

As a research exercise, the study of creativity has long been the province of psychologists. In recent years, administrators have researched the creativity literature and have encouraged administrative practitioners to accelerate discovery and increase effectiveness of their organizations through more efficient use of their personnel. The author discusses why and how school administrators must manage schools creatively if creativity is to be fostered in the classroom.

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Creativity and its Necessity in Teaching and in the Administration of Schools

I: *CREATIVITY AND TEACHING*

The Dilemma of the School

As society changes so do the demands made upon the school change. In response to these demands the school has undergone a most intensive transformation in such areas as curriculum, techniques of instruction, the tools of instruction and administration. Many people, however, viewing the changes in society as being too rapid for them to handle, have made excessive demands upon the school. These people believe that education is a panacea for alleviating all the social, economic and political ills of the time. We have come to a time in the development of our democratic, industrial, scientific and technological society when we are becoming increasingly enriched by the creation of new inventions; especially in the realm of content, processes, products, machines; and most importantly, ideas. In education, innovation and creativity must play an increasingly significant role if the students of today, who are the workers of tomorrow, are to be prepared to have employability for business, industry and government. Most of the new jobs being created today require a high school education. Industry is becoming more complex and the threshold of employability is constantly rising.

The function of the school should be to aid students in meeting value change and in providing opportunities for making value choices. Traditionally, the school was, and in some cases still is, regarded as an instructional agency. Innovative creativity is needed in the administration of schools to assure that teachers obtain information relevant to today. Benne¹ has suggested that education must be conceived as an

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¹K. D. Benne, "Continuity and Discontinuity in Educational Development"; *The Journal of Educational Thought*; 2:3 (Dec. 1968), pp. 147-148.

empowering process equipping students to invent and reinvent their futures. The process of creative change in our school system may lead to many disagreements; but, disagreements are part and parcel of any administrative system. This statement is not a reluctant acceptance of the inevitable, for disagreement can be as constructive as it is sometimes destructive. Innovative or creative ideas frequently cause disagreements, and the greater the change which they represent, the greater the possibility of disagreement. The fact that discussion may lead to disagreement can serve either to create hard feelings among staff members or lead to a resolution of conflict and hence to a creative solution. The first of these outcomes of disagreement is a liability, especially with regard to the acceptance of solutions; while the second is an asset especially where innovation and creativity is desired. An administrator can treat disagreements as undesirable and thereby reduce the probability of both hard feelings and creativity, or he can maximize disagreement and risk hard feelings in his attempts to achieve creativity. The skill of the administrator requires his ability to create a climate for disagreement which will permit innovation and creativity without risking hard feelings.

The commonly held notion that materials, equipment and structural organization changes are the key factors in fostering creativity in both students, teachers and administrators, in our schools, is false. While these factors are important, the human factors are more crucial to creativity than are the non-human factors. Humans are both the most common obstacles to, and facilitators of, creative educational changes, both in teachers and administrators, as working effectively with people is the key to successful innovative creativity. School administrators should be aware of the fact that adequate planning and in-service education for staffs are very important when introducing changes based on creative ideas affecting the administration of the school. The school and its administrative system which truly wishes to be creative, has to make creativity a deliberate objective, or goal, and an overall organizational policy.

The Nature and Criteria of Creativity

Creativity may be defined as the product of some innately given power related in some intimate but obscure way to our unconscious mind. Creativity is a power which thrives on exercise but withers away if checked. Creative thinking is not a peculiar type of thinking that has different, non-publicly observable, features from other types of thinking. White² defined a creative thinker as one whose thinking leads to a result which conforms to criteria of value in one domain or another. It is well recognized that our schools cannot teach creativity; however, administrators must share responsibility with teachers for creating environments and circumstances conducive to creative behavior that will encourage

²J. P. White "Creativity and Education: A Philosophical Analysis"; *British Journal of Educational Studies*; XVI:2 (June 1968), pp. 123-137.

venturesomeness and freedom from precedent. Teachers should give students the opportunities and the environment that will pull out of them those ingredients which result in creative acts. Administrators, likewise, must provide environments necessary for teachers to develop creative powers and atmospheres in their classrooms.

