Since 1955, six major thrusts of the school reform movement have sought to give direction, substance, and meaning to education: Content revision, educational technology, equalized opportunity for children from poverty environments and from minority groups, individualized instruction, organizational flexibility, and teacher renewal. Organizational changes should not be viewed apart from instructional change, should be viewed as a systems problem, and should incorporate a strategy for implementation. Four positive and four negative criteria are outlined as a guide to the evaluation of innovations in education. (JK)
SCHOOL REORGANIZATION
AND THE
PROCESS OF EDUCATIONAL CHANGE

by

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King Henry V in William Shakespeare's play certainly was aware of the necessity of reorganization and change when he commanded his troops: "Once more unto the breach, dear friends, once more."

While our task is a much tamer one, I would suggest that it is even more difficult, for we are talking about the battlefield of ideas and the clash of conflicting points of view. As A.N. Whitehead said, "It is the business of the future to be dangerous," and again quoting Marshall McLuhan's favorite author, "The major advances in civilization are processes that all but wreck the societies in which they occur."

It is the task of this conference to live dangerously; it is my task to attempt perspective, to survey the battlefield and to weigh the opposing strengths, but not to command the troops. This is yours.

With this division of labor in mind, I would like first to mention some overriding considerations that are aspects of perspective. Elaborations of these points can be found in another work of mine. 1/

1/ See Catalyst for Change, Subcommittee on Education, Committee on Labor and Public Welfare, United States Senate, 1967.
Education needs to be understood in its larger societal context in order to be analyzed as a separate force. Too often this simple truth is lost, and education and schools are given a test-tube sterility that does not, in fact, exist.

Education serves both as a leader and follower of society, operating somewhere between the challenge of George Counts' *Dare the School Build a New Social Order*? (1932), and Henry Steele Commager's "schools reflect society" thesis (1950). One can argue a particular mix depending on the level and type of involvement, but to argue one to the exclusion of the other reveals a basic misunderstanding of our unique local-state-federal relationships.

This paper, then, will begin with the mention of four problems, "crises" is a better word in some cases, that are intimately wrapped up with the future of our nation. Our greatness, near greatness, or mediocrity will depend upon how well we meet these challenges.

**Four Immense, Difficult, and Urgent National Problems**

1. Will we be able to develop various decision-making mechanisms and ways of analyzing problems that will keep us abreast with rapid advancements in almost all aspects of life?

2. Will we be able to meet the international challenges of poverty and of communist totalitarianism?

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3. Will we make the difficult, complex, and courageous decisions necessary for urban and metropolitan improvement?

4. Will we continue to push civil rights forward vigorously toward moral and humanistic values that are fundamental to democracy and freedom? Our actions in the next few years may be decisive in setting trends and directions for the remainder of this century.

To elaborate briefly upon the first problem—creative adaptation to change: within one or two years some nations will make a frontal attack on the nearest celestial body, and our children will come to accept interplanetary travel as commonplace; the mysteries of cancer will remain elusive only a short while longer; Telestar soon will provide instant television coverage of major news stories anywhere on this planet; and giant data banks plugged into institutions, schools, and homes will provide instant electronic retrieval of sought information.

These scientific and technological developments will come about in months or years, yet many large cities now are canopied with a deadly layer of smog; millions of citizens live in poverty circumstances amidst a national affluence of unparalleled proportions; millions of manpower hours are lost daily by forced usage of antiquated transportation systems; and thousands of pathetic schools are daily developing lifelong handicaps among those they profess to assist.

Creative and courageous adaptation to change, then, is a problem of major proportions, and one that is becoming daily more complicated as
the tempo of science and technology continues to accelerate; while management of change--the procedures by which present practices are adjusted to advancements--remains far behind. In some areas, such as medicine and military science, the lag time is minimized because events and circumstances demand it; in education and in some other areas, difficulties of product measurement and outcome evaluation militate against precise and planned change, but certainly much greater effectiveness is possible than is evident today.

The School Reform Movement

Education has been in more or less continual ferment since the end of the Second World War. Classroom and teacher shortages, double and triple sessions, soaring tax rates, and books such as Educational Wastelands and Why Johnny Can't Read have triggered sharp criticism. The classicists' point of view brought angry rebuttals and countercharges of "ivy towerism" and "elitism" from teachers in the front trenches fighting daily battles with the baby bulge.

