that resources for carrying on desired educational programs, while rarely fully utilized, are not unlimited. We must, as Lecht[8] has pointed out, balance our national aspirations against our national resources, and allocate scarce resources in terms of agreed-upon priorities.

At the same time that we are realistically assessing what resources we have and how we want to spend them, we are also realistically appraising our pluralistic culture with the full realization that we are not dealing with the *good* versus the *bad*, the *desirable* versus the *undesirable*, the *simply-true* against the *simply-false*. We are dealing in our educational planning—as in every aspect of our life—with a host of variables, an almost unlimited range of options and alternatives for action. Plans are made and programs carried out not in tems of clear-cut "good" and "evil," but in terms of alternatives for action that may turn out simply better or worse than other alternatives.

We are realistic enough to see that our socie y is not made up entirely of clear-cut cause-and-effect reactions. Thus, we want our educational planning to give us not just the one "right" answer, but a variety of

potential answers to our questions and solutions to our problems. We are generally too sophisticated to believe in the single solution.

Our realism causes us also to recognize the multiplicity of forces that are involved in the interplay of people and events governing how some plan actually will work out. We no longer find it possible to believe that we live in a world where simple causes produce simple effects. The interplay of complicated economic, social, technological, and ideological factors that exert a kind of vectoring influence on any of our plans—pushing in from the outside to change the nature of the "cause" or pushing from another direction to change and deflect the course of events that we call "effects"—makes us seek for plans that have the built-in flexibility to withstand and profit from this multiple interplay of social forces.

Thus, we approach planning realistically, as realistic people. We do not believe that in education, or in any other segment of our social life, a completely "planned" society is possible or desirable; we seek a *planning* society instead. Thus, rather than a *plan* for the future we are looking for the parameters of a *design* for the future.

And in this *seeking for a design*, rather than a fixed plan, we exhibit again our built-in idealism. We are not satisfied with society or schools as they now are. We think that things could be different and better. In this very optimism is an expression of idealistic concern for a better world for ourselves, our children, and our fellow Americans. Sentimental as this may seem in a mechanistic age and a materialistic society, it is the way we feel. And since reality to us tends to be interpreted as "the world as *I* perceive it," this idealism is part of our realism.

Thus, we cover change—not change which is forced on us by circumstances or by authority nor what Blanke has called "random, reactive change"—but change resulting from *planned educational improvement.* As Blanke goes on to say:

> As technological change, national planning, and mass education became accepted, men began to change even their basic values. More and more people in each succeeding generation believed that further technological and behavioral change was inevitable. More important still, they believed also that *change was better than persistence.*[9] (Italics supplied.)

So there is a new spirit of change abroad in our land and in our social and educational systems. *We believe that change toward desired goals is a positive value,* and toward that end we are willing to take the necessary steps to organize and plan for change and make the necessary decisions to bring about the change.

INCREASING KNOWLEDGE AND BETTER TOOLS

It is fortunate that at the same time both the *need* for change and the *desire* for change in education are increasing, our technological capacity for planning and effecting change has also been greatly strengthened. The stepped-up pace of educational and social research made possible by the increasing numbers of students engaged in full time graduate study, the emphasis placed on research in most colleges and universities, and the

establishment of new federally financed research activities (Reseach and
Development Centers, Regional Educational Laboratories, and individual
and institutional research projects financed by the U.S. Office of Educa-
tion and other governmental agencies) have all operated to increase our
fund of knowledge. This knowledge, on which all effective planning for
change must be based, embraces a vast array of fields—psychology, so-
ciology, economics, demography and political science, to name only a few.
The more we know about our society and its people, the better we can
plan and the sounder our decisions will be.

Devices for the gathering, storage, retrieval, and dissemination of
this new knowledge-base, so essential to productive planning for change,
have been developed to a remarkably high degree of sophistication. The
computer, especially, has made it possible not only to utilize more fully
the knowledge already extant, but to develop tremendous amounts of new
information useful to planners and change agents. Perhaps an even more
important use of the computer lies in its capability of being programmed
to handle simultaneously an almost unlimited number of variables so that
predictions of what *might* occur under different sets of circumstances not
yet existing can be used to guide planners as they attempt to modify the
future of man and his society.

Yet neither the *need,* the *desire,* nor the *tools* for change actually
bring about change. There must be organization and planning and action.

ORGANIZATION FOR PLANNING

The activist in or concerned with education—the individual teacher,
school administrator, parent or other citizen, or an official at any level
of government—quite understandably wants change in a hurry. He is im-
patient with organizing and structuring for change, and is dubious of the
necessity of going through a long, involved sequence of steps in the change
process. He wants something different, and wants it now: put more voca-
tional courses in the curriculum; impose higher academic standards; re-
organize school districts; integrate the schools; establish a junior college;
fire the superintendent!

Appropriate or inappropriate as these suggested changes might be in
a given instance, they have one thing in common: they call for action, for
change, for doing things differently *to accomplish some end.* As such,
they are commendable. And no wonder those who see changes that need
to be made, and who want to get on with the job, become impatient with
extended or detailed plans concerned with how to bring about change.

But the kinds of change that these rapid-fire suggestions would imply
do not exhibit a high degree of planning or rationality. Rather, they are
examples of what was previously referred to as *random, reactive* change:
random selection of a given end and a route to achieving that end, without
reference to the interrelation of that educational change to the total educa-
tional and social system; or *reactions* to a given situation that does not
meet current needs or is not now accomplishing what is desired. Even

random, reactive change, if carried to completion, does make some difference; the problem is that it is almost impossible to tell whether change thus left merely to chance really makes a *productive* difference.

Organization for planning does not delay the change process; it both enhances and embraces it. That is, *organization for planning must both precede and accompany the process of change;* it simply cannot occur after the change process has been undertaken if it is to have the beneficial effect of improving the rationality and appropriateness of the change.

The characteristics of rational planning have been well summarized by Huefner:

> Everyone plans—but not very well. Most of our actions are influenced by expectations of the future and a written—or at least a mental—"plan" of how that future can be improved. But seldom have these plans been subjected to a critical evaluation of assumptions and objectives, a rigorous questioning of internal consistency, a useful analysis of realistic alternatives, or a careful coordination with other plans to which they must relate.[10]

The factors which this author says are often missing in what are allegedly "plans" for education are, of course, the very ones which make planning a rationally effective procedure. They require a carefully developed organizational pattern, lest what is called "planning" may become either mere *dreaming* about what ought to be or, as often happens, autocratic *imposition* of the ideas of a single individual or of a power group. Without careful organization for planning, it is very easy to slip into the pitfall of just talking about doing something, just doing something because it seems like a good idea, or doing the wrong thing because some one person or group "knows" that this is "right."

There are two fundamental steps in organizing for planning: (1) creation of awareness of the need for change, and (2) establishment of specific planning mechanisms and sequences.

CREATION OF AWARENESS

In the American educational enterprise, as in other aspects of our personal life and our society, there is often very little awareness of either the need for change or of the planning that must precede such change. Self-satisfaction and self-delusion about how well things are going are very common human traits. Unless clear cut and persuasive analyses—both of *where we are* in a specific educational program and *where we want to be*—are specifically set forth, there often is no awareness that any change is needed.

The possibility that change *might* take place often eludes our attention. Even when we are not satisfied with the curriculum as it is, the way teachers teach, or the way children learn, we tend to think that there is little or nothing that can be done about it. We tell ourselves that we are doing the best we can and, although we are not really satisfied with it, we see no possibility of effecting change.

Creating awareness of the need to organize for planning in order to bring about desired change requires that we translate *vague uneasiness*

about what is, and *vague hope about what might be,* into specific structures and mechanisms for bringing about change.

PLANNING FOR PLANNING

The specific mechanisms for getting planning started and making it effective vary a great deal with the organization and the people involved, the problems that are faced, and the structural level within the total social system.

For example, if an awareness both of the need for, and the possibility of, productive planning in a local school district is focused on an area of specific curricular change, a simple committee structure (properly supported as explained below) with the assignment and authority to carry out the initial planning may be all that is required.

At the state level, an adequate planning organization will require much more elaborate mechanisms. If the planning unit is concerned only with limited facets of education falling quite clearly within the province, say, of a state education agency, a group of experts under the chairmanship of a competent leader might meet the minimum requirements of organizational necessity.

But if the planning should extend into areas of education that involve other segments of the government, more specialists and more complex organizational mechanisms would of course be necessary. And if the planning is on a state wide, long-range basis (for example, a state plan for total manpower development on a comprehensive basis, as opposed to a plan for some one aspect of junior college technical programs) then a centralized professional staff, supplemented and supported by knowledgeable personnel from the related agencies, would obviously be needed.

In national planning for the attainment of educational goals, a progressively more complex and comprehensive mechanism involving a large specialized staff, substantial budgetary allocations, and even perhaps some administrative and review authority is necessary in order to make sure that the plans are not ignored.

There is no one "right" way, therefore, for a state to organize for educational planning.[11] Both centralized and decentralized state planning agencies, for example, have their advantages and disadvantages. A state-level comprehensive planning mechanism, cutting across and embracing every department of state government, strengthens the administrative control of all governmental functions, provides a common set of criteria and goals, and forces coordinated efforts. But decentralization—for example, giving the state department of education its own planning staff and planning authority—develops wider participation and more personal commitment, and brings to the forefront of the planning effort the more detailed information and specialized skills of the particular department involved.

Similarly, a permanent centralized staff of planning experts is more cohesive than a group of come-and-go consultants, but the latter may offer

a more highly-specialized degree of sophistication and a greater degree of personal detachment.[12]

Use of outside "experts" in educational planning at the state level—especially when they work with problems that the local school districts consider to be in their own province—often raises hackles and creates suspicions. But if the state education agencies are really doing their job in educational planning, *they will assume as one of their primary responsibilities that of helping local districts develop their own planning teams and planning expertise,* even if it means importing temporary "outsiders" to get the work under way and subjecting themselves in the process to a certain amount of criticism for "interfering."

Whatever the scope of the mechanism for planning—from the simplest local school district internal problem to the most complex problem of national magnitude—any organization for planning must provide adequate support of three kinds: money, manpower, and data. *Planning is* inherently time consuming and expensive—though *not as expensive as failure to plan.* It takes substantial amounts of money. Planning must be directed carefully and deliberately by expert and often high-priced people; it is not something that can be done by a person who is told to do a little bit of planning in his spare time. Planning requires the collection, assimilation, analysis, and interpretation of vast amounts of pertinent but complex data; planning done without adequate research is probably no more effective than any other off-the-cuff enterprise. *Money, manpower,* and *data* are essential parts of the support system for organized planning.

The specific steps to be taken in getting a planning organization into effective operation—so that plans move clearly from identification of needed areas of change, through problem resolution, to final decision making and action—depend a great deal on the specific situation involved.[13] Multiple approaches, many with specific variations, are doubtless necessary; the one major danger to be avoided is that of assuming that a single model or a single approach is the best.

A particularly seductive example of the dangers of adopting a single "model" of planning may be found in what is generically called the "systems" approach. In this approach[14] any segment of a society—the defense establishment, a business enterprise, a unit of government, a school district—is thought of as a "system" of which each subordinate part is a "sub-system". The "system" operates through the mechanism of receiving "input" and producing "output." In the very simplest concept, for example, the school receives *inputs* such as financial support, the professional services of teachers, the learning materials and experiences that are introduced into the system, and the children themselves. In turn, it produces educational *outputs* in terms of learnings, trained manpower, economic and other benefits to society, etc.