Teachers should be encouraged at all times, by enlightened administrators, to teach techniques that encourage creativity and to teach ways of working with and re-evaluating sets of assumptions and different conditions. Teachers are not only removing obstacles and allowing expression and liberation, but new ways are being taught when the atmosphere is creative. Teachers, with the help of the administrator, should design their classrooms so that as many students as possible are being creative constantly — not forced into a creative mold, but encouraged to develop infinite new ways in which they can refine their own elements of creativity. As an institution, the school should make sure that every student, and especially the creative one, is worked hard while at the same time, allow the creative student to choose academically acceptable projects on his own. The school must be rigid enough to force the lazy student to study and yet flexible enough to let the highly motivated one set his own pace.

Hallman³ has identified five criteria which normally define creativity as a unique form of human behavior — connectedness, originality, non-rationality, self-actualization and openness. Both teachers and school administrators should keep these in mind when in the classroom, or when managing a school wherein creativity is desired. Connectedness refers to the total act of producing novelty and identifies it as a metaphoric process. The process consists of the thing created, the process of creating, the personality of the creator and the creative environment. The criterion of originality identifies the quality of surprise as characteristic of the thing created. Artists and writers emphasize this quality, for the production of distinctive objects lies at the heart of artistic creativity. The principle of non-rationality refers both to mental operations which produce novelty and to the four stages noted under connectedness. The fourth and fifth criteria refer respectively to the personality traits of the creative individual and the kind of environment which facilitates creativeness. Traits which foster creativity include psychological health, non-defensiveness, independence in value judgments, sensitivity to problems, capacity to tolerate ambiguity and a display of strong aesthetic interests.

Barron⁴ has identified three distinct traits that mark the highly creative person:

- (i) Creative individuals seem to be able to discern accurately more complexity in whatever it is they attend to. This results in part

³R. J. Hallman, "Creativity and Educational Philosophy"; *Educational Theory*; 17:4 (January 1967), pp. 3-13.

⁴F. Barron, "The Dream of Art and Poetry"; *Psychology Today*; 2:7 (December 1968), pp. 19-23.

from the fact that they are attracted to complexity and find it more challenging, so that indeed there is more complexity for them to discern. They prefer phenomena and visual displays not readily ordered. When confronted with an ambiguous perceptual field, they seek the single synthesizing image that will unite many diverse elements.

- (ii) Creative individuals display perceptual openness, or resistance to premature closure. This is very closely related to (i), since such an attitude provides more opportunity for complexity in the phenomenal field to develop.
- (iii) Creative people often rely on intuition, hunches and inexplicable feelings. They trust the non-rational processes of their own mind.

Another writer, Loewenfeld⁵ has developed eight attributes of creativity:

- (i) Sensitivity to Problems
- (ii) Fluency of ideas
- (iii) Flexibility
- (iv) Originality
- (v) Redefinition and ability to rearrange
- (vi) Analysis or the ability to abstract
- (vii) Synthesis and closure
- (viii) Coherence of Organization

Another important criteria is openness. The criteria of openness, as it relates to creativity, refers really to the absence of inhibiting forces rather than to the presence of causally operative ones. It includes attitudes of receptivity and objectivity as these states of mind allow for responses which are respectively spontaneous and authentic. Intellectually, openness describes the state of being fully attentive and engaged; of being detached from beliefs, creeds and dogmas and of being free from automatic memories. Psychologically, openness refers to the free play of conscious processes so that one can accept them without fear and react to them without threat. Openness is extremely important for school administrators. Administrators must realize that if creativity is to be fostered in the classroom, then creative environments must be established in the school and creative environments are non-authoritarian and open. Therefore, openness on the parts of both teachers and administrators contributes to creative acts because it provides flexibility of minds, spontaneity of responses and sensitivity to states of affairs.

