Confirmation of Creativity

Dorothy N. Phillips
Central Washington University

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CONFIRMATION OF CREATIVITY

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Dorothy N. Phillips
June 1966
APPROVED FOR THE GRADUATE FACULTY

______________________________
Gerald L. Moulton, COMMITTEE CHAIRMAN

______________________________
Louis A. Kollmeyer

______________________________
Edith Kiser
ACKNOWLEDGMENTS

In preparation of this thesis, I am under great obligation to many individuals who have unfailingly given their support. At every stage of the work my family has both suffered from my preoccupation with creativity and persevered in their faith in my commitment to its investigation.

My indebtedness extends to those who have preceeded me in this study and have contributed of their insights through books, articles, letters, and dialogue.

For the kindness of Robert Rumsey, who during these four years has read and commented on most of the journals that have recorded these experiences, I am sincerely grateful. He has encouraged the projects and shared the tribulations and triumphs of the venture.

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Particular notice is taken of my neighbor and friend, Myrtle Craddock, who has so frequently shared the trivial and the profound of these experiences.

Invaluable aid must be acknowledged from the girl next door, Truda Craddock, for the correcting and typing of this manuscript under frustrating circumstances.

May the reward of our deeper understanding be more permeable boundaries and broader bans of communion.
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CHAPTER I


Discipulus est priori posterior dies, each day is the scholar of yesterday, is an aphorism that acknowledges the long roots into a quarter century of teaching from which has grown the hypothesis of this study. From these yesterdays, vibrant with the sight and sounds of multitudes of children, four major premises have been assumed by the writer that are basic to the formulation of the concepts of this thesis. First, all normal children have a creative potential. Second, it is vitally important to the child and to society that he be encouraged to respond creatively to the experiences of his life. Third, creativity is a powerful spur to learning. Fourth, the climate that is most productive of creative responses also tends to produce sound and healthful individuals.

The writer has hypothesized from these assumptions that through creativity a dialogue of communication may be established that will free both students and teachers to expose themselves to that which is most real within themselves and the world without, and to have the courage to respond to this reality in their own unique and meaningful ways.
Confirmation of this thesis by investigation, and by the practice of creative teaching and learning, is the subject of this report. Investigated was the accumulated knowledge of what is known or surmised about creativity; practiced was the skill of becoming the kind of person who, while working with children, can establish an atmosphere where creativity is likely to flourish.

I. IMPORTANCE OF THE NOTION OF CREATIVITY

The Concept

The concept of creativity has been alternately venerated and rejected by both society and individuals. It could be partially defined as the ability to imaginatively synthesize the familiar into original products. It implies newness; it involves adventurous thinking; and it breaks barriers. Torrance (131:32) states that "creativity is the process of forming ideas or hypotheses, testing hypotheses and communicating the results." Koestler defines the act of creation as

... a certain way in which the mind functions whereby two seemingly unrelated patterns of behavior are brought together. ... The act of discovery has a disruptive as well as a constructive aspect. It must disrupt rigid patterns of mental organization to achieve a new synthesis (101:18).
The ability of the individual to see original analogies in the familiar and to reveal them to us in personal and inventive ways is the essence of creativity.

The dialogue of communication which, we hypothesize, may be established through the nurturing of creativity, requires mutual trust to the extent to which one is willing to re-examine one's bias and to permit some exposure to the other person.

Priorities are subject to review in dialogue. They are likely to be solidified in negotiation. . . . The consequence of dialogue is greater confidence in the other fellow and in oneself (154:46).

The Concern

A concern for the establishment of this dialogue, and a belief that through the encouragement of creativity it is possible to make real contact with children and experience this dialogue, has motivated the persistent attention of the writer for the past four years. Through stages of comparative tentativeness, as confirming creative experiences have accumulated and understanding of the creative process has grown, the commitment has deepened.

Such devotion to an idea, "caring desperately and caring all the time" (55:210), arises from concerns inherent in the dichotomy of the classroom. In this interchange there is, traditionally, the teacher and the taught.
Though the teacher may be a professor, another student, the curriculum, or the experiential environment of the pupil, teaching implies that the student is ignorant, empty, perhaps hungry, and waiting to be filled like a nursing infant. This analogy to education is illuminating.

Certainly there must be warmth, and the satisfaction that comes from an abundance of nourishment, freely given, that is necessary for growth. Hopefully an individual so nurtured will be well started in his development, eventually realizing his full potential. This is the level of our expectation, the accepted right for our children. The minimalness of the realization of these goals is our concern.

Those who care for children during the process of their development within the hours of the school day are appalled by the child who is apathetic in his appetite to learn. The deaf ear, the dull eye, the closed mind prophesy premature atrophying of both talents and personality. Teachers are frequently frustrated in their attempts to contact a child whose channels of communication are so obscured that they seem undiscoverable. The pain of starvation, emotional or mental, the bloating, blocking effects of anger, or the inhibiting power of fears may absorb most of the child's energy, leaving little impetus
for striving toward goals other than that of mere survival. There is a recognizable stunting of the growth of his possibilities.

We blame the familiar central determinants of the failure to learn: the type of child, the parents, and the non-school environment. It is with wariness that we consider the rejecting attitudes of the school and the resulting anger and loss of interest on the part of the child (138:37). Almost too painful to entertain, more than in passing, is the thought that we, the teachers, might be contributors to this premature withering.

There are the zestful, the joyful, the bouyant; words descriptive of the "creating person . . . also frequently used in mental health literature to describe mature, well adjusted adults" (55:211). MacKinnon says:

The creative individual, as we have seen him, is an impressive person, and he is so because he has to such a large degree realized his potentialities. He has become in great measure the person he was capable of becoming (133:13).

Not only has it been the experience of the author, but current research has shown that for many of our children the educational process, rather than extending the range of adaptive patterns, may freeze the student in one stance.

In the process of achieving mastery of the human task, the cognitive and adaptive styles of an individual
may become so fixed that his ability to cope with altered circumstances becomes limited (154:41).

Who could imagine the variations of life that might have developed in the evolutionary process, perhaps beneficent mutations, but for the unconscious selection of climate, predators, or even selective cultivation? Wirth writes:

The biosphere itself provides the nurture for life in its marvelous and varied forms, yet it also functions in ways to block or choke diverse modes which might have been. Human culture is an indispensable storehouse for sustaining and furthering growth of the human spirit, but it may function also as an agent for atrophy (59:8).

Eisely picks up the same theme and relates it to our personal influence as the teacher. Whether we will it so or not, we as educators play the part of the biological screen in the natural world, or the psychological censor to the individual human mind. In innumerable small ways, if we are rigid, dogmatic, arrogant, we shall be laying stone upon stone, an ugly thing. We shall, for all our power, give the semblance of necessary reality to a future that need never have been permitted. "The educator can be the withholder as well as the giver of life" (59:52).

Is it our withholding that causes the demonstratable drop in creativity at the age of five, a further drop at nine, or the fourth grade level, and another significant decrease at the age of twelve? Calvin Taylor (158:180)
appeals for research to help understand this observable decline. Studies made deliberately to keep alive creative growth in the fourth grade, and studies made in cultures outside the United States, indicate that the drop at this level is man made and not developmental (165:10-11).

The more empathetic the teacher, the greater the distress as he witnesses the destructiveness of some of the accepted aspects of our school situation. He suspects and may finally acknowledge his own inadequacies. "A sensitive teacher becomes anxious if he is a partner in, or a silent spectator of practices which he regards as wrong" (91:24).

It is amid a chaos of complexities that the teacher, frequently with blindness, with uncertainties of his own, must fight with circumstance for the developing mind, perhaps even for the very survival of the child. The teacher is fighting for an oncoming future, for something that has not emerged, may never emerge.

It is a dangerous occupation, for what we conceive as our masterpiece may appear out of time to mock us - a horrible caricature of ourselves (59:27).

It is essential for survival in our complex and threatened world to discover ways to foster the actualization of all the untapped or dormant capacities of our people, especially the young. When we fail, the future of all of us is concomitantly jeopardized.

... it is clear that civilization must owe much, if not everything, to the individuals so gifted with creativity. The greater the number and variety of
genuinely creative minds a nation can produce and cultivate, the faster will be its rate of progress (101:16).

Lowenfeld (131:10) reports an interesting conversation with a member of the Russian delegation while viewing the drawings of Russian children on display at the International Society for Education through Art Convention in The Hague in 1957. He was amazed by the unusually spontaneous and creative work, free of political overtones. He asked, "Why do you fail to indoctrinate small children with your political aims while their personalities still can be molded easily?"

"Don't you realize," the Russian delegate lectured, "that we must first unfold the child's creativity? This means giving him as much freedom as possible. In our schools, for example, we would never use fixed pattern workbooks because . . . ."

The Russians evidently know something that our own research is just beginning to show, that a creative child, encouraged to develop openness and a free imagination, will bring to any work he does these same qualities. McKinnon, who has been engaged in the intensive study of the creative individual at the Institute of Personality Assessment and Research at the University of California in Berkeley, gives
This summary description of this aspect of creative individuals:

... What seems to characterize the creative person -- and this is especially so for the artistically creative -- is a relative absence of repression and suppression as mechanisms for the control of impulse and imagery. Repression operates against creativity, regardless of how intelligent a person may be, because it makes unavailable to the individual large aspects of his own experience. ... Disassociated items of experience cannot combine with one another; there are barriers to communication among different systems of experience. The creative person, given to expression rather than suppression or repression, thus has fuller access to his own experience, both conscious and unconscious. Furthermore, because the unconscious operates more by symbols than by logic, the creative person is more open to the perception of complex equivalences in experience, facility in metaphor being one specific consequence of the creative person's greater openness to his own depth (112:15).

Drews (55:211) documents this quality and sees it as being "directly related to positive adjustment."

Stirred and made anxious by the events of our times, the noted British scientist, Fred Hoyle, warns, "The nation that neglects creative thought today will assuredly have its nose ground into the dust of tomorrow" (131:17).

Rogers expresses his alarm at the consequences of the neglect of creativity.

... a generally passive and culture-bound people cannot cope with the multiplying issues and problems. Unless individuals, groups, and nations can imagine, construct, and creatively revise new ways of relating to these complex changes, the lights will go out. ...
Not only individual maladjustment and group tensions, but international annihilation will be the price we pay for a lack of creativity (131:64).

The intense interest in creativity is evidenced by a growing library of books, articles, and research devoted to its exploration. The government and industry are supporting investigations, workshops, institutes, and research projects. Educators have become aware of the fact that

Education must prepare the individual for facing problems and for dealing with conditions which are not presently known. This change of purpose, from the acquisition of knowledge to the development of the ability to function with unknowns, is essentially putting emphasis upon creative thinking (23:5).

On every level -- intellectual, emotional, and moral -- we must get used to the idea that nothing is fixed or permanent, but everything transient. We automatically mistrust change, but to the extent that we do, we have been dangerously miseducated (169:93).

Even if the importance of creativity is granted, other imponderables confront us. Is it possible in our society to identify and develop creative people? Who are the creative? Do all individuals possess creative potentials? Do we really want creative people in our schools? Will our increasingly regimented society tolerate them?

The most important thing is that we break down the taboo -- and it is a most stringent taboo -- in this country against any attention to the inward life; we must make it possible for people to be serious again. It has been said that the United States has never produced an Einstein because we don't really want to. We don't have the atmosphere that would nurture the inward development of a really visionary man (134:5).
One wonders how much freedom of choice there is in man's future. Will there be opportunity for this realization of self? Will the unfenced mind become as obsolete as the open range?

Contemporary man seems not so much disturbed by the nightmare of total destruction as by a vague, general fear of losing those attributes that give life zest (33:4).

Can we go beyond the accepted definitions of the creative individual and develop students with not only zest, perserverance, and imagination, but those "who will grow beyond scholarly virtuosity and become sensitized to the needs of man?" (55:218).

The teacher is faced daily with children who must be guided, for whom he must prepare a total curriculum. He threads his way gingerly between the necessity of inducing those conformities which he evaluates, without benefit of a crystal ball, to be absolutely necessary to safety, courtesy, and obligations to the school organization and the society of the community, and clearing a way for the free-ranging exercise of the creative spirit.

The seeming ambiguities of conformity and creativity demand decisions throughout the day. Though a thorough philosophical and psychological background is invaluable,
if it does not contain the dimension of creativity the preparation will be inadequate for the responsibility of the teacher.

Landes reminds teachers of the necessity of strenuous searching for solutions to problems of responsibility and suggests the necessity of beginning with oneself.

. . . However, teaching is a public responsibility entrusted by law; therefore, the teacher must control the cultural and social processes and symbols in his relationships with pupils and parents. In our unstable environment, he cannot do it intuitively. He needs to learn deliberately who he is, as a private person and as a public functionary in American society (100:334).

If acquiescence to the status quo and the resulting deterioration of our effectiveness and our self-respect is not to be our future, we must let ourselves be deeply concerned with the enhancement of the unique possibilities of each child. Our role is critical. How we encourage or discourage may have an immeasurable influence on the child's and, perhaps, on our own futures. While recognizing the distorting pressures of some of the influences upon the child, we must not let this become a convenient scapegoat and employ it to relieve us of the responsibility for contacting, warming and, in a real sense, teaching the child in our care. We must admit that our "own inner angers and personal rigidities may affect our relations with students so as to close doors to avenues of exploration" (59:9).
Our response to these concerns must be unmeasured commitment. The functions that we visualize as being effective procedures for a teacher demand consummate power and skill.

The attack that demands priority, though the most difficult, is self-confrontation of our own values as a beginning toward greater self-involvement. Only by intensive study and re-evaluation of our basic beliefs about ourselves and our perception of other individuals, and receptive exposure to the insights of knowledgeable authorities, can we reformulate our theoretical constructs. We will need all of this plowing and upheaval in order to change effectively, in order to have the courage to change.

It has been sagely observed that "a prerequisite for recovery from a behavior disorder is a willingness to acknowledge one's personal contribution to the illness" (152:153).

There is a disorder in our education of American children. That we have made a contribution to this disorder, either by commission or omission, is evident. That there is hope for a cure is our faith.
II. PURPOSE OF THE STUDY

The Commitment

Viktor Frankl says, "... the cue to cure is self-commitment" (67:204). Aiming at a cure, this study to confirm the concept of creativity was undertaken. It was a response to deeply felt concerns rising primarily from dissatisfaction with much of the education of children and the determination of this writer to reorient her teaching to encourage creativity more effectively. Preliminary observations, experiments, and reflections indicated that efforts made to cultivate creativity in the classroom seemed to produce healthful and helpful results.

Limited only by ignorance, ineptness, some situational conditions, and the inherent obscurities of the creative process, the values and attitudes found necessary when learning how to accept, how to appreciate, and how to encourage, were translated into action. There were no arbitrary boundaries, no neat, safe areas to be scrutinized, no predetermined sequential directions. Where experience led or provocative ideas beckoned the investigation would follow. Such procedure is frequently dignified as the respectable process of clarifying areas for future hypothesis.
In order to understand creativity at all, the unwieldy mass of information had to be surveyed and some attempt made to assimilate and synthesize the material. Only then could the relationships applicable to the educational concerns that motivated the study become evident. Coupled with this intensive program of study was a commitment to begin immediately to practice creativity daily in every possible contact with children.

It was hoped that the hypothesized dialogue of communication to be established in the group would result in the courage to create. A sense of confidence and satisfaction was expected to accompany the personal and inventive expressions of the students and the teacher as their multi-potentialities were realized.

It may seem that it was presumptuous to have begun persistent efforts to elicit creative responses when the investigation was primarily producing more and more questions. Are all children really creative, or is it a gift of a few? Research has shown that teachers generally do not like their creative students. "Teachers frequently find creative children threatening to their status and security and disconcerting to classroom procedures" (165:21). Getzels' (1958) research gives eloquent witness to this fact (131:34). Is it possible for a teacher in our
public schools with our protected standards, traditions, and grading systems to make any effective change in a student's approach to learning? Even if it were possible to change, would it be wise, knowing that the child's teachers in succeeding years might penalize this budding creativeness? Perhaps it would be a disservice to a child to encourage a potential that might isolate him from the group and his teacher.

Torrance suggests that it is inevitable that creative individuals will alienate their peers. He lists characteristics isolated by Sprecher (1959) that support this statement. From studies of research chemists, Stern (1956) has formulated some principles to help the highly creative person to reduce peer sanctions to a tolerable level. Torrance has translated these suggestions into workable guidelines for teachers (131:39).

A practical consideration was the fact that any investigation of a complex characteristic or a process of personality change is tremendously expensive in time, effort, and money. A systematically controlled program designed to follow the development and the effects of change demands talents and resources beyond the scope of a classroom teacher.
Even more inhibiting to the enthusiastic determination that a study of this length and nebulousness demands, was the hesitancy of consciously nurturing a quality so far reaching. Might not this be a manipulation that could distort the uniqueness of the individual? For this reason, most of what we know about change comes from studies made during psychotherapy. The distress of such patients seems to justify the expenditures of time and energy and the manipulation deemed necessary to effect a more satisfactory adjustment. There is a question in this writer's mind as to just how valid the findings of psychotherapy are when applied to normal children.

Self-examination produced self-doubts. It had been assumed that there were limits to an attention span, that energy and concentration had boundaries, and that beyond these boundaries lurked disaster. Could an experienced teacher make the major changes in attitudes and practices that are so different from the way the vast majority of the teachers have been taught when they were children, or when they were instructed how to teach in college? This re-orientation was, and is, the most trying part of the whole project -- and the most difficult to report.

In defense of the decision to begin to practice creativity immediately, to risk radical changes in teaching
methods even without answers to the questions that critics would surely ask, a statement of John Keats is appropriate: "Nothing ever becomes real until it is experienced. Even a proverb is no proverb to you till your life has illustrated it." It was surmised that creativity, like love, could best become real, understandable, and amenable to some type of cultivation, while it was being practiced and experienced. Creative encounters that had proven successful had started this study. The direction was already set and tentatively explored. All that was needed was the courage to step into the unknown and the determination to intensify efforts in understanding, in experiencing, in recording, and in reflecting. This became the procedure.