The real question is whether or not the systems concept—which is highly applicable in more mechanical and mechanistic arenas—is really appropriate, without major adaptations, to the school system. Culbertson has suggested that some of these new planning techniques based essentially

on the systems outlook have tremendous potential value but also certain built-in limitations:

> Even though many new techniques pertinent to educational planning have been developed in the last two decades which have promise for those interested in more effective state planning for education, these techniques do have limitations which need to be recognized. For one thing *they cannot make decisions nor can they replace judgment on the part of decision makers.* Rather, the techniques can aid and support decision makers by providing pertinent data on alternative programs and courses of action. *The decision maker, as a rule, will need to be responsive to values not encompassed by the planning techniques.*
>
> Secondly, since the various techniques involve highly rational procedures, *efficiency may tend to be the value which is more forceful in shaping choices.* To be sure the planning techniques of today go beyond those of fifty years ago when the so-called "Cult of Efficiency" in education was rampant, in large part, because these techniques focus both upon costs *and* benefits. However, *since operations research and PPBS emphasize precise measures of outputs, there is a tendency for planners, when using these techniques, to be influenced more by economic measures simply because other measures of values* (e.g., human dignity) *are extremely difficult to achieve.*
>
> Thirdly, *the techniques to be employed require specific measures of output.* In education it is well known that we are only beginning to make progress in achieving precise output measures. In the first place, it is not easy to define educational goals with sufficient precision to make accurate measurements of output possible. In the second place, even if goals are precisely defined, their number, variety, and nature are such that measurement is not easy.
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> Fourth, it should be emphasized that the new planning techniques represent a special way of thinking and a rigorous approach to problem solving. The techniques have their roots in such disciplines as economics and mathematics. Therefore, they should not be viewed as simplistic procedures which will produce incontestable conclusions. Rather, *they require a highly disciplined way of thinking and the courage to examine assumptions and to respect empirical data.*
>
> Finally, educational planning based upon manpower requirements emphasizes the instrumental aspects of education. Education is seen, in other words, as a means to achieve important economic and social goals, usually of a national character. *The full development of the unique talents of individuals, as an educational goal, would be considered only incidentally in the manpower requirements approach.* Consequently, *fundamental educational goals,* which are not so easily defined, *could be neglected by planners using this approach.*[15]

The above cautions are not meant to suggest that a *systematic* approach to planning should not be used. Quite the opposite is true. Careful and systematic planning does not necessarily become mechanistic, nor does it kill the spirit and decrease the human concern. Rather, although organized planning calls into play such an intermix of forces that additional conflicts will come about—the conflict between competing viewpoints and competing demands upon the allocation of scarce resources may actually increase—planning opens up so many new possibilities of ways of doing things that the *options* are also increased. Planning, therefore, increases both conflicts and options.[16]

But all organization for planning is useless unless the planning is directed toward change. The process of bringing about change demands our next attention.

THE CHANGE PROCESS

How to bring about change is a problem which has entranced and baffled researchers and practitioners for a long time.[17] Scholars and practitioners alike disagree on the definition of change, on the theories and strategies of change, and on the most effective ways for the "change-agent" to work with his "client-system."

The ordinary person concerned with educational change—the school man, the lawmaker, or the citizen—often finds himself understandably lost in this morass of technical theory. Granted that good theory always underlies the best practice, and that much highly technical research in the change process is needed, when it comes to producing specific desired change for a specific educational system these all-encompassing theories of change processes may not be found very practical in a particular situation.

Goals for desired change are essential, of course, and a clear sense of direction for change is vitally needed. Theoretical considerations loom large in developing both goals and directions, but a *detailed theory of the change process itself* may not be immediately essential. All inclusive "taxonomies," "models," "paradigms," or "configurational theories" of the change process do not seem to some to have a great deal of immediate utility for many people concerned with educational change. These are valuable, all right, but the processes and techniques and strategies of change as global models may be less useful than some specific suggestions.

For example, even the widely discussed Clark-Guba systematization of the change process into *development, diffusion,* and *adoption* is at once too complex and also too simplistic to fit many real life situations. Not all changes go through every step of the pattern from the development, invention, and design of a new educational idea, through its diffusion by the use of techniques of dissemination and demonstration, to its final adoption or adaptation, including the trial, installation and institutionalization of the idea in the school system.[18] Some of these steps are sometimes quite legitimately omitted; at other times, different and divergent steps enter into the process of bringing about educational change.

Even attempting to describe change as something that takes place in a series of discrete steps between the time a policy is formulated or a problem identified and a final decision is made or action is taken does not do justice to the varieties and complexities of what happens in the change process.

Therefore, perhaps instead of trying to think through and set forth another inclusive series of sequential steps which would attempt to define and explain the change process, it would be more fruitful to look at some of the elements involved in the change process—elements that can be either the source of tremendous impetus towards change or real stumbling blocks in accomplishing change in the educational system.

Part of our common intellectual heritage is a general acceptance of
the Baconian concept that "knowledge is power." Unfortunately, how-
ever, *merely knowing,* in the sense of developing or accumulating data,
*is only one aspect of the power that is needed to bring about successful
and rational change.*

Certainly, it can be readily seen that a good bit of educational change
that can be described as the random, reactive type of change discussed
earlier in this paper results from allowing or inducing change without
an adequate knowledge-base. Detailed data about both the *current* and the
desired educational situation are of course necessary before we can even
identify the problems that may be amenable to planned change. There is
not much use, for example, in even considering a change in the method
of state level school support until we know what the present tax bases in
a state are; how the assessment and other tax producing practices are
administered; how effectively local effort is coordinated with local re-
sources; the nature and availability of new tax resources; and the actual
objectives of the *desired* educational program. Likewise, new proposals
for establishment of vocational-technical education cannot be made on
any rational basis without a clear assessment of the strengths and weak-
nesses of the present program in the light of the objectives and demands
of the occupational structure projected geographically, demographically,
and economically. As another example, any proposed change in curriculum,
whether at the district or state level, cannot be intelligently undertaken
without a careful assessment of *present* and *future* curricular goals, ma-
terials, teaching methods, organizational and administrative practices, and
the actual or potential availability of teacher manpower.

Thus, any useful and productive educational change must be preceded
by planning devices and mechanisms that will yield a maximum of usable
data about the educational system and all the persons effective in, and
affected by, the system. And the rather simple word "data" must include
not only routine facts and figures, but educational goals and principles
as well, for all of those are information—the knowledge-base from which
any change is projected. These data must be highly selective and carefully-
correlated; for while there is probably no such thing as "too much data,"
*it is quite possible to amass and disseminate so much irrelevant data that
only confusion results.*

Data are needed, then, at every step in the change process: assessing
the present problem; defining future objectives; examining alternatives;
and formulating action programs. Yet these data can be both misleading
and dangerous.

First of all, it is difficult to define what data really are valid. Chin
includes in his concept of "valid knowledge" not only research findings,
concepts, and theories, but ideologies and utopias, though he confesses
somewhat wistfully that he ". . . would much rather define valid knowledge
solely as that created by social and behavioral scientists . . ." He con-
cludes, however, that since valid knowledge is not solely that which a

particular academic discipline considers true, ". . . the essential quality of valid knowledge is that the holder 'knows,' as a 'proven' relationship, some statements about the social, and human processes that are being acted upon, or utilized in the process of change."[19]

It is to be noted that the author cited finds it necessary to place the words "knows" and "proven" in quotation marks, for the real problem is that valid knowledge *cannot* be entirely known or proven. It cannot even be simply *produced*, although Blanke[20] has maintained that "scientific research is concerned with the *production* of knowledge through the projection and testing of theory." (Italics supplied.) In actuality, neither science nor any other human activity "produces" knowledge in the same way that a machine "produces" products.

Therefore, we are left with a dilemma: in order to plan for and effect rational change, we need a great deal of knowledge but we have no very good way to define what constitutes valid knowledge.

There is no easy answer to this paradox; if there were, it wouldn't be a paradox! About the best we can hope for is to bring together all of the pertinent available data on the educational area in which change is being considered, knowing at once that we will never have all of the possible data and that even if we did, data alone would not answer the questions. Data can provide definition and clarification of the issue, articulation of the problems, and suggestions for solution. But the *answers,* as will be discussed below, must be essentially value judgments.

USE AND MISUSE OF GOALS

If you don't know where you are going, you can't get there. But goals and objectives, like data, have a slippery way of intruding into as well as encouraging the process of change. A couple of illustrations will suffice.

First, goals are always multiple, often contradictory, and usually not completely attainable. If the process of change is delayed until there is complete agreement upon goals, and the way toward those goals is clearly seen, change will be inordinately delayed. And if we wait until there is complete consensus on educational goals—at the local district level, at the state level, or the national level—we will wait until Domesday. Goals, like data, do not give us ultimate solutions to our problems; they can be used in a step-by-step way to point toward and lead toward desirable directions of change. But, alas, they can never clearly become the entire director of the change process.

Moreover, goals can look good but turn out badly. Much of the current innovation in education is ostensibly directed toward the reputed goal of desirable educational change, but the real goal of many school systems is often money. Hencley has noted that

> ... when funds are made available at state or national levels, if school districts can meet or conform to criteria set in legislation or administrative regulations, we have a *remunerative power strategy* in operation. Indeed, external grants of money under legislation such as the National Defense Education Act (NDEA) and the ESEA may be sufficient to trigger massive changes in education.[21] (Italics supplied.)

Nyquist notes that " . . . a major strategy in effecting change is the use of dollars." He goes on to say:

> An emergent function of a state education department is to act more like a combined management consultant firm and philanthropic foundation, able to provide consultative services on a wide variety of problems and to make available money to bring about correction and change on the basis of formulated plans judged by adopted state criteria.[22]

Nyquist implies, but does not directly state, that these adopted state criteria are the ones for which money is available—so the *criteria* as goals tend to become subordinated to *dollars* as goals.

The goals or objectives themselves *may become a manipulative form of management of the educational process,* not only in a monetary fashion but in other ways. Chin decries "management by objectives," quoting McGregor as saying "the essential task of management is to arrange organizational conditions and methods of operation so that people can achieve their own goals best by directing their own efforts toward organization objectives." In other words, the goals of the organization subtly become the goals of the individual—and the organizational goals may or may not be legitimate ones. Chin lists this imposition of organizational goals as one of the "power approaches" to effecting change, saying:

> In most general terms, the imposition of power alters the conditions within which other people act by limiting the alternatives or by shaping the consequences of their acts, or by directly influencing and controlling actions.[23]

What we see in these illustrations is a clear employment of a goal—money or power—as a management tool that is often used to the detriment of the people involved—and in the particular case of a school, to the detriment of the children involved.

Thus, when the goals imposed by money or strategy get in the way of values in the change process, goals have themselves been misused. It was pointed out earlier in this paper that one of the fundamental difficulties with assessing educational change in terms of "inputs" and "outputs" is that the outputs are likely to be expressed in terms of organizational and institutional objectives (including money and power) rather than in terms of educational values.

CHANGING ATTITUDES AND CHANGING BEHAVIORS

Whatever strategy or technique of change may be employed, or whatever sequence of steps may be used in the change process in education, *nothing much happens until people change.* It is true that there must be organizational mechanisms for change—local district and state and national planning committees or commissions, for example; there must be supporting devices for change—money, time, and manpower—but all of these make very little difference unless there is built into the process of change a way both of involving the creativity of those who must plan and bring about change and of lessening the rejection of, and over-sensitivity to, change which is all too common when change is imposed from the outside. Thus, while we cannot ignore the *technical* strategies of change or

the *organizational* strategies of change, we must concentrate most of our efforts on changing people.

Many authorities have pointed out that one of the greatest deterents to change is the fact that most people involved in the educational system— or anywhere else in our entire social system, for that matter—have a strong natural resistance to change. McPhee comments that ". . . our individual enthusiasm for a specific change is usually inversely proportional to how much we ourselves must change." He goes on to say:

> Perhaps one of the most crucial barriers . . . (to 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.[24]

Fortunately, however, the use of the first technique mentioned above— that of unshackling the creativity of people involved in change—tends to resolve the problem of resistance offered by those who must themselves undergo change if they are to be part of the change process. Unfortunately, we cannot really remove all of the threatening aspects of change: people simply like to do as they have always done. But we can overcome the most severely traumatic aspects of this threat, in many instances, by encouraging people not only to become *involved* in the change but also by encouraging them to become positive *contributors* to the change.

This is very different from saying that we involve people in the change process simply because it is an acceptable strategy or because it is the democratic thing to do. We involve them in *every step of change*—data collection, formulation of objectives, analysis of problems, diagnosis of the causes and remedies of the problem situation, suggestions of alternatives, try-out and dissemination of new ideas—that is, in the whole range of the possible steps in the change process. We do this simply because change works best and fastest and is most likely to be effective and lasting when we work that way. So involvement of people in the change process does not become a barren technology or a maudlin sentimentality; it becomes a practical technique in the most effective bringing about of change in the educational system.

MAINTAINING THE OPTIONS

A prominent Secretary of Defense once said that the function of the U.S. military establishment was not either to wage war or to defend the country; it was simply to maintain our national options. Something of the same might be said of the change process. The very reason for encouraging educational change is, strangely enough, both a result and a process. We want to change not just so that things will be different from what they are now, *but so that they may be different again.* If change becomes just an organizational end-result, without in the process also creating the feeling that further change is something that should always and continuously be occurring, the organization becomes subject to what John Gardner has described as "organizational dry rot."[25]

One way to preserve the options in change is to provide for not just one mode of action, but for a series of choices from which a decision can be made. Then, if a single solution to the problem for which change is sought becomes the one most usable at a given time, well and good; but the door is not closed to the selection of another option either as a series of parallel actions (We'll do both this and that, depending on the circumstances) or as a sequential alternative (First we'll try this, and then we'll try that). Preserving options and alternatives is a final, but inherently not a conclusive step in the change process.

