

E. Paul Torrance

Commitment to Creativity in Education?

In the United States and Canada, there is a widespread belief that every human being has a right to optimum development of his potentialities, interests, goals, percepts and assets. In the United States, this belief was reaffirmed when the 1970 White House Conference on Children voted its top priority by a large margin to the following recommendations:

Provide opportunities for every child to learn, grow, and live creatively by reordering national priorities.

Despite all of our affirmations we have never had much sustained support for educational provisions that support creativity. It is now time that we ask some searching questions about our priorities. What is necessary for the realization of a more creative kind of education?

why rearrange priorities?

To consider action for a more creative kind of education, one must be prepared to rearrange priorities. The important question is — who will be willing to reorder priorities so that we can have a more creative kind of education to give all children a better chance to realize their potentialities? Will it be our national governments? Will it be our state or provincial governments? Will it be colleges of teacher education? Will it be school systems? Will it be public schools? Or, will it have to be private schools or special programs provided by community agencies or industrial groups? Or, can it come only from individual families?

When we ask anyone to consider reordering priorities, we

must be mighty sure that what we are asking them to change their priorities for is worthwhile? So — is a more creative kind of education all this important? In several sources, I have given an affirmative answer, but the eminent historian, Arnold Toynbee says it much more powerfully than I:

To give a fair chance to potential creativity is a matter of life and death in any society . . . In a child, ability can be discouraged easily; for children are even more sensitive to hostile public opinion than adults are, and are even readier to purchase, at almost any price, the toleration that is an egalitarian-minded society's alluring reward for poor-spirited conformity. The price, however, is likely to be a prohibitively high one . . . When creative ability is thwarted, it will not be extinguished; it is more likely to be given an anti-social turn . . . And it will have been the society, not the individual, that has been to blame for this obstruction of God's or Nature's purpose.¹

In the 1950's educators got "hung up" on the use of the IQ as the basis for identifying the gifted and on enrichment, acceleration, and special classes as the vehicles for educating them. The research of the sixties discredited such concepts about intelligence as its resistance to change and its predetermined development. This research also gave us a multi-talent concept of giftedness to replace the concept of a single type of giftedness. One of the first things we learned is that highly intelligent children are not necessarily highly creative and vice versa. Then we began learning about other important types of giftedness that need to be cultivated. We now know enough about measuring and fostering multiple talents to find ways of cultivating most of them in school rather than letting them lie largely dormant. In classrooms where multiple talents are cultivated all students will learn more. In other words, by having more pathways through their complex nervous systems, students can use several different abilities at one time or another to process information during the school week. This will happen if teachers sharpen their abilities to cultivate these talents and deliberately work across a greater number of these talents.

what is creativity?

After all, what is creativity and what is there about it that makes it so potentially powerful as a force in education? Assignments, instructions, and conditions that set in motion

E. Paul Torrance

the creative thinking processes are powerful in motivating and guiding relevant, purposeful learning. Such assignments, instructions, and conditions have a built-in motivation that makes unnecessary the application and reapplication of the kinds of parent and teacher imposed rewards and punishment common in schools today.

I have defined the creative thinking process as one of becoming sensitive to or aware of problems, deficiencies, gaps in knowledge, missing elements, and disharmonies for which there are no learned solutions; bringing together available information; defining the difficulty and identifying the missing element; searching for solutions, making guesses, or formulating hypotheses about the deficiencies; testing and retesting these hypotheses and modifying then retesting them; perfecting them; and finally communicating the results. This definition describes a natural human process. Strong human motivations are involved at each stage.