This report does not conclude the experiment. It is a halt to regroup forces of energy and interest that have scouted long and far from the central objective. During this rally, the findings will be assessed. Particularly noted will be the occasions where practice of creative attitudes with children has confirmed the assumptions of the author of this paper or the indications of scholarly research. This is a report of a continuing process of becoming the kind of person who can communicate with children and help them to respond to their experiences creatively.
III. PROCEDURES

The Construct

To construct a plan that would implement the dual plan of investigation and practice of creativity that could be put into practice immediately in the classroom, called for procedures both varied and flexible. A preliminary survey of the available information on creativity showed that there did not seem to be a comprehensive source that would answer the questions that the author's exploratory creative ventures had aroused. To find scholars interested and cognizant of the problems of creativity, or to find books and articles that dealt with the development of creative potentials, demanded the talents of a detective.

The reading program became a dominant feature of the procedure. It began haphazardly, but over the years it became, if not more selective, at least more comprehensive. Copious notes were taken on large cards, which were reread and underscored in different colors of ink according to predetermined categories. Many books were purchased because of the remoteness of the author from adequate libraries. An annotated bibliography was kept of the major works studied. This reading is recorded in the bibliography of this paper.
It was determined that all phases of the project would be painstakingly recorded and preserved. This was not done, primarily, to have something to report, but so that the information gathered could be reflected upon. By the unconscious reiteration of attitudes or responses, clues to the secrets of creativeness would be emphasized and made more recognizable. Such clues often indicated helpful solutions or new insights.

The primary device for this recording was a diary-like chronological account of experiences and significant dialogue with students and interested people. As the projects progressed, lesson plans, tests, and examples of creative products were inserted in the text. Photographs were taken of the bulletin boards, and of the class while engaged in their creative work. Tapes, examples of exhibits, music written, and samples of the students' art work were saved for assessment and reference.

One important technique was the frequent pause to reflect, in writing, on the progress of the project. These essays, usually weekly, required persistent effort since they were not assigned and seldom read by anyone other than the instigator of the project. They were invaluable, though, in applying disciplined, concentrated thought to observations made in study and practice. The habit of
reflection was found to be a valuable one to cultivate because it isolates the implications for further study or endeavor.

The three main difficulties that plagued the project were experienced very early in the study: (1) the inertia of what is, whether in the situation, another person, or oneself: (2) the open resistance and hostility encountered as a defense against change, even the suggestion of change; (3) the obscurity of the unknown.

It is to be expected that any research deals with the unknown. Creativity, however, seems to be "peculiarly set in the invisible" (59:28). On this point there seems to be complete agreement by all researchers in this field. This study was an attempt to investigate an unknown process, arising from unglimped depths, coming to no closure in its ramifications. "How satisfying it would be if one could report the essence of solid research neatly synthesized" (11:60). The web of mystery that surrounds the word creativity denies such a desire. Humility is appropriate, for creativity is not contained in one philosophy, or explained by any or all psychology, not can it be contained in any one research. In Experience and Nature, Dewey reminds us that "the tangible rests precariously on the untouched and the ungrasped" (131:65). This study can only touch
certain aspects of the concept, hoping that the contact will lighten our darkness.

Though exasperatingly nebulous and mercurial, still creativity is found in people, even though it has not yet been isolated by tests or confined by categories. Its products are observable, as are the creators of these products. It is a part of the process of how people behave, inventing, planning, composing, constructing, and behaving in ways that people have always identified as unique and imaginative. Stein, in his paper *Creativity as an Intra and Inter-personal Process*, writes: "It is a function of the transactional relationships between the individual and the environment in which he lives" (131:91). As such, it is observable in behavior, in attitudes, and in products and, therefore, it is accessible to investigation.

The selection of some of the courses undertaken on the master's program was motivated by the desire to know more about creativity. Professors were chosen, when possible, because they evidenced some of the attributes of a creative teacher and might be counted on to demonstrate this ability in their class work. In seminars and in other courses where a major paper was required, the author elected to write the paper on some aspect of creativity, believing that the research required and the concentrated thinking and writing
would enlarge her understanding of the subject. Listed below are the courses most applicable to the subject, and the title of the major paper where appropriate to this study:

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<td>Seminar in Music Education: History of Choral Music</td>
<td>Dr. Joseph Haruda</td>
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<td>&quot;Ethnomusicology: Features and Functions of American Folk Song&quot;</td>
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<td>Psych. 552</td>
<td>Advanced Human Growth and Development</td>
<td>Mr. Carl Muson</td>
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<td></td>
<td>&quot;Freedom of the Individual&quot;</td>
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</table>

Books and courses advanced the study, but contacts with authorities on creativity, the gifted, psychology, or
education, had the additional dimension of warmth. All of the professors were sympathetic, helpful, encouraging and, more often than one could reasonably expect, clarified problem areas with their insightfulness.

Dr. Elizabeth Drews, an authority on the gifted student, has continued to give counsel and has generously shared some of her materials, used in her research, with the writer. Dr. Paul Torrance gave permission to use his tests to identify and measure creative talent even before they were published. Dr. Pitrin Sorokin was a helpful and interesting correspondent, telling of his work in creative altruism. It is tremendously encouraging when a man of Dr. Sorokin's stature writes, "I'm sure you are on the right track. . . ."

Every opportunity to observe creative teachers or creators at work was explored. For example, the author arranged to observe Mr. Ladre, the choreographer who danced with the original Ballet Russe, as he created a dance with children. His charm, his warmth, and his rapport with the children will never be forgotten. The effort was made to attend all conferences, workshops, conventions, and lectures where any facet of creativity was being discussed.
To implement the second part of the dual study, the practice of creativity, two projects were planned and carried out. The first was a pilot group of neighborhood children who met informally and with whom various creative approaches to experiencing and responding were tried and evaluated. One afternoon session with this group will be reported in detail so that the reader can catch the tenor of the dialogue of the creators.

The second project was with children in a fourth grade classroom of a public school. Twenty-four boys and girls met for an hour a day for one school year. The class was labeled "Language Arts" on the grade card. There was no planned curriculum or syllabus. The students, with the teacher, attempted to draw close to each other and establish the dialogue that had been hypothesized might be possible. The aim was as simple as this: to see if it could be done; that is, to see if creativity could be encouraged, to see if an experienced and mature teacher could learn how to contact the children and establish the dialogue that would help them learn through their own creative experiences.

The insights gained through both the investigation and the practice of creative approaches to teaching and learning will be reported throughout the entire study.
CHAPTER II

ESTABLISHING A DIALOGUE OF COMMUNICATION THROUGH CREATIVITY

I. THE PILOT PROJECT

"The most difficult task confronting a philosopher or historian," Charles H. Beard used to say, "is to understand those things that have actually happened to him" (128:21). It is also difficult to separate these experiences from the investigation, for it is the interaction of the study and the practice of creativity that results in the observations and reflections that produce the growth in understanding. Perceptions change with each rise in the level of knowledge. These perceptions, as they are integrated with the values held by the individual, are the basis from which he acts and expresses and grows. Hopkins writes:

\[ \ldots \text{He grows through expanding, differentiating and integrating his experiences, which means reconstructing and organizing them around some basic values which constitute his inner self or self concept. (12:29).} \]

In considering the experiences and insights recorded in the remainder of this study, the reader might be helped in his understanding of some of the weaknesses in procedure if he remembers that the commitment was to begin now! Now mobilized immediate action and, also, modified and limited the study. Activity was not delayed until it was positively...
known that the ideas or the techniques would work or be effective. "How can we produce a more creative trend in American education? Let's begin today!" (131:7).

"Mama," said Annie, "I don't want you to take a trip now."

"But, Annie, you know I always come back."

"I know you do, but now never comes back!"

To begin now, under the strain of the poverty of our knowledge, is to take an incalculable risk. However, the willingness to risk censure and defeat for the sake of a project or an idea or a creative product is an essential ingredient of a creative person. The courage to begin is equally important.

The First Encounter with the Pilot Group

In preparation for the year's project with fourth graders in creative approaches to the language arts, it seemed wise to try out ways of working and ways of beginning in a situation slanted to success. The young people, whose ages were from eleven to seventeen, were intelligent and interested. The teacher and the members of the group were well acquainted, so many preliminaries could be eliminated. The teacher's plan was merely to provide an atmosphere of stimulation conducive to the heightening of awareness. The
assumption was that if the students were spoken to by the
world around them, and this stimulation of the senses held
meaning, there would be a response.

The first encounter was on a clear, cool July day in
Chelan, Washington. We sat in the grass and listened.

"What did you hear? What did the sounds tell you?
What do the sounds suggest to you?"

The response: "I heard a whistle. It's the whistle
at the lumber mill. It means it's noon and time for lunch --
but I'm not hungry!"

"I hear the wind! That means the lake will be rough
and there will be waves to float over when we go swimming."

"The wind crescendos and decrescendos."

"Would the wind have a sound if there were nothing to
whistle around? Do we hear with anything other than our
ears?"

"Likely not, but the feel of the wind seems to rein-
force our hearing. When you see the trees bend or the waves
crash, it makes the wind noisier."

"The wind has a different sound in the locust tree
than it has in the pine tree."

"When I listened I heard the dog panting. I knew it
was hot, lying there in the sun."
"I heard myself breathing. I thought, 'I'm glad to be alive'."

"I heard the wind swoosh loud, then it rolled back like a wave." She swept her arms forward, then slowly back, then forward in a rush.

"Phoebe, would you be the wind?"

"You mean dance it?" Phoebe seemed embarrassed, so Carol rose to interpret the wind with her. Both girls started slowly, but soon began to lose self-consciousness. The others joined in the play.

One girl called, "I'm a leaf!", and cartwheeled across the lawn. Another leaned against the wind. As this experiment passed it's climax the students gathered again in a group on the grass.

Teacher: "Does a poem, a song, a story, a picture come to your mind about wind or the sound of wind -- of the effects of wind?"

"Yes! 'The Wind in the Willows'." All sang it, then repeated it as a round.

"The music sounds gusty and windy and mysterious. Perhaps that's why we think it's a good song. The tune and words fit."

"I like e. e. cummings' poem, 'what if a much of a which of a wind'." The student recited part of it, then got
a copy, reading all of it for us. Later she made copies to give to other members of the group.

"We all know 'Where the Cold North Winds are Blowing' by Kopolyoff." They sang together:

Where the cold north winds were blowing
Now we feel the warmth of spring
All the ice and snow is going,
All the birds are on the wing.
Pushing out into the sunshine
From their winter prison freed.
Sing, oh sing, raise high your voices.
Alleluia! Spring is here, is here indeed.

"Remember 'Ode to the West Wind' by Shelley?" It was recited. Rossetti's "Who has Seen the Wind" was familiar and was recited in chorus. Stevenson's poem on "The Wind" was read. We tried "Big Waves and Little Waves" in choral speech. The oldest student left the group to get a copy of "Sounds" by Thoreau. The children had been interpreting sounds, so Thoreau's words were meaningful to them.

... If we read only written languages, which are themselves but dialects, we are in danger of forgetting the language which all things and events speak without metaphor. ... No method nor discipline can supercede the necessity of being forever on the alert. ... I love a margin to my life. Sometimes, in a summer morning I sat in my sunny doorway from sunrise till noon, rapt in a revery. ... I grew in those seasons like corn in the night. ... A man must find his occasions in himself, it is true.

Many unmounted pictures were available on a table. The students looked at them, selecting ones that appealed to them as illustrative of the senses. They mounted some on
construction paper and wrote comments that expressed their feelings on small pieces of paper, attaching them to the pictures. Example:

She - a gazelle
Runs into the wind
Gracefully swaying.
Her long slender legs
And narrow arms
Are filled with animal spirit.
She is wild -
Undomesticated.
Alive with the forces of nature.

Millet's "Bringing Home the New Born Calf" drew this comment:

Seen in the soft brown light of the earth they toil
All these beautiful creatures of the soil.

A turbaned young Indian, his moustache curled, motivated these lines:

As a cat
He sits
Smugly smiling.
Never returning love
But purring in its warmth.

A snow scene:

The snow falls lightly
Soft cool flakes of purity
Cloaking the street's dirt,
Masking the edges of reality.

On the tables were pastels, charcoal, paints, paper. Opportunity was given to use these materials to communicate a sound, any sound, and what it means. They were assured that their pictures could be realistic, symbolic, or abstract. There were some questions about these styles, so
examples were located in the collections of pictures available. As they painted they sang "Wind in the Olive Trees" and "Sweet and Low, Winds of the Western Seas". There was a happy, excited atmosphere, much laughing, and a high level of interest.

"May we write a poem?"

"Does it have to rhyme?"

Among themselves they discussed the qualities and styles of poems. To stimulate the flow of the poetic expressions, the group composed a haiku on sounds:

Sounds I feel against my skin
Tingle down my back and arms,
Sometimes reach my heart.

"Cathy's picture looks like sound splashing in the air."

A swirl of multicolored streaks, ending in a vortex on which was pasted a winged maple seed, carried this caption:

Sirens make me catch my breath;
My heart jumps up against my teeth -
The taste is metal.

As they painted and composed, the teacher served as a resource person and typist when needed. The generous comments, the joy and approval with which each contribution was greeted, bolstered confidence. As one child sketched, her friend asked, "What is it?"
"It's an eye, an ear, a nose, a mouth and a thumb."

Another member of the group said, "That would make a good line for a poem." The result:

An eye, an ear, a nose, a mouth and a thumb
Would be adequate for some,
But for me that's kind of rough
For one of each is not enough.

Carolyn questioned, "Would your vision be impaired if a second nose moved in?"

A pastel drawing of singers against snow-covered hills was enhanced by these lines:

Just some people singing carols
If their songs crystalize in the cold, still air
I'll pack them in our freezer.

The sixth sense was discussed. "What is it?"

"I think it's when you put all of the other senses together and come up with a feeling -- like when you go into a room and you sense you're not wanted." The student wrote a long poem on this idea, closing with this stanza:

The wind blows in tones today,
A scale, a wave with end and beginning not seen . . .
The sixth sense symphony.

Long after most of the group had gone to the lake to swim in the wind-driven waves, one artist sat crosslegged, still absorbed in her creation. This zest, this joy in working, this total involvement, the writer has witnessed many times when people are engaged in creative projects.
As Robert Louis Stevenson says, "To miss the joy is to miss all."

From our own store of knowledge most people could testify that joy comes from the awareness of a deepened insight, from the "eureka" effect of discovery, from a sense of affinity to nature, a oneness with the world, from the contacts with another living thing that we call love, from creativeness. Obviously all of these joyous happenings, within and without ourselves, are creative experiences.

Even those children who are generally apathetic will work for long periods of time perfecting and polishing their own creative products.

... While many people become intensely involved in experiences which are not clearly creative, creative behavior is always accompanied by deep involvement.

Facial expression, the slowness to react to irrelevant stimuli, are part of the tests of researchers into the intensity of the creative process (12:134).

This same young person who stayed after the others went swimming was so motivated by her own desire to create, her reaction to the stimulus of the day, and by her own success, that she continued to title pictures and write poems. The next day she collected poems she had written in the past and began organizing a file of her work. The wave of creativity did diminish, but it resisted being extinguished.
There is no escaping the delight we all experience as we appreciate and, hence, share with the creator such products as her poem on the sense of touch.

A hand,
A finger,
A nerve,
A cell,
Help me touch and feel and tell
What you're made of,
How you live,
And if my touches
You pleasure give.

Hot, cold,
Young, old,
With my fingers I can tell.
Soft, rough
Tender, tough,
These I feel and know as well.
Big, small
Short, tall
I touch, feel and know you all.

With my fingers, legs and toes
With my arms, my back, my nose
I can touch and sense and feel.
Knowing a thing makes it real.

"By appreciation we make excellence in others our own property." If this statement of Voltaire's could be believed and practiced, how much jealousy might be eliminated, how much richer our lives would be!

Bronowski (24:31) points to appreciation as a triumph of personal creativity:

... The poem or discovery exists in two moments of vision, the moment of appreciation as much as that of creation. ... We re-enact the creative act and we ourselves make the discovery again.
Appreciation is a major skill that springs from an accepting and secure personality. When children are creators in the classroom there are many opportunities, important and rewarding to both the appreciated and the appreciator, to approve their products. Equally important is the opportunity to approve of the child for what he is -- not waiting until he fulfills our ambitions plans for him, but here and now as he stands at this moment -- not just grudgingly admitting his possibilities.

The entire book by Dinkmeyer and Dreikurs, Encouraging Children to Learn, is most helpful in developing deeper understanding and skill in this often neglected art. Dreikurs insists that the result of our efforts . . . depends less on what the educator does than on how the child perceives and responds to it. The ability to be sensitive to the child's perception is one of the premises that are so seldom met. Further more, in order to have an encouraging influence one must sincerely believe in the child's ability and willingness. Trust in the child is often lacking, especially where it is most needed, with discouraged and deviant children (51:4).

He defines discouragement as the individual's loss of confidence in himself and in his ability.

In an atmosphere of appreciation the teacher demonstrates something that should have priority in education and in all of our relationships to human beings. He teaches the student that he is worth our concern and care. The
teacher, from his experience with many students, finds the individual student acceptable and believes in him. Then the student is helped to look at himself, to know who and what he is, to tolerate himself. Jersild says, "What knowledge is more fundamental than knowledge of self?"

... Self knowledge not only helps an individual to understand himself, it helps him understand others, too. ... The closer any human comes to knowledge of himself the more he is in touch with a core of humanity which he shares with all others (91:24).

Maslow comments on the effects of increased knowledge of the self:

... any technique which will increase self-knowledge in depth should in principle increase one's creativity by making available to oneself these sources of fantasy, play with ideas. ... (131:101).

... in the healthy person, and especially the healthy person who creates, I find that he has somehow managed a fusion and a synthesis of both primary and secondary processes, both conscious and unconscious, both of deeper self and of conscious self. And he manages to do this gracefully and fruitfully (131:99).