Moreover, as Gardner has pointed out in the article cited above, change is ideally a kind of self-renewing process. One of the best ways to evaluate any educational change is not in terms of whether it brought about the desired results at a given time, but whether the change itself has in it the seeds for continuing self-renewal of the educational program. If a change simply yields results—that is, "gets" results—it likely is a change down a dead-end road. But if the change *begets other change,* then it can probably be evaluated as a successful outcome of the change process.

VALUE SYSTEMS: HOW DO YOU DECIDE?

Throughout this paper, there has been frequent mention of the importance of a system of values in the change process. *Every change is directed toward some end—some goal, some objective, some priority.* Each of these ends of the change process involves the adoption (or rejection) of some set of values: perhaps not a complete "value system," but a belief that some thing, activity, style of living, or way of behaving is superior to or of less worth than some other.

Any change in education—a new pattern for increased school support, a change in the teacher education program, a shift in curricular emphasis, an extension of opportunities in higher education, or whatever—may be predicated on certain data and analyzed in terms of practicality and feasibility, but it is ultimately found or determined to be of *worth.* It can be assessed in what might be called purely fiscal terms, purely political terms, or purely educational terms — but the change itself must always be *evaluated:* that is, it must be subjected to some kind of value judgment.

The question, then, becomes fairly clear: How do we decide what to do? What are the bases for the necessary value judgments?

With all of the desirable specificity and sophistication of various methods of planning for and bringing about change, various change mechanisms, change techniques, and change strategies, no way has been found to evolve what one author[26] recommends: a "value free science" of change. Much as we might like to have the specificity and assurance of a clear-cut *science* of change, the change process and the ends of that process inherently involve value judgments. *There can be no "value-free" science of change.*

Even changes involving setting priorities on the basis of such apparently clear cut judgments as that of what the economists would call the

"rational allocation of scarce resources"[27] involve value judgments about what is a "rational" balance between our resources and our aspirations in education.

Value judgments infuse all attempts at the establishment of priorities. Even decisions about which educational problems will be initially *attacked,* much less *solved,* involve what Blanke has called "political" decisions, but these political decisions are of course value decisions as well. Blanke goes on to say:

> Many criteria are used to establish such priorities. One criterion is the importance that society places on finding a solution to this problem. A second criterion in the establishment of political priority is the availability of resources which can be put to bear on these kinds of problems . . . A third criterion focuses on the probability of a problem's solution. Not only must political leaders be assured that development resources for problem solving are available, but they must also be assured that these resources will, in fact, be likely to come up with a solution.[28]

Unfortunately, in deciding what change is of value in the educational system, the priority basis most often used is that of money, or money in terms of some perhaps undefined result. As indicated previously, this emphasis on making value judgments on a cost-benefit ratio basis is one of the inherent weaknesses of many of the proposals relating to newer educational programs. Masters[29] has pointed out that under current federal administrative practices, the General Accounting Office will now be concerned not only with whether or not monies have been expended in accordance with government regulations, but with the evaluation of the programs themselves. Thus, the value judgment about a program presumably will be made from essentially an accounting viewpoint.

It can clearly be seen, therefore, that not only do value judgments infuse every educational change-decision as made, but often that the values used are themselves either simplistic values like the cost-accounting approach, or more complex but undefined values like the "rational" allocation of resources to specific programs. Perhaps even more dangerous, the values may be those that are described as expedientially political—that is, what will work or what we think we can we get away with at a given time.

ALTERNATIVES AND IMPERATIVES

The suggestion is sometimes made that the way to resolve the problem of value judgments—since values are complex and often contradictory and conflicting—is simply not to make the judgments at all. That is, instead of specifying a particular educational change as a goal, those in charge of planning for and bringing about change present for consideration an undetermined number of alternatives from which the clients may choose. In an earlier paragraph, we applauded the use of alternatives as a way of maintaining options—a way of keeping from being locked into a certain dead-endedness that mitigates against further change. But simply supplying alternatives, as a way of avoiding value judgments, is inadequate.

It is fairly simple to come up to the final step—or one of the final steps—in the process of making change and simply say at this point: "Look, there are three or four ways to do this, depending upon what you

(the administrator, the legislator or the people) really want. *You* make the choice."

For example, a school-district curriculum committee can work out cooperatively and democratically a new curriculum in social studies that offers two fairly clear-cut options: an emphasis on traditional academic knowledge or an emphasis on direct involvement of the learner in the experiences of his society. The committee could stop there, leaving to the administration, the school board, the individual teacher, or even a lay citizens' committee the decision about which of the alternatives would be used. A state education agency could develop alternative ways of organizing vocational-technical education, and render a report to the legislature which sets forth these alternatives or options in clear-cut fashion, discharging their duty—they think—when they say to the legislature, "Here are several alternatives; you, as representative of the people, make the decision."

The problem with leaving the change process at the alternatives-only step is that, while options are preserved, no decisions are made. And no basis—no real basis—for decision has been given. An unevaluated range of alternatives offered for the solution of educational problems is unfortunately analogous to the completely free-elective curriculum; it gives no guide for the choices to be elected in the curriculum, and no basis for making such choices. As another analogy, it is like the cafeteria approach to nutrition: just give the youngsters a choice of anything they want to eat and hope that nutritional balance will be maintained. Simply *providing alternatives evades the crucial problem of decision making.*

Alternatives can be derived (as the project, *Designing Education For the Future,* has shown with remarkable clarity) from the implications which the future has for education. So far, so good. The reasoning is somewhat like this: society is changing, and therefore the changes that are known or expected to occur in society generate certain implications for education— or at least allow reasonable inferences to be drawn. Out of these implications or inferences come a host of alternative modes of action. From those alternatives, in turn, one or more segments of society—citizens at large, political decision makers, administrators, teachers, and even students—will be given a choice of both the means and the ends of education.

As we said above, so far, so good. But *some alternatives,* in any society at any stage of change or development, *emerge as imperatives.* There are simply some things that are too important to be left either to chance or to random-choice. For example, our society can no longer afford an education that simply offers an option between isolationism or internationalism; we can no longer risk the free choice involved in the option of the historic separate-but-equal educational facilities for the races; we cannot simply give the individual student the option of electing an education which prepares solely for a world of intellectual leisure in a world in which everyone must—one way or another—work to earn his living. *Historic options have been resolved into urgent imperatives.*

Back again to the original question of this section: How do we make the choice? How do we decide what to do in directing educational change?

There is no easy answer; but there is a necessary answer: *we have to make value judgments.* And these judgments can neither be delayed nor denied.

Decision making, of course, is at least on one level a form of p. :blem solving, and certain sequential steps in such decision making can be clearly detailed. Dewey's familiar sequence of problem solving steps is an example of one kind of decision making.[30]

Decision making can also be described as a kind of a logical executive or management function, in which one starts with a general definition of the principle or policy involved, proceeds through such steps as the clear specification of what the decision has to accomplish, moves finally to converting the decision into action and later, through testing out the results of that action, reformulating the decision in terms of how well it has worked.[31]

These two types of decision making—one essentially a pragmatic problem-solving approach and the other essentially a deductive process which moves from general principle to specific application—actually represent rather theoretical poles of a single continuum. That is, there is perhaps not as much difference between the inductive and the deductive process in decision making as might at first appear. In a previous article[32] I have suggested that the ordinary decision is most likely to be inductive: one moves from a specific problem into a generalized area of solution, rather than from a general principle to a specific problem-solution.

Whatever general approach or specific methodology of decision making is used, we still can't get away from the value question. A tendency to ignore the question of values in the change process has been noted by Chin:

> . . . These value issues tend, however, to become imbedded into 'technical' concepts in the professional field so that the implications of the assumptions are not seen. For example, health, the educated person, adjustment, culturally deprived, and delinquent are seemingly technical concepts in the professional field, but in fact bury out of sight a *host of value judgments.* (Italics supplied.)

Some overriding ideology is needed, as Chin further remarks:

> . . . It is interesting and somewhat disheartening to note the relative absence of an out-and-out ideology, the rousing and beckoning normative statements of what ought to be, and the visions and the utopias—whether these are based on psychology or on personality theory, or on political or philosophical assumptions. The absence of ideology in current society has led to the presentation of future directions as 'technical' questions, not as matters of values and preferences.[33]

What are these values; what are these preferences? Is there any satisfactory answer? Perhaps not, but one may be attempted: *whatever values there are in our modern changing society*—and whatever values there are likely to be in the society of the future—*are ultimately relative rather than absolute.* That is, they are a host of interrelated values which do not come to us from some outside or "given" source, but values which are relative to still other values. This sounds inordinately complex, and to some people it sounds dangerous and depressing; for if values are relative, where are our stand. ds—our intellectual standards, our social standards, our moral standards?

It is perhaps comforting to note that even relative values must be relative to something. It is impossible to "relate" without relating *to* something. And that something is the general ideology—the general framework of those things which are perhaps not *ultimately* important but the most important values *that we as human beings can know out of human experience.*[34] Really, there is nothing so startling, or especially frightening, or at all disheartening about a relative value system. Most of our essential, cherished values have been ones expressed in relative terms. The golden rule, whether found in the Christian or any of the other great religious traditions of the world, is expressed not in terms of specific do's and don'ts, but in terms of human behavior *relative to other people;* and that behavior, too, is only a relative matter—doing unto others *as* one would have others to unto him.

So the value system which must underlie even thoroughly scientific and technical efforts in the change process is, in its last analysis, not really a "system" at all. It is an outlook, a set of beliefs that cannot claim to be exclusively rational, but which are rooted in a view of the rational nature of man, and hence disclaim as appropriate human behavior the irrational, the merely chance or random behavior, preferring instead a firmly-held if not always clearly articulated view of the ultimate importance of man as a member of a society of man. *The prime value, in short, is the value of humanness.* And it is in relation to human worth and human value that the decisions about educational change must be made. Ultimately, as human beings, we have no other guide.

IMPLICATIONS FOR "LEVELS" OF GOVERNMENT AND OF EDUCATION

Moving from the discussion in the preceding sections of this paper (through the stages of (a) a brief analysis of changes in society for the 1980's, to (b) the organization of planning for change and the factors involved in the change process itself, into (c) the seemingly-abstract but actually very practical question of what values we are going to use as criteria or bases for change) brings us to the logical next question: What do we do now? And even more specifically: Who does it?

It is rather comforting to discuss change generally; but setting one's self—or somebody else—to the actual job of bringing about change is a much more uncomfortable task. But if educational change is to be effective in the light of the developing needs of our changing culture, somebody has to do the work. Somebody has to get the job done—to make the change. And those "somebodies" are people with very different tasks: lay citizens, political decision makers, educators, and—in many cases—the students who are at once the end and the means of much of the process of educational change. And those several classes of persons are, in the structure of our society, located in various places: at the local and regional levels, the state level, and the national level. Furthermore, they are situated in different kinds of organizational settings: the local school district, the county or intermediate organization, the state education agency (or the state legislature or state administrative offices), and in various segments of national organizations—professional and lay as well as governmental.

Pinning down, then, the implications of all that has been said about the change process for the various "levels" of people, governmental structures, and organizational structures is no easy task. In fact, it probably cannot be done; there is no way to draw a chart, or to set forth an organizational table, or to list in sequential steps just who does what at each "level" of person or organization involved. But some very specific and perhaps helpful things can be said about the implications of the change process for these levels. From these implications can be derived some action programs.

INCREASING POWER THROUGH SHARING

Even in a society built on the principle of division of labor—differentiation of functions in order to accomplish specific tasks—there is no possibility of completely dividing the functions of the various "levels" of education. Certainly, we can identify and emphasize certain distinctive functions of, say, the local, state, and national segments of our educational system. Keeping these relatively clear-cut identifications of duty and allocations of responsibilities clearly before us defines the task, prevents waste and duplication of effort, and brings some sort of systematization into the notably unsystematic education enterprise.