⁵V. Loewenfeld, V., "Current Research on Creativity"; *NEA Journal*; XLVII:8 (November 1958), pp. 538-540.

Creative people are, then, not “oddballs” but are often viewed with disdain by non-creative people. This is to be expected since they do not share the same basic values as those held by non-creative people. Non-creative people derive a great deal of satisfaction and comfort from sharing a “common idea” and maintaining the status quo; whereas, many creative people do not wish to hold on to conventional ideas. Creative people derive little, if any, true satisfaction from holding on to the old ideas and therefore tend to degrade the things that non-creative people consider sacrosanct.

I.Q., Achievement and Creativity

Despite considerable disagreement concerning creativity's nature, personality correlates and relationship to conventional intelligence, a large number of studies⁶ in recent years report significant relationships among creativity, I.Q., and achievement measures. Some of these studies have also indicated that creativity scores are useful in discriminating between high and low achievers, by permitting predictions not possible on the basis of I.Q. scores that measure mainly convergent thinking ability. These findings support, in some measure, the hypothesis that the kinds of tests often described as measuring “creativity” are in some way usefully related to academic achievement, despite the fact that strictly speaking, their predictive validity is unknown.

The very nature of I.Q. tests recognizes the correct answer, the common answer, and the answer typical of the majority of an age group or a defined population. Traditional intelligence testing makes little provision for the unusual response, for variety of responses, or for many responses. Yet these possibilities are phases of intellectual functioning. Many researchers have attempted to expand and clarify the range of intellectual functions involved in this area through theoretical and statistical analysis. One closely related to the schools that has generated a plethora of research and discussion is the distinction between convergent and divergent thinking. Convergent thinking refers to abilities that permit us to narrow down, to focus, to limit our thinking, to give the correct response, the carefully defined answer, or the limited statement, which fits a carefully defined situation. This kind of thinking is usually well represented in traditional intelligence tests. Less well represented are the divergent thinking abilities, those that open up a situation and expand and broaden thinking to original responses, unusual answers, or fluency of ideas. In areas where there are no final answers, where problem solution requires exploration of an open system rather than analyses of a closed system or situation, divergent abilities are most useful. Creative thinking calls more upon divergent thinking than upon convergent thinking.

If these divergent abilities are the attributes of creativity, then it is clear that the creative aspects of intelligence are not coherently organized

⁶A. J. Cropley, “Creativity, Intelligence and Achievement”; *Alberta Journal of Educational Research*; XIII:1 (March 1967), pp. 51-57.

in the normal I.Q. tests. The foregoing statement has been tested by a number of investigations comparing children's and adolescents' tests of creativity, I.Q., and achievement in school. Although there are varied details surrounding these studies, the general conclusions seem to be consistent: I.Q. and creativity as tested show different distributions and those with high I.Q. are not necessarily the highly creative. Holland⁷ has also shown that creative performance shows no correlation with high school grades, scholastic achievement or scholastic aptitude. Barron⁸ also points out that beyond a minimum I.Q. creativity is not a function of intelligence as measured by standard I.Q. tests. Barron's research also indicates that:

- (i) Persons of a high order of creative ability are usually in the upper 10% of the general population in terms of I.Q.; and,
- (ii) Within groups of such persons, there is usually little, or no, relationship between I.Q. and creativity.

It becomes clear that every individual has some creative ability, even though the ability differs widely, and that the average person possesses a certain amount of this ability even though he may make little use of it. The mental processes, while not yet completely understood, are processes which rely on perception, imagination and a mental activity called divergent thinking. However, the ability to converge logically and the ability to diverge imaginatively do not seem to necessarily go together. Many organizations today are populated with a number of intelligent, logical and analytical people who are capable of less creativity than others who are more imaginative but less analytical. Non-creative organizations usually place all their convergent thinkers at the top of the hierarchy and their divergent thinkers at the bottom; whereas, creative organizations do just the opposite.