The teacher helps the child to this knowledge of himself primarily by accepting him as a unique and worthy individual. First, though, the teacher must learn what acceptance is. Obviously the bitter remark, "Oh, I accept Tom, all right; I know all about him." is an expression of resentment and rejection. He betrays complete ignorance of the emotional experience of accepting.
The first inkling of what acceptance means is often found in experiences of acceptance. One may come to the unusual realization that he is being accepted. Then he will experience the dialogue of communication in which negotiation is at a minimum. Once the tone is heard, like in helping a child to find his voice and sing, the pitch can be found again. More likely it will be the other way around and, as if by accident, the person will have the deep consciousness of making a connection with another person in which there is an openness, a flow, that is free from judgement, unfettered by age, or time, or training.

The writer found this contact with children to be so fruitful that the desire to become the kind of person whose attitude pattern is one of acceptance has motivated most of the learning of the past four years.

By observing the symptoms that precede or accompany such experiences, the writer found a number of constants. Invariably the teacher had lowered her barriers, her own bristling defenses. The subtle feeling of contest between student and teacher was voided. In this relaxed atmosphere each was able to free himself from his stereotyped role and to adopt a new frame of reference based upon acceptance of their common humanity.
The teacher is really accepting himself as he is and knows he is becoming. Guilt is not dividing the person into two warring camps. His parts, though complex, are integrated into a realistic concept of himself, and it is a comfortable feeling.

With this inner warmth a child is not something to tame, as the writer frequently hears teachers remark, nor is he someone to train. He is, as the teacher, an individual firmly joined to others by a broad band of compassions. Barriers that separate are unimportant and penetrable. There is a softening of the inner rigidities as the teacher looks at the child. He presents a responsive surface on which a child cannot help but paint a positive picture of himself.¹

The students in the classroom not only feel this atmosphere of acceptance, but they observe that it is not an attitude reserved for one child alone, that it is the way the teacher reaches out to contact the other children. Thus, he learns how to respond in these compassionate ways. In creative work he will have many opportunities to try these generous and non-defensive attitudes by appreciating other children for their uniqueness, as he appreciates their

¹Refer to pages 86-87 for further documentations.
products. Haldane says:

... Most have been taught to learn from their mistakes. What? To make more mistakes. Study your successes. Such an approach not only unleashes the desire for more achievement; it also encourages individuals to look for the best in others as well as in themselves (85:32).

Peer encouragement has been found to be even more effective than teacher encouragement, a factor frequently overlooked (165:22; 131:37-38). Thus, a psychologically safe climate will develop in the group where a child can dare to express his ideas and can feel free at last to learn, to risk change, and to realize his potentials.

The pilot study confirmed the writer's assumption that creativity is important. It has proved to be a major avenue of communication between teacher and pupil. These preliminary studies and projects have indicated that creativity warrants the teacher's effort and attention to achieve understanding of the concept and skill in its practice.

II. THE EXPERIMENTAL CLASS IN CREATIVE LANGUAGE ARTS WITH A FOURTH GRADE CLASS

Preparation and Assessment of the Situation

The permission and support of the principal of the school is imperative in planning a deviation from the
curriculum. Robert Rumsey, the principal of the elementary school where this project took place, unfailingly defended the program and was generous with his time and concern.

It was determined that for a period of a school year an experimental class would be developed in which the emphasis would be upon the encouragement of the children's creative potentials. A heterogeneously grouped class of fourth graders, meeting daily for fifty minutes, was selected for the experiment. Though language arts was the assigned field of study, it was expected that all of the arts would be involved and the areas of exploration unfenced.

The purposes, the philosophy, the situation, and the costs of the venture were assessed as carefully as possible with only assumptions for guides.

The purpose. The ultimate purpose of the study was to try in every way imaginable to see if encouraging the creative talents of children would help the teacher and the students to communicate more freely and to respond more uniquely. It did not prescribe the direction or the procedures of the project.

The philosophy. The philosophy was yet to be discovered. "Feeling our way" made prediction of a philosophical trend too tentative.
The Situation. Ideal conditions could only be surmised. It was not known what would constitute an adequate, or nurturing, climate. So, like any other teaching situation, the class began in September in much the same way it ended in June. Only the room number and the teacher were different.

One factor working for the group was the lack of strangeness between the students and teacher. They had shared their music experiences the preceding year and there was no evidence of friction.

The children in the town are generally "nice". The school runs smoothly, and discipline is not a constant concern. Most of the students' schooling has been traditional, much like the way the teachers themselves were taught.

Without definite future goals, a teacher is likely to incline to live in retrospect, to lean on the past. This robs today of its reality - the here and now of our opportunity - the opportunity to make something positive of our school life (67:114).

The common problems of a small town remote from the stimulation of many creative persons or products are mitigated to some extent by the uncommon beauty of the physical situation. The lake and the towering mountains encourage recreational interests. Response to the spectacular landscape is seldom articulated in any of the art forms.
There is little commitment or few interests that are explored deeply. Most of the preferred activities are muscular.\(^2\) The peculiar, energizing joy that comes from flexing the creative muscles was one of the experiences it was hoped that this experiment would offer these children. Franz (68:166) claims that:

\[
\text{dreaming, neurotic symptoms, play and creative processes all have certain common elements. They are all motivated by internal tension caused by internal conflict, or conflict with external reality. Play and creativity both are distinguished by freedom from emergency, from the need to resolve a tension immediately. This freedom allows playful experimentation on a pre-conscious level. Only in creativity is communication with others a paramount component which lends it social value. Creativity is essentially a higher derivative of play. Representational skill is its basic prerequisite.}
\]

The children whom this teacher has observed in creative ventures have approached their activities in the spirit of play, but have remained employed in polishing, expanding, and following the trail of their ideas into the hardest kind of work, and enjoyed the process.

In searching for guidance and support, the author could find no similar group experiments with creativity. Some "gifted" classes put considerable emphasis upon creative work. Much of the writing directed to teachers of

\(^2\)In this connection it is interesting to read Maccoby's article, "Love and Authority", a study of a Mexican village with Erich Fromm as advisor.
the gifted, or about projects designed to study this phase of education, proved to be useful not only for the philosophy but for the actual techniques employed. Helpful information will be found in *The Gifted Student* (163), the works of Drews (55, 56, 57), Bettelheim (18), Hollingsworth (87), and Torrance (167).

The children involved in this part of the report would not meet the criteria used in selecting gifted students. For example, the I.Q. level of the children selected for the differential education programs for the gifted is seldom below 125 and generally is 130 and up. The trend, however, is to consider many other factors, such as teacher judgement, school record, appraisal of social and emotional maturity, parental interviews, and the ambition and drive of the student. Daily, however, the original assumption that all normal children are "gifted" with creative potentials was confirmed in this work.

To present a clearer picture of the academic standing of the group, the scores on the California Language Test, Elementary Form AA, are given in Table I. Also charted, on Table II, are the results of the California Test of Mental Maturity. Pertinent environmental factors, such as socio-economic information, actual age, and school background are presented in Table III.
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ADMINISTERED SEPTEMBER 12, 1963

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(A) Standing in total class of 69 on California Test of Mental Maturity. (See Table II.)

NA Not in attendance at time of this examination.
TABLE II
CALIFORNIA TEST OF MENTAL MATURITY
ADMINISTERED JANUARY 31, 1963

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</table>

(A) Student standing in total class of 69.
### TABLE III

**ENVIRONMENTAL FACTORS**

<table>
<thead>
<tr>
<th>Student</th>
<th>Actual Age</th>
<th>Family Background</th>
<th>School Background</th>
<th>Parents Education &amp; Income</th>
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<tr>
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<td>23</td>
<td>10</td>
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<td>R</td>
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<tr>
<td>24</td>
<td>11</td>
<td>BH</td>
<td>RR,T</td>
<td></td>
</tr>
</tbody>
</table>

BH  Broken home  
DH  Distressed home  
U  Above average income  
L  Below Average income  
R  Repeated one grade  
RR  Repeated two grades  
T  Transient, has attended several schools  
C  College or university
From these tables the picture emerges of an ordinary classroom for this primarily agricultural area. The lack of intellectual stimulation in the home situation which can be inferred was confirmed by our experiences with the group.

To attempt to understand creativity is to draw close to the mainsprings, the moving forces of an individual. Dewey wrote, "No mechanically exact science of an individual is possible. An individual is a history unique in character" (59:28).

It is possible to risk the unknown, to determine, to have courage entirely on your own, without recourse to the judgement of others. However, responsible individuals, those who see problems and care enough to diligently seek solutions, are willing to admit their fallibility. They are not reckless. The reckless invite disaster (It is possible that the unconscious goal is disaster.) by not projecting the end results, weighing the possibilities, estimating the costs, and preparing for known contingencies. The familiar saying, "Not to plan is to plan to fail", is applicable here.

It seemed not only prudent but comforting to seek counsel, to check decisions against one's perceptions, those distillations of multitudes of experiences. With the hesitancy of humility, these perceptions were scrutinized and tested for validity against the wisdom of others. Books and
writings extend this reservoir of human experience, but they cannot take the place of live and lively dialogue with other informed and exploring human beings. Such open communication has the effect of evaluating experiences and information, of raising questions and affirming answers. It was rarely experienced, but in the accepting atmosphere of true dialogue, shaken confidence is restored, courage is burnished and wounds begin to heal. The person attempting a creative venture turns to books, family, long-suffering friends and colleagues for support, guidance, and as a way of tapping out radar-like soundings so as to maintain a sound course. While the help so obtained is invaluable and incalculable, it still cannot eliminate the ultimate loneliness of the unique. Loneliness is an essential element of humanity necessary to the growth of individuality and creative living.

Loneliness paves the way to healing, to true compassion, to intimate bonds with all living creatures and all aspects of nature and the universe. . . . When an individual avoids facing directly a situation which contains the seeds of loneliness, he alienates himself from his own capacity for being lonely and from the possibility for fundamental social ties and empathy. It is not loneliness which separates the person from others, but the terror of loneliness and the constant effort to escape it (122:103).

Costs. In assessing the costs of any creative venture, one can count wounds and loneliness. These wounds come from the realization of mistakes and failures, the batterings of
trying to move the unmovable, and punitiveness of outraged resistors to the disquieting strangeness of the new.

The most static and stubborn resistor is, surprisingly, oneself. But long before this obstacle to progress has been admitted, active rejection and open hostility will have been encountered. Those directly, or even indirectly, cognizant of efforts being made in the direction of change will have stiffened their backs and projected their objections. This will be true even if the change is primarily directed toward oneself.

Of course, rarely is change programmed to begin with oneself. Dissatisfied by conditions, values, results or products, the restiveness of the individual implies criticism, arousing and energizing the overdeveloped defense mechanisms of ourselves and others. Some minds seem to be as allergic to a new idea as some bodies are to a new protein. Automatically the reaction is protest and rejection. Any movement, even from an uncomfortable position, is risky. It takes us from the familiar but endurably painful into the unknown. Perilous this may be. The very word peril is derived from roots in the Latin word peri, meaning to risk or try. This condition is sometimes described as "existential anxiety". By recognizing these
anxieties and our choleric reactions to them we may be able "to react to change with something less than sphincter loosing terror" (14:1).

The assumptions were primarily affirmative and, perhaps, not enough attention was given to the difficulties and the costs of the experiment. The concept of creativity alluded precise definition. To be continually faced with the question, "What is it that is under investigation?", is to contend with a frustratingly ambiguous situation. Along with this limitation was the indecisiveness of separating the unknown from the unknowable. The study of creative experience is limited by the complexities and nuances inherent in the creative act itself. The rich qualities so closely allied with feeling are not adequately described with words. There are dangers of oversimplification, of prestructuring ideas of what constitutes creative behavior. "No simple formulae or pat methodologies can contribute to such investigation" (11:141).

The complex relationships of creativity are made even more difficult to study in the usual scientifically approved ways by the fact that they won't stand still. The observation is complicated by the prolific variables of change and growth. As Gordon says (79:3), "The creative process is encumbered by the fact that, being a process, it is in motion."
Like a herd of animals we sniff warily at the strange among us. If he is fortunate enough to be accepted it is apt to be after a trial of ridicule and after the sting has been removed from his work by long familiarization. . . . The artist is frequently a human mirror. If what we see there displeases us, if we see all too clearly our own insignificance and vanity, we tend to revolt, not against ourselves, but in order to martyrize the unfortunate one who forced us into self-examination.

The fear of the upheld mirror extends to the teaching profession and perhaps to the primary and secondary teacher most of all (59:37).

To be forewarned may not forearm us when the fear of change activates much unpleasantness in our path, but at least we can avoid being startled and surprised at the almost sure result of creative ventures.

It is obvious that in order for change to occur at all, inhibited as it is by hostility and inertia, there must be a tremendous primal creative drive within the organism. There is! Sinnott (152), Bronowski (24), Koestler (101), to mention only a few who write with authority on creativity and are also scientists, have insisted that this undeniable urge is basic to survival.

According to Dr. John Platt, Chicago physicist, after air, water, food and protection, the fifth need of modern man is novelty or change.

Our sense impressions must be organized into meaningful patterns if they are to bring us much information. But the most important pattern of all is the pattern of change (131:Preface VI).
Only as the organism is amenable to changing conditions, to improvement, to creating its own climate, or adapting when conditions are inflexible, can growth occur and life be maintained. Man is in the process, an active participant in his own creation and a powerful influence in the creation of those persons and things around him. The insatiable curiosity, the drive to learn, the "itch" to relieve the irritants of stressful conditions is paradoxically met by the equally strong instinct to survival, that is, fear. In this case the fear is of leaving the relative safety of the known for the questionable security of the unknown. The plea for "the liberty to be left alone to go on doing what they are doing, usually denying liberty to other people, invariably turns into fear" (154:22).

Fundamental to our experience, recognition of this fact of our existance throws considerable light on the intolerable tension which lies at the heart of creativity. "Being at dead center is such well-known pain" (14:2). Creative experience lies in the unknown.

What balance of constructive synthesis can be effected between such powerful antagonists as the forces within man which impel him toward freedom and creative expression and the forces both within and without which work to constrain and control him? (64:viii).

Flags of alarm flying, we hastily ask, "Do we then want to foster and encourage tension in children?"
Misunderstanding at exactly this point has damaged the cause of creativity. Creative activity has been commonly granted to be a kind of useful therapy whereby very "high-strung" individuals relieved their tensions by painting, composing, writing, etc., thus narrowly escaping madness. What aberrations of thought or behavior caused the tensions is as indefinite and as condemning as a raised eyebrow.'

... And the world loves the illusion that people who are "different" must also be in a bad way. A handful of painters who seem to fit the pattern -- Toulouse-Lautrec, Van Gogh, Modigliani -- are made ikons of distress. Press and film are brought to bear, and the lie grows.

... The truth is that great artists in particular are healthier, more at peace and wiser than the run of men. Their cup runneth over; hence, their art (60:30).

This is not at all what is implied by the tension of creativity. Viktor Frankl states it clearly:

To be sure, man's search for meaning and values may arouse inner tension rather than inner equilibrium. However, precisely this tension is an indispensable prerequisite of mental health.

Mental health is based on a certain degree of tension between what one has already achieved and what one still ought to accomplish or the gap between what one is and what one should become. Such a tension is inherent in the human being and, therefore, is indispensable to mental well-being. We should not then be hesitant about challenging man with a potential meaning for him to fulfill. It is only thus that we evoke his will to meaning from its state of latency. I consider it a dangerous misconception of mental hygiene to assume that what man needs in the first place is equilibrium or, as it is called in biology, "homeostasis", i.e., a tensionless state. What man needs is not the discharge of tension at any cost, but the call of a potential meaning
waiting to be fulfilled by him. . . . And one should not think that holds true only for normal conditions; in neurotic individuals it is even more valid. If architects want to strengthen a decrepit arch, they increase the load that is laid upon it, for thereby the parts are joined more firmly together. . . . They should not be afraid to increase the load through a reorientation toward the meaning of one's life (67:164).

Considerable recent investigation has explored this thought. Barron's *Creativity and Psychological Health* (13), Rees' *A Psychology of Artistic Creation* (137), Franz' *Neurosis and Creativity* (68), May's *The Psychological Basis of Freedom* (64), Koestler's *Act of Creation* (101), Frankl's *Man's Search for Meaning* (67) are especially illuminating.

Cursory observation of the creative process could frequently detect an atmosphere of turbulence. Barron (13:4) comments on this:

. . . there are times when it is a mark of greater health to be unruly, and a sign of greater inner resources to be able to upset one's own balance and to seek a new order of selfhood.

This ability to permit oneself to become disorganized is, in my judgement, quite crucial to the development of a very high level of integration. Because we are capable of reflecting upon ourselves, we are committed to an artistic enterprise in the creation of our own personality. . . . A certain amount of discord and disorder must be permitted into the perceptual system if a more complex synthesis is to result. . . . The more energy a person has at his disposal, the more fully will he become committed to the most complex possible integration . . . the capacity to symbolize, to create a valid image of reality, is the peculiarly human energy, the triumphant form of energy in the living world . . . for the moment of health is the moment of unconscious creative synthesis . . . (13:4).
Since 1965 three books by internationally eminent psychiatrists have dealt with the concept of disintegration: Dr. Menninger's *Vital Balance* (119), Glasser's *Reality Therapy* (77), and Dabrowski's *Positive Disintegration*.

Individual differences must be recognized in assessment of tension. What is one man's stressor may be another's zestful challenge (152:152).

Aware of the dangers to well being that creative endeavors frequently bring, loneliness, rejection, overt hostility, a creative person is encouraged to continue to courageously express his ideas by the knowledge that these effects are "par for the course" and that they also contain the seeds of deeper development. The writer can confirm this from experiences of the last four years. Actually, if one wishes to progress and not regress, there is no choice but to learn to take the risks and to bear what ever punishment it brings. To protect oneself by accepting what is known, what is safe to assume, to conform to the limits of the past, is to deny freedom and become the servant of fear. Fromm explains why such a solution inevitably fails:

Just as a child can never return to his mother's womb physically, so it can never reverse, psychically, the process of individuation. Attempts to do so necessarily assume the character of submission, in which the basic contradiction between the authority and the child who submits to it is never eliminated. Consciously the child may feel secure and satisfied, but
unconsciously it realizes that the price it pays is giving up strength and the integrity of its self. Thus the result of submission is the very opposite of what it was to be: submission increases the child's insecurity and at the same time creates hostility and rebelliousness, which is the more frightening since it is directed against the very persons on whom the child has remained or become dependent (70:29).