Sensitivity to problems, gaps in information, deficiencies, disharmonies, and the like may be aroused by structured but yet open-ended learning experiences designed by the teacher for the student or self-initiated activities of the learner. This sensing of an incompleteness, disharmony, or problem arouses tension. When this happens, the learner is curious. He is ready to act, to learn, to grow. Since he has no adequate learned response *or* his habitual ways of responding are inadequate, he searches for clues both in his own memory storehouse and in other sources such as books, the experiences of others, and the like. From these, he may be able to define the problem or identify the gap in information. This done, he searches for possible alternative solutions, trying to avoid commonplace and obvious (but erroneous and inadequate) solutions by investigating, diagnosing, manipulating, rearranging, building onto, and making guesses or approximations. Until these guesses or hypotheses are tested, modified, and retested, the learner is still unable to rest. He is still motivated to continue trying to perfect his solution until it is aesthetically as well as logically satisfying. The tension remains unrelieved, however, until the learner communicates his discoveries, solutions, or other productions to someone. Then if motivation is to continue, there must be a response from peers, teachers, or others. (Even the chimpanzee who solves a problem and gets a banana as his reward will rush behind the viewing screen to show his banana to the experimenter.)

what changes must be made?

It is obvious that bold and imaginative ideas are necessary to bring about a more creative kind of education. What, then, is the nature of these changes? In a number of sources, I have described the procedures that my associates and I have developed and tested.^{2,3,4} I shall discuss here the two changes that I believe are most essential:

1. Respect for individuality and acknowledgement of creative potentialities.
2. Provision of open-ended curricula, open-ended instructional methods, and open-ended relationships.

1. Individuality and Acknowledgement of Potential

RESPECT FOR INDIVIDUALITY: The first requirement for a kind of education that permits children to learn, grow, and live creatively is that we respect each child's individuality and aid him in attaining a healthy, strong sense of identity. Rather than honoring the cultural assumption that "the good child is a modest child," it must stress the fact that recognition and acceptance of positive characteristics is necessary for self-realization. It must reject the assumption that "man is innately evil" and instead accept the fact that man is born neither good nor evil but with innate potential for determining in large part his "human" development. It must reject the assumption that giving attention to deficiencies motivates proper behavior and instead accept the more realistic belief that giving attention to successful behavior motivates attainment of potentialities.

It must reject the assumption that suffering produces character and instead teach children to cope constructively with predictable stresses. It must reject the assumption that independence is the highest virtue and instead recognize that interdependence is the road to cultural competence and interpersonal satisfaction. It must reject the belief that the only way a person can succeed is to best others and instead recognize that each person is unique and has particular strengths that must be valued. It must reject the idea that there is a superior race, a superior sex, or a superior set of cultural characteristics and instead accept the fact that our strength is in our diversity. It must reject the assumption that the expression of feelings demonstrates weakness and instead accept the fact that the healthy expression of feelings is

essential to mental health and to the realization of human potential.

INDIVIDUALITY IN THE EARLY YEARS: Individuality is established largely in the early years of a child's life and these early years are critically important in the emergence of a healthy, strong identity and the realization of potentialities. We should start teaching children almost from birth about their own individuality. Almost from birth, children's senses of taste and smell, their reactions to colors and forms, their styles of doing things, their likes and dislikes of sounds, and so forth will be sufficiently diverse from those of other children to be striking and revealing. The idea of non-uniformity, if clearly demonstrated to children at an early age, would become an easily accepted commonplace. As the child grows older, he would continue to learn more and more about himself and about the society into which he has to fit (or *misfit*, if need be). However, it is likely that a child's chance of being a misfit would be decreased if he knows about himself and about society.

Certainly in the primary grades, children would be taught about their individuality. There are certainly pitfalls, and ways and means of avoiding these must be worked out. However, I can see no reason why even small children would not profit from learning about their differences in tastes (colors, designs, music, flowers, food), in motor skills, and in hearing and visual characteristics. I would even teach them about the differences in their intellectual skills. If schools could do this successfully, we would no longer find so many gifted older adults whose potentialities have been wasted because they always thought that they were "below average" or "only average."