There is a great deal of disagreement in American education today about where the real responsibility for planning and effecting change primarily lies. There are those who see as our most important current revolution in education the growing interest in innovation at the local level—down at the grass roots where education really happens. Others suggest that the major thrust for educational change must come through state level educational agencies—"strengthening state education departments" has become almost a shibboleth in American education (one rather generously, if not amply, supported by Title V of the Elementary and Secondary Education Act (ESEA)). As Blanke has said:

> Although new development organizations like national curriculum projects, regional educational laboratories, research and development centers, and merging industrial complexes are already instituted, *I have concentrated on the old line state and local educational organizations* because, in the final analysis, they will decide whether any improvement system will work.[35] (Italics supplied.)

Despite the assurances given us by the author just quoted, there are many who believe that the old-line agencies, state and local, will *not* work any major improvement in education; those persons generally place their faith in the newer innovative centers located in educational complexes and/or in the federal government itself. And within the federal governmental structure, there are many who look not to the established "educational" agencies but to new quasi-educational agencies such as the Office of Economic Opportunity (OEO) to bring about any massive improvement in education.

It would probably serve no useful purpose to take sides in this debate when it clearly is not a question of which of the levels of educational organization operation is most important. There is not a certain amount of power that has to be divided up among competing enterprises. The world

of power is not a closed world, but an open one. Adding power some-
where does not diminish, but rather tends to increase the power of other
units of educational government.[36] Nor does power remain static because
it is divided and enlarged; as Nyquist[37] has pointed out, "Joint efforts and
mutual development of new activities *enlarges* the power of states and
localities—not *diminishes* it." (Italics supplied.)

What is needed, then, in the pluralistic society and pluralistic edu-
cational enterprise which we have, it is not to cut anybody down to size
or build up somebody else; *what is needed is the joint effort of every
segment of the society,* an effort which increases the power and enlarges
the opportunity for each of these parts of our educational organization.

NEW PLANNING ORGANIZATIONS NEEDED

It is not enough just to suggest that the joint efforts of one educa-
tional level strengthens all of the levels; *ways must be found to make these
joint efforts integrative and effective.* New planning organizations are
badly needed, and perhaps the level at which formal planning mechanisms
can be most effective is that of the state.

One author[38] has defined the functions of a state level planning mech-
anism as including the following: identifying goals, clarifying policies,
setting priorities, coordinating multi-agency involvement, mediating dif-
ferences, considering alternatives, deciding on a single comprehensive plan,
and advocating acceptance of that plan. Each of these steps is extremely
complex, even in situations where such a state planning mechanism (con-
cerned either with education solely or with all levels of state govern-
ment) has been or can be established. Certainly, if it is to coordinate
multi-agency involvement, such a planning mechanism should not be lim-
ited solely to educational matters. And if it is to set forth goals, policies,
and priorities that would ultimately be adopted by all segments of gov-
ernment within the state, it would have to be closely tied to regional and
local activities and agencies. Nevertheless, despite the problems involved
in setting up, funding, and staffing such a mechanism, there is clearly a
need for this activity.

Some would advocate that any such state wide planning, insofar
as it affects education, could well be placed within existing state depart-
ments of education. The present demonstrated capacity of some state de-
partments of education for such planning, however, leaves much to be
desired. Although a few state departments *have* demonstrated this capac-
ity, many more—for reasons sometimes virtually beyond their control—
do not presently have this capacity. Even with the infusion of additional
funds—and additional vision—coming from the Title V programs of
ESEA, state departments alone are often not yet capable of state wide
planning for education.

One problem with using a state department of education as the state
wide education planning agency is that in many states there are really
several state education agencies—the state board and department of edu-
cation itself, boards or coordinating councils for higher education, com-

munity and junior college boards, vocational education boards, and others. Therefore, it is most likely that while existing state education agencies could be vastly improved in their planning resources, in many instances new planning organizations will be needed.[39, 40]

CHANGES IN ORGANIZATION AND ADMINISTRATION OF EDUCATION

Systematic planning for educational change is essential, but planning is likely either to be *ineffective in its scope* or *inoperative in its effect* unless there are some changes in educational organization.

The first of these needed changes, as has become obvious in many of the states, is for a more rational and effective organization of school districts. The best planned change is likely to be ineffective in a district that is itself so meagerly supported and so professionally impoverished that even a minimal educational program is hard to come by.[41] With adequately organized local school districts, both the planning and the resultant changes in education would be vastly improved.

At the other end of the spectrum from the small local school district is the large, urban, metropolitan district. In addition to a multiplicity of sociological, economic, and demographic problems which plague urban educational systems, but which are not particularly relevant for our discussion here, there are two clear cut problems which bear directly on the efficacy of planning for educational change: the excessive size of some single urban districts and the lack of coordination among contiguous districts which operate independently within large metropolitan centers.[42]

Unless we are willing to make dramatic changes in school system organization—both in the largest and the smallest districts—the chances of moving the educational programs of these districts effectively into the mainstream of the changes demanded by the society of the 1980's remain extremely small—no matter how careful the planning for change or how innovative the changes themselves.

LINKING DESIGN TO DECISION TO ACTION

At any level of the educational enterprise, or in any segment of the personnel groups involved in that level of the enterprise, *designing* the kind of education we want and ought to have for the future is a difficult but not impossible step. Nor is it particularly hard to reach some *decisions* about what ought to be done. But actually getting the *action* without which "change" is simply a meaningless cliché—one comforting to the egos involved, but useless in terms of effect—is enormously difficult. There has to be built—and this has a clear implication for *all* levels of education—what has been called a "linkage" system: some way to get the change disseminated and adopted or adapted in an actual school situation.

Hencley has suggested one kind of arrangement that would result both in division of labor and multiplication of effect among the various kinds of educational organizations involved in bringing about change. In

order to tie research and development to demonstration and diffusion, he
suggests the following:

> State and regional partnerships should be mounted among local and state
> educational agencies, universities, and the newly developed research and de-
> velopment centers and regional educational laboratories. Such partnerships,
> when wedded to the interdisciplinary approaches recommended earlier for
> staffing research agencies, would provide needed linking systems to cope with
> the discontinuities occurring between research, development, diffusion, and
> adoption.

> As compacts and partnerships are mounted, general divisions of labor in rela-
> tion to various aspects of the change process should begin to emerge. It might
> be found, for example, that basic research and development would fall nat-
> urally to the universities, the R & D centers and the REL's. State education
> agencies could take responsibility for diffusion, while schools and school dis-
> tricts might concentrate on demonstration and field testing. The lines of func-
> tional demarkation would probably be structured to provide opportunities for
> overlap.[43]

This is an insightful and engaging concept, that of linking together
all of the agencies now involved in devising and bringing about change.
It is an important one, well worth our consideration. But perhaps even
more important than linking together the various *agencies* devoted to
change is linking together the *steps* of the change process through the
people who are involved in these steps.

This means two kinds of linkage, in addition to the structural link-
age suggested in Hencley's model. It means not only linking together local,
state, and national educational organizations and agencies seriously de-
voted to educational planning. It means also linking together the various
groups that must be involved in successful educational planning—that is,
as already noted: lay citizens, political and educational decision makers,
teachers and students. And finally, it means linking together the neces-
sary steps in change: from designing education for the future, to making
decisions about what changes are needed, to the final and crucial step:
taking action to change ourselves and to change our schools.

IN SUMMARY

Educational change—and the organizing, planning, and decision
making that goes into that change—is no longer just a pleasant and dis-
cretionary luxury, or something we undertake if we are not busy doing
something else. Our changing culture has placed inescapable demands
upon our educational system—demands that must be met by planned
change. An educational system which lags behind the culture is intolerable
in a time of rapid social change. *Our society cannot afford schools which
fail in any preventable measure to provide appropriate learning experi-
ences for all of our citizens* of every age and social background, to offer
diversified programs to meet individual needs and develop individual po-
tentialities, and to furnish the common experience-background which gives
unity and direction to our society.

SUPPORT FOR CHANGE

The American society tends to be oriented toward the possibilities
of the future rather than toward a worship of the past. Thus, there is to be

found in our society today a pervasive change-readiness, a rather generalized and diffuse mind-set favorable toward change. But the necessary *support systems*—organizational structures for planning, and the money and manpower necessary to suppor* these—will be forthcoming only when the people-at-large are assured that the proposed changes are in their own interest and under their control.

THE ROLE OF SPECIALISTS

Organization and planning for change, and actual change decisions, must have popular support and political implementation. It is the function of the specialist in educational planning to provide the technical studies, the back-up data, and the identification of feasible alternative and their probable consequences. At that point, the actual decisions become both *popular* (of and by the people) and *political* (carried out through the established mechanisms of the body politic).

THE LEVELS OF DECISION MAKING

Determination of educational goals, and the decisions about the means of reaching these goals, is a shared responsibility in a democratic social system. National educational goals must be determined by the collective voice of the people or their representatives in the various states, and state educational goals by the people or their representatives from the localities that together constitute the state educational system. No one of the levels of educational decision making is more important than another, but the state educational agencies stand clearly in a key position, individually aiding and encouraging local districts in educational planning and decision making, and collectively voicing the states' view and exerting the states' influence in the determination of national educational priorities.

CREATING THE FUTURE

The future of our society, and more particularly the future of our educational system, is not something that will just "emerge" or "happen." Rather, it will be created through the interaction of a vast constellation of forces—social as well as economic, ideological as well as technological. All of these forces are subject to human intervention, planning, and *action*. If we take the necessary action now, we should find ourselves no longer restricted just to gazing into an unknown future, but charged with the awesome responsibility for changing the course and direction of that future. Then, *we will be designing education for a future which we ourselves have helped to design.*

Footnote References

[1]*Prospective Changes in Society by 1980* (Denver, Colorado: Designing Education for the Future: An Eight-State Project, 1966).

[2]*Implications for Education of Prospective Changes in Society* (Denver, Colorado: Designing Education for the Future: An Eight-State Project, 1967).

[3]*Planning and Effecting Needed Changes in Education* (Denver, Colorado: Designing Education for the Future: An Eight-State Project, 1967). (Hereafter referred to as "DEF Vol. III.")

[4]For example, see the citations and bibliographical references accompanying the many insightful papers in *DEF Vol. III.*

[5]Richard Wynn, "Centralizing Tendencies in Education" in *Federal Policy and the Public Schools* (Washington, D. C.: The American Association of School Administrators, 1967), p. 16.

[6]Nicholas A. Masters, "Some Political Problems Involved in Educational Planning," in *DEF Vol. III,* pp. 144ff.

[7]Jack M. Campbell, "The Politics of Planning and Change," in *DEF Vol. III,* p. 161.

[8]Leonard A. Lecht, "Strategic Variables in Planning," in *DEF Vol. III,* pp. 8ff.

[9]Virgil E. Blanke, "Planned Change, Public Education and the State," in *DEF Vol. III*. p. 292.

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CHAPTER 4

Problems, Procedures and Priorities
in Designing Education for the Future

ROBERT B. HOWSAM*

Since its organization early in 1966, the project, *Designing Education for the Future,* has been moving steadily toward the achievement of its major purposes and goals. These include: (1) providing—primarily through conferences and publications—information, concepts and insights that should be helpful to all who are concerned with planning and effecting needed improvements in education; and (2) helping each state to develop a design for improving—and to establish priorities and steps for improving and strengthening—its educational program and organization. The policy board and central staff provide, or help to arrange for, needed services and financial support to assist the participating states in planning. However, the lay citizens and educators of each state necessarily are responsible for developing their own organization for planning, and for agreeing on their own design and plans for improving education.

Many hundreds of people have been involved in the processes and activities of this project. The three major conferences on *prospective changes in society, implications for education* of these changes, and *planning and effecting needed changes in education* have been successfully conducted and the proceedings published and widely distributed. The contributions of the conferences and publications have been generally attested, not only in the participating states, but also in other areas.

In the present volume an attempt is made to provide a useful synthesis and supplement. Drs. Haskew and Hansen have done this admirably in the earlier chapters. What, then, is left to be accomplished in this chapter? It appears that an attempt at perspective might hold the greatest promise for a further contribution.

The planners of the Eight-State Project designed this series of publications with great care, both in the overall design and in the execution of the parts by individual contributors. In retrospect, how has it turned out? What was overlooked? What was over- or under-emphasized? What separately presented insights need to be inter-related? This chapter will at-

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tempt to consider some of these questions from the point of view of a single observer.

Part of the emphasis will be on potential problems and "pitfalls". Here the concern will be with the prospect that mistakes are being made, or may be made. The comments may be considered as cautions or warning signals. Another part will be devoted to major problems that are likely to be inadequately perceived. Some consideration will also be given to a few particularly important procedures and priorities in the process of planning and effecting changes.