The task of the educator, as Tumin sees it, is to . . . discover special techniques for making the life of the creative seem specially desirable and interesting, in spite of the dangers which seem to be automatically sensed by so many people when they are first teased with the idea that there is more to life and living than the achievement of socially approved, status positions (131:113).

Dr. Snyder, psychiatrist-in-chief at M. I. T., tries to identify what the appeal of creative endeavor is when he says:

The more a student derives some personal meaning and delight, and achieves some sharper sense of who he is from the competent mastery of a given task, the more the task can be said to have expressive significance for him. Simply, he expresses something of his own uniqueness in the solution that he finds (154:44).

The nagging feeling that perhaps helping a child to respond creatively may cause conflicts and that the child may sustain injuries because of his creativity is somewhat relieved by the support of such eminent authorities as Moustakas, who comments on one of the dangers that inhibit creative activity, the fear of finding oneself alone in opinion or in fact.
It takes creative courage to accept the inevitable, existential loneliness of life, to face one's essential loneliness openly and honestly. It requires inner fortitude not to be afraid or overwhelmed with the fear of being and the fear of being alone. Fear, evasion, denial, and the accompanying attempts to escape the experience of being lonely will forever isolate the person from his own resources so that there is no development, no creative emergence, no growth in awareness, perceptiveness, sensitivity. If the individual does not exercise his loneliness, one significant capacity and dimension of being human remains undeveloped, denied. A fear of despair, an agony of aloneness replaces the real experience, but strategies of escape and alienation can never substitute for the growth-inducing, deepening values of a genuine, vital, lonely experience (122:34).

Snyder believes that the crucial issue is whether the school environment "provides means for the students to achieve a new and altered equilibrium in their self-esteem . . . unless this happens it will limit their opportunities for growth and change" (154:45).

The cost to well-being and the gains in self-knowledge and expression need to be confronted realistically. Children can be helped to develop the courage to make creative decisions by learning to evaluate these pros and cons of each situation. Research is needed along these lines. Essentially we need to know how the individual can express his uniqueness and still survive in a specific environment. What does the individual have to give up or alter in self-expression, in restriction of pleasure or flight from pain, in order to achieve even temporary equilibrium with his surroundings? How does the individual develop a range of adaptive mechanisms appropriate to a variety of stimuli?" (131:113).
Tumin's article on "Obstacles to Creativity" is pertinent in planning to meet, or help children to meet, difficulties. His concluding remark will make anyone who has attempted creative endeavors smile knowingly. "Let us not kid ourselves. The way to the creative life for the average man is difficult in the extreme" (131:113).

Description of the Project

During the summer preceding the experiment with the fourth grade language arts class, a careful critique was made of the text used by all three of the fourth grade rooms. Particularly scrutinized was the philosophy and how it would coincide with the concepts of creativity. The text was disappointing and proved to be practically unusable except for a few exercises on skills that needed review or practice.

Lowenfeld, in appealing for an institute to be established to further investigate the creative process says, "There normally hardpressed scholars could turn their collective talents to one of education's pressing problems; what kinds of textbooks we need to teach creativity" (113:17). This author's experience confirms that plea. Four texts, by different publishers, were surveyed with the additional goal in mind of isolating just what fourth graders
all over the country were supposed to learn. It was felt that it would be unfair to our fourth graders to leave gaps in their knowledge that would put them at a disadvantage when they moved on to fifth grade.

The principal, in granting permission to conduct this class, stipulated that while the children need not show marked gains on the California Achievement Tests - language form AA, which was given at the end of the school year, he was anxious that they not fall behind. This condition was made to protect the children from too much deviancy from the pattern, to protect himself from criticisms of irresponsibility in allowing an innovation in the program, and to protect the teacher from criticism that could carry economic bite. This protection was noted and appreciated; however, like most protection, it was limiting.

To meet the requirements of continuity and the expected standard, it was found in the survey, for example, that all of the texts devoted considerable time to letter writing. This was introduced in the text used in our school by listing the five parts of a friendly letter. The instructions were to learn about the parts and blocking of a letter, to proof read and correct a letter, and then they finally made a suggestion that the student might write a letter. The student was then admonished to make the letter
both interesting and correct. How dull! There was no suggestion of how to make a letter interesting. The total push was to spell correctly, to punctuate correctly, and to conform to the accepted letter form.

Children are apathetic as they approach an exercise of this kind — and they should be. There is nothing of themselves in it. They are only involved as instruments that manipulate the pencil and follow directions.

However, the real reason this writer objects to the approach to learning of which this letter writing project is only illustrative, is that it does not recognize the child as a unique individual or value what is happening to him. Isn't the purpose of a letter to communicate? What is said in a letter is what is important. The form is custom and following it just a convenient habit. A friendly letter should carry from one person to another feelings, attitudes, the sense that two people are visiting. A lesson on letter writing that fails to emphasize content and concentrates on manners implies that nothing the child has to say is important or even interesting. It seems a completely backward way to learn anything. You don't instruct a child to say "thank you" without first having helped him to feel grateful, unless you are teaching him to be dishonest.
In the notes to the teacher in their new book, *Invitations to Speaking and Writing Creatively*, Meyers and Torrance state their belief, which has been confirmed by this writer's experiences:

We believe that an attitude of valuing the productions of children promotes creative thinking, and that such an attitude can develop through the use of techniques and materials which encourage the teacher to be respectful of his pupils' ideas. . . . The authors are convinced that a teacher's respect for his pupils is the greatest factor in facilitating creative growth in the classroom (125:14).

The experimental language arts class was introduced to letter writing in an entirely different way. The butte that towers 4,000 feet above the town caught fire on October 22. By the afternoon recess the air was thick with smoke and the playground was speckled with charred bits of pine. As the sky darkened, the high winds fanned the flames as they roared and raced in towering, fiery peaks toward the town. Miraculously, it rained -- but just on the butte. The wind turned and blew the flames back on the charred ground and Chelan survived, scorched, but safe.

In class the next day, work already underway was put aside as we talked about the fire. One student said, wrinkling his nose, "It smelled like garbage burning." The teacher wrote on the board:

```
Its smell
like garbage burning
```
Another said, "I could taste it on my lips -- the ashes, I mean. They were bitter."

"It had an awful sound, kind of hollow."

"My dad heard a whole tree explode."

We had been discussing contrasts. We had made a display of contrasting textures, using actual samples of such things as velvet and sandpaper. Each student had devised sentences to describe his combinations, such as, "Surprise! My kitty's pink velvet tongue is made of sandpaper!" It was to be expected that the next words added to our collection as souvenirs of the fire were such textural descriptions as "gritty", "charred", and "crusty". The blackboard was soon full of words grouped under headings as shown below:

<table>
<thead>
<tr>
<th>Its smell</th>
<th>Its taste</th>
<th>Its sound</th>
</tr>
</thead>
<tbody>
<tr>
<td>like garbage burning</td>
<td>bitter</td>
<td>rushing wind</td>
</tr>
<tr>
<td>hot pine pitch</td>
<td>ashy</td>
<td>roaring</td>
</tr>
<tr>
<td>dusty</td>
<td>smoky</td>
<td>crackling</td>
</tr>
<tr>
<td>dirty</td>
<td></td>
<td>explosions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>gritty under foot</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Its colors</th>
<th>How it made us feel</th>
<th>Its textures</th>
</tr>
</thead>
<tbody>
<tr>
<td>flames on night</td>
<td>scared that our house would burn</td>
<td>gritty</td>
</tr>
<tr>
<td>showers of yellow sparks</td>
<td>sorry for the animals</td>
<td>charred</td>
</tr>
<tr>
<td></td>
<td></td>
<td>crusty</td>
</tr>
</tbody>
</table>

The words mobilized the students' reactions to the fire. Each began to write how he felt, what he saw, heard, or smelled.
"How can a thing so terrible still be beautiful?" one little girl inquired. This started us on quite a discussion. Many emotions found outlet as they expressed their horror at the plight of the horses roaming the butte. One boy told of his terror when he realized that his father was driving the "cat", loaded with diesel fuel, over that hot ground. To give everyone a chance to express their own experiences, time was given to write them down.

"Let's sing 'Smoky, the Bear'!" was Jimmy's suggestion. When all were seated again one student complained, "I couldn't say how it looked; it's too hard to put in words."

"Would you like to draw it?" brought a chorused, "Yeah!" Black construction paper was made available and a huge, old box of pastels. The results were spectacular, like the fire, and wonderfully free from the "stay within the lines" type of work they so frequently do.

The children gave the teacher their writings and drawings at the end of the class. She enjoyed sharing their experiences. Her comments were primarily affirmative. Colorful words, apt expressions, good sentences were underlined. Correction, in the usual sense, was done lightly. Each paper was returned the next day, with a word to the class pointing out the completeness of the story, the evident sympathy for others, the imaginative use of words, etc.
"These writings tell me not only about the fire, but they tell me how you reacted to the experience. It's a shame to just put them in our notebooks. Can you think of some further use for them?"

A bulletin board for the hall was suggested. Then a student said, "I would like to send mine to my grandmother. I could just add, 'Dear Grandmother', and it would be a letter."

Eagerly each decided to whom they would address their letter. They looked at the examples in the book. A business letter to our office was passed around and examined. Spelling and punctuation were corrected with a will for, "Grandmother will likely show it to all her old friends. She'll be so proud." It wasn't necessary to explain why the date was important because October 22 was the "scariest" day they had ever known and was obviously important. It was easy to write "Dear Grandmother", and natural enough to close, "Sincerely,"

Overlays for the overhead projector that charted the framework of a letter further clarified the accepted pattern. In a triumphant procession they mailed their letters, confidant they would be received with joy and probably cherished.
The blackened butte was mercifully covered a few days later by a hoar frost. As we looked out the windows at the transformation, words fell into place and soon a poem recorded this additional experience. Together they composed the music and laboriously notated it on a large sheet of music paper. The song, the drawings, and some of the writings became the materials of the bulletin board.

FIGURE 1
THE BLACK BUTTE

Some of the intense emotions aroused by the fire had been vented in the discussions and the variety of related
activities in which the class became engaged. By writing to someone interested in what was happening to them they had deepened the channels of their common contact and turned their experience into a giving situation. The drawings, the poems, and the music reassured them that their responses to the happenings of their lives were reliable and acceptable.

Of course, the town is not threatened by fire every day, but many other meaningful opportunities to write were found, and will be found by most groups. The children wrote to obtain films and materials, and for permission to visit the newspaper office, the fish hatchery, and the telephone office. Many letters of appreciation were sent to those who helped us with our trips or in producing the Christmas program for the community.

One of our best experiences, though, was a contrived one. The snow was deep, and after three and a half months the landscape held little interest. The children assembled small notebooks out of blue construction paper, lined note paper and brads. With notebook and pencil we left the classroom, collected our wraps and gathered on the sheltered steps at the front of the school building. Each child had a buddy. The teacher proposed that they imagine that they were from Florida and had never experienced snow. They were also to assume that they were blind, and had been blind from
birth. They were reminded to use all of their senses but the sense of sight to find out about snow. In their notebooks they were to list words, sentences, or phrases that would describe what they were able to determine about snow. The students stayed out five minutes, then came in out of the cold to continue writing in their books. A few went back again to re-experience some particular situation they wished to clarify. The teacher's diary for that day included this excerpt:

The children reacted well to this experiment. Jimmy (a severely crippled and handicapped boy) sat on the step. Donny, his buddy who was usually frowning and almost bitter, was genuinely amused as Jimmy closed his eyes and, reaching out hesitantly as a blind person does, felt for the snow. He jumped back as his hand unexpectedly touched the cold snow.

Donny, watching this, smiled and winked at me in an appreciative way. Did he see the pathos of Jimmy, the damaged one, entering so wholeheartedly into the experience of another hurt child?

When the class returned to their room, the teacher asked them to continue the pretense and write a letter to their mother in Florida, describing their first experience with snow. The letters were written eagerly. They stayed in character, mentioning how snow looked only as it was told to them. The following letter illustrates one student's involvement.
Dear Mother,

Today I went outside for the first time since I came here. I didn't wear a coat. It was so c-c-cold. My feet crunched on something, and yet it felt soft. I slipped on something and fell. It was hard under me, but soft all around. It is cold like ice and when I put it in my mouth it was cold. It disappeared and there wasn't any taste. My hands got nome. I realised they were wet and stingy. This stuff sticks together and it's easy to make into balls. It is everywhere. They call it snow and say it's white. I wish I could send you some.

Your blind boy,

One ten year old boy wrote in his notes, "It's throwable, it's crushable, it's meltable, it's packable, it's slideable; it's playable; and that's all I'm able to think of except it's wet and cold."

The next class period was spent in enjoying and appreciating each student's work. As a treat, the teacher brought them a collection of poems about the snow. They particularly liked the haiku, sometimes written hokku. It is an appealing poetic form used for centuries by the Japanese. The poems generally have three lines, the first using five syllables, the second seven, and the third five. The subject is about nature, with philosophical or insightful overtones. Each verse should present a colorful picture, create a mood or sound. Why the formula produces something so appealing to our sense of the beautiful is a mystery. It has been this writer's experience that children
respond well to haikus. They find the style easy to use in producing their own poems. Haikus serve as short, controllable exercises that practice the skills of conciseness and the effective use of imagery in the writing of poetry. They often produce such interesting results, even with their first efforts, that the children themselves are surprised.

They asked to include some of these ancient Japanese haikus in their notebooks. The teacher was amused to see one student copy two carefully, and then add his own, "By: Henderson."

At freezing midnight
Hear that rat go rummaging...
Dirty kitchen dishes.
By: Buson

Wet snow is sweeping
Over the red-berry bush
Two sparrows chirping.
By: Shiki

Soft snow is drifting
Drifting along so slowly
While winds are wailing.
By: Henderson

The children wrote many haikus about the snow. They selected their best, polished the phrases, then recorded them on light blue construction paper. These they displayed on the deep blue bulletin board under an extended, snow covered roof hung with plastic icicles. The results motivated about twenty poems from other rooms not involved in the project. These were accepted and shared with the class. The students volunteered to rotate the poems so that all of the imaginative ones could be displayed. The class was
generous with praise, but critical in selecting ones for the board. Examples:

Ghostly icicles
Glistening in the moon's cold light
Growing in the sun.

White is "in" this year
White, cool carpets on the ground
White hats on fenceposts.

Where are you going
Little snowflakes I know,
With your glistening coats?

The birds were dying because of the prolonged snow. The Game Department asked the orchardists to plough out the roads into the mountains with their tractors and set up feeding stations. The children in our school became involved when the experimental group set up a display, using mounted pheasants, partridges, and quail posed as if eating from the feeders made for the emergency by the Sportsmen's Club. The children made different types of feeders and wrote signs explaining the importance of gravel as well as food. A song was written, both words and music, and the children taught it to the whole school. It was taped and played on the local radio station frequently during this bad time for the birds. Later the display was moved at the request of the Sportsmen's Club, song and all, to the P. U. D. window in downtown Chelan.
Winter can be cruel for rabbits and deer and all the birds that need food for fuel. Let's help these creatures, great and small who suffer from the snow. Let's give them water, gravel and grain so they can live and grow.

FIGURE 2

WINTER CAN BE CRUEL

The students in all the upper elementary grades learned the song:
All beautiful the march of days as seasons come and go.
The hand that shaped the rose hath wrought the crystal
of the snow.

Large sheets of butcher paper were glued together and
volunteers, working during their free time, painted the
picture photographed and presented here.

FIGURE 3
ALL BEAUTIFUL THE MARCH OF DAYS

Unsolicited poems, pictures and writings continued to
appear in the writer's office mailbox, or were brought in
during recesses. Often these were accompanied by a plea for
help. Occasionally these writings could be used as the
lyrics of a song.

The first two writings included here are by first
graders. Kim composed her poem, the first of the two, to the
rhythm of her bouncing ball. She first chanted it to this
writer during recess. When she brought in her carefully
printed copy she said, "Did you notice the A. B. A. song
form?"

"Yes!" And the free-wheeling fantasy, the understanding
of relationships, the grasp of meter, were also noticed.

Corncob, corncob,
Corncob on a stalk
I am trying to bounce my ball
Up and down the walk.

My sister is trying to jump my jumprope.
The corncob said, "She will never do it yet.
She is too small; she is only three.
She is too short and the rope is too long."

Corncob, corncob,
Corncob on a stalk.

Kelly's poem is spelled here exactly as she wrote it:

I sawd robin making a nest
She was going to have baby
robin at last she got done
than She laid on Her nest
eggs popped our one at a time.

Carolyn's poem is more contained by the rigidity of
the form, but her insights break through boundaries ex-
pected of sixth graders.

Silence is a wonder
Which comes from up above.
It may be up, around, or under.
It may be flying with a dove!

Silence is a gift from God
As I find when I sit here
Though it is very odd,
I can hear it in my ear.
There was little communication between the other teachers and the author of this paper about these creative efforts of the students. The writer learned to draw as little attention as possible to this extra-curricular work, as it seemed to disturb or threaten some teachers. The results were unpleasant for all concerned, especially for the student, who was apt to be confused and alarmed by the sanctions imposed. The reiterated words "my children" reflect the commonly accepted pattern of adoption that seems to foster the teachers' tendency to be possessive. Likely a wiser person could have not only understood and sympathized with the situation, but could have developed better and more fruitful ways of meeting the problems that developed. The inability of the writer and others helping in the experiment to avoid or bridge this break was one of the failures of the project. Hindsight indicates that better preplanning and greater efforts to involve the entire faculty of a school before a venture of this kind is undertaken would help.

