This paper reviews current educational research and philosophy on effective school characteristics and discusses how to put them into practice. Prevailing beliefs among educators have advanced from "there are good and poor learners" to "there are faster and slower learners" and now to "most students are similar in learning ability, rate, and motivation, when provided with favorable learning conditions." Cognitive and affective entry behaviors account for about 75% of differences in student learning outcomes. Therefore, instructional quality has little chance of overcoming the effects of entry behaviors unless the instruction takes into account cognitive or affective deficiencies. It follows that effective schooling should involve high expectations of students' performance, instructional assignments based on continuous assessment of student learning, consideration of the role of self-concept, sharing by staff and students of responsibility for successful learning outcomes, and varied time for learning according to student needs and task complexity. The paper presents: (1) Cruickshank's listing of leadership, efficacy, and efficiency dimensions of effective schools; (2) Stutz's comparison of the "model" change process concepts of the 1950s with those now found to be more effective; (3) Champlin's critical factors in organizational change, and basic components of a comprehensive plan for change; and (4) necessary changes in instructional process, curriculum organization, intentional school and classroom practices, and organizational structures. Contains 23 references. (SV)
EFFECTIVE RURAL SCHOOLS
WHERE ARE WE? WHERE ARE WE GOING? HOW DO WE GET THERE?

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"Effective Schools" and "Effective Schools Research" are the currently popular terms among those interested in improving schools and improving the educational accomplishments of our young people. However, the terms are fuzzy and subject to many interpretations. This paper explores the application of various concepts typically included under these terms, summarizing the "state of the art" and discussing how what we now know with relative certainty about what makes schools effective can be better applied in our schools. The question of "How do we get from where we are to where we want to be?" is answered by presenting the best information now available about successful change processes as applied to renorming schools in accordance with the best research about good education.

Psychological principles and philosophical premises are used to support a summary of effective school characteristics. Change process principles and a proven model for change are discussed to show how our schools can be remade according to what we now know is characteristic of the best schools.
The terms "Effective Schools" and "Effective Schools Research" have become the most recent in a long line of educational bywords and cliches. They are used by so many people with differing concepts of what good schools are and what schools are supposed to accomplish that to define the terms is an exercise in frustration. The terms currently mean whatever the user decides they mean. So, let's just agree to explore what current research and experience in the field of education seem to tell us about good schools and how we can best pursue the goal of being sure that students learn what we want them to learn.

WHAT ARE SCHOOLS FOR?

This somewhat ungrammatical question forms the foundation for our thinking about what schools should accomplish. Each person concerned with the question would answer it somewhat differently. The critical point is that, whatever our concept of "what schools are for" may be, there are certain practices and procedures which will best accomplish the desired purposes.

There is little evidence available at this time to indicate that principles for achieving desired outcomes are significantly different for rural schools than for other schools. The following discussion will, therefore, usually apply to schools in
almost any setting or situation. Many of the principles and practices are easier to apply in a rural school, however, because of shorter lines of communication, less "red tape," and closer relationships among faculty and students.

PSYCHOLOGICAL PRINCIPLES

Without getting unnecessarily deep into the subject, it seems appropriate to explore the psychological principles upon which our knowledge about good schools is built. We now have good evidence to support some bedrock assumptions about how people learn (both young and old), and from these assumptions we can pursue a logical path to determine desirable school practices and needs for change.

We owe to Benjamin Bloom (1976), his students, and colleagues much credit for carrying out seminal studies and then summarizing the research on good schools. The discussion which follows is based on his writing.

Not so many years ago (and sadly still prominent among many so-called educators today) the prevailing belief was that "there are good learners and there are poor learners." We must, therefore, make adjustments in what we do in school to best accommodate this "fact." Good learners can learn the more
complex and abstract ideas, but poor learners can learn only
the simple and concrete. To help us divide students into proper
categories for teaching, we devised I.Q. tests, ability grouping,
tracking programs, etc. Most of our schools still follow
practices based on this construct about learners.

About thirty years ago, there began to develop a
body of research that said "there are faster learners and there
are slower learners." We then began to develop ways to give the
slower learners the extra time they needed to reach the learning
objectives deemed important. This was an important advancement
in the science of learning and pedagogy, but we now have
additional evidence that supports a more revolutionary construct
about teaching and learning, one that says "...most students
become very similar with regard to learning ability, rate of
learning, and motivation for further learning--when provided with
favorable learning conditions."