Some of the positions taken are likely to be considered controversial. The writer hopes that on such issues "equal time" will be sought in the on-going forums and dialogues relating to the project and other public decision processes. He considers them to be of critical importance.

HISTORY IN THE MAKING

Those who are involved in educational planning at the present time find themselves facing a veritable torrent of pressures to change. This situation results from the historical confluence of three major streams of change, any one of which, by itself, would pose a major challenge. Each of the streams is at flood level and apparently still rising. The three streams are *social change, educational change,* and *technological change.* The preceding volumes in this series have provided ample evidence of the existence of change forces in each of the three areas. History *is* in the making.

The condition indicated above probably has not existed before in education. There have been times when considerable educational insight has existed but the social situation necessary for change was not present— "progressive education" may be looked upon as a possible early example. At other times the educational insight has been frustrated by lack of an adequate technical support system—the effort to bring about individualiza-tion of instruction in the 1950's seems to have suffered this limitation.

There is danger that the power and impact of the combined "streams" or forces listed above will be underestimated with the result that the ap-proaches to change will be more leisurely than circumstances will permit. Such approaches would not only result in a lost opportunity but also in serious—perhaps even disastrous—social consequences.

Other dangers are: (1) that we will be swept along without the ability to choose the most appropriate course, rate, or destination; and (2) that we will look at what is happening without recognizing all of the forces or without considering them as a systems-like interaction.

One thing seems certain. *The present is clearly not the time for com-placency.* A sense of urgency is imperative. *But the urgency has to be matched by insight and wisdom.* We are caught between the advice: "Don't just stand there; do something!" and the admonition: "Don't just do some-thing; stand there and consider what should be done!" Processes like those of the project, *Designing Education for the Future,* hold the greatest of

promise. Even these, however, need to be carefully monitored if they are to yield an educational system which will educate the oncoming generations for the twenty-first century.

All who are concerned with planning for the future in education are inevitably confronted with a variety of problems. The kind and quality of the decisions made about ways of interpreting and resolving these problems have important implications for the adequacy of the planning. There is always a possibility that: (1) some of the important problems that need consideration will not even be recognized as worthy of serious attention; (2) some of the minor problems will receive more time and attention than some of the more important; (3) false or unrecognized assumptions on the one hand, or incomplete, irrelevant or inaccurate information, on the other will result in indefensible decisions and conclusions; (4) failure to establish priorities will result in confusion or in an attempt to accomplish the impossible; and (5) failure to recognize that (a) agreement on some aspect of a plan constitutes only one step in the process of effecting needed changes, or (b) the process of planning and of updating various aspects of a plan must be continuous if the educational program is to be adjusted to meet changing needs and to benefit from new insights.

A few of the important and often inadequately considered problems, pitfalls and other pertinent factors relating to planning for education are discussed on the following pages.

INTERPRETING ACCURATELY THE SIGNS OF THE TIMES

It is always possible and relatively easy for many people—even for a majority of the citizens of a nation—to misinterpret developments, underestimate the significance of changes or fail to take into consideration the extent or implications of prospective changes in society or even in their own country. An accurate reading and interpretation of the "signs of the times" is important for every group engaged in planning. Any serious misinterpretation is certain to result in major problems and difficulties.

One Pitfall: Planning for a World that No Longer Exists

Ernest Melby frequently has reminded us of our tendency to do what he calls *"Neanderthal thinking"*. *The major pitfall facing the present (or any) generation of planners is its built-in tendency to view the future in frames of reference suited to an already outmoded present and past.*

Even the most responsible adult may tend to react negatively to the above statement. However, widespread awareness of this concept will provide the best opportunity for us to deal effectively with the limitation it imposes. Few would quarrel with the generalization that the older members of a society tend to be more cautious, more conservative, than the younger members. The findings of behavioral science confirm this tendency and provide a rationale for it. *Those of us who are engaged in planning for the future need to understand ourselves as well as the world for which we plan.* Failure to make such an effort represents a serious planning pitfall.

How we look at things is a product of our culture and of our own experiences. Gallaher has defined culture as ". . . those ideas, socially transmitted and learned, shared by the members of a group and toward which in their behavior they tend to conform."[1] Indeed, how a society or group teaches its members to perceive reality is an essential part of its culture. As a child lives and grows up in the culture of his society he is taught what is "true," what is to be valued, what is right, what is wrong, and ways of behaving. For him this becomes the real world.*

Notions about reality are formed early in life and tend to be resistant to change. A number of factors account for this resistance. Part of the explanation lies in each person's ego which does not take kindly to a suggestion that some early impressions of reality were in error. Probably a greater part lies in the social group which rewards members who conform and punishes members who deviate. Whatever the reasons, individuals do tend to resist changes in basic behavior patterns, in value systems, and in modes of viewing the world and its realities.

Cultures do change, however. As already noted, it is generally more difficult for the older generations to change than for the younger. The young grow up with the changing conditions and to some extent are able to modify the perceptions of reality which adults pass on. Indeed, in times of rapid change the younger generation may have quite a different perception of reality than does the adult generation. At such times there is a "generation gap". Adults and youth have a hard time understanding each other or communicating.

Ascertaining the extent of the generation gap is one way of testing whether or not members of the adult society are accommodating changing conditions adequately. *This is not to suggest that youth are more accurate observers than are adults or that youth is right and adults wrong.* At any given time they may or may not be. It does suggest, however, that many of them do tend to be more open in response to changing conditions. A wide generation gap is symptomatic of cultural disruption. At such times it behooves the adult society to examine closely its cultural realities.

There is ample evidence that a marked generation gap characterizes the America of the 1960's. The meaning of that gap should be of central concern to those who plan for education in 1980.

Another method for assessing the possibility that a new reality is developing is to examine the culture for signs of change and for forces that may be expected to produce change. Previous volumes in this series have presented convincing evidence that massive changes are taking place in the society. *There is a new reality.*

Anyone who doubts that the world of the future (1980 or beyond) is going to be different in more than superficial technical ways should compare his own conditions for growing up with those of the present generation of

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*The truth of this observation can be tested by reference to different cultures. In one society a person is taught to die before he would steal; in another, theft under certain conditions is approved behavior. In one area life may be seen as hard and nature as cruel and perverse; in another life may be viewed as relatively easy and pleasant and nature as friendly and generous. In each case the view is *real* for that culture regardless of whether the reality would be agreed to by objective observers.

youth and those that the 1980 generation will undoubtedly experience. Competent observers are pointing out that this generation has been growing up in circumstances never before ever approximated. For example, this is the first generation to:

- See the scientific and inventive method applied wholesale to human problems and to witness the phenomenal results so far achieved.

- Face the prospect of a man-made world—an easy extension from the results so far achieved.

- Grow up with television and the other media which free it from the restraints of provincialism and open to it the world and all its diversity of culture and views.

- Experience release from earth-boundness in the sense of physical space.

- Confront the reality of possible total human destruction.

- Live with the growing use of automation with all its attendant impact on living styles and value systems.

- Make widespread use of experimentation with drugs, both new and old, in an atmosphere that permits consideration of two sides to the question of their use.

- Experience "the pill" and its impact on the cultural imperatives concerning sex relationships.

- Know the phenomenon of physical, as well as verbal, protest in widespread use.

Personally, I find it hard to believe that changes of the order of significance of these can do anything less than fundamentally alter some of our traditional views and values. By the same token, it is difficult to believe that those of us who grew up with a different reality will be able to perceive *the new reality* in the same way as those who grow up with it. Can a generation which grew up with the hard-work-to-succeed ethic, for example, ever come to accept the probable value system of a world increasingly characterized by automation?

The adult generation retains much of the responsibility for planning for the future. It cannot abdicate. But it can strive to keep itself open to new evidence and suggestions.

Nothing is more important to the success of the Eight-State Project than serious self-examination to determine whether the planners themselves are able to do thinking that is not outdated. As one reviews the previous conference reports and goes back over his conference experiences he is struck by the possibility that many participants may be taking for granted *their own* readiness for change and considering that *other people* constitute the only serious problem. Though the conferees have been involved in a planning system, apparently no serious attempt to monitor the processes and provide feedback has been made in many of the activities. Nor has there been any significant amount of attention to the individual and the processes of change within individuals. In retrospect it appears that a more serious early and continuing attempt to develop awareness of one's self and one's reactions to change and change agentry would have been helpful. Much further attention to this issue should be useful.

Avoiding This Pitfall. Some steps that should be taken in attempts to avoid this pitfall are:

1. Proceed from the assumption that people do only things *that make sense to them*, regardless of how ridiculous their behavior may appear to us;

2. Discuss openly and freely the nature of the problem of seeing things *as they now are* rather than *as they once were;*

3. Build observation and feedback mechanisms into the planning and study processes so that there will be evidence of what is going on;

4. Consider carefully the question as to whether we are being "Neanderthal" about an issue;

5. Involve youth, and work at being attentive and responsive to them;

6. Hear what seemingly dissident individuals and groups have to say even though their methods and behaviors may not accord with our standards;

7. Seek the assistance of serious observers and students of present day behaviors in youth and dissident groups. (This can be done through reading as well as by using consultants. Examples of scholars and observers include Marshall McLuhan, Patrick Moynihan, James Coleman and Urie Bronfenbrenner—all of whom have contributed to or been reviewed in recent issues of widely-read non-professional journals); and

8. Ensure that the public in general has access to searching questions about the meaning of what is being observed in the society. Television seems the medium with the greatest potential for this but all other public avenues should be used as appropriate.

A Second Pitfall: *Assuming that a Problem is the Same as One Encountered in the Past, but Merely Bigger.*

This tendency amongst us is similar to the one previously discussed, but is a special version of it. We tend to view many situations simply as history repeating itself—perhaps on a bigger scale. Sometimes it is; many times it is not. It is important to keep asking ourselves: Is it possible that something different is going on here?

LeBaron,[2] in another connection, has pointed out the *kind of changes* which tend to be *viewed as growth,* when in fact they are much more— enough more to be *viewed as transformations.* He refers to technology changing from *mechanical* to *electronic* and from *non-systematic* to *systematic.* It is a gross error to think of one of these as merely an extension of the other. Both the growth and the impact are exponential rather than linear. Entry into outer space was not just another step in the conquering of man's access to his world; it opened a new world and altered the old one.

If one is aware of this tendency he will *seek to identify the true nature of change.* He will ask whether the seeming alienation of youth is just a modern version of the search by adolescents for identity and independence or if it is more than that. He will want to know whether computer assisted instruction is just another gadget to extend the effectiveness of the individual teacher or whether it possibly might provide the means for a new kind of education.

A Third Pitfall: *The Solution to a Problem Merely Requires a Larger "Dose" of Remedies Previously Utilized*

Within limits a physician may rely on varying the dosage to control the ailment. As an approach, however, this soon loses its effectiveness.

There seems to be heavy reliance on this technique as those responsible for education plan for the future. One hears the familiar ". . . nothing wrong that a dose of additional money wouldn't cure", or the call for "more time, money, and personnel" is repeated. Another age-old approach is to seek merely to organize or to reorganize.

None of us will be likely to deny the importance of time, money, personnel or a change in organization as we seek change and improvement. However, we should see them as *necessary but not sufficient* for our purposes.

A fruitful exercise would be to attempt to discuss the educational change issues under the limitation that no one could mention the above four areas. There well might be a long period of silence but discourse would come. The chairman would probably be kept busy enforcing the rule while the discussion proceeded. Another approach would be to make frequent use of resource people who think freely in unconventional terms and could help us to do the same.

ASSURING BALANCE IN USE OF CHANGE STRATEGIES

Many people who become convinced that an improvement (change) is needed in any aspect of education, or of society, tend to look for what seems to them to be an easy—or the most logical—way to get the change made. They may not be aware of the fact that researchers have identified a number of strategies or procedures for effecting change, some of which are considered more appropriate in one society than in another, or more suitable for accomplishing certain purposes than for others. Even those who are familiar with most of the strategies for change may fail to recognize that a strategy that may be effective under certain conditions may not work under others, or that an appropriate combination of strategies may be needed instead of a single strategy.

Pitfall: Excessive Reliance on a Single Approach to the Solution of a Problem

The publication *Planning and Effecting Needed Changes in Education* was devoted to a consideration of the processes of planning and change and how they are carried out. Many suggestions were made for bringing about change at all levels of concern. Hansen has summarized, distilled, reoriented and added to some of these suggestions in Chapter 3 of this volume. The impression persists for this observer, however, that there is imbalance in the relative emphasis on the several identified approaches and that many people engaged in planning tend to rely too heavily on a single approach.