The most practical suggestions to smooth the road of experimentation that this writer has found are stated by Wiles (175:283-294). Two research studies that are pertinent to this problem are Singleton's "Freedom to Research" (150: 114-117), and Singleton, Carlton, Deiderick's "The Classroom Teacher as a Researcher" (151:330-355).
Much of the trauma of experimental work and research in the schools stems from threatened teachers. Research in public relations may be of help. Encouragement must be given to the dual problem of how to effect change and how to do it more painlessly for all concerned.

The serious business of language arts may seem to have been approached much too casually and to have been lacking in organization from the example given of how letter writing skills and related areas were practiced. Our approach may have been casual, but it was not disorganized. A loose-leaf notebook with a challenging pack of fresh paper was to become the text as well as the record keeper.

Amy Lowell, in answering the question "How are poems made?", replied:

The first thing I do when I am conscious of the coming of a poem is to seek paper and pencil. It seems as though the simple gazing at a piece of blank paper hypnotized me into an awareness of the subconscious (75:III).

Dittoed material was prepared to stimulate study, to record what was produced (Frequently these were composites of the best parts of the work of all the students.), or to expand the edges of areas explored. Dr. Elizabeth Drews' work with gifted ninth graders served as inspiration (55:216). As in the course of study developed for her experimental group, the students here were helped to become
aware of the happenings in and out of the classroom, to reflect on these events and to respond in writing, in music, in art, or by gathering other illustrations or relationships.

Dr. Drews sent copies of the dittoed material she had presented to her gifted group. The writer examined several of these notebooks completed by the students, and adapted for the fourth grade class some of the ideas they had developed.

In this class, it was expected and accepted that the curriculum, as both projected and experienced, would vary for each child. Wiles comments on this:

The thirty students in a classroom do not experience a common curriculum. His concept of himself and his world provides the basic orientation of the curriculum for him. The organization of knowledge that a child makes does not follow the outline the teacher puts on the board or that he finds in a textbook. It is made by the student and consists of the facts that he comes in contact with, the data he chooses to incorporate in the body of knowledge he possesses and the new fields he picks to stake out for himself as future areas of exploration. Each youngster analyzes his experiences and creatively develops his own applications to the succeeding situations at school and at home (175:15).

During the first semester the work was kept in the notebook chronologically, entries being made in the table of contents for each filing. This was taxing and tedious for fourth graders, but it taught valuable skills of organization and order, and seemed to be a necessity if they were to keep their work for further reference and appreciation. The
students used dividers, index tabs, title pages of different colors, and other devices to help.

Evaluation of the students' work involved problems both complex and specific. Rapid growth occurs at this middle grade period in amount, kind, and quality of the work. A sound program must take into account the child's growth and maturation, the processes and skills involved in his work, and the relationships between the nature and past experiences of the child and his developing values.

The first of the four criteria lightly used in evaluating the creative products of this project was content, its creative ideas, their relevance to the task, their importance, frequency and depth. Second to be considered was the form. This included both the style and the sequential development of the theme. Form or structure, as interpreted in this report, is essential to genuine works of art, even children's artistic products. This qualification must be met for esthetic acceptance. The progress in skills, in this case handwriting, spelling, and usage, was the third area to be evaluated. The obvious importance of this measure of a student's progress, and the comparative ease of evaluation, frequently obscures the other three criteria. Though the fourth criteria is difficult to assess, it is at the heart of that tender spot that not only judges the student, but also
the teacher. One must carefully weigh the students' personal development, the strength of his interest, his direction, his persistence and the expanding range of his investigation.

Children can, and do, evaluate their own work. It is often a refreshing and insightful experience for them to be allowed to do this "for the record". However, their secret and inevitable judgements of their own work and selves can be a fertile source of encouragement and, even more frequently, of real discouragement. Time must be taken to listen empathetically to the child, hearing his words as they fit into the harmonies and dissonances that are familiar parts of his life. Translated with this information must be the tone of his voice, the gestures and postures of his body, the expressions of his eyes and mouth. As there develops this kind of atunement between teacher and pupil, the child will be able to feel the value you have placed on him. This strengthens his sense of his worth and he takes courage and can step out, lengthening his stride.

The child is surrounded by evaluators, many of whom have a stake in his progress. The family, the principal, teachers, future employers, and the community surround him with expectations. It is the privilege of the teacher, because of her training and the many hours a day spent in close contact with the child, to make these evaluations,
that are so potentially dangerous, in non-damaging and even helpful ways.

During the time of this project the traditional grading pattern of the school was followed, keeping a grade book and reporting A, B, C, D, or F on the quarterly reports sent home to the parents. Separate grades were kept for writing and language.

This type of grading system is destructive to progress in creativity, though it may have other advantages. It is impossible to evaluate one creative work "A" and another "C" when they are original, perhaps with entirely different subjects, mediums, or modes of expression. Grading disrupts the carefully nurtured rapport the teacher has been building with the children. The students may be discouraged by the grade, or even because striving for the grade may have put too much emphasis on extrinsic rewards rather than intrinsic values. The most serious damage, though, is to the teacher. Traditional grading subtly changes and interferes with his attitude toward the students.

This writer has observed this destructive change within herself. There is a distortion of empathetic relations in the group. The truth of the Biblical injunction, "Judge not that ye be not judged" (Matt. 7:1) was clarified as this writer struggled with this problem. It is not a
"tit for tat" situation, nor is it even that the methods used in assessment will judge the wisdom of the assessor. Rather, it is the inescapable fact that judgement separates. It presumes that the person is different from ourselves. In separating we are separated.

After the first semester the class became terribly dull. The joy, the almost electric feeling of excitement, was gone. The oneness that had permeated the overlapping and meshed interests of the class could not be sensed.

At first the teacher was only vaguely aware of this creeping sterility in the class. She was expending enormous amounts of energy in trying to correct some of the obvious weaknesses of the students that had been exposed by either the semester tests or by the reflective evaluation preparitory to grading. The urgency and the determination of the teacher to "make it clear", to "show them how", to "teach them" was apparent in her manner and voice. When the lack of luster in the class finally penetrated this concentration, the crusade was arrested for an analysis of the situation.

The grading had been an agonizing process. It rankled to have to competitively rank the students against each other, a process long rejected by writers on creativity (131: 109). A standard had to be set and the child judged as to
whether he had met that standard, rather than whether he had realized his own possibilities.

... nothing is quite so hostile to the maximization of creativity as the competitive grading system which prevails in our schools. ... the educator is contributing to the very social atmosphere which is so inimical to the creative life. ... It is only when a society genuinely seeks to discover the talent present in the population that we have a condition friendly to the evocation of the creative urges in man in the mass (131:109).

Insistence on excellence, volume of productivity, and limitations of time often make children and educators feel imprisoned. "This may result in inactivity, a kind of inertia developed out of paralyzing expectancies" (55:215).

Grading was done as positively as possible. None of the children seemed to be estranged by the evaluation. Since their attitude was not easily accessible, the teacher began by exploring her own behavior and its motivations. She found that she was worried that these children might not succeed, might not do as well on the tests or official observations as was expected. This would be detrimental not only to the particular program in which they were engaged, but might adversely affect the distinctly tentative perm issiveness of the witnesses of the program when challenged to permit other creative endeavors.

The teacher, by the inevitable comparison of grading, had slipped into the old habits of categorizing, which is the
prevailing experience of most of our life in school and in society. "This child really hasn't got it"; "You can't make a silk purse...", and similar cliches serve as blankets of defense and insulate us from our responsibility to elicit better responses.

Those who have studied creativity have usually concerned themselves with the adept... In contrast, a smaller group of investigators has tried to get at the natural dimensions of creativity as it is found in the ordinary classroom. Interest is centered on what people can do and how well they can do it, rather than on what kind of people they are and what they have been through. The pace setter in this group is J. P. Guilford. (47:201).

There needs to be more help available to teachers who have the desire and courage to try to change themselves and to make changes in their teaching when they become discouraged by their inability to maintain their new directions (91:23; 51:31; 154:45). Snyder's words were found useful in this particular situation by helping this writer to understand student apathy and teacher depression.

The educational system may, on a dynamic level, provide means for achieving significant individual ends and/or alter aspirations and appetites by intervention in the individual's self esteem. Depression occurs where the means are, or are felt to be, lacking for achieving important individual ends. Boredom occurs where the ends, that is, the aspirations, have been repressed and are consciously not known, so that activity appears pointless (154:45).

The discrepancy between the teacher's avowed motives and the motives actually impelling her was certainly one of
the sources of the anxiety. The conflict of being a partner to a practice regarded as detrimental, as pointed out by Jersild (91:23), was also disturbing. The inability to reach desired goals was reflected by the depression.

The cure, as Frankl (67:204) stated, is commitment. In this case it was to become committed again to the goal of the project. The belief was that through creativity a climate could be established in which the teacher and child could communicate, accept each other, dare to explore themselves and the world, and to freely respond. The surmise was that the resulting energy and interest would spur the learning of skills necessary to accomplish the desired goals.

The group was out of communion and the climate was threatening. The teacher was doubting their possibilities and responses. This lack of faith could be damaging the children's self-image, causing them to retreat, to resist, to be discouraged. English says, "The self of the child is chiefly a mirror of the responses which others make to him, and the self continues so through life" (62:402).

The first thing to do, then, was to refurbish, by review and reflection, the belief in the value of the individual. Only by faith can the necessary step be taken to accept the child just as he is. This is the heart of the whole technique of the encouragement of creativity. It is a
difficult for a questioning, problem identifying type of personality to make. Here is one of the real dilemmas of creativity.

On the one hand, some research has indicated that creative teachers are more interested, apt, and adept in fostering creative growth.

... Children under the tutelage of the "highly creative" teacher scored significantly higher on the post-test of the Minnesota Test of Creative Thinking than children in the class of the "less creative" teacher.

These results are consistent with the limited research on the subject to date. ... (42:39).

On the other hand, the creative personality is seldom content with what is, and is preoccupied with changing the existing to something new and improved. If a highly creative person is not able to overcome this tendency by placing an equally high value on the uniqueness, the irreplaceability of the individual and his contribution, his influence could be disasterous to the fostering of creative ability in others. This important factor is not mentioned in the above research.

In attempting to help a second grade class interpret an abstract painting done by a teacher, the students were asked, "What is the real interest of the teacher?" The first reply was, "She likes to correct papers."

Teachers have emphasized "correct" until there is
almost a compulsion to pick out the mistake, to root it out. A more helpful and less traumatic point of view has a medical analogy. Perhaps the child isn't ill; surgery is not required (If it were, the job would be outside our field of competency.): could the child just need strengthening? If so, the attack is not to detect the particular spot and apply intensive treatment, but to encourage the existing body to cope with the stresses to which it is heir. Strengthening doesn't occur by tearing down, but by adding to. For example, perhaps the child learns through the rhythmic use of his large muscles much better than by just moving his eyes. Teachers must give a child a chance to learn through his strong ways of gathering information.

When we think over our ways of teaching, we realize how little time is given to physical styles of learning. Attention is being drawn to the finding that the typically disadvantaged child prefers and learns better through physical, rather than visual or aural, styles (148; 149; 138; 139).

... children at a school in New York City's poorest neighborhood are learning to read effectively by singing and dancing to the words. Since songs and physical movement have been incorporated into the teaching of reading the percent of retarded readers in the school has reportedly been cut in half (139:17).
The ability to believe and trust what is within the student is based on the teacher's own self-acceptance and the realization of their shared common core of humanity. A highly creative person has been shown to be secure in himself, typically, and it is perhaps the secret of his success in igniting the fires of creativity in others. The accepting personality has usually plumbed the depths of his own loneliness, suffering, and experienced their flowerings of compassion and love. It is an essential experience, one that must be repeated until its frequency results in the steady tone that permeates the teacher's life as well as the classroom.

For guidance and support in this learning "to be" and "to become", the learner might read Allport's Becoming (2), Farber and Wilson's Conflict and Creativity (64), especially the chapter by Rogers, "Learning to be Free" (141:280). He outlines conditions which foster the process of becoming free, drawn from his extensive experience as a psychotherapist. Rogers seems to feel that only teachers with a "confidant view of man", a profound trust in the human organism can develop the warm, positive, and accepting attitudes toward their students that facilitate change.

If we distrust, we find it necessary to cram our information into the student. . . .
The more this positive regard, caring in a non-
possessive way, is experienced by the therapist, the
more likelihood there is that the therapist will
succeed. Why does this help? When he finds someone
else listening acceptantly to his feelings, he becomes
able to listen to himself, to realize he is frightened,
or courageous. He comes to accept himself . . . ex-
presses more and more the hidden aspects of himself.
. . . He drops his defensive behavior, becoming less
evaluative, more self expressive, more open, free
to change and grow. He can make imperfect choices and
correct them (141:275).

May (64:221) believes that under pressure of non-
acceptance a person doubts the competence of his own
thoughts, feels dejected, depressed, and isolated. His
tendency to conformity is heightened. It is known that con-
formity reduces anxiety. The body reflects this fact
dramatically by a measurable drop in the fatty acid level;
however, the person is less capable of rational judgements
and closer to panic. His resistance is lowered.

An interesting finding is that highly creative
people seem to have a higher tolerance for stress and a
stronger sense of self. Drews reports that:

. . . The independent behavior observed in the creative
and emotionally mature has a kind of resiliency as well
as resoluteness, an ability to bear frustrations in a
constructive way. This springs, in essence, from a
confidence in one's own integrity and worth, long con-
sidered an essential ingredient of mental health. This
confidence is found among the highly effective (22) and
the gifted (37) and is a part of the definition of
mental health (55:211).
Fromm's *The Art of Loving* will be helpful and will contribute to a deeper understanding of the wisdom of the New Testament, as typified by the statement, ". . . he that loseth his life shall find it. . ." and, "Love thy neighbor as thyself" (70:108, 109).

The moral message of Christ consisted exactly of the advocacy of the wisdom of self forgetfulness, which 'objectively' means the dissolution of the wall that separates what we are from what we think we should be (13:268).

This quotation from Barron's *Creativity and Mental Health* has illuminated this idea for the author.

After realization of the source of the problem and reorientation of the misdirected thinking, the didactic trends in the class were stopped. The therapy indicated was creative involvement. Since we were becalmed, it was the teacher's responsibility to instigate the experience that would create the wind for their sails.

The senses, seeing, hearing, and feeling, had been explored. The sense of taste was a logical progression. It promised dramatic investigation and suggested implications for the study of taste as an element of all creative products. A blindfold prevented each student from seeing the color of the "Fruit Chewie" that the teacher dropped into his mouth. He returned to his seat to write how it tasted, of other relationships of which it reminded him.
Thoughtfully they chewed, and eagerly they wrote. The best lines of each of the writings were selected to be included in a composite sheet. They were dittoed and given to the students to file in their notebooks. Examples:

- It smells like an apple blossom, but it tastes like an orange.
- First it was square, then soft. It dissolved in my mouth.
- I never had it before, but if I had it again I would know it.
- It made my mouth water, it was so good.
- It tasted like an orange as fresh as can be from the tree.
- It is a good thing to taste.
- It made my throat feel sticky, dry and wet both.

Quite a study developed from this small start. The film "Creative Patterns" is an excellent bridge from the sense of taste to what constitutes factors of "good taste".

Other than the spirit of acceptance and the attitudes and skills of appreciation, the teacher's most helpful role is to guide the child into an understanding of the conceptual structure of the things he sees and hears. The sense of order, or symmetry, the development of an idea by repetition, contrast, color, and all the means by which man has intuitively determined what is valuable and endurably beautiful, can be observed and exposed so that the children can identify its supportive structure. Here one must proceed with enthusiasm, energy, and boldness and yet exercise considerable caution. Even in this exposing there is the
danger that the teacher will impose, that the structure may
become a confining set of rules of good taste from which he
dare not depart. Rather,

. . . mastery of the fundamental ideas of a field in­
volves not only the grasping of general principles, but
also the development of an attitude toward learning and
inquiry, toward guessing and hunches, toward the possi­
bility of solving problems on one's own (28:20).

Such a foundation should provide an adequate launching pad
for practice of gravity defying flights of creativeness.

Teaching specific topics or skills without making
clear their context in the broader fundamental structure
of a field of knowledge is uneconomical in several deep
senses. In the first place, such teaching makes it
exceedingly difficult for the student to generalize from
what he has learned to what he will encounter later. In
the second place, learning that has fallen short of a
grasp of general principles has little reward in terms
of intellectual excitement. The best way to create
interest in a subject is to render it worth knowing,
which means to make the knowledge gained usable in one's
thinking beyond the situation in which the learning has
occurred. Third, knowledge one has acquired without
sufficient structure to tie it together is knowledge
that is likely to be forgotten. An unconnected set of
facts has a pitifully short half-life in memory. Or­
ganizing facts in terms of principle and ideas from
which they may be inferred is the only known way of re­
ducing the quick loss of human memory (28:32).

Bruner's important and influential book The Process
of Education (28), which should be studied by anyone in­
vestigating creativity, was discovered by this writer long
after she had worked out some ways of teaching structure to
children and had tried these ideas in the classroom. The
interdisciplinary relatedness of motif, and the methods of
its variation, is a unifying concept in all of the arts. Theme is as basic to music, literature, dance, or art as function is to biology. One quickly observes that the more basic the idea, the more applicable it is to new problems.

It takes diligent searching to find very much of value written about the unifying concepts of creative products. The artists seem to have identified the structuring elements of their medium of expression with the most clarity. The Visual Experience by Lowry (15) and Sight and Sound by Eliot (60) are rewarding reading.

Some educators are proclaiming the importance of the teaching of structure. Cronbach typifies the approach of the Physical Science Study Project in his address to the International Congress of Applied Psychology as follows:

The scholars believe that a curriculum built around applications gives a false picture of a field of knowledge, or no picture at all. It omits both the systematic content of a discipline and its procedures. Moreover, they deny that it is possible to arm the pupil with the technological knowledge that will serve the needs of his lifetime. The typical physical theory, they say, goes out of date in about twenty years. . . . Knowledge of specific chemical compounds or processes, therefore, is of transient value; only a highly generalized understanding of molecular structure and conditions governing reactions remains pertinent (133:45).