There is less evidence to support the last statement, but
even if we are not ready to wholly embrace such a revolutionary
assumption we must admit that at least to a large degree it is
probably true. There is good evidence that, to state it in
negative terms, "when students are provided with unfavorable
learning conditions, they become even more dissimilar with regard
to learning ability, rate of learning, and motivation for further learning." You don't have to be an esoteric researcher to reach these conclusions. Just observe evidence readily available in most of the classrooms of the world.

COGNITIVE ENTRY BEHAVIORS

Bloom (1976) and his colleagues have estimated "... that cognitive entry behavior can account for up to one-half of the variance on relevant cognitive achievement measures over subsequent learning task(s)." In other words, this means that about half of what determines whether or not students learn what we want them to learn depends on whether or not they have the necessary knowledge and cognitive skill when we start teaching the new material. This "readiness" refers to both SPECIFIC cognitive behaviors (knowledge) and more GENERAL cognitive entry behaviors such as verbal ability, reading comprehension, and learning styles.

AFFECTIVE ENTRY BEHAVIORS

Research evidence indicates that "... affective entry characteristics can account for up to one-fourth of the variance on relevant cognitive achievement measures." The student enters
each new learning task with a concept about the material to be learned (positive, negative, or somewhere in between) and about his ability to learn that material. These concepts have been developed over a period of time and as a result of previous related experiences.

QUALITY OF INSTRUCTION

The conclusions stated above indicate that, in determining what they will learn, the characteristics of students at the beginning of a series of learning tasks are much more important than the quality of instruction. These characteristics are both cognitive and affective, the two accounting for about 75% of the differences in learning outcomes among students. Quality of instruction appears to account for only about one-fourth of the variance in learning. This means that the quality of instruction has little chance of overcoming the effect of cognitive and affective entry behaviors unless the instruction is directly related to the cognitive and/or affective deficiencies.

PHILOSOPHICAL PREMISES

If one follows the above and related principles about how we may achieve the purposes of our schools, there are certain
philosophical premises which we must logically observe. The following seem to be the most obvious.

1. Almost all students are capable of achieving excellence in learning the essentials of formal schooling, and all students are expected to perform at high levels of learning.

2. Instructional assignments should be made directly, based on continuous assessment of student learning, while being sure that each student is ready, both cognitively and affectively, before beginning a new learning task.


4. The instructional process can be changed to improve learning.

5. Staff and students both take responsibility for successful learning outcomes.

6. Time for learning should be varied according to the needs of each student and the complexity of the task.

CHARACTERISTICS OF EFFECTIVE SCHOOLS

There are numerous compilations of characteristics which seem to be somewhat common among the schools designated as
"effective," or what we might just call good schools. A recent listing by Cruickshank (1986) seems to be adequate and understandable.

LEADERSHIP DIMENSIONS:

Core Elements
- Positive climate and overall atmosphere
- Goal-focused activities toward clear, attainable and relevant objectives
- Teacher-directed classroom management and decision making
- In-service staff training for effective teaching

Facilitating Elements
- Shared consensus on values and goals
- Long-range planning and coordination
- Stability and continuity of key staff
- District-level support for school improvement

EFFICACY DIMENSIONS:

Core Elements
- High and positive achievement expectations with a constant press for excellence
- Visible rewards for academic excellence and growth
- Cooperative activity and group interaction in the classroom
- Total staff involvement with school improvement
- Autonomy and flexibility to implement adaptive practices
- Appropriate levels of difficulty for learning tasks
- Teacher empathy, rapport, and personal interaction with students

Facilitating Elements
- Emphasis on homework and study
Positive accountability; acceptance of responsibility for learning outcomes
Strategies to avoid nonpromotion of students
Deemphasis of strict ability grouping; interaction with more accomplished peers

EFFICIENCY DIMENSIONS:

Core Elements
Effective use of instructional time; amount and intensity of engagement in school learning
Orderly and disciplined school and classroom environments
Continuous diagnosis, evaluation, and feedback
Well-structured classroom activities
Instruction guided by content coverage
Schoolwide emphasis on basic and higher order skills

Facilitating Elements
Opportunities for individualized work
Number and variety of opportunities to learn

CHANGING (RENORMING) SCHOOLS

As indicated above, there is now available enough research and history of successful practice to provide adequate information about what schools should be like. Good information about how to move from "where we are to where we want to be" is much less available. The remainder of this paper will focus on the information now available about how to bring about significant change in a school or school district. Most of this
information is available in the form of experience documentation and descriptive studies. Little has been done to document more empirically what works best when a school leader with vision decides to change "what is" to "what should be."