Creativity in the Classroom

The difference between excellence and mediocrity of creative ability is one of degree, not of kind. This indicates that each classroom teacher must strive to see that as many students as possible be exposed to a creative atmosphere. Creative thought is close to reality, in most instances, and its end results are given to the social group involved. Consequently, creative thinking should not be confused with idle reverie, as most creative thinking is goal-directed and deliberate. The classroom teacher must attempt to set up situations that will facilitate the development of "controlled" imaginations, and pupils should be encouraged to look for new solutions to problems and to find adequate media in which to express their ideas. If teachers are not impatient and hasty in judg-

⁷J. L. Holland, "Creative and Academic Performance Among Talented Adolescents", ed. Grinder, R. E., *Studies in Adolescence* (New York: MacMillan, 1963) pp. 511-524.

⁸Barron, F. *loc. cit.*

ing by adult standards of excellence, the pupils will not be stifled and inhibited in creative activities. The emphasis should be upon co-operative endeavors and the sharing of new discoveries. The presence of other pupils engaged in similar activities greatly facilitates the responses of the individual. The teacher must not uphold standards that are beyond the possibility of attainment by students, nor should he compare the performance of one pupil with that of another. The desirable procedure should be to point out to each pupil how he is improving in creative performance and to suggest new attacks that might hasten improvement. Hopefully in time, each pupil will come to realize his own limitations; but he is not discouraged by the abrupt realization of incapacity for outstanding creative ability.

Glasser⁹ believes that it is not a frill to have children involved with many good teachers, to give them individual and small - group attention, to extend the educational program far beyond the limitations of the regular curriculum and to give children an opportunity to create without being judged or graded. On the basis of the above, Glasser defines a creative child as one who discovers something important on his own. Whether or not his discovery has been discovered before is unimportant. The child gets the same thrill as the original discoverer, a thrill that motivates him to keep discovering.

There is some evidence¹⁰ to suggest that the highly creative learn better and more easily in a more fluid problem - solving situation. Memorization, conventional information - giving, and examinations are not appropriate modes of learning for highly creative students. Dobinson¹¹ suggests that the abolition of the written examination would release many creative abilities which have been suppressed by the outmoded doctrine that schooling and the acquisition of information are one in the same and have the same parameters. Holt¹² suggests that schools should be a mixture of intellectual, artistic and creative activities from which each child can take whatever he wants, and as much, or as little, as he wants.

There are, then, many changes occurring in our schools. The basic function of the school is changing from one of information - giving to one of helping students meet value changes. Although money and material are often needed for facilitating creativity, the human factors are most vital for creativity. Both teachers and school administrators must become more aware of the relationships that exist between I.Q., achievement and creativity. The administrator's grasp of the research in this area can have a significant effect on his decisions regarding grouping, curriculum,

⁹W. Glasser, *Schools Without Failure* (New York: Harper and Row, 1969) pp. 204-206.

¹⁰T. E. Clayton, *Teaching and Learning* (Englewood Cliffs: Prentice-Hall, 1965) pp. 166-167.

¹¹C. H. Dobinson, "Education Tomorrow"; *The Journal of Educational Thought*; 1:1 (April 1967) pp. 9-10.

¹²John Holt, *How Children Fail* (New York, Dell, 1964) p. 180.

and class loads, as well as examinations and evaluation criteria. Teachers, and particularly administrators, must create non-authoritarian, open school environments conducive to creative behavior if creativity is to be realized. How the school administrator facilitates some of the changes needed in our school system for creativity to be achieved, and what creative organizational and personnel management techniques are required to promote creativity in our schools, are discussed below.