Thus the emphasis has been toward the goal of teaching the basic structure of the subject matter (133:43).
Monsour and Perry have, in their new and interesting handbook for use in the junior high school music program (120), sections on understanding melody, rhythm, harmony, and form. These are well done and helpful in the teaching of lasting musical values through the study of essential musical elements. However, these elements are not related to, nor illustrated by their equally basic functions in art, dance, language, or almost any creative product, concrete or ideational. Speaking of teachers, Lowenfeld says, "Each must learn to use his specialty creatively and understand how it relates to other bodies of knowledge" (131:15).

... our most creative scientists, artists, theorists are those who glean ideas from many disciplines and who can, from these multidimensional perspectives come up with unusual insights, an original juxtaposing of ideas and new analogies (55:211).

This writer would suggest that the most helpful insight gained in perspective is often recognition of likenesses rather than differences. Having recognized the usual, the divergency of the creative mind invents the unusual.

The mathematicians speak of their creative formulations as being beautiful or elegant, meaning they are simple, rhythmic formulations and, as such, works of art. Their procedures frequently parallel those of artists.
... 'thinking in pictures' dominates the manifestations of the unconscious in the dream, in hallucinatory states, but also in the creative work of scientists. In fact, the majority of mathematicians and physicists turned out to be 'visionaries' in the literal sense — that is, visual, not verbal thinkers (101:322).

When Coleridge tried to define beauty, he said, "Beauty is unity in variety." Science is the search to discover unity in the wild variety of nature — or in the variety of our experience. Perhaps all of art and science, the whole drive of our creative efforts, is to establish patterns of likenesses. "Einstein linked time with space, mass with energy, and the path of light past the sun with the flight of a bullet" (24:26-27).

A basic structure is common to all things. Emerson observed this and wrote, "Motion or change, and identity or rest, are the first and second secrets of nature" (101:388). Kreps described these types as "expression of order, coherence, discipline, stability on the one hand; expression of chaos, movement, vitality, change on the other (101:389).

These conceptions can be taught. It will simplify the tremendous volume of information that proliferates unendingly and threatens to overwhelm the student. A skeletal structure upon which ideas from many disciplines can be organized will facilitate the forming of meaningful relationships and greatly aid retention of information.
A study of the background of richly creative people reveals training in the observation of structure. Compare the figure drawn by a person, ignorant of the structure of the human body, with one who understands anatomy thoroughly. "... both see the same life, but with different eyes" (101:382). Think of the training of Leonardo, of Michelangelo. Many creative artists were apprenticed to men of genius, where they basked in exposure to the best. Doubtless there have been people who wallowed through seas of mediocrity and sensual illiteracy and still learned from within themselves to form syntheses that illuminated the structuring elements. However, many of the great composers, artists, dancers, and creative scientists were surrounded from early childhood with contact with works of art, with people who possessed and valued good taste. As a general rule, competency in these skills, as well as manipulative ones (usually referred to as technique), was well established before the age of twenty. There is a good deal of truth in the observation that the self-made man is frequently a product of unskilled labor.

Bruner (27:32, 40, 54, 62, 67) calls for research to answer the problems of teaching structure, to fashion curricula that may be tried out on an experimental basis, to develop textbooks with an eye to the issues of continuity,
the methods of discovery and the development of intuitive understanding.

It becomes important to nurture confidant intuition in the realm of literature and the arts, yet one finds a virtual vacuum of research on this topic in educational literature (27:67).

Not one of the publishers of graded music books commonly used in the elementary school has organized their books so that the basic structure of music is emphasized. You can't expect creative work, musical compositions, from students if you just say, "Write a song!" Even if they are well motivated, the students rarely know how to begin. This frustrating event, common to so many creative ventures a student makes, discourages further experimentation and encourages the tendency to do nothing, at least not anything that involves so much effort and risk.

The joy one feels when one discovers that what appears to be formless is intricately patterned, is one of the lures of the arts. A snowflake is just a fuzzy white glob, only important as it accumulates enough for snowballing or skiing, until one is collected on a piece of velvet and observed under the microscope. "Gee, I didn't know it was so beautiful. Wow!" Koestler's chapter "Motif and Medium" explains that this delight is the result of the

. . . superimposition of the matrices -- the trivial object revealing the mathematical regularity of its
micro-cosmic architecture -- which creates the impact, and gives rise to the aesthetic experience (101:366).

A song is just a song, but when the song form A B A, or a more complex pattern is understood, the revelation enhances the song. This discovery also nourishes self confidence. A person feels quite pleased that he can see this hidden structure; he feels more in control of the situation, and is certainly more able to invent a song of his own.

As pattern is observed in nature, the uniqueness of an object, even if it is only a snowflake, encourages a child to accept his own uniqueness and the differentness of his own creations.

The backbone of the structural emphasis in this class started with pattern. Recognition of patterns, analysis of the overall design of the poem, story, picture, song, or even a sentence, was part of the "mind set". Visual patterns were sometimes translated to auditory or tactile patterns, or vice versa. Generally the overall design of the complete work would be tentatively sensed, then the class would attempt to recognize the basic motif. How the artist combined periods of motion and periods of rest into a pattern (perhaps the most basic notion of all relating to the understanding of structure) was the focus of their first observations. Then the continuing development of the pattern, the
inventions upon it, the use of reversal, contrast, extension, imitation, harmonization was investigated. Contrasting material was frequently identified as a secondary pattern. Untangling even these two threads simplified the children's observations of much complex material.

... we have failed to see that form and content are essentially one and that in overstressing the meaning of ideas, we have shamefully neglected the structure of the ideas, which in themselves define and illuminate the message that is being communicated (154:535).

The second premise of Bruner's thesis is that "the foundations of any subject may be taught to anybody at any age in some form" (28:12). This emphasis on structure may seem to be inappropriate and "over the heads" of little children. This is not true. The presentation must be modified so that the structure is represented in the terms of the child's way of viewing things. The whole process of education, as this writer sees it, is focused on helping a child to see relationships in the world about him and within himself, and to develop the attitudes or heuristic devices most effective in dealing with these relationships. Even kindergarten pupils and first graders can be encouraged to see, and to make connections and to recognize the improbability of the isolated object or experience.

The reader should be warned that when the word "structure" is used in this report it is not referring to
the structural analysis type of program commonly employed in our public schools, which research shows is often detrimental to the functional language program, even if taught concomitantly. Marcus, supervising teacher at Tulane, reports in her doctoral dissertation, "... Structural analysis made up 8.5% of the fourth grade instruction, 19.0% of the fifth and 36.0% of the sixth in the observed schools" (114:389).

The approach used in this experimental class was primarily functional. The procedure was similar to that reported by Marcus. She proposed...

... to find out if it were possible to teach sixth grade pupils to express their thoughts correctly without giving instruction in the identification of parts of speech or their function in the sentence. All writing of the pupils arose from a real need; it was carefully evaluated ... and papers re-written by pupils. Evaluation indicated that there was a statistically significant difference favoring the experimental pupils in fluency and correctness of written expression over the control pupils who had been taught with attention to structural analysis (114:389).

To be sensitive to form, to be aware of the structure in composing, may be one characteristic that distinguishes the good writer from the poor. The poor writer is concerned for the mechanics of spelling, punctuation, and vocabulary. The good writer's concern for content is paralleled by an equal concern for form.

Although lovely things usually have discernable patterns, the children recognized that there are many differing
opinions about what constitutes beauty and ugliness. It is possible not to have, or not to recognize, any guiding design and still, perhaps, have a worthwhile product. It was further noticed that people differ in their capacities or their developed abilities to respond to forms. The unconscious energy we expend blocking out, as well as intently perceiving, objects was noted. A classroom exposed to the wear and tear of playground or street sounds is a good place to start a discussion on this idea.

Caution was exercised in using the word "pattern". It was found to have disadvantages in a creative program because it is associated with the idea of copying, or tracing. As soon as possible, the words "motif" and "design" became a part of the students' conceptual vocabulary.

The end held in view in this class was not to pick at the flaws, but to develop the style of each of the individuals in the room. "For the development of style, be it style of writing or loving or dancing or eating, requires a sense of contrast and completeness. . ." (27:103). The complex parts of any art, the rhythm, the form, the color, the line, the way they are arranged and interrelated, result in that phenomenon called style. Style is the fluid part of any composition that penetrates and is penetrated by every part and division of the work. It is the synthesis of the
individual's environment and the skills of his art. It is his characteristic creative response.

The fact that style may not always be easily categorized does not mean a style does not exist or that it isn't important. Style has always been a distinguishing feature of creative artists, no matter what their field.

The writer confirm from her experience that, even by fourth grade, many of the children have developed a recognizable style. It is as distinctive as the overtones that form the quality of a musical instrument. This "sound" must be heard by the teacher and encouragement must be given to enrich the timbre.

A teacher, trying to help a little boy learn to sing on key, kept sounding notes at the piano while the little boy tried to match the sounds. With an impatient look or his face he finally said, "I guess you just don't have my tune in your piano."

Many incidents in Ashton-Warner's books (8) illustrate how teaching can enhance this uniqueness. The research of Goodland and Woodruff (77:105; 78:67) and Bruner (27:103) has indicated the need of determining basic principles and reported advances in training in visual design.

It is difficult to isolate one example from the work of the class that was inclusive enough to prove the importance
or the efficacy of the concept of structure in producing creative works. The emphasis permeated the whole program.

The human preference for design was assumed. Sympathetic vibrations were the expected response from the students as they became aware of the patterns around them and within themselves. Perhaps one doesn't teach structure, but just unleashes the tendency and encourages its practice by pointing out that it has been successfully used by others before. A knowing philosopher, though unknown to this writer, said, "What you seek is not to be sought and seized, but waited upon and made welcome."

It is easy to see patterns. The flower on the desk was the first observation. When the question, "Why do you say this is a rose?" is answered, "Because it looks like other roses I've seen," you have established a beginning concept that patterns look alike. "How does a red rose differ from a red bird?" will start a chain of thought that shows how we identify and distinguish almost everything by pattern.

"Could you use a flower as a main idea, a theme, a motif, and develop it into a pattern?" While letting the students experiment with this idea, other patterns in the room, such as the brick, the acoustical tiles, or the patterns in the students' clothing, can be noticed. By
observing, the students will discover that each part of the flower is a pattern and that the sum of all of these parts is the flower. This is true of every work of art. There are many parts; many of these parts are patterns. The sum of the innumerable ways these parts can be finally arranged is the artist's creation. The creation is chiefly limited by the artist's imagination, the ideas he wishes to communicate, and his style.

This is well illustrated by noticing that humans are recognizable as humans because we follow a pattern. We are made up of repeated patterns, two eyes, two ears, etc. "Is there more to us than just a visual pattern, one you can see?" Our rhythmic patterns, sound patterns of heart beats, breathing, walking patterns, patterns of movement, habits, behavior patterns can be discussed. By being interested, accepting and eager to hear what relationships the students will make, a creative teacher can increase her students' and her own awareness of form. The important word "relationships" can be illustrated by showing the relatedness of families, how brothers and sisters may look alike or be "like Mother".

In the first class in the fall, the students talked of their summer vacations. The teacher said, "I sense, from hearing you talk, that the important part of your
vacation was not what you did, how far you traveled, but how you felt about what you did or saw or heard. It could be a very small happening that made an impression on you, such a strong impression that you have a picture of it in your mind, a picture you like to recall.

"Sometimes people try to express these rememberings in music, painting, dances or, most frequently, by words. Here is how one poet recorded the pictures she remembered."

After reading the poem, which had been dittoed for inclusion in their notebooks, the students observed the rhythm and rhyming patterns. We tried to compose lines in a similar scheme that would tell of their summer experiences. At first the contributions were oral, then each child wrote his own invention. Typical results:

I can see a picture.
Tell me what you see.
I saw a crab walking
Slowly to the sea.

or,
I saw a little squirrel.
He was nuttier than me.

or,
I saw a huge bumblebee.
He meant trouble to me.

Out of the discussions about the pictures they saw, came the recognized need to understand how to use see, saw, and seen. "I seen," was frequently heard. While the students
could understand when to use "saw" and when to use "seen", many of their speech patterns were set in incorrect molds. The class decided to devise a poem that would accustom their ears to the correct usage. The poem developed into a chant, and they sang it on an ascending scale tune accompanied by the melody bells.

(Do) I saw a purple mountain, as pretty as could be.
(Re) I have seen a tree as green as the sea.
(Me) I saw a leaf floating in the breeze.
(Fa) I have seen a baby crawling on her knees.
(So) I saw a cloud drifting through the sky.
(La) I have seen a bird soaring up so high.
(Ti) I saw a fish swimming with a swish.
(Do) I hope you've seen these things, that is my wish.

The last line descended the scale to "do". Singing and dancing the Danish folk game, "I See You", varying the grammatical pattern to "I Saw You" and "I Have Seen You", provided additional practice. "He Thought He Saw", by Lewis Carroll, was read with delight. A copy was included in their notebooks.

Robert Squire, Executive Secretary of the National Council of Teachers of English, seems to support this technique when he says:

. . . much of the progress achieved through the oral-lingual approach has been predicated in part, although not entirely, by the study and practice of oral and written patterns. . . . Pattern practice, repetition of sound, some repetitive drill on basic structures -- these seem an important part of the approach (154:235).
One of the neglected arts of teaching is the encouraging of the students to ask questions, to volunteer observations and relationships.

One day a student remarked, "Did you ever notice that the words of a song always turn out to be poetry?"

In examining this statement, Jimmy explained that this was because poetry has rhythm like music.

We liked Lawrence's answer. "When you need to say something special you use poetry, 'cause it's kind of special."

"Why is it special?"

"It rhymes - well, not always."

One student volunteered that the Indians thought that speech was much too ordinary for communicating with their gods. They used their special voice and sang their prayers, illustrating them with dances.

By enjoying many types of poetry, we came to understand the poetic experience as a yearning "to get through the curtain of things as they appear, to things as they are, and then into the larger space of things as they are becoming" (155:16). We found the poet's thoughts ranging into all areas of life and nature, refusing limits on subject or time. His ideas are not shaped by his forms, but the forms help give his ideas unity and harmony so that they become an organism.
Experience had indicated the advantages of the haiku as a poetic form. Immediate satisfaction and success is almost guaranteed. The class first experimented with this form as an incidental part of a cursive writing lesson. Many of the children were having problems writing the letter "b". They were confusing "b" and "d". Suggested to them was "'b' as in bat," the letter being formed by a bat "l" and a ball "o"; thus, "b" was formed. After considerable practice with the capital and lower case "b", the students practiced writing it to the rhythmic beat of a Sousa march. They made the letter "b" on the first three counts and rested on the fourth count. This was fun to do, and the students practiced willingly, filling pages with the letters learned.

The class often composed little lines to help them remember some troublesome peculiarity of a letter and to help them write rhythmically. For example, while writing " " they chanted, "Tails up, tails up - merry as a beagle's tail." Saying "One o'clock and all's well" when writing " " reminded them that the pen begins to form the letter "O" at the position of one on the clock. Silently chanting "U and I" while forming the letters reinforced the correct speech pattern, which was ingrained as "me and you". After practicing

3Refer to pages 68-70 of this thesis.
the letter "b" with the music, the teacher asked, "What word can you recall that has more than one "b" in it?"

"Bubbling!" was the first contribution.

"Boiling!" quickly followed.

"What's bubbling and boiling?" the teacher asked.

"Geysers."

"What are the geysers doigg?"

"Spewing mud and rocks!"

"Use a word beginning with "b" for spewing."

"Blowing! Blowing mud and rocks!" The students counted the syllables.

"Fine! That's just the correct number for the first line of a haiku." A student wrote on the blackboard:

Blowing mud and rock
/ / / / / / (5)

Bubbling and boiling geysers
/ / / / / / / / / (7)

"What causes a geyser?"

"Oh, it's a way of letting heat and steam out through the earth."

"What word beginning with "b" could we use in front of 'through the earth'?"

"Breaking!"

These words came tumbling, with freedom and excitement. The alliteration wasn't necessary to the form of the haiku,
but we liked it, and just think of all the practice in writing "b"!

Blowing mud and rocks,
Bubbling and boiling geysers
Breaking through the earth!

In commenting on some of the children's writing, the teacher complimented a student on his colorful sentence. This began an investigation of color as a part of creative products. The students hunted in their reading for colorful words and phrases. Color as used in painting and works of art was discussed and illustrated with pictures. That music could be described in color terms was noted. The familiar "blue" of jazz, the contrasts of dark and light, the shading of phrases, the intensity of color that is called "loud", were some of our free-ranging discoveries.

The teacher said, "I'm thinking black. Black as...." Quickly a child shouted, "Night!"

Another child wrote the lines on the blackboard as the children invented them:

I'm thinking black.
Black as night.
Black as midnight.
Her face is black, and
dark is part black.
Black as a Halloween cat.
Black as soot.
A rain-cloud is black, as black as coal.
If it's deep it's black.
A package of multicolored construction paper was available. The teacher offered each child his choice of color. They were then asked, "Why did you choose that particular color? Of what does the color remind you? What is it like?"

Otis chose brown and wrote:

Brown as the tree trunks on some trees,
Brown as the leaves in an autumn breeze.
Brown as a bear walking in the woods
Brown as a candy dish filled with goods.
Brown as a wig sitting on it's tray.
Brown as an old cat that is going stray.
Brown as some peanut butter melting in its jar,
Brown as a rusty, rusty bar.
Brown as some dry soil,
Brown as a rattlesnake in a big coil.
Brown as a polliwog in a small pool,
Brown as the floor in our school.
Brown as the setting chicken's eggs,
Brown as all the Indian's legs.

A school failure, twisted by an impossible family situation, wrote lyrically:

Blue, blue, blue!
Blue as a violet;
Blue as the sea;
Blue as paint;
Bluejay!

Blue, blue, blue!
Blue as the sky at night;
Blue as the lake;
Blue as ice;
Bluebirds!