PRINCIPLES OF EFFECTIVE CHANGE PROCESS

Much as been said and written about the best way to go about changing schools. This has developed over time, as we have moved from "scientific management" concepts about organization and organizational change to more modern approaches. Recent publications from the business world and the popular press have emphasized principles which have been around for some time but seldom followed.

Rowan C. Stutz, at the Northwest Regional Educational Laboratory provided a good comparison of the "model" concepts of the fifties with more effective ideas which he incorporated into what he called the "Rural Futures Development Process." This seems to be a good source for comparing traditional change process concepts with those now found to be more effective, especially since they were developed in the context of rural education needs. He summarized his conclusions as follows.
CHARACTERISTICS OF THE MODEL INNOVATIVE PROCESS:

(as identified by Michael Fullan, 1971, and reported by Stutz, 1974)

1. Innovations are developed externally and transmitted to schools on a relatively universal basis.

2. Users of innovations (parents, teachers, students) have had limited roles in the educational change process, and generally are seen as passive adopters of the best of recent innovations.

3. Primacy is given to innovations which often become the ends of the change process rather than the means for achieving desired outcomes.

4. Change is initiated from the outside and schools are viewed as a part of the universe of adopters.

CHARACTERISTICS OF THE RURAL FUTURES DEVELOPMENT PROCESS:

1. Learners, parents, and teachers have enough understanding of curriculum design, organizational development, and instructional methods that they can make wise choices regarding the creative development of new programs utilizing components of a wide variety of alternatives.

2. Users (citizens, educators, students) are in control of the innovative process in their own schools and participate in selecting and/or creating the innovations to be used in working out the implementation problems.

3. Primacy is given to outcomes and user capacities to innovate. Innovations are viewed as means to accomplishing desired outcomes.

4. Schools and their communities are viewed as initiators of change and as selective, creative, deliberative users of the products of research and development.
<table>
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<th>Educational reforms are often individualistic as a result of permissive process.</th>
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<td>Educational reforms are pervasive—a result of participative process.</td>
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<td>6</td>
<td>Values and goals as articulated by the users have no direct influence in the process.</td>
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<td>Users' values and goals provide much of the input to the process and directly influence decisions made about innovating.</td>
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<td>7</td>
<td>Diversity of innovations is not allowed.</td>
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<td>RFD assumes wide diversity in goals and legitimizes diversity of alternatives. It recognizes that different communities and schools may have different objectives and priorities at any given point in time.</td>
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<td>8</td>
<td>The force of the innovative process is from the top down.</td>
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<td>The force of the innovative process is from the bottom up. The role of the top-down relationship is to facilitate the bottom-up innovative process.</td>
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<td>9</td>
<td>Role changes in user systems, which are theoretically part and parcel of intended consequences of most educational innovations, are not recognized and planned for.</td>
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<td>Changes in roles and role relationships are part and parcel of the implementation process.</td>
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<td>10</td>
<td>Little awareness exists that innovations require unlearning and relearning, and create uncertainty and a concern about competencies to perform new roles.</td>
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<td>RFD recognizes that virtually every significant change has implications for changes in roles and role relationships. These changes, and the opportunity, resources and atmosphere for acquiring needed</td>
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11. New educational ideas and organizational changes often, through lack of user involvement, become empty alternatives because they create unrealistic conditions and expectations for teacher, administrator, parent and/or student performance.

11. Users participate in deciding what changes are to be made and in deciding what is needed to successfully implement them. Thus, new performance expectations are more likely to be realistic and planned changes are more likely to occur.

12. Those affected by the change are dependent upon the process.

12. Use of the process is dependent upon those affected by the changes.

Another view of how change may be most successfully attempted has been provided by John Champlin, former superintendent of schools in Johnson City, N. Y., and now Professor of Educational Administration at Texas Tech University. His success in leading the Johnson City Schools in achieving unusual advances in test score data and other indicators of effective school operation earned him national recognition while he was superintendent, and he has been involved extensively in working with districts and states around the nation in helping them achieve similar results in school reform.
Champlin (1987) states that managing change successfully is a controlled process consisting of seven critical change factors, all of which relate to the prime assumption that "any intervention or alteration will have eventual if not immediate total organizational impact." The seven critical change factors he identifies are as follows.

(1) ORGANIZATIONAL HEALTH, including the way individuals and the organization interact together. This concept is often discussed within the concept of "school climate."

(2) GOAL CLARITY, to guide all efforts and give a basis for assessment and renewal.