Three areas seem worthy of comment: (1) undue emphasis on rational approaches; (2) insufficient attention to practical formulations of change strategies; and (3) neglect of the phenomenon of resistance to change.

EMPHASIS ON "RATIONAL" APPROACHES

Chin,[3] in an excellent chapter in the publication noted above, set forth a comprehensive analysis of the various approaches to inducing change and

provided some important guidelines. He saw the many approaches as fitting into three major categories: (1) rational-empirical; (2) normative-reeducative; and (3) power-coercive.

The *rational-empirical approach* uses a variety of techniques which are characterized by attempts to convince the clients (those who would be affected by, or should be concerned with the change) that the proposed change is desirable and in their best interests. The assumption is that if people are convinced, they will agree to make the change. By contrast the *normative-reeducative approach* attempts to help people to change their behavior by improving the problem solving processes used by individuals and groups and by giving attention to ways of changing attitudes, feelings and value systems. *Power-coercive approaches,* as the name clearly implies, use strategies involving the allocation of authority, resources and reward systems. The three approaches are not mutually exclusive—often they exist together in a given situation. Nonetheless they are based on very different assumptions and make use of strategies which are quite dissimilar.

A careful reading of the presentations contained in the strategies volume (*Planning and Effecting Needed Changes in Education*) seems to indicate that most emphasis is placed on the rational-empirical. Where choice of approach was feasible, the result seemed to be an attempt to present the change or strategy in a rational light and argue for its adoption. Power-coercion was the assigned topic for some papers but the authors treated the topic rationally and seemed to have little zest for power approaches. An exception is where the use of reorganization is considered though, even here, there seemed to be little emphasis on the power phenomenon. There is scant attention to the normative-reeducative approach, although a number of the writers refer to value issues and to resistance to change.

In the discussion sessions, whether formal or informal, the same priorities appeared. "Convince" and "lead" seemed to be the favored strategies. There seemed to be little expression of realization of the depth of the problem involved in helping people to move beyond understanding to changes in values, perceptions and behavior. Involvement on a widespread basis of both lay and professionals in the cognitive processes of study and policy formulation seemed to be a major commitment. Probably most would agree with Hansen's "consent, consensus, and compromise" as the basis for moving forward.

Though this emphasis is understandable among people who work with large populations in the policy-making realm, it also is disturbing. *People do have to be persuaded to change or to support change.* But *those responsible for executing the changes in the institutional settings need more than mere convincing.* Failure to recognize the central importance of the normative-reeducative approach within work groups risks the possibility that the public decisions may not be executed no matter how widespread the consent, consensus and compromise. And if those who are charged with executing decisions are unable to do so, the very institutions of education are threatened.

The processes of undermining educational institutions already are well along in the United States. A recent *Newsweek* education feature article reminded the nation that Commissioner Howe has said, "the failure of the schools to serve the community is on everyone's agenda now. It was not [on their agenda] five years ago".[4]

The same article reported that:

> . . . thoughtful professionals like sociologist James S. Coleman of Johns Hopkins and psychologist Kenneth Clark . . . argue that urban schools have failed on so grand a scale they might well be modified by competing systems—for example, by contracting education out to such firms as IBM or agencies like the Defense Department.

This is not the place to argue the merits of the proposal. It is the place to point out, however, that IBM as a quality production organization and the Defense Department as a privileged beneficiary of federal military spending have *invested in people* far beyond anything ever permitted in the public schools. It is long past the time when educators and those who support education should have given up their parsimonious and naive ideas about how change is wrought within institutions. Most of our efforts at in-service and other reeducative approaches have been at the rational-empirical level and have been woefully superficial and inadequate.

Only reeducative efforts on a large scale can salvage the best of public education and its institutions. The more schools come into open competition with other agencies, the more will this be true. We cannot any longer afford the luxury of allowing schools, from sheer neglect, to deteriorate as institutions. If they are to be displaced, let it be after fair and open competition on equal grounds with the institutions which claim the ability to serve the nation better.

Practical Formulations of Change Strategies

Scattered throughout the literature on the dynamics of change are insights sorely needed by those who must work with and preside over the processes of change. It appears to this observer that some of these have been neglected thus far by the project and by the states. A more serious attempt should be made to bring appropriate insights together and present them effectively through a variety of means.

Many will argue that this should not yet be done. Admittedly there is danger in oversimplification. But there also is danger in handing the change processes over to persons with no access to insights or with inadequate ideas about—or skills in—the change processes. The danger will be minimized if the work is undertaken by authorities in this area. It will be further minimized if the project, or each of the states, undertakes an in-service program using normative-reeducative as well as rational-empirical (logical) approaches for key people in the planning and leadership groups of the states.

A similar project recently was carried out by the Cooperative Project for Educational Development (COPED). Working papers about core concepts relating to planned change, together with strategies for testing the

concepts, were prepared for the project and subsequently included in two volumes.[5] Collectively the two volumes represent the best exposition of the normative-reeducative method yet seen by this writer, and each volume clearly demonstrates that basic concepts or ideas about change can be presented in understandable and usable form.

THE PHENOMENON OF RESISTANCE TO CHANGE

Though several of the authors of the change strategies volume refer to resistance to change, failure to pursue the question further is a notable omission. The phenomenon of resistance is little understood by many of the people who attempt to further the public interest through activities such as the project, *Designing Education for the Future*. Believing strongly in the need for change, they cannot understand those who are apathetic or resistant. At the conscious level their approach is based on insight and logic. But behavior in the person who resists change may not have a rational base. Thus rational-empirical approaches do not reach him. Among those who are interested in promoting educational change, there is need for widespread understanding of the nature of resistance. For example, it is useful to know, as Watson[6] so clearly points out, that resistance to change typically moves through a discernible pattern or cycle and that wise strategy—for effectively coping with resistance—requires that a perceptive analysis of the nature of the resistance be made. Watson has identified and characterized five stages in the cycle. He points out that during the *early (or first) stage,* resistance to the change will appear to be massive and undifferentiated. During this stage the opponents will derisively label proponents as crackpots or visionaries, and will insist that "no one in his right mind" could seriously advocate the change. In the *second stage,* which occurs after the movement for change has begun to grow, the opposing forces are more clearly discernible, and the relative power of each can be more accurately ascertained. The *third stage,* which is the vital or crucial one in the cycle, occurs as opposing forces are mobilized and battle lines drawn. Direct conflict and showdown mark this stage, and survival of the change depends largely upon the ability to reduce the potency of the resisting forces. Following the decisive battles, and after the supporters of the change are in power, resistance assumes the form of "cantankerous, hide-bound stubbornness." In this, the *fourth stage,* strategy demands that considerable wisdom be used in dealing with the still dissonant forces, for the pendulum is still unstabilized. In the *fifth stage,* which occurs after the change has become stabilized, the strategic situation is one in which the one-time supporters of the change become the resistors to any emerging change.

In addition, there is need to understand the function of resistance. Probably most who encounter resistance view it as obstructive and negative. Such a view often leads to reactive behavior which may increase the level of resistance. Resistance, like social conflict, may be a positive as well as a negative force in the processes of change.* Appreciation of its nature

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* Donald Klein has a fascinating chapter, on "Some Notes on the Dynamics of Resistance to Change: The Defender Role", in *Concepts for Social Change.*

and its contribution among change planners can contribute much to the effectiveness of projects and programs.

EFFECTING CHANGE THROUGH EDUCATIONAL REORGANIZATION

"The old order changeth." What had remained relatively stable over a century of time suddenly is exploding with activity. Those on the inside of the educational system often are threatened and dismayed. Those on the outside are baffled and confused.

Some of the changes in structure and role are coming about as a consequence of adjustments to changes in society or in education itself. Others are coming about as a consequence of seemingly deliberate interventions from the outside.

Pitfall: Letting Others Determine What Changes Should Be Made in Education

In the change process, the naive (educators and others) tend to be at a disadvantage; their interventions are poorly timed—usually too late—and unsophisticated. Recently both educators and lay citizens vitally concerned with education have tended to stand by while others have moved to influence the course of developments in or affecting education. If they wish to significantly affect the course of events they will have to devise and use appropriate strategies and interventions of their own. If they wait until other groups or events have already accomplished change before they intervene, the intervention will probably be too little and too late.

As a part of their own planning for organizational change in education, the interested groups will need to attempt to understand other influence groups, their methods, and their objectives. Several sources of deliberate attempts to change the organizational system—"the Establishment"—will be readily apparent. One of these is the seemingly small and insightful group which has been largely responsible for getting the federal government involved in education and for determining the nature of its interventions. This group appears bold, sophisticated and determined. For the most part it is a power-coercive change-oriented group. It has in its control both political and economic power which it has used with great effect. *A conscious strategy of this group appears to be that of setting up new organizations* where existing organizations fail to respond quickly enough or adequately.

Another group of a quite different type is the organized teaching profession. Over the years this group has sought organizational stability and has devoted its efforts quite successfully to improvement of working conditions in teaching. More recently, however, its strategies have shifted. Now it is concerning itself with changing the role of the teacher in the policy and decision making processes of schools and school systems. There seems to be little awareness in this group of the organizational impact it is having on the educational system, however. There is littl. ...m for doubt that school organization will be affected by these efforts.

A third group (which may be unorganized and therefore inappropri-

ately categorized as a group) is comprised of the commercial and industrial companies which have entered both the production and services areas relating to education in recent years. The primary intent of this group is to market hardware, software, and services. More significant, from an impact-on-organization point of view, is their attempt to develop *instructional systems*. The systems analyst concerns himself with designing all parts of the system: thus the attempt to influence organization is certain. In addition, contracting for important areas of service will have organizational impact.

Nothing in the statements above should be interpreted as implying disapproval of the activities of the groups described. Much of what they have done, and are doing, can only be lauded. The argument is for more active interventions in the organizational change process by other agencies and units and at all levels. People in state and local level organizations also have the privilege of—and the responsibility for—intervening to change education to meet the needs. Failure to do so adequately and in time simply means that control of education is shifted without some of the groups most concerned having an influence on the directions.

For some years it appeared that the large foundations were exercising inordinate influence on the directions of educational change. As other influences have developed, the role of the foundations has come into a wholesome balance. In this same way, other influences can be controlled or counter balanced. Another example of conscious intervention was the establishment of the Education Commission of the States on the basis of a compact among the states. In speaking of this, Commissioner Allen of New York State said:

> If the states do not band together, if they stand apart while education is changed without their participation, if they do not accommodate to changed conditions, if they do not reshape themselves to new needs, they will be increasingly bypassed and new agencies will be created to do their jobs. State prerogatives must be aggressively reasserted—a commitment to the reforms necessary to make the states strong and fully effective in their role in the governance of education.[7]

A Second Pitfall: Retreating at the Local or State Level

Currently there is widespread discussion in both professional and non-professional circles about the most effective control system for education. Many question whether local—or even state—school systems can continue their important role and whether the local school board—or state board of education—is a viable element in the control system.

There is no question that a redistribution of power and authority in education is taking place. Nor need there be doubt that some redistribution is needed. On the other hand the gloom in some quarters over the expansion of federal influence and its assumed reduction of state and local control probably is not warranted. What is not clearly seen is the indisputable fact that *the entrance of the federal government into the education scene has greatly increased both the number and importance of decisions which have to be made.* Since the active participation of the federal government has

begun *there simply are more educational activities to be decided upon, planned and executed.*

During the history of education in this country, local schools and local school districts have had little of major importance about which to make decisions. Resources were scant and often were committed in advance. For the most part, only a minimal curriculum offering was possible and the state largely controlled it. Local control was indeed, as it has been called, mostly a "myth."

But local control now holds promise of taking on new meaning. Resources are increasing as are the number of options open to choice. The educational enterprise is expanding into the community so as to cover the whole life span of citizens. Never before have communities and states faced challenges equal to those now confronting them. And never before has the society shown such a willingness to support a comprehensive quality endeavor in education.

This, then is no time to retreat or to abdicate to other levels of government. Instead it is time for creative and energetic local and state efforts.

One other point of great significance should not escape us at this time. *The local district and the individual school are the action units of education.* It is here that the institutional systems exist. No amount of shifting of control can alter the fact that *motivation and morale are generated primarily in the action,* rather than in the control *units.* Productivity and output must always have a strong local component. And the normative-reeducative change processes take place in individuals and in face-to-face work groups. Thus, as resources increase and are directed toward the ultimate targets of change, properly organized local units can only increase in significance with the assistance and leadership provided by properly organized state systems. It will not be of great moment if some aspects of local control are shifted elsewhere or shared. The truly important tasks will remain.