II: CREATIVITY IN SCHOOL ADMINISTRATION

The Administrator's Assistance with the Encouragement of Creativity

Creativity, in pedagogical circles, should be considered as a process and as a central purpose of education. Creativity in students can be encouraged and developed, or stifled and submerged. Teachers must be urged to view creativity not as totally indefinable, but as a process concerning which certain things are known. They should be made familiar with what they can do to encourage it, and what they might do which would discourage it. This is the job, in part, of the school administrator. Since creativity can only flourish in an atmosphere of freedom from non-authoritarianism, it follows that the educational administrator has a grave responsibility toward creativity.

Harrison¹³ suggests that creativity can be encouraged by the teacher who is sure enough of himself to be tolerant of clumsy efforts and sensitive to new ideas, who encourages diversity, and who is willing to let the familiar and the comfortable be challenged. At both the secondary and elementary levels, the school administrator should encourage teachers to:

- (i) Attempt to provoke creative thinking
- (ii) Allow time for creative thinking
- (iii) Give status to the ideas of the students
- (iv) Consider learners as thinkers and not consumers of information
- (v) Provide a research setting in as many situations as possible
- (vi) Encourage experimentation
- (vii) Provoke pupils to learn
- (viii) Encourage future-oriented thinkers
- (ix) Minimize the fear of failure
- (x) Provoke creative use of subject matter
- (xi) Use a minimum of time telling students what to do
- (xii) Provide open-ended questions
- (xiii) Leave some decisions up to the students

¹³R. H. Harrison, *Supervisory Leadership in Education* (New York: American Book, 1968) pp. 335-338.

People differ not only in general intelligence, but in two rather contrasting types of ability. Some individuals are gifted in originality, they are able to see new relationships and to impose new structures upon old facts. Others may have marked ability in making common sense judgments requiring the assessment of many relevant factors, and in accurately predicting outcomes. Though not logically antithetical, these two abilities do not often occur in the same person. The idea man, by virtue of his enthusiasm, originality and creativity, does not examine his flow of ideas with searching criticism. Such an attitude would obviously inhibit his creativity. On the other hand, the person seeking to make a balanced judgment and concerned with giving the appropriate weight to competing notions is unlikely to produce a new solution. Occasionally, the two abilities are combined in a person who can move from a phase of creativity to a phase of criticism.

This has some implications for school administrators in that normally policy-making is in the hands of the men of good judgment, rather than men of creativity. School administrators of good judgment and insight will take on enlightened subordinates to perform the innovative and creative functions. The creative school administrator can supplement his talent by surrounding himself with teachers and supervisors of good sense, but he still has the problem of making the final judgment or decision. It is understandable, then, and as has been noted previously, that the most original minds in any organization — the school being no exception — are rarely found in top administrative positions. However, more and more, creativity as well as judgment are being found in some of our more enlightened school administrators. The complexities of organizational life with its many conflicting demands on administrators mean that critical, judgmental and creative abilities are the essential requirements at this level.

Egan¹⁴ suggests that school managers, or school administrators, are usually interested in creativity from three points of view:

- (i) How to identify and assess creative and potentially creative supervisors and teachers.
- (ii) How to foster creativity within the school organization.
- (iii) How to train teachers and students to be creative.

Insofar as school administrators are concerned, creativity may be described as involving the following:

- (i) Originality in thinking and frankness of approach to school administrative problems.
- (ii) Constructive ingenuity, the ability to set aside established conventions and procedures when appropriate.

¹⁴D. Egan, "Creativity in Management"; *The Journal of Creative Behavior*; 3:3 (Summer 1969) pp. 178-183.

- (iii) A flair for devising effective and original solutions to the major demands of the school.

There are several general aspects of organization structure and process which help creativity thrive that should be kept in mind by the school administrator:

- (i) The relationship between superior and subordinate is important as well as the influence of the immediate group.
- (ii) The attitudes and roles which the individual teacher is expected by the organization to fill are important.
- (iii) Creative thinking takes time; consequently, ample time should be provided for teachers and administrators for true creative thinking.
- (iv) General cultural factors in the school environment may account for the fact that men rather than women have given greater evidence of creativity productivity in various fields.