The tenor of ferment changed abruptly after October 4, 1957, when the vitriolic sensitivities of many citizens were shocked by the successful launching of Sputnik. Someone must be blamed--the schools. Our schools, it was alleged, were not producing enough scientists to keep up with Soviet scientific developments, so we needed instant scientists. Admiral Rickover, riding in on a wave of perfect timing and excellent credentials
(for making submarines), charged that our public schools were inadequate and misdirected. He contended that the curriculum emphasized know-how subjects at the expense of academic subjects, teachers' colleges lacked substance courses, comprehensive high schools stifled the talented, talented youth were not being identified, and the philosophy of John Dewey had weakened our traditional curriculum.

But since about 1955, more fundamental causes for educational ferment have come to the front. If one factor were chosen as most responsible for the present ferment in education, it would be difficult not to choose the knowledge explosion. And the "explosion" or the manufacture of knowledge is just getting underway. As Gilbert Burck points out: "One of the most undercomprehended facts of our age is its huge and growing demand for knowledge. Just as the production and distribution of food is the major occupation of primitive and 'emerging' societies, the production and distribution of knowledge is the major occupation of technically advanced nations, and may approach half the total U.S. output by 1984. . . . In 1963 the nation's total outlay for knowledge came to nearly $195 billion, up 43 percent in five years." 2/

The "school reform movement" is a response to the educational ferment; it is a variety of efforts to give direction, substance, and

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meaning to education.

What are the main thrusts of the school reform movement? Certain thrusts are quite evident; others are more difficult to discern and to appraise. The six major thrusts outlined here (in alphabetical order) are content revision; educational technology; equalized opportunity in terms of children from poverty environments and those from minority groups; individualized instruction; organizational flexibility; and teacher renewal. Obviously these thrusts are quite familiar to the readers, yet a list constructed five years ago would be somewhat different, and one prepared in 1972 also would reflect the changing demands and challenges that a dynamic and pragmatic society places on its formal education system.

Guidelines for Reorganization

Reorganization of slums began in earnest shortly after World War II—and we built vertical slums. But worse, we took people out of their psychological living space; we thought flushing toilets and sliding closet doors would somehow acculturate the residents to the finer things of life. Now the authorities are insisting, indeed requiring, residents to show greater compliance to rules and behavior. The insides are now cleaner, but people continue to be contained in living cubicles not unlike the learning cubicles that contain their children. And neighbors remain strangers.

Organization, on the other hand, can significantly influence performance and attitude in bureaucracies. Lines of communication,
flexibility, parameters of responsibility are influenced significantly by whether the bureaucracy is a traditional, human relations, or professional type.  The latter two, while retaining many features of traditional bureaucracies, tend to be more effective when the tasks to be done are diverse and involve social skills. For example, commissions with broad discretionary powers, large graduate schools, and large research organizations differ from the more traditional bureaucracies in permitting warmer personal relations, fewer hierarchic considerations, less specialization, and less separation of policy from administrative decisions.

Public schools most nearly resemble the traditional type of bureaucracy. It is interesting to note the attitudes of 723 ESEA Title III project directors when asked about the "administration, coordination, etc." of Title III (PACE) at the local-state-federal levels. Three percent rated local administration as "very good to excellent" as compared to a 6 3/4 percent rating for the federal level. And 5 1/2 percent rated local administration as "unsatisfactory to poor" as compared to 2 1/4 percent for the federal level.

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In other words, more problems were encountered with local than federal administration. This point and other evidences indicate the basically conservative and cautious approach to innovation that characterizes our public schools. One can certainly find fault with this reality, especially if you are not daily immersed in it. I am going to take the easy way out of the stability-change dilemma and talk about several dimensions of organizational change that seem relevant to innovation.

Organizational changes should not be viewed apart from instructional changes. It is obvious to this group that one cannot organize away instructional issues, but some colleagues have become so immersed in one that they overlooked or assumed the other. The non-graded school, for example, is an organizational change to begin with, but heaven forbid it to stop here. The middle school is an organizational problem to begin with but its ripple effects quickly disturb instructional waters.