A Third Pitfall: Failure to Recognize and Take Into Account Changes Taking Place in the Role of Public Education

Education appears to be emerging from its protective social cocoon to live in the political, social and economic market place.

For most of our recent history, education has enjoyed (or suffered) a unique position in the society. This position is changing. The role of education in our society was fashioned early in our history. Though not spelled out as such in law or constitution, education has had many of the characteristics of a *fourth estate.* Perhaps intuitively, Americans recognize education as of unusual importance to the development and preservation of our way of life. Accordingly it was provided for in separate governmental units (school districts) and presumably shielded from the partisan political activities of the times. Teachers were given a protected position in the society and treated much as were clergymen of the times. Indeed the correspondence in attitudes toward missionaries abroad and teachers at home were observably close. Pay was similar too.

Modern times are seeing schools and school affairs moved steadily away from the often isolated "fourth estate" status to a more focal position in the public decision arenas. Part of this trend may be due to the persuasive arguments over the years that educational policies should be hammered out on the same social anvil as are other important issues to which they are related. Part may arise from the realization in recent years that education is inextricably interwoven with the economic development of the nation as well as with the great social problems of the times. Whatever the forces bringing it about, it seems unlikely that the schools ever again will experience the political and social isolation which characterized the past.

The teaching profession itself may, quite inadvertently, have contributed to the change of status. When organized professional groups of teachers sought and gained labor-type bargaining privileges and when they entered the scene with shows of strength in the form of strikes, contract withholding, and output restriction they shattered whatever may have been left of the image. There is every evidence that the confrontations in the public view will continue.*

Not only are the public schools now in the market place. They also are being subjected to increased competition after many years as a virtual monopoly. Over a long period of time our society was quite happy to leave education largely to the educators. With the exception of parochial schools run by some religious denominations and a few private schools, the public schools had little competition; even their competitors differed little except for inclusion of religion. Suddenly the situation has changed. New kinds of competition are developing. How far such movements will go cannot at this time be foretold. Whether they succeed or fail, the impact on the schools, the educators, and the public will be great.

Everyone now seems to be trying to get into the education act. In particular, groups with concern for the socially disadvantaged are seeking the opportunity to use these children and youth as client or target groups and the education process as the means of bringing about change.** These groups distrust the ability of the public schools to meet the needs of markedly different or disadvantaged children and so they seek to do it themselves.

The struggle to obtain public funds for private and parochial education continues with ups and downs in success. Meanwhile the proportion of children in such schools rises slowly but steadily.

There seems to be considerable evidence that some forces are tending to lead Americans toward more pluralistic approaches to education. The

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*It is to be hoped that the organized profession will not lose sight of the possible long-term impact of its militant behavior on the decisions as to what the organization of education should be. Excesses and poor timing could predispose the public to permit decisions which would be detrimental to the profession and perhaps to education. As pointed out earlier, professional associations have shown little evidence of awareness of the significance of changes taking place in the *system* and the changes which their behaviors may induce.

**In a sense this is merely a reverse use of the parochial or private school approach. Private and parochial schools traditionally sought to protect their populations against change influence from outsiders. Now the groups which need special emphasis on rapid change and learning are seeking cohesive groups with specially designed programs to bring about change.

problems which the public schools have had in developing uniformly high quality education may account for much of this trend.

A recent competitor is business and industry. The arrival on the education scene of electronic technology, systems analysis, and federal money were enough to spark feverish activity. Merger followed merger as the electronic firms (producing hardware) combined with publishing firms (producing software). Vast sums have been risked in the belief that education will become much more technology oriented. As successful, or promising learning systems are developed, the companies may be expected to actively promote their use. They may also be expected to seek the privilege of *selling education* on an open market in at least partial competition with public education.

Again it is important to remind ourselves that observations such as those above are merely descriptive and predictive. They are not intended as judgments as to what will or will not be most beneficial. We can expect that, with all the options being opened to us, we will be able to fashion more effective education systems. The important point is that those who plan for the future must be aware of such developments and their import. It is also important that they continually seek to influence the course of development in desired directions.

DEVELOPING APPROPRIATE UTOPIAN IMAGES AND GOALS

There can be no truly great society without a sense of purpose, without an image of what that society and its people should be like. High on the agenda of America should be the effort to reformulate the ideal model for itself and its people.

Chin made brief reference in his paper to the use of utopias. He says:

> The title for the Eight-State Project, "Designing Education for the Future" and the papers of the three conferences show the practical application of the strategy of prospecting the future. *At the same time, it is interesting and somewhat disheartening to note the relative absence of out-and-out ideology, the rousing and beckoning normative statements of what ought to be, and the visions and utopias*—whether these are based on psychology and on personality theory, or on political or philosophical assumptions.[8] (Italics provided)

Chin finds the absence of utopias in the Eight-State Project materials "interesting" and "disheartening." While recognizing that the nature of the project may have precluded this approach, the expression of concern appears well taken. Somewhere in an undertaking of this magnitude there should be room for seeking the best of worlds as well as attempting to develop defensible assumptions concerning what the world will be like.

In times of rapid change there are many forces which threaten, disrupt or sometimes destroy. The stabilizing roots of the past are torn up. At such times there tend to be many thrusts but no special direction—power without control. At such times goal specification becomes most critical; stars to steer by may save the ship and the people. Further, generally accepted idealistic goals have some ability to cause their own realization.

Serious students of culture talk of "serviceable myths." Believing in them, up to a certain point, makes them come true.

It can be hypothesized—perhaps asserted—that we have long used utopia-type goals. They have been expressed in such terms as "democracy," "liberty," and "equality." Even more, perhaps, they have appeared in the concept "great." This aspiration has been displayed in our national behavior as we have sought to set ourselves against nature and the elements and win for ourselves the highest standard of living (in the material sense, but with the assumption that the other good things go with the material) known to man. Until space was opened up, we seemed to have come close to realizing that objective. Now, confronted with the realization that there is no end to the ability of nature to absorb our energies and resources on the one hand, and caught in the social consequences of our own technology on the other, we seem to be turning back toward our human goals. Disconcertingly, we are finding less evidence of success in reaching our political, psychological and social utopias than we did in reaching our materialistic utopia.

This discovery has proven highly disturbing to many people. It is likely that the widespread protest movement has its roots in this discovery, though there undoubtedly is much more to it than this. Probably the protest is the outward manifestation of a renewed search for worthwhile goals based on meaning in life. The search may be expected to continue. Ultimately it will be a direct concern in education.

Clear goals and utopian images are more important to education today than at any time in our history. Powerful new *means* are being developed and put into use. In sight are educational processes and systems more effective than anything previously more than dreamed about. These means can be used for good or for evil purposes; their potential can be frittered away by lack of purpose. Or they can determine our purpose for us, which perhaps would be the worst of all alternatives.

A widely accepted utopian concept of *what is America and American education at its best* would be an effective means of keeping us on a proper course.

To start a dialogue I should like to suggest that *we in this country adopt as one important aspect of our utopia the image of being the most open society on earth.*

The word, "open" here is used in the sense of being the opposite to "closed." It is similar to the concept of the "open" and "closed" mind as used by Rokeach. More pertinently perhaps, it is the concept used in systems theory where reference is made to "open systems" and "closed systems."

Probably no society has ever had this as a goal or ideal. Indeed, most have had quite different notions. Most have structured the society to limit openness and the tolerable range of activities and behaviors.

Many of our ideals of the past have been rooted in the notion of openness. Liberty is the notion of access to freedom for all. Equality says

that opportunity, justice, and all other desirable possibilities are equally open to all. Despite this, however, the concept of openness is used in only a few areas and—as recent events have demonstrated—has been rather imperfectly implemented.

One meaning of open would be *open access*. This would mean that the society would strive to make all forms of experience and opportunity available equally to all. Another meaning would be *freedom from bias and prejudice*. Still another would be *openness to ideas* in any form and from any source. *Freedom of association* would represent another type of openness. The search for all kinds of association would characterize this at its best.

In a systems model the open system exchanges energy and information with the environment; the closed system does not. There are inputs to the system and outputs from it. Feedback provides constant means of evaluation and adaptation.

PROVIDING FOR OPENNESS IN EDUCATION

A good means of testing the openness concept of utopia is to attempt to apply it to the education system. If it has meaning, it should be evident from the test.

Education can be viewed as a process of *socialization*. It can also be viewed as a process of *individualization*. Socialization means helping the student or other person to understand the culture of his society and the ways he is supposed to behave in the society. Socialization always is a process that involves closedness since the ranges of permissible behavior—the options if you prefer—are considerably reduced. Societies vary in the extent of the closedness but all organized groups do enforce constraints on choices; all provide norms for perceiving, thinking, and behaving.

Individualization, on the other hand, means leaving the individual free to make choices that are consistent with what he believes to be his own needs.

There is no such thing as a society that exists either with total socialization or with total individualization. Neither are there totally open or totally closed societies or individuals. But there are marked differences in the extent to which one emphasis or the other prevails.

In a highly socialized society the behavior norm is established and there is a sanctions (rewards and punishments) system to enforce the norm. However, an individualized society should not be viewed as representing anarchy. The open individual in an open society makes many more choices about behavior but he also takes into account the probable consequences for others and himself and thus arrives at the kind of decisions which characterize highly responsible behavior. Openness to feedback information constantly provides the individual with the means of assessing and modifying his own behavior.*

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*For an excellent discussion of some of the implications, see Roger L. Shinn, "Human Responsibility in the Emerging Society," in *Prospective Changes in Society by 1980* (Denver, Colorado: Designing Education for the Future, 1966), Chapter 15.

School curricula customarily are designed to promote socialization. They are chosen to accomplish the purposes of the society of the time. Often they are set by the state. The use or misuse of history in developing a favorable national image is a case in point. Thus, curricula represent efforts to exercise closure on indivic ·ıls in the schools. Rarely are schools encouraged, or even permitted, to allow learners to think and discuss freely or to question the basic norms of the society. It is equally rare for individual students or even teachers to be allowed relatively unlimited freedom of choice in programs, schedules, topics or textbooks.

The importance of the issue of openness or closedness for education quickly becomes apparent when one considers what is meant by the widely used term "to individualize instruction." To some, the term means that a student is "to proceed through a *fixed* curriculum at his own rate." This clearly is an attempt to make the socialization process effective. To others, however, there is no fixed curriculum, and there are few if any required sequences. Rather there is a vast array of learning materials and there are a number of choices as to means and media. Professional guidance or counseling also is provided. But the student has a large measure of responsibility for his own learning and is held accountable for what he does with his opportunities—for the way he meets his responsibilities. This latter approach has large elements of individualization. It is more concerned with learning to think, for example, than it is with controlling what is thought. It is concerned with *learning and facilitating learning* rather than with "teaching."

Over almost all of our educational history we have had both socialization goals and means for teaching that favored a fixed curriculum for everyone. Today we have a technology that favors individual approaches and permits the choice—indeed demands the choice—of primarily either a socialization or an individualization approach. The choice cannot be made without a prior value judgment as to what kind of person and what kind of society we want. The individualization approach is, of course, more consistent with the openness objective.

If the reader cannot accept openness as a utopian condition for America perhaps he can suggest another. Would he, for example, take kindly to the hope that every American will develop a sense of his own destiny? Or would he accept the utopian idea that America is a place where every man becomes the best of which he is capable?

DIFFERENTIATING MEANS AND ENDS AND USING EACH APPROPRIATELY

All systems, whether social or other (such as technical), are goal oriented; that is, they exist for certain purposes and attempt to act or perform accordingly. Not all systems explicate or state their goals and keep them clearly in mind, however.

Sub-systems also have goals. These goals are intended to facilitate achievement of the goals of the major system, otherwise the sub-system

would never have been established. In reality the sub-systems are *means* for achieving system *goals*.

Those who study organizations have for years been pointing out the strong tendency for the means and ends to become mixed or even inverted. The institution can forget its goals and make the means its goals. For example, a school may be conducting a broad and effective program with learning as its goal. The faculty decides that it needs knowledge of results (feedback) to help with planning and individual counseling. So it sets up a testing program using standardized tests. (The testing program would be in the nature of a technical sub-system set up as a means to achieve the main purpose of effective instruction.) The teachers find that the students are weak in certain areas—perhaps English grammar and mathematics computation. Incidentally the principal expresses his displeasure about these weaknesses. Soon the teachers are spending time teaching grammar and computation to bring up the test scores and to please the principal. They are neglecting some other aspects of the program—such as critical thinking —which the tests did not measure. Clearly the original goals have been subverted and means have become ends. The testing program—a technical sub-system—now is determining instructional goals.