Obstacles to Creative Change

In the administrative world, the single most important factor influencing creative activity is the organizational climate. But organizational climate can turn off, or turn on, creative output with equal ease. One of the quickest ways to "turn off" creativity is to set up a bureaucratic model in which a quasi-authoritarian base is established which encourages and supports conformity and uniformity. Traditionally, bureaucracy seems to encourage negative thinking and, at the same time, discourage independent and autonomous thinking which is the essence of creativity. Only very skillful handling will make it possible for a school administrator to direct school personnel with negative attitudes into channels which are compatible with the ways of improving organization and enhancing a creative atmosphere in the school. The blocks to acceptance and participation in the creative change process must be recognized, clarified and dispelled by the school administrator. The alert school administrator may see some of the following:

- (i) Extreme desire to conform to an accepted pattern.
- (ii) Undue respect for existing policies, practices and procedures.
- (iii) Judging a contemplated change or innovation too quickly.
- (iv) Excessive caution and fear of being mistaken or ridiculed.
- (v) Lack of self-confidence and lack of strong orientation toward the future.
- (vi) Failure to comprehend the change or innovation.

In general, if school employees are happy, then a desire to produce behavior or products of value in a creative atmosphere will most likely

ensue. School administrators must also keep in mind that school personnel might feel that their work is dull, routine and dissatisfying under the following conditions:

- (i) When objectives are set by others.
- (ii) When instructional techniques are standardized.
- (iii) When high emphasis is placed on routine operations and production.
- (iv) When a question of tenure exists.
- (v) When experimentation is discouraged.
- (vi) When the unique talents of individuals are not recognized.
- (vii) When problems associated with personnel are settled by rulings from above.
- (viii) When the tools and conditions of work place limits on the quantity of work that might be accomplished.
- (ix) When the occupation itself is seen as being socially depreciated by the community.

Should a combination of the above listed criteria be operating in a school or school system, it is doubtful that personnel will have an opportunity to experience satisfaction on the job, the lack of which will greatly limit their willingness to be, or become, creative in the classroom.

There are, I am sure, a vast number of teachers for whom life in general and their jobs in particular have become just plain dull. Teachers do turn quite naturally to their jobs for a chance to satisfy their needs for self-expression and creativity. Their jobs do occupy the bulk of their day and the period during which they are the most alert, energetic and productive. Even though some of their work is often tedious and repetitive, it is for many the only aspect of their lives in which they hope to accomplish something worthy of their talents and profession.

One of the greatest challenges facing the school administrator today is to meet this need for a feeling of accomplishment, significance and relevance in their teacher's work. The greatest need is for the school administrator to create an organizational atmosphere or climate in which a teacher's creativity or latent creativity can blossom. Boredom is not so much a problem in itself as it is a symptom of one of the administrator's greatest problems today — maximizing the achievement potential of his people. The basic reason why this must be achieved lies in the premise that this is the most difficult challenge to the administrator's own ability to manage. By maximizing others' potential, the administrator develops his own skills and potentialities to their highest levels.

The involvement of individuals in future oriented decision-making that concerns them is an important source of motivation. Participation

in group decision - making and planning tends to give an individual a better understanding of the situation or problem at hand and an opportunity to contribute ideas. Such involvement may be realized by the use of Synectics Theory. Synectics Theory integrates diverse individuals and different and apparently irrelevant elements into dynamic problem-solving groups. Through Synectics, an organization keeps itself viable by building into itself creative forces for continued survival.