Each child selected another piece of paper in a lighter color than their original choice, cut it in the shape
of a large leaf and wrote their poem or composition on it, pasting it to a larger leaf of the original color. Jan, who is a retarded and disadvantaged youngster (73 in a class of 75), struggled with her choice of red. Finally she completed it to her satisfaction. It was legible and revealed a little girl with a sensitivity not suspected:

Red is the prettiest color I can think of. It is like my sweater, which is a pretty color. I think of it as red as my cheeks, or it's like an apple on the tree. It is like a flag. It is like a rose!

Later we read together "Pink", by C. Rosetti, and copies were included in their notebooks.

The students worked after school to paint a large sky background and to cut a replica of a tree from corrugated cardboard. The leaves held their carefully polished writings. They devised a haiku as a title:

Cascading colors
Creatively calico
Cartwheeling like clowns

FIGURE 4
WRITINGS ON COLOR
Around Halloween time the teacher brought to class a pumpkin and a large black velvet cat sporting a rhinestone necklace. The students described the objects, listing the words under appropriate headings, such as "Color", "Texture", "What is its Value?", and "How we Feel about It". Quite extensive lists were made to help them get their minds focused on the cat and pumpkin and to clarify their impressions. The teacher suggested, as a starter for the group composition, "A cat is . . . . " The composite of their contributions read, in part:

A cat is a claw and a scratch.
A cat is a tough tiger and a trouble maker.
A cat is a fuzzy, fluffy, furry feline.
A cat is as black as charcoal and as black as night.

The class decided to write stories about the cat and the pumpkin, using drawings whenever possible for words. Many were well done and some were clever. Otis wrote of "The Cat Who Didn't Have a Colorful Coat"; Marsha wrote of . . . a little who was lonely. He met a that was lonely too. The and walked on. Then, all of a sudden, it started to . The said, "I am empty inside. Hop in." So the did. . . .

Richard, almost blind and a low, low achiever (74 in a class of 75), wrote:

A pumpkin is a nice jack-o-lantern. A pumpkin is orange with a long green vine. A pumpkin is round as a
ball. A pumpkin is very good in pies. A pumpkin can be little or a pumpkin can be big. A cat can be the color of a pumpkin because a cat can be black, yellow, white and brown, but a pumpkin is one color only - one color and that is orange and only orange, ORANGE, ORANGE!

The class studied Richard's writing. They noted the repeated use of "orange", the most symbolic word for a pumpkin. They noticed how emphasizing and accenting orange brought the mind back to the pumpkin, the central theme of the writing. The students recognized how Richard used contrast in his writing: "A pumpkin can be big and a pumpkin can be little." They noticed how he drew attention to differences by pointing out that cats can be a number of colors, the pumpkin only one.

As the other stories were projected and read, the class noticed the evidences of the form or structure of each story. Pete had a perfect three point, accumulative story form. Karla's story began with a distinctive phrase and became progressively more complex, closing with almost the same words with which she began, similar to an A B A song form.

Nearly every critical assessment of our school system pontifically proclaims that the students cannot write a sentence. Fourth graders do find it difficult to manipulate sentences. There is a tendency in writing, as in speech, to let the sentence run on and on. In this class the students
used, with considerable success, the techniques of understanding a musical phrase to help them delineate the structure of a sentence. A paragraph without punctuation was distributed. The students read it aloud without taking a breath. Then they reread the paragraph, stopping at natural places to breathe. Where a breath was needed, they pointed their finger to indicate the period, and said, "Phtt!" This was fun. The last line was written on the board, using musical symbols they already knew. The children phrased it like this:

Leaving a burning campfire can set a whole forest on fire.

Other sentences from songs were phrased in the same way, using a sweep of the arm to conduct them. Scholl, in her article "Music for Dancers" (145:101), says:

Dance itself can be used to teach musical concepts as well as to develop the body. Certain subtle concepts can be taught better by translation into movement than by almost any other means, particularly with young students. Words cannot convey the idea of a musical phrase as well as a sequence of muscular tension and relaxation.

Breathing is used by singers, instrumentalists, dancers, actors, speakers, and almost everyone, to enhance the content, to clarify ideas, and to heighten aesthetic impact. The phrase, which is the chief unit of the basic pattern, is formed by the nuances of tempo and dynamics. By
helping the student to listen and understand this flowing movement, the teacher increases his ability to form a sentence, a phrase, or his own work of art. Some discussion comments the teacher thought worth recording were:

"If you jam all the words together in a sentence it's like a little kid's fist-full of dandelions."

"A run-on sentence is like colors that run when you wash a dress. They blur."

. . . Research in language, then, is demonstrating the importance of form in the communication of ideas. . . . By teaching not only basic pattern, but the methods of achieving variation, we may not only develop greater understanding of the English sentence, but greater facility in its use (154:537).

It became increasingly clear that in order to encourage creative work, three major requirements should be met. First, there should be a climate favorable to creative development. The basics of this climate were identified as acceptance, freedom, and concern. Second, there should be some stimulus, a problem to be solved, a happening of enough intensity that a response is spontaneous. Third, there should be appreciators, individuals having resources of confidence, of knowledge, of love, patience and stamina to help, if needed, in the shaping of the response and to be deeply interested in the creator and his product. When enough individuals champion these values we have a society that will nurture creativity. Stein writes:
it may be said that a culture fosters creativity to the extent that it provides an individual with the opportunity to express its many facets. To the extent its value system includes positive regard for change and novelty (and) to the extent that it encourages openness to external and internal experience.

Lasswell, in his studies of the social setting of creativity, regards the need of an individual for support as particularly strong when venturing into new fields. "... every innovator needs a recognizer" (4:203).

A large part of this paper has been devoted to the first and third requirements. The second, the need of stimulus, appears to be the easiest for a teacher to achieve. It is true that some success can be experienced even without the other, more difficult values. One hesitates to even record some ways of stimulating creative responses for fear that these ways will be adopted, a "do-it-yourself" type of creativity, and the long, slow, tortuous, self-examining, self-changing process will be neglected. Then, no matter what is done, the dialogue between child and teacher is unlikely to flourish. A teacher is not able to create a psychologically safe or stimulating climate without first becoming, as Maslow says, a "self-actualized" and creative individual.

Generally the stimulus for creative ventures came from the happenings or problems that rose spontaneously in the
class. A crucial part of the role of the teacher in nurturing creative potential is to recognize and to be quick in magnifying these luminous flashes of insight into energizing creative expressions. The alertness demanded may make the teacher seem to pounce on the child's idea. The teacher must be cautious and empathetic in his grasp, so as not to embarrassingly expose or bruise the young creator. The child is likely more surprised, even alarmed, over his unaccustomed brilliance than the teacher. This handling and fanning of the spark is a skill that, again, grows from the educated heart. Many of a sensitive teacher's regrets and feelings of incompetency come from the realization of the "muffed" opportunities, and the involuntary rough handling of a child's tentative explorations.

There is a difference between tolerating individual differences and making use of them. When a teacher actually helps a child to use his uniqueness in valuable ways, the child becomes more confident of himself.

Classes that generate creative work seldom can be pre-planned, but must be pre-arranged and prepared. Teacher preparation includes a grasp of the subject and the skills involved and a wide range of knowledge that allows the teacher to follow and support the student without becoming touchy and defensive because of his own lack of information
or ability. However, he must realize the improbability of always being able to help, to finish, to make the right move, and so prepare himself for failure. A teacher must determine to develop the courage to fail, the courage to risk failure. It is essential that his classroom preparation include the gathering of the strength and courage for this task. It may be as obvious as improving one’s health, going to bed an hour earlier, eating a lighter lunch, developing a rewarding hobby, or cultivating a sensitivity to loveliness. It certainly will demand the deeper reorientation of attitudes and reactions, as indicated in other parts of this study.

Prearrangement involves anything that can be arranged to enhance the life and learning of the child. The most crucial of these is time, time to contact the child, time to communicate with him, time to wait for his unfolding. Temperature, ventilation, light, quiet, books, maps, seating, supplies, visual materials, art supplies, audio-visual equipment, and much more are necessary parts of the prearrangement. The imagination and taste of the entire school, as well as the classroom and the teacher, is a vital ingredient that nurtures creativity. Bruner says:

... a theory of instruction, which must be at the heart of educational psychology, is primarily concerned with how to arrange environments to optimize learning according
to various criteria - to optimize transfer or retrieve-ability of inference, for example (27:103).

Reissman takes exception to this when he says:

... Conditions may not affect his learning as much as the methods his teacher uses to teach him - does it utilize sufficiently the strengths in a child's style? (139:16).

The spontaneous sparks that spring from the internal warmth and life of the child are highly individualistic and frequently capricious. Sometimes it is well for the whole class to experience the same stimulus in order that they may work together, contributing their unique solutions to a common problem. Perhaps there is an infertile period and neither the students or the teacher are emitting any observed signs of internal combustion. It may happen that the class needs to be jarred out of a preoccupation with an unproductive direction, or needs a more intense, emotion producing experience. For all of these reasons, and others, it is well to have in mind some ways of externally stimulating the creative fancy.

Of the many stimulators adapted for use in this class only four will be noted. These four very common aids to instruction are programs, films, field trips, and bulletin boards. Because of the presence of the first and third requirements (even if in limited amounts), and because of the
direction of the students' imaginations into creative channels, interesting results were obtained.

Programs, particularly those to which the public is invited, are dangerous spurs to creative efforts. The teachers and the children are "on the spot", and the tendency is to play it safe with tried, true, and trite materials. One must be willing to gamble on the inherent abilities and creativeness of the students and to free himself as much as possible from defensiveness and fears.

In this school the fourth grade music students produce the Christmas program, which is attended by all of the elementary school students and four hundred or so adults. For five years the children have written their own hour-long show or play, composing four or five of the songs and working out the script around a motif, developing the scenery, managing the stage, etc. With nearly ninety children involved, all being on stage with some particular part, the assignment is difficult. The three classes work separately in their music class periods, but every recess the teacher is surrounded by volunteers who sit together in a huddle, imagining, trying, role playing, writing, and composing.

The year of this experimental language class, the very real problem of writing and staging this production was
shared with this group. Together they determined the theme and title, *The Sounds of Christmas*. Together they wrote the opening poetic prologue and decided how to present it. Together they wrote three original songs, the lyrics and the music.

Jimmy, our terribly crippled boy, wrote the first lines of a poem on Christmas sounds. They were scarcely legible, but we liked the rhythm and the ideas. The class was proud of Jimmy's work and began to expand it into the theme song of their production. They phrased with arm movements; they clapped the rhythm; they tried out their own ideas for a tune with hands over their ears so as not to be influenced by any other student's version. The class pooled their ideas and each willingly scrapped his lines if some other person's suggested words seemed to be more appropriate. At the close of class, as Jimmy hobbled out on his crutches he paused to say, "It's a good thing I stayed awake last night and made up that good poem. We wouldn't have had much of a class without it." The teacher agreed with him. . . .
When the Christmas carols sound, when the snow is on the ground,

Christmas is here! When the children make a ring,

When they laugh and dance and sing, Christmas is here!

We will load our sleigh with hay, pile the presents high,
Soon we'll be at Grandma's house, eating pumpkin pie,

We will be so glad and gay, Wave as we pass by.
Soon we'll show the things we made, across the snow we'll fly.

FIGURE 5

WHEN THE CHRISTMAS CAROLS SOUND
Two dances were invented to accompany the original songs. Nothing so clearly delineates the form of a composition as the analysis based on careful listening that must be made in order to choreograph even a simple dance. As they compose and practice, repeating the performance over and over, the understanding becomes a part of their kinesthetic response.

The motif of the program being "sounds of Christmas", Poe's poem "The Bells" was memorized and recited chorally by the class. In choral speech the structural elements must be observed and isolated enough that the dynamics of vocal timbre and diction can underscore the form, clarifying the content. Practice impresses the design upon the students.

The original music was hung around the auditorium.

FIGURE 6
DISPLAY OF ORIGINAL MUSIC
Biographical films, films about the telephone, the dictionary, and films that traced the development of time or language were useful to the class. The films that elicited the really memorable creative works were films that were themselves unusually imaginative and creative products. The films in the following list were choice:

Ages of Time  
Alphabet Conspiracy  
Caps for Sale  
Creative Patterns  
Designing to Music  
Fiddle-dee-dee  
Harmony in Music  
The Loon's Necklace  
The Moonbirds  
White Wilderness

Previewing was done with the purpose in mind of how to enhance the impact of the film. Sometimes a discussion or an investigation before the film raised questions that might be partially answered by the film's content. After the showing, the usual "testing for alertness" type of question was avoided. The teacher's obvious valuing of the students' questions that sprang from curiosity, or the sensing of a problem, seemed to encourage questions that began, "I wonder why . . . ?"; or, "Do you think that if . . . ?" The class searched for and noted the observable differences in the film, the variations, the deviancies from the usual. They helped each other "to search for the likenesses beneath the surface of diversity and change . . . the unsuspected kinship" (27:103). To keep a record in their notebooks of each
film, the students wrote a review, a recommendation or, occasionally, a paraphrased account of the entire story.

Caprice was stimulated, and the students wrote with even more interest and joy when they paralleled the idea of the film by producing their own creative story. After viewing "The Loon's Necklace", Romona wrote about "Mrs. Racoon's Day in the Woods".

One day Mrs. Racoon was walking in the woods and came to a bear who was beating her cubs. "What a wonderful day it is and you're spending all your time beating those poor cubs. You shouldn't do it anyway," said Mrs. Racoon. Mrs. Bear was furious! "Then why don't you mind your own business?" She gave Mrs. Racoon two black eyes. It looked as if Mrs. Racoon had a mask one. Well, when Mrs. Racoon went home her husband laughed at her and she gave him two black eyes. A few days later when the baby racoons were born, they had masks, too!

Galton described the motivational ingredient that kept each child eagerly writing, by the label "zeal".

... the enthusiasm of the genius over his problems keeps him working late into the night long after the clerks and the factory-workers have gone home to their evening relaxations (101:14).

Field trips have many disadvantages. They are time consuming in organization and difficult to manage in the schedule. Many people besides the class and the teacher become involved and must be considered. The positive factors must be kept in mind and weighed with the negative. Pre-planning demands conferences with the principal. Reading some of the comprehensive literature available for guidance
on field trips is recommended. Visits to the publisher of our local newspaper, to the railroad telegraph office, and to the telephone company clearly were indicated as part of the subject-matter of the class. Then the class decided to tour the fish-hatchery! It took imagination to relate this trip to the study of language. Perhaps because of the additional effort to justify the trip, or perhaps because it was a more gripping experience, the results were more creative. We prepared by writing numerous letters to the Fish and Game Department and to the Chelan Hatchery, by reading the materials they sent us, and by studying and painting fish. We saw two films, "The Life Story of the Salmon" and "Planting Fish in Lake Chelan", to familiarize us with the processes to be observed.

The trip went smoothly and nothing marred its success. The students wrote a report of their trip for the newspaper. Motivated by this experience, they decided to be reporters and to imagine they were interviewing one of the fish they had seen, reporting how the fish might think or feel about life in the hatchery.

Nearly all of the papers were hilariously funny. Pages were written with enthusiasm. Otis wrote, "A Talk with Stan Steelhead": 
Your Reporter: Stan Steelhead, what do you think about the new hatcheries the government is building to raise your children in?

Stan Steelhead: I don't like it one bit because then you might never get to see your children.

Y. R. Oh! I thought you would like it, especially the part about having your children in good hands.

S. S. Good hands, my fin! You call fish hatcheries good hands?

Y. R. I most certainly do. What do you think you would call them, if they aren't good hands?

S. S. I call them baby thieves . . .

Mitch wrote:

Y. R. Tell me, Mr. Rainbow, what do you think about fishing this year?

R. R. You may call me Robert. Well, fishing is about the same as any year. . . .

Y. R. I take it that you were raised in a hatchery.

R. R. Yes, I was, and so were my brothers and sisters.

Y. R. You never told me you had any brothers and sisters.

R. R. Oh, yes, one hundred and forty two. Father always said Mother was very fat.

Jerry's story on Mr. Steelhead contained this choice phrase:

Question: Do you think that fishing season should be longer or shorter?

Answer: I don't carry a saw to shorn it, do I?

Marsha's soft romantic style shows through in even this short excerpt from her four page story:
The Reporter: What is your name?

The Fish: My name is Marsh, and what's yours?

T. R. My name is Reggie, your reporter.

T. F. Oh! I just adore reporters!!!

T. R. I like fish, too.

T. F. Well, if you don't mind, I have to go and have a baby.

T. R. Don't let me stop you.

T. F. Then will you please get out of my way?

T. R. Why do you go up stream and have your kids?

T. F. I guess they will have a better life. I have to go now.

T. R. I have more questions to ask you.

T. F. I can't stop now!...

(After she had her baby's, the reporter came back.)

T. R. Now where will you go?

T. F. I will stay here and die.

(The reporter stayed until she died.)...

Interest was expressed in owning fish, so a film was obtained on how to make aquariums and to care for its inhabitants. As a correlated project, large imaginery fish were outlined on drawing paper with heavy twine that had been dipped in Elmer's Glue and white tempera. The interiors of the fish were then painted with multi-colored tempera and dusted with gold. This produced such startling specimens
that the class decided to display them in a three dimensional aquarium which they designed on our blackboard.

**FIGURE 7**

**WATER WIERDIES**

Bulletin boards can be powerful tools in stimulating creativity. They provide opportunities for the students to translate into visual forms their concepts of design, to experiment with the elements of rhythm, color, likenesses and contrasts, form and its variations. The bulletin board designated for our use in the dual purpose lunchroom-gym, had certain drawbacks. It often became disarranged from flying balls and the fingerings of the physical education classes. The advantage, which overrode these objections, was that it served as a stimulus to all the students, elementary
through high school, as they observed the inventiveness of
the student creators. Photographs kept a permanent record
of the changing board and added to the enjoyment and satis-
faction of the children as they reviewed their handiwork.