Happenings such as discussed above are common in education as well as in other areas of endeavor. They are particularly prone to happen where performance is more precisely observable or measurable in one area of activity than in another.

As we move into the era of technological applications in education— that is, as we move into today and the future—the problem of means and ends will become pervasive and intense. At least in its earlier stages, and probably always, there will be some functions which technology will serve well. Others will be beyond our capacity to program effectively. As is the case with objective testing now, the technology will appear precise and objective while other approaches will remain less precise and more subjective. Further, the technology will have involved massive expenditures and so will call for extensive use to warrant the expenditures that must be made. Human talent will be more expendable than machine talent. These are the very kinds of circumstances which lead to substitution of means, of presumably achieving some aspect of the goal, for the goal itself—that is, substituting means for ends.

This is not to suggest that educational goals and means should not be examined in light of the new technology. In this connection LeBaron has ventured the opinion that ". . . recent developments indicate that the electronic technologies will require replacement (or at least rethinking) of the entire public school system."[9] If such changes occur as a result of careful rethinking and revaluing, society need have no concern. If, as is so often the case, technology makes the decision, damage—perhaps grave damage —will be done.

Considerations such as those discussed above again emphasize the importance of goal setting. Americans as a people are not particularly given to goal setting or even to conscious consideration of values. Perhaps

this is a national weakness. In less complex times we managed to get by with intuitive approaches. In the future the consequences of this kind of approach will be more serious. It should be apparent that groups in every state that are concerned with planning for the future should be seriously concerned with goal setting and values.

CLARIFYING THE FUNCTIONS OF LAY CITIZENS AND PROFESSIONALS

The Eight-State Project is involving citizens, governmental representatives, educators from the several states, and a variety of consultants. In many ways the project may be seen as a model for planned involvements in planning.

Americans long have followed the pattern of having the educational enterprise controlled by lay bodies, with operation and management delegated to professionals. Public involvement has been a conscious objective. By and large this system has worked well. It has worked best where the respective roles and functions of the citizen-trustee and the professional have been agreed upon and followed in practice. In general the citizen has been seen as best able to contribute through:

- Sensing needs and setting goals;
- Deciding on and approving policies;
- Delegating responsibilities;
- Evaluating results;
- Providing support;
- Serving as a communications bridge between professionals and the community; and
- Providing feedback from the community environment as a basis for planning.

Professionals have served most effectively in:

- Providing information, data, and advice: indicating alternatives and their implications, and making recommendations;
- Executing public policies through professionally sound procedures; and
- Accounting to the public for stewardship.

Citizens and professionals have tended to share the leadership function in establishing and implementing policies for education.

When not applied too rigidly, the above distribution of functions seems to serve well. It has equal validity as a model for major planning activities such as the project, *Designing Education for the Future.*

As has been said: "Education is too important to be left to the educators." But it can be maintained equally well that "Education is too complex to be left to lay citizens." What the citizens can do best is found in the area of setting social and educational purposes and of weighing alternatives and consequences. When lay citizens devote their time and energies to technical details they are depriving the educational system of their greatest contribution. At the same time they will be interfering with the delegation of responsibility system and the accountability system upon which both lay citizens and professionals depend.

The detailed work of planning and implementing professional aspects

of the plans, for the most part, should be done by specialists. Weighing of alternatives and making policy decisions should rest with citizens.

Leadership in the change process should be a shared function. Ideas are not the prerogative of either group. Lay citizens perform a needed service when they press the educational personnel to be innovation oriented; people in large organizations often become too routinized, too bureaucratized.

Those who participate in the Eight-State Project will do well to confront seriously the question: *Who should do what?* Agreement will facilitate action. Failure to develop clear guidelines tends to hamstring progress as each awaits action or direction from the other.

AVOIDING THE LEVELING OF LIGHTHOUSES

Much of the success and vitality of our education system has been due to its decentralization and the freedom of one unit to be different from another. We have progressed partly by encouraging the establishment of "lighthouse" programs and practices and then using these to guide others to better practices. This approach leads to wide differences in quality and effort. Nevertheless it is our belief and our experience that the average level under this approach to change and innovation is higher than it could be under a state-prescribed uniform practice system.

It is probable that this decade has seen more attempts at "lighthouse building" than has the remainder of our educational history. Foundations set the pace at first. Subsequently the federal government came in with large categorical grants-in-aid. Some states and local school systems have also helped to point the way. The results appear to have been phenomenal.

At present, strong efforts are being made to cause the federal government to discontinue its categorical aid programs in favor of general grants to the states. Basically there are two questions:

1. Should the federal government return to the states some of the tax revenues collected? This primarily is a problem of access to taxation which could be alleviated by some sharing agreement.

2. Should categorical aid be discontinued? This question primarily concerns the use of federal funds to influence educational policy and decision making.

Somewhat less frequently heard is a third question: Should the federal government deal directly with school districts which are established by, and are agencies of, the state? Such dealing may be viewed as direct interference with programs which are a state responsibility

Already Congress has gone a considerable distance in allocating funds to states or to local units only on state recommendation. The reasons for this policy are clear enough. Nonetheless *there is real danger that, under existing conditions, the lighthouse principle will be progressively weakened as this course is followed.* Bureaucratic tendencies currently are much stronger in the state-local relationship than they are in the federal-local

transactions. In the one case, there is a comprehensive responsibility-accountability system at work. In the other, the responsibility-accountability applies only to the single transaction. Under these circumstances the states are much more likely to spread the available resources thinly over many districts, thus stifling the lighthouse phenomenon which is based on putting ample resources where they will count toward a specific goal.

In the planning undertaken by the states participating in this project it is to be hoped that attention will be given to the role each state and local school system may play in guaranteeing continuation and extension of the use of lighthouses as beacons to light the way.

RELATING PROFESSIONALIZATION OF EDUCATION TO PLANNING AND CHANGE

It is hard to conceive an educational plan designed to bring us to 1980 that would not find it necessary to address itself to the question as to what needs to be done about the professional status of teachers. Indeed, deliberate attention to this issue in the several conferences and reports seems to be a striking omission or oversight.

For more than half a century educators have been striving to develop a profession that meets the commonly accepted criteria for professions. Though the teaching force has experienced phenomenal growth and its organizations have become strong and effective, the behavioral and qualifications aspects continue to lag. The public has come to respect organized teacher power: it has yet to show signs of respecting teachers for their specialized professional competence. It would appear that progress in education through 1980 and beyond must depend to no small degree on progress in professionalization of teaching.

It may be that professionalization of teaching was virtually impossible while the pattern of teaching continued to be modeled after the teacher that all of us knew as children. Teaching has been and continues to be folkway oriented. Since folkways are difficult to change, developing a new style of teaching, given the conditions existing, has not yet succeeded.

Sometimes problems can be by-passed when confrontation fails. This may happen to teaching in the next decade or two. The traditional role of the teacher may virtually disappear. No folkway behavior pattern exists for the new roles. New roles will have to be learned.

But where can they be learned? The roles are not yet defined. No state has set up preparation or licensing policies or programs for the new positions. No university is seriously "tooled up" to provide the programs that will be needed. School districts are woefully unprepared for in-service education programs. Given present conditions and status of pre-paredness we can only expect a considerable amount of chaos and disruption. Also there probably will be serious constraints on, or frustration of, development plans.

It may be anticipated that many kinds of crash training programs will be mounted. Universities and colleges, school systems, government agencies,

professional organizations and private concerns, may all be expected to participate in attempting to meet the training need. In the processes the "gatekeepers" of the profession probably will be overwhelmed; the walls of the profession may tend to crumble.

But not for long. Education is too serious a social responsibility and too complex a task to long be left without at least the trappings of professional status. On the other hand the traditional homogeneity of the teaching group will have gone. Many different roles will be encompassed.

Education should not stand by and wait for the revolution to come about before taking any action on professionalization problems. *Now* is the time to prepare a long range plan. It should start with development of a model based on the sociology of professional groups. Planning should include flexible arrangements for establishing licensing and training requirements. There should be careful guarantees against the return of folk-wisdom as the dominant characteristic. A solid profession always is rooted in valid knowledge from its undergirding disciplines and tested practices from its own research and development activities. LeBaron characterizes the new look by saying, "Decisions formerly based on a low amount of specific information and a high degree of personal insight will now require judgments based on large amounts of information and a different kind of decision power".[10] Still, not all of the people who serve the educational processes of the community will need the same kind of professional insights. Some system of categorization will be needed.

Preparing a model in advance would strongly influence developments as they occur. The matter should not be left to chance. The Eight-State Project could perform a national as well as a regional service if it were to tackle this problem.

ASSURING ACCEPTANCE OF THE NEED FOR PLANNING AND CHANGE

For many who seriously study the existing and the on-the-horizon developments in education there remains something not quite real about the process of planning for the future. Education has made many false starts and has had more than a fair share of false prophets. And many of us have tried to move things before. Small wonder then that there tends, in many quarters, to be considerable skepticism and a wait-and-see attitude.*

There seems little reason to doubt that the forces necessary to bring about massive changes are present. It also seems sensible to accept the broad general outlines of predictions of things to come.** It is one thing for planning committees to be convinced, but quite another to convince many educators and large segments of the public that certain changes are

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*A colleague says he has worked through five sets of plans for a new physical education building over the last fifteen years. This year he was at it again. He worked cheerfully but said he'd believe it when the first shovel hit the dirt. Recently construction began. At that point he said he had changed his mind. Now he will believe it when they hand over the keys.

**Personally I anticipate values and goals issues will be raised once the real import of many of the changes is realized. There will be storms of controversy over such issues as individualization, freedom, and openness. The presence on the scene at the same time, of great social issues such as integration may obscure the issues and delay implementation. Nonetheless the tide has begun to rise; it will not easily be contained.

essential. Long experience has taught us that change in education is easy to *talk about* but not so easy to *bring about*. They are inclined to view proposed change in Hamlet's words—"The funeral baked-meats did coldly furnish forth the marriage tables."

It is not that people do not recognize the need for change. Many do, though they would probably look backward toward what they tend to think of as the better disciplined, tougher ways of yesterdays. This paper began with the suggestion that we are at the confluence of three streams of change influence. It ends on the notion that many forces are at work to make the present a difficult time to try to introduce major changes. Yet many of these forces point to the urgent need for planning and change. Delinquency and crime rates, protest and rebellion, drug usage and promiscuity and many other developments are causing concern in the adult generation. Many attribute these conditions to the permissive conditions under which the present generation of youth is believed to have been raised. It will not be easy to convince them that *more freedom will bring more responsibility.*

The validity of these observations would be tested if we were to have Gallup ask public reaction to these two recent statements which we probably could cautiously endorse:

1. By 2020 we will have discovered that all learning is joyful, and will realize "that solving an elegant mathematical problem and making love are only different classes in the same order of things, sharing common ecstacy. Advanced learning . . . will be like pursuing a pretty girl."

2. By 2000, or before, "teaching" as it is now commonly accepted will be dead, and the job of an educator will be transformed into that of a "facilitator . . . one who creates a rich, responsive environment that will elicit the most learning and change from the student." There won't be any compulsory education, but educators will have to make their material relevant to students' needs "or they won't get any students."[11]

The problem is partly how to get the story to the public and to *all* educators. Acceptance can be made easier and implementation more effective if public understanding and support are gained.

Each of the eight states involved in the project probably would be well advised to develop a large-scale information dissemination plan for use at the opportune time. Communication strategists should advise on how to do the task most effectively. It would appear that a comprehensive program involving a number of different approaches will be needed. It also appears that an effective beginning strategy would be to disseminate as much information as possible about new developments and lighthouse practices both elsewhere and within the states. The more people can know about the new realities of education, the easier it will be for them to be willing to trust their children and their taxes to new programs in their own school.

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[6]Goodwin Watson, "Resistance to Change," in *Concepts for Social Change* (Washington: Cooperative Project on Educational Development, NEA, 1967), pp. 10ff.

[7]James E. Allen, as quoted by Wendell Pierce, Executive Director of the Commission, in *Nation's Schools,* August, 1966.

[8]Robert Chin, *op. cit.*

[9]Walt LeBaron, *op. cit.*

[10]*Ibid.*

[11]George B Leonard and John Poppy of *Look* magazine, quoted in *Education U.S.A.,* October 16, 1967.