A category of acts beyond the line of duty for teachers consists of creative suggestions for the improvement of methods of instruction or of any other situations surrounding the operations of the school. Some school organizations encourage their members to feed constructive suggestions into the system, but coming up with good creative ideas for the organization and formulating them to the administration is not the typical role of the teacher. A school organization that can stimulate its teachers to contribute ideas for over - all organizational improvement is a more effective organization in that the people who are close to operational problems can often furnish informative suggestions about such operations. The system that does not have this stream of contributions from its members is not utilizing its potential human resources effectively. Personal interaction and an appetite for constructive novelty in an atmosphere of inquiry is the keystone to improvement of the learning situation and to the implementation of meaningful innovation and creativity. It becomes the task of the school administrator to provide a visible kind of commitment, through dynamic leadership, when introducing creative change into the school.

Management of Creative Personnel and the Creative Organization

Trained and educated during the now by - gone period of the Protestant Ethic with its stern belief in disciplined hard work, most "old - line" administrators acquired a subconscious conviction that the only way to achievement was the "nose - to - the - grindstone" or the "shoulder - to - the - wheel" approach. There are still a few vestiges of this type of administrator in our organizations today. Unfortunately, this is not a posture suitable to the discovery of new ideas. The force of accelerating social, economic and technological change will greatly increase the need for administration by creativity and innovation in the future. The appearance of a new breed of employee in our organizations who is better educated, more informed, more sceptical, more socially conscious and less materialistically oriented has resulted in a pattern of change with so many ramifications and implications that it staggers the imagination.

Achieving optimum creativity, morale and motivation in the school personnel necessitates creative change on the part of the school administrator. Certain school administrative policies can foster a creative atmosphere in the school and can help prevent the alienation of creativity.

Tight, formal authority systems, as has been noted previously, discourage creativity. The creative teacher needs to be given intelligent audience by the kind of flexible administration that listens to all new ideas, absorbs the useful and tactfully defers the unrealistic. Feedback is always needed to upgrade the effectiveness of management decisions. Hence a free-flowing communication network is needed if a creative open atmosphere is to exist in the school. School administrators should keep in mind that too much pressure with too little time off for relaxed thinking increases the risk of reducing creative output. Reasonable deadlines are effective motivators, but continued crash programs tend to automate thinking, lower morale, increase tension and promote interpersonal conflict. Open communications, dynamic organization concepts, and "think sessions" are all means for administrators to build an environment for self-actualization and high levels of job satisfaction; and, consequently to acquire a climate of high motivation, morale and creativity.

School administrators will have to learn to build and effectively manage innovative organizations where creativity is fostered and insisted upon. They will have to learn to build and manage a human group that is capable of anticipating the new, accepting the new, and able to "teach" creativity. This will require a different structure regarding the relationship between people in the school in that it requires a team organization rather than a command organization. The many changes in administrative technology will force school administrators to change their behavior in many areas, including the fostering of creativity. Existing school administrations will have to learn to reach out for creativity as an opportunity and will have to learn to resist continuity.

The school administrator playing his dual role of educational leader and school personnel manager holds the key to successful creativity within the school setting. The school administrator will in the future need to keep himself well informed of emerging educational theory and research. He must also engage in a deep study of group processes as well as of the personalities and talents of the school personnel. In the final analysis, how he functions in relation to personnel and knowledge will determine the degree of creativity that will exist in his school. The ideal school climate for creativity is supportive and promotes divergent thinking; however the ideal school climate presents many complex problems, some of which are insolvable. The existence of this climate, as promoted by the school administrator, implies a staff capable of creativity. The nature of the problem, the quality of the group leadership, the composition of the group, the climate and procedures adopted, determine to a large extent both the students', the teachers' and the administrators' creative output.

We have entered into the post-industrial society with its new social and conceptual arrangements and its new ideologies and values. The

demand for enlightened school administrators with professional competency, imagination, flexibility and creativity must be effectively met. The vast problems, challenges and opportunities caused by change are causing many organizations, the school being no exception, to re - evaluate their mission and purpose. Administrative ability to make traditional operating decisions is no longer adequate. A creative approach by operating in new ways is quickly becoming the requirement for existence in contemporary educational organizations.