Ronald Lippitt and Colleagues found the physical arrangement of the building to be "very important" in influencing the processes of educational change. They write: "One aspect of school arrangements that was readily noted by teachers as a condition for innovation and sharing, was the amount of time teachers can spend with one another. The actual physical setup of the building also appears to condition the process of innovation and diffusion of classroom practices. Teachers who are separated from one another by halls, corridors, and floors seldom have
time to talk with one another. Further, teachers who are near one another, but who teach different grades or subjects often feel they have little in common to talk about with regard to professional educational matters." 6/ And Allan A. Glatthorn writes: "We have frequently heard the educational platitude that 'changing a schedule won't change the teacher.' Don't believe it. We have found that scheduling the teacher for a small group does change teacher behavior." 7/

Having said that organizational changes can induce instructional changes is not saying that this should happen or that it happens often. But it does say that the two facets are usually related and one should not make organizational changes without considering instructional ramifications.

- Organizational changes should be viewed as a systems problem. The call for a systems approach to educational problems is now commonplace in the literature yet the concept has not penetrated educational practice to any extent. The systems approach may be defined as a problem solving procedure that begins with carefully constructed

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objectives, then develops a plan which considers how all important aspects relate to the objectives and how they interrelate. The initial careful analysis is certainly nothing new. It is the first point in Ralph Tyler's rationale for curriculum development, and it is prominent in many other similar developments. Systems analysis, however, places an even greater emphasis on this initial step.

The analysis then proceeds backwards from the desired outcomes by asking what needs to take place before these outcomes can be expected. Gradually the necessary preconditions are spelled out and then, on the next round, the preconditions for the preconditions are established, and so forth until it is clear by what process the objectives can be attained. In this way the optimal required means to the desired ends are found. A "map" of the converging chain of casual preconditions for the desired outcome emerges. This map represents not only the necessary objects and events, but also their complex mutual interrelationships.

A system map or plan needs to be tested to assure its adequacy. The only relevant question for a system test is whether the system will, in fact, produce the effects of outcome that were initially specified. If it does not, it needs to be revised. However, for many reasons, usually cost and time, testing usually cannot wait until an actual system prototype has been put together from the plan. Pretesting can be done in one of two ways: by using a mathematical model or by testing progressively
in a step-by-step fashion. 3/

The systems approach seems quite appropriate to introduction of the middle school. Certainly we should have this approach tried in a few places. If the middle school fails it will more than likely, if it follows the patterns of other innovations, be due to faulty planning and implementation. It is here that systems analysis can make a signal contribution.

**Organizational changes should have a strategy for change—systems or otherwise.** If the systems approach is used fully and effectively, it includes a strategy for implementation. But it will be many, many years before the systems approach becomes commonplace.

A strategy for change includes such items as teacher retooling, and a mechanism for evaluation.

For the middle school, teacher retooling has not been given the attention it receives in the case of educational technology and some other innovations.

Evaluation is an "in" concept today, and it is long overdue. I believe we have far too much residual fear of it in education, refusing "to meet the sun upon the upland lawn." 2/ But my most serious criticism

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2/ Thomas Gray, "Elegy Written in a Country Churchyard."
of some colleagues is not of their residual fear of evaluation but their irrational approach to analyzing and evaluating evaluation. The present national assessment controversy is a case in point.

Criteria for Evaluating an Innovation

In this section I would like to touch upon two kinds of criteria that are and/or should be used in judging an innovation. Starting on a negative note, the first four criteria are questionable ones.

1. Is it in vogue? Too often we use the supermarket, consumer approach to innovation rather than an analytical, clinical one. What is "in" is the innovation of the year. Needless to say, this bandwagon effect is something less than desirable.

2. Can money be obtained for it? Some individuals are approaching education in precisely the wrong way, with their activities growing out of where the federal monies are rather than where their burning interests point. And some colleges of education are becoming top heavy with monies for vocational and special education. These areas are important, to be sure, but the three R's remain at the heart of the educational enterprise.

   Money is vital to educational development, make no mistake about it, but one must not sell his interests or zeal for a pile of plenty.

3. Can it be installed without much effort? This is the era of ease and instants! We have instant charcoal fires, easy lessons for
flying (without LSD), instant relief from sadness, fatigue, sexual indifference, and of course easy living. It is little wonder that we have easy and instant innovations! If it were only true! How nice our lives would be if the transition from print-to-program could be made without loss of time or effectiveness. Until the millenium we will just have to fit good ideas with manageable handles and hope the mix is reasonable and manageable. Actually, we know a great deal about installation of ideas which is not being used. Strategies for management of change can be found in abundance, but each situation usually needs some individualization. The problem is not lack of know-how; it is lack of planning-through.