(3) UTILIZATION OF A PROCESS, consisting of four phases which are preceded by three prerequisites. The prerequisites are organizational health, goal clarity and evidence of effective leader behavior. Phase I deals with general readiness issues, Phase II develops pre-entry skills, Phase III gets the program in operation, and Phase IV is for evaluation and renewal.

(4) PRESENCE OF A CHANGE AGENT, to serve as a catalyst, source of solutions, and process assistant and to alter the existing equilibrium.

(5) RE-EDUCATION AND RE-NORMING THE COMMUNITY, primarily through small group meetings involving at least 90% of the
parents. These meetings should be conducted by teachers, not administrators.

(6) EFFECTIVE LEADER BEHAVIOR, fulfilling the roles of gate-keeper, supporter, encourager and enabler.

(7) RENEWAL, to keep the process ongoing.

Champlin (1987) further points out that successful change must:

(1) Be driven by data from research and the local district, leading to a purging of ineffective practices;

(2) Be committed to being goal driven, doing everything according to desired goals;

(3) Be committed to renewal, always correcting and adjusting;

(4) Use the available knowledge on change and behavioral management to plan and control every move;

(5) Develop an intolerance for mediocrity, both personally and organizationally;

(6) train staff members in every skill they are asked to perform and encourage their creativity in using the skills;

(7) Win the community as an ally by working with them and giving them reason to support the effort;

(8) Win staff support by creating a strong sense of need, ownership, and commitment;
Never rest, but renew;

Never lose sight of the ultimate goal.

A MODEL FOR CHANGE

To carry out desired change requires that some plan or model be followed which is consistent with the principles outlined above. This will vary for each situation according to local conditions and preferences, but there are some vital elements which must be included if the plan is to be effective. Again drawing from Champlin (1986) and his colleagues, the following brief discussion will identify the basic components of a good model for change. They use the term "Outcomes Driven Developmental Model" in referring to this comprehensive plan for change. It includes:

1. Designation of desired student exit behaviors: from the literature on effective schools one would select behaviors such as self-esteem as a learner and as a person; desired cognitive learning, both lower and higher levels; acquisition of process skills, such as problem solving, communication, decision making, accountability, and group process; being a self-directed learner; and concern for others.
(2) Acceptance of the basic mission statement that "All students will learn well what schools want them to learn."

(3) Development among the staff and community understanding and acceptance of the psychological and philosophical bases for the model, as discussed in the first part of this paper.

(4) The existence of transformational leadership.

(5) Development and/or change in administrative support systems, including staff development, communications network in the school and the community, a problem-solving model to follow, adherence to appropriate change process concepts, climate improvement, and resource management.

(6) Development and/or change in board of education policies, support, and relationships with the community; and networking with other boards attempting similar reforms.

(7) Development and/or change in school support systems, including instructional processes, curriculum organization, intentional school practices (discipline, grading, class scheduling, etc.), intentional classroom practices to produce "mastery" (teaching methods, lesson cycle, grading practices, disciplinary practices, etc.), and various organizational structures and practices.

SOME SPECIFIC CONCERNS

A thorough discussion of the specific kinds of implications
for implementing the principles and model for change discussed above would make this paper much too long, but a brief exploration of some of the more obvious and important items seems appropriate. Many of the changes called for are rather simple and probably not particularly controversial. Others are more revolutionary and likely to precipitate considerable controversy and resistance among both the faculty and the community, primarily because of the timeless excuse that "we haven't done it that way before," or "we don't do things that way here."

The basic mission statement, "All students will learn well what schools want them to learn," means that we no longer accept the notion that certain students are not capable of learning what we want them to learn. We may not achieve the mission all of the time, but we should not accept excuses related to home background, ethnic or religious background, or even many disabilities. The common educational statement that we will provide "equal opportunity" is not enough. We must commit to providing EQUAL LEARNING.

An extremely important, and seldom adequately addressed, part of successful renorming of a school is climate. By this is meant developing an atmosphere of mutual respect, safety, and comfort that facilitates the free exchange of ideas, differences, and
preferences, combined with a dedication to school improvement, needed change, and maximum effort. If the school climate is not right there will not be successful school reform.

Staff development must follow a model that emphasizes control of the effort by teachers, according to needs recognized as important to implementation of the stated goals and objectives. Much of this will be directly related to classroom teaching and curriculum organization, and it will be specific to the needs of the various types of teachers. One shot "dog-and-pony shows" to fill the time allotted for "in-service" will not suffice.