Bulletin boards take tremendous amounts of time. Each
board consumed, on an average, about five hours of the
teacher's time, plus the efforts of the class, and about the
same number of hours of voluntary free time from three or
four students. In this class the work was not divided into
committees, perhaps because the teacher's mind doesn't
function that way. Those interested just came in, saying,
"May I help?" Strangely enough, there was always enough help
and no one failed to volunteer some of the time. The group
that came after school usually stood around talking, trying,
arguing, deciding what to do. This was the most exciting
part, even to children who did not seem to have much to
contribute. It was a kind of relief, after all the decision
making processes, to do something as uninvolved as climbing
stepladders, measuring, and pinning.

The influence of the bulletin board was demonstrated
when the whole school became involved in one of our projects
which was recorded by our display. The class planned to
retreat from the company of others to a private place where
they would listen to the sounds of spring until they felt
moved to reflect upon the experience in some way, whether by a poem, a painting, a song, or just telling about what happened. Other students joined this simple experiment. With bird nests or other evidences of their retreat in hand, they joined the unending clusters of children waiting to be helped with their writings or wanting to use paper and paint because, "I ain't got no paints at home." The majority of the children wrote poems and lyrical accounts of their moments of awareness.

A Bird

I saw a bird go flying by.
It looked so sweet against the sky,
   I know not what it was.
I would like to have it for my own,
But would he like it at my home?
   I feared that it might die.
He came to visit me one day.
He was so sweet, so bright, so gay.
   I love him tenderly!

Scottie

Spring

When winter came the days were dreary.
Long nights came and made it weary.
Loneliness crept in,
And I crept out in the cold, cold night!

When night came no sign of life,
No mouse came stirring
In the night,
Emptiness and quiet.
Then came sunlight bright and light.

Susie
Included here is a picture of one of the four bulletin boards designed to share some of these creative efforts.

FIGURE 8

ALL NATURE SINGS

When you encourage creativity you encourage the child. An encouraged child is more inclined to behave in creative, productive ways. For this reason if for no other, it is worth all the effort necessary to become a creative teacher. What teacher has not encountered the unteachable, the child who destroys the class and the rapport of teacher and students? This writer's experiences confirm the effectiveness of the encouragement of creativity in reaching these students. It is remarkable, the changes that can be made, though it is well to know that the changes won't all be in the student.
Freddie has worn out about five teachers though he is in third grade now. He is large, squishy, and his staring blue eyes lack the expressiveness afforded by definitive eyebrows. His hearing is defective, his coordination poor, his academic progress laborious. He wallows through most recesses slugging and kicking. In class his interruptions and distracting behavior are nearly unbearable. With every resource, the writer consciously tried to rechannel her thinking into accepting Freddie as he was. Some progress was made. At least the teacher didn't feel so guilty. Then, as often happens, a break came.

The following are pages taken from the writer's recording of the happenings of each day. They are included "as is", and illustrate the method used during the study, as well as the content of the dialogue.

October 26

... Freddie came to the stage where the music classes meet and asked, "Can I do something to help you?" He helped, along with about five other boys and girls, to straighten the chairs, wash the blackboard, wipe up the bottle of glue he had knocked over, and other small chores.

As we were moving the piano, he volunteered, "Boy, did I have a terrible day!"

"Yeah, we had a substitute. I just ask her a question and she points at me and yells, 'You stay in for recess.' Boy, oh!" Sighs and much sad head-shaking followed this. Then --
"I look around and all the other kids around me is coloring. But all I get to do is work, and work." Sigh! "Mrs. Phillips, you got any painting to do?"

"We don't have any large pictures under way, but I'd be glad to have you do one on your own." Supplies were provided.

"Mary had a big pumpkin," chanted Freddie as he pressed hard on the paper with his pastel. "Hey, that could be a song, couldn't it? I think I'll write a song. Is that all right?"

"Certainly! But why do you say, 'Mary had a pumpkin'?: Doesn't Freddie have a pumpkin?"

"Sure, Freddie has a pumpkin. I like that better."

"Where did you get it?"

"In a garden."

"Then you stole it!" accused Bill, who had been listening and was a little jealous of the attention Freddie was getting.

"I did not! It was in this ol' weed patch on the way home from school."

"Yeah? Then who watered it? I ask you that!" snarled Bill.

"This don't have to be true, does it?" appealed Freddie.

"What do you want? An imaginary song or a true one?"

"I think I'll just imagine it." Maybe I could have a pumpkin that no one else wanted. Sure! See, Bill, just nobody wants it."

"Why don't they want it, Freddie?"

"Well -- see, it looked kinda funny. It was round on one side but kinda -- (he slanted his hand) you know -- on the other side."
"Do you mean it looked like this?" The teacher drew a sketch on the blackboard.

"Lopsided! It's a little lopsided pumpkin. I'll write that down!" He tried valiantly, but it was just too hard, so the teacher volunteered to help him.

"Where was this pumpkin?"

"Hanging on a fence."

"What was his trouble?"

"He was sad, awful, real, real sad!"

"Why?"

"Well, he know no one wanted him. Why don't you write that down?"

"While I write, you think of a rhyme for fence for the last line." He tried. He was stuck. "Where could this pumpkin be besides on a fence?"

"On a branch -- no, them low growing things. Vines!" He tried to rhyme vine, listing pine, fine, time, etc.

"Freddie, no one wanted him when?"

"At Halloween -- time!" he shouted. In this manner we went on, until the poem read:

A little lopsided pumpkin
Was hanging on a vine.
He knew that no one wanted him
At Halloween time.

Only big and orange pumpkins
Make Jack-o-lanterns gay.
He wished someone would take him
And made him smile someday.

Then Freddie saw him drooping;
He picked him off the ground.
He made that pumpkin happy
As a Halloween clown.
Long before the poem ended he had decided that the pumpkin would be a clown.

"Boy, this is sure a good poem. I'll bet even Mr. Rumsey (the principal) would like it."

Then began the long process of writing it down. He had come in at 3:00. He was patiently writing at 4:30. A reminder that he should call his mother brought this reply, "Nobody'll care. Nobody'll be home till after five."

He took his completed poem down to the principal. When he came back he said, "He liked it. Them other two teachers liked it too."

"Take it home and show it to your family. Sing it over until you have a tune you like and I'll help you make a song out of your poem tomorrow."

Freddie was waiting for the teacher when she arrived at school the next morning. His rumpled poem was in his hand. Though his face was still as round as a pumpkin, the insolent stare that acknowledged that "no one wanted him" seemed to be gone, at least the teacher couldn't see it.

"Do you want to hear my song right now?"

Freddie had two good lines. Together he and the teacher worked out the techniques of the music on the blackboard, identifying the time signature, deciding on the key, sketching and finally writing the correct notes. When his class come to music, Freddie stood by the teacher and explained his song, asking for his classmates' help in finishing it. The children, as has always been the experience of this writer, responded with interest and generous approval.
of Freddy. He assumed great dignity as the class referred to him to make the final decision as to the choice of the music suggested by the students.

It seems incredible, but since this incident, Freddie has not had to be punished or scolded in this class. He and the teacher are firm friends, and both seem to look forward to the music class.
CHAPTER III

SUMMARY OF THE SIGNIFICANT

In weighing the work of the past four years, the writer searches for the significant pattern, the ineffable essence of truth that should have been distilled, by now, from the disordered complexity of these daily experiences. What are the unifying relationships that emerge from all the exploratory research and the concentrated practical experimentation? Much like the writing of a symphony, the motif, creativity, was trumpeted. It was, and continues to be, a confident, powerful theme that lends itself to abundant variation. The recapitulation should not be a finale. It should sift for the significant that suggests further study.

Tentative assumptions led to a commitment to investigate, by study and practice, the validity of the hypothesis that through creativity a dialogue of communication may be established that will free both the student and the teacher to expose themselves to that which is most real within themselves and the world about, and to have the courage to respond to this reality in their own unique and meaningful ways.
Both phases of the research were carefully recorded. The primary device for this recording was a diary-like chronological account of experiences, dialogue, lesson plans, and weekly reflections on insights or assessments.

The investigation explored the literature bearing on the subject of creativity, freedom, motivation, perception, and the creative arts. Complete notes were taken, an annotated bibliography kept, and a file of pertinent information organized under broad subject matter heads. A program of course work under the master's program was undertaken that related to creativity. Creators were observed at their work, and contacts were sought with authoritative persons in the field of creativity.

Daily, continuous practice of the attitudes found to be most conducive to the encouragement of creativity was the rule. Two major projects were attempted that took a full year's time. The first project was a pilot group in which were tried ways of working and ways of beginning in an atmosphere that predicted success. The second project was an experimental class in language arts with fourth graders. In this class the emphasis was upon creative experiences.

The confirmations of the hypothesis have been gathered slowly. First to reach a mature assurance was the conviction of the importance of creativity to the child, the teacher, the
Creativity at its best seems to nurture an individual's inner resources, strengthening his sense of self, his tolerance of his self. It will exercise and toughen his courage, and demand his determination and dedication. In the strivings to bring forth his creative product, learning will be accelerated as he searches the far and scrutinizes the near to find solutions to problems. A creative person seems to intuitively understand that saturation in the known is the preparation most likely to produce the new synthesis we label "creative". What is known by the individual has been experienced. The stronger the experience, the stronger the possibility that there will be a response.

The creative attitude, which prefers innovative ways of responding to the old, will equip him to cope with the unexpected. He may even learn to enjoy the unpredictability which seems to be the normal condition of our lives. Flexibility, resourcefulness, and originality will be valued increasingly, making him more assured as he undertakes ventures that expose his defended self. To become involved will
mean not only risk, but reward and renewal. These attitudes will penetrate the society as the number of creative people is increased and their vigor and productiveness are recognized.

It is important to strive to develop each person's creative potential because it individualizes the person, making him more interesting to himself and to others. His life takes on new directions, depths, and dimensions. He becomes a free personality, not manipulated by the past, not hesitating because of self-accusations, not terrorized by the inexplicable, not stalemated by ambiguities. In this freedom he can explore the universe or marvel at the obvious.

Though important and a source of joy, creativity was found to be dangerous. Suffering was recognized as so inevitable that it was suspected it might be a component of creativity. The dilemma of whether the importance of creativity warranted the risks was made more acute by the fact that the experimental subjects, whose creativity was being encouraged, were children.

The experiences of this study confirm the assumption that courage will develop as it is fed by the enriched self-image that creative ventures nurture. A personality so integrated resists the slings and darts of the outraged and outrageous. Though his hide may remain sensitive, he seems
to develop rallying power (13:121).

More perplexing was the moral issue of whether creativity should be fostered. Would this not be over manipulation and molding of malleable personality?

Insight into this problem followed this writer's acceptance of the teacher's inevitable position as a molder of persons within the classroom. The teacher's very presence shapes; his contacts leave their marks. But the child, too, is a presence, a presence that touches the teacher and his classmates, exerting the pressures of his needs. In the dialogue of creativity, there is a comfortable and comforting give and take as both yield and make room for each other's growth.

Could creativity be developed? Osborne, Parnes (131:191), Gordon (79), Torance (166), and others have written copiously of their techniques devised to increase creativity. Many of their ideas were used in the experimental class. Dr. Paul Torrance's tests were given, as well as numerous home made evaluations. Though Creekmore's research (42) reports some positive figures based on Torrance's tests, the low reliability of the battery test scores, (.60), did not seem to justify testing at the elementary level. Correspondence with Harcourt and Brace's Testing Service repeated this reluctance to measure creative potential or growth
statistically. This writer found much of interest and value in the tests, however, and the children enjoyed taking them. As the tests are now being copywrited, no samples will be included in this report.

The conviction seems to grow that one does not develop creativity. One can envision, with more accuracy, a widening of the apperature through which the individual perceives and responds to experience. This openness, a recognized characteristic of the creative personality, will increase his awareness and sensitivity to people and problems as he develops compassion and becomes committed. The strictures that block this flow are frequently caused by the lack of courage to brave a threatening climate or lack of stimulus and reward. The apperature widens with each new insight, with deepening empathy and with use. Creative experiences beget more creativity because each summation provides a new starting point.

The role of the teacher seems to be to arrange conditions so that the child feels capable of being responsive. Every effort should be made to nurture his self-acceptance and feelings of self worth, knowing that he will need these resources to strengthen him to cope with the stresses of the world, and to act responsible, lovingly, and creatively.
Though there are many facets to the conditioning elements of the classroom, the human responsiveness of members of the group to each other is most effective. Soundings are continually being made as contacts occur. These serve as directional factors that guide development.

Maturity, training, status, and the purposiveness of the teacher place him in an inescapably separate and responsible position in the group. If he wants to really contact the children in his care, and let them practice their creative talents, he must attend to his own responsiveness.

"What can I do to help children be creative?" is frequently asked. The teacher may do things for the students, may plan and even move mountains, but it is better if these actions are a genuine response to the students.

The more he does for the students, the more he expects, and the more discouraged he will become at the lack of response. The students sense they are expected to be grateful, to like their teacher, to do what he wants and, because their freedom to formulate their own attitude is jeopardized, they may retreat from the contact or experience resentment. Alienation is less likely to occur if the teacher's actions are an affirmation that the student has made contact with the teacher, moving the teacher to respond.
To be able to respond to all thirty or more children in the class may be an impossible goal for any teacher. It would be easier with a smaller group, but if the teacher learns to contact even one student, it will start a chain reaction that will change the atmosphere and encourage others to be more accessible to each other and to themselves.

The writer confirms that when the teacher is able to be responsive, the climate is right. The enabling factors are an unshakeable faith in the child as wonderful and worthy, and an unquenchable thirst to become the kind of person that can attune himself to another human being.

Some research reports that students guided by creative teachers tend to show increased creative activity (40). This seems obvious at first, so obvious that some teachers excuse their lack of effort in this direction by explaining that they are not creative. This writer's experience suggests that, though he understand all mysteries and all knowledge (and even is creative), and have not love it profiteth him nothing (38).

Often teachers attempt to justify the authoritative attitudes demonstrated in their classrooms on the grounds that freedom equates with lack of discipline. Such teachers distrust the creative approach, which relies on inventiveness rather than syllabus. They rely, rather, upon a highly organized procedure where a specific, well-defined point of
departure, sequence, and even conclusion is determined in advance.

Trust in another human being is based on friendship with your own self. It will be augmented by creative experiences with students and is developed by study (131:64). The tendency of all organic and human life to mature, extending all the capacities of the organism, may perhaps be the basic motivation of creativity. When you couple this insight with knowing that "When an individual is 'open' to all of his experience his behaviour will be creative", you have a rationale for the belief that a child and his directional tendencies can be relied upon to be essentially constructive (131:66).

The teacher does not have to be creative, if he has learned to relate to the students, in order to prepare the climate where creativity can flourish. However, there is no doubt that the whole situation is helped if the teacher is creative. He demonstrates by precept and example that there is more to see, to feel, or to sense than is apparent on the surface or in the habitual perception. As a child is encouraged to act upon this concept, his curiosity enables him to see things differently than he did before. He begins to look for the problem, to recognize the differences, and to spot the hidden analogies. Creativity is not a way of
thinking about certain things like art or music, but a certain way of thinking about most things.

Perhaps because the creative teacher has learned to accept his own uniqueness, he appreciates it in others. He finds caprice respectable and makes it safe to be curious. Even cherished plans and immovable curriculum will yield to the possibilities evidenced by a child's intuitive assumptions, or the leads suggested by a student exercising his critical thinking abilities. Actually the teacher may be intrigued by the students' ideas and welcome a break in his own patterns.

The creative teacher has enough energy and imagination that, when the class bogs down, he can think of some way to produce a happening that will jar, or warm, or stir the class to action. The teacher holds closer on the target of encouraging creativity when his aim is not to predicate the response, but to provide the stimulus strong enough to predict that there will be a response.

A strong reason, but one little noted, for the seeming effectiveness of the creative teachers is that his own tendencies to do creative work are so insistent that he, too, is motivated by all the stimuli present in the class, and his responses restlessly seek their own outlet. This is good for children. They come to realize that an adult can be happily
absorbed in creative work. When creative efforts go well, children catch the excitement, the satisfying elation, and they empathetically experience the rewards of creating. Children like the closeness of sharing such a deep channel of the teacher's life and it build the contact and rapport in which creativity flourishes.

Because this teacher has a creative life of his own, he will probably be too busy to become the busybody that smothers the students with possessive care and manipulative concern. Creating is done in a private world. Creators are hampered by hovering.

Creative experience as an approach to learning is not a panacea for all our educational problems. It is not an incubator of geniuses. The aim is not to produce masterpieces, but to open avenues of perception and response for all the students, whatever their gifts.

This project has reinforced the assumption that the potentials of children are frequently underestimated, with the resulting undercurrent in the teacher's attitude that devalues the student. The interest, motivation, and joy that were evident in the students as they participated in the program indicated that a climate that nurtures creative processes is an effective way of learning that demands the further attention of dedicated research.
From the vantage point of the summation of this study, a further direction becomes clear. The more adept one becomes in experiencing the relatedness of deep acceptance of another person, the stronger grows the sense of oneness with that individual. Once these barriers are lowered there is a sense of flow, of connection with many individuals, with the world. Even one's own personality seems less compartmentalized and more integrated. It is as if the demarkation lines of skin become endlessly permeable boundaries. One gradually loses the freedom to create for oneself. Even self-actualization becomes too constricted an objective. Though the challenges of life can only be answered by commitment of one's own life, the response becomes more and more responsible for the whole of our connections. It is no longer of importance what one creates, but for what one creates.

The end of all our exploring
Will be to arrive where we started
And know the place for the first time.

T. S. Eliot (61:53)

This study proved to be a confirmation of the hypothesis that through creativity a dialogue may be established that will free both students and teachers to expose themselves to that which is most real within themselves and the world without, and to have the courage to respond to this reality in their own unique and meaningful ways.
BIBLIOGRAPHY


84. _____, P. R. Christensen, and R. C. Wilson. *A Bibliography of Thinking including Creative Thinking, Reasoning, Evaluation, and Planning.* Los Angeles: University of Southern California, Department of Psychology, 1953.