4. **Is the innovation designed to do something that is beyond its competence?** In other words, is the innovation overambitious or does it have a hidden agenda? The first instance can be handled by carefully constructing objectives that provide the basis for realistic progress.

The second instance might be illustrated by those educational park advocates and the middle school supporters who look upon these innovations primarily as attacks upon racial segregation. In my opinion, the primary overall purpose of any innovation is better individual learning in a democratic environment. The direct attacks upon racial segregation have come through the courts and should continue to do so. In education we need to facilitate and expedite these decisions in every way possible, but major new institutions should not be
established, except on an experimental basis, unless there exists a reasonably sound theoretical base. I question whether social and pedagogical objectives can be sorted out as easily as some apparently believe can be done.

Turning now to desirable criteria for successful innovation, four are suggested:

1. **Is the innovation in harmony with the best theory?** John Dewey is attributed to the thought that nothing is more practical than good theory. Some innovations simply are not fundamentally sound in terms of what we know about the learning process, the nature of society, and the nature of knowledge. It is true that our theoretical bases are more-or-less constantly in flux, yet we do know some things today that should not be ignored, bypassed, or twisted.

2. **Will the innovation likely result in better education?** Change for change's sake can be justified in some instances as a device for moving away from dead center, but the exception must not be confused with the rule; namely, that innovations should have some idea of the light at the end of the tunnel. (Experimental programs are another matter and they should be greatly encouraged.)

In recent years some school systems have become innovation-happy, grabbing almost any idea that comes along, inviting in an expert, appointing a committee, writing a story for the local newspaper, and confusing all of this with better education for youngsters. Some school
administrators and others are experiencing an innovation-backlash as a result of hastily conceived, ill-defined innovation efforts. More innovation rather than less is needed, to be sure, but more planning and a clearer picture of expected outcomes would assist in avoiding the pitfalls of instant innovations.

3. **Does it reduce the details of managing a classroom?** Innovations that add to the teachers' already overburdened existence likely will not enjoy any long term success. Teachers and administrators are willing to contribute extra time and effort if they believe some benefit will accrue to the children, but only so much additional time is available and most of what can be found is outside of regular school hours.

A good example of an outstanding idea that is thusfar bogged down in excessive detail is individually prescribed instruction (IPI). The clerical and paperwork for administrators and teachers alike is a major problem for the nongraded approach.

4. **Is it simple enough to be mastered in a reasonable time?**
The Core approach to the instructional program failed to move ahead more than has been the case because teachers were not equipped to

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10/ An excellent description of this promising innovation is contained in an article by John Bolvin and C.M. Lindvall in the 1967 NSSE Yearbook, Part II.

handle the increased intellectual demands it required. With little or no support from their preservice teacher preparation experiences, from their graduate courses, or from special summer institutes, core teachers were expected--on their own--to learn and coordinate the complexities of another subject area.

The effectiveness of the language laboratory has been dulled, indeed defeated in some instances, by inadequate procedures for developing teacher competence to use this approach.

One should not expect busy and already overworked teachers to grasp and effectively use an innovation that is second nature to its designer who has in all probability been living with it for years. And the designer should welcome their reservations and problems as valuable input and make revisions and developments based upon them.

In closing I would like to read a quote from Perle Ayers. As a sociologist at Berea College and as founder of the Council for the Southern Mountains, Professor Ayers has probably had more to do than anyone else with constructive programs for people in the Appalachian area. He said there are four things you can do about change.

1. Ignore it; pretend things are just as they always have been and will be. Think that the usual is the eternal.

2. Resist it. Prefer things not as good as they could be for fear they might be worse than they are.

3. Adapt and accept with an easy, false enthusiasm under the delusion of action: "We did this." Dedicated to ourselves,
our goals are simply adaptation to the past as we knew and loved.

4. Design and create the future. Mistakes may occur but not by folks who do nothing. Any true leader is always exposed to risk. But he takes the risk in the hope of real gain where inaction can only court certain disaster.