An effective communications network will be designed to function horizontally as much as vertically, so that teachers and administrators may exchange ideas and assistance with as little logistical interference as possible. It will also keep the community informed and encourage input from parents and others, even students.

Practices within the "school support systems" area include many of the areas requiring revolutionary change to achieve the mission of an effective school. Instructional processes, curriculum organization, intentional school practices, intentional classroom practices, and organizational structures must all undergo radical revision. A few examples will illustrate the many changes required.
INSTRUCTIONAL PROCESS changes follow "mastery" models of the teaching cycle and lesson planning which have been widely promoted in recent years. They include concepts of task analysis, lesson planning, statement of objectives, focus and mental set, input, guided practice, cues and correctives, formative assessment, enrichment, reteaching, closure, and summative assessment. Specific terms and variations on the theme may change the way these ideas are followed, but most of the basic ideas are similar. Much progress has been made in improving the act of teaching through use of these models, but without significant necessary revision of other parts of the educational system instructional procedures will not change significantly. What is being termed a "holistic" approach must be followed which incorporates all of the related practices and concepts. The term "mastery learning" has been widely used in referring to these kinds of reform, although the term also includes some aspects of curriculum organization, school practice, and classroom practice.

CURRICULUM ORGANIZATION must also be dedicated to helping achieve needed school reform. Subject-matter divisions must be minimized and an organization developed which will facilitate the continuous progress of students through the curriculum.
Organization will tend to be by rather short units, learning tasks, and lessons, with very specific objectives and indicators of successful attainment for each one. Organization according to traditional grade levels will be largely abandoned, but alignment of one unit or learning task with the next must be carefully maintained.

INTENTIONAL SCHOOL PRACTICES which require careful attention and drastic revision in most schools include the critical practices of placement, movement, and certification. "Individualized instruction" is not necessary, but students are taught in groups which have achieved comparable levels of learning. These groups typically stay together for the most part, although students may be moved in and out according to their individual progress. This placement in small groups is a vital part of the process.

Movement through the curriculum continuum must be carefully monitored and controlled to assure mastery of one task or concept before a student attempts to move on to the next one. This movement is controlled by "certifying" that a student has reached the required level of learning or skill before being allowed to progress to the next unit, task, or lesson. Mastery at the 80%
level is a common requirement, although it may be lower or higher.

The continuous progress practices are usually directed primarily at the basic skills of reading, mathematics, and language arts. For the other subject areas and school activities students usually stay with their chronological age group.

"Time on task" has received much attention by those interested in school reform, and it plays an important part in improving student learning. Eliminating unnecessary class interruptions and student distractions deserves a lot of attention. However, it has been shown that moving to mastery and continuous progress practices can in itself increase time on task from about 50% to about 80%.

INTENTIONAL CLASSROOM PRACTICES which usually require radical change include those having to do with school marks (grading), motivation, use of tests, discipline, expectations, and the like. Grades become a measure of power, and no student receives a failing grade. Incompletes are used to show that a student has not yet reached the required level of mastery. Positive forms of motivation (success, encouragement) are used rather than threats of failure and punishment, thus eliminating most traditional
forms of discipline and student control. High expectations for all students requires doing away with the idea that some students "just can't learn." Formative assessments (tests) are used to determine progress, diagnose needs, and plan remediation, and they are not "averaged" with the summative evaluations to determine grades. Homework is part of the learning process and not used for grade determination. Assessments are not confined to "hard data" such as test scores; teacher judgement is equally acceptable.

ORGANIZATIONAL STRUCTURES which require revision include some of the things discussed above, such as grade level designations. They also include provision for encouraging team teaching, various continuous progress organizational schemes, and elimination of "promotion" and "failure."

THE VALUE OF COLLABORATION

"Going it alone" is a lonely and difficult task when attempts are made to reform schools. Consequently, it is becoming more and more evident that there is great benefit in two or more school districts working together as they follow a common path toward renorming their schools. The benefits are many, including
mutual support and encouragement, cross-fertilization of ideas and experiences, stronger defense against attackers, and combining of resources (both financial and human) to support the cooperative effort. This "partnership" concept is proving to be most beneficial for rural school districts, in particular, and much more use of the idea seems likely in the future.

IN CONCLUSION

The times are both exciting and challenging for educators and educational leaders. There are difficulties, but there are tremendous possibilities, and if we will use the knowledge we now have about teaching and learning to remake our schools we can look forward to a most exciting and rewarding professional life. The alternative, staying with the mediocre and unfulfilling system now found in most parts of the country, is surely not what those who claim to be professional educators will tolerate any longer.
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