When I think about what happens to gifted young people today, it is easy to understand why we have so many cases of wasted potentialities. For example, a college freshman recently wrote me about a whole series of things that teachers, counsellors, and school administrators have done to "put him down" and to pressure him in the direction of uniformity. For example, the counsellor who gave him the individually-administered Wechsler Adult Intelligence Scale deliberately showed him another person's test record (pretending it was his) to make him "feel more normal or average." In dealing with this highly intelligent and creative young adult, not even a professionally trained counsellor was able to acknowl-

edge this boy's identity. Such behavior would not occur in this new approach that I am trying to describe.

RECOGNITION AND ACKNOWLEDGING POTENTIALITIES: Perhaps the most powerful single factor in the development of potentialities of any kind is for someone to recognize and acknowledge that potentiality.

I have asked several hundred high school and college teachers and students to describe some instances in which they did something that resulted in improved behavior and/or achievement in a child or young person. An analysis of these two sets of material reveals that in approximately 90 percent of these instances the critical teaching act consisted of the recognition and acknowledgement of some unusual potentiality, usually some creative potentiality. The descriptions offered both by the teachers and students are quite compelling. The following is an example of one of these:

The principal, the janitor, the teachers all worked on the problem of John, the vandal. He was reported as being the culprit of many a weekend shambles at our school, but no one could prove anything. He couldn't stay still very long; his iron muscles seemed to need to move every minute; he was as strong, at twelve years, as most grown men. He was almost a permanent fixture in the office because of his undesirable behavior. He was skilled, a *natural*, in things mechanical. He liked to boss and was often swaggering and bully-like in his playground behavior. The consensus as a result of brain-storming was that John did not feel that he belonged. The problem was how to make him feel he *did* belong.

He was appointed by the Student Council (in which he could never be an officer, because of their strict code of grades and behavior) to be chairman of the lunchroom committee. He organized a team of boys; they spent half of their noon recess cleaning, moving tables, helping the janitor. He began to notice the litter which collected in certain windy corners of the schoolyard. His gang cleaned it up. He noticed other things about the school that needed improving and organized efforts to get the work done. He helped park cars for Back-to-School Night... He organized the entire parking area without a hitch, where the drivers followed his directions, and all this done as well as any adult could have done it.

Happily as John became a 'part' of the school, the vandalism became less and less. Reports came to us that he threatened (and coming from this boy that was no mean threat) others who tried to destroy school property. Happily, he began to take an interest in school work. His father told us that John had learned to read things around the house, in the neighborhood, at the store, and on trips for the first time in his life. His art work (racing cars, car engines, and antique cars) was excellent. We all hope that some of this progress will continue when he leaves us this fall to go to junior high school.

We have here a demonstration of what *can* happen when potentialities are recognized and acknowledged. Other teachers had regarded John as hopeless, but his sixth-grade teacher was able to see and acknowledge his genius for organizing people, his skill in solving mechanical problems, and his excellence in certain kinds of art work.

2. *Open-Endedness and Incompleteness*

There is a built-in power of motivation in creative ways of learning and teaching. Wherein lies the essence of this power?

Perhaps the most essential characteristic of self-motivating learning experiences is incompleteness or openness. Many outstanding creative people have commented upon the power of incompleteness in motivating achievement. Ben Shahn,⁵ in discussing his creativity in painting, described how he traps images like some inventors trap ideas. He explained that these images are not complete, saying, "If I had a complete image I think I would lose interest in it." To him, the most rewarding thing about painting is the exploration and discovery that he finds. Compton,⁶ in his case studies of Nobel prize winners in science, concluded that it is not the love of knowledge but the love of adding to knowledge that is important in motivating achievement.

A pupil may encounter incompleteness outside of school and this may motivate his achievement or he may encounter incompleteness in the classroom. The incompleteness may be encountered in experiences, pictures, stories, objects of instruction, the behavioral settings of the classroom, or in structured sequences of learning activities. In my recent work with five year olds, I have been encouraging children to see all knowledge as incomplete. I show children a picture or read them a story and then ask them to think about the events described and then to ask questions about these things.

In answering the children's questions, information is frequently given as incomplete. The incompleteness and changing nature of the objects presented are emphasized. There are many teacher strategies for creating and using incompleteness in motivating achievement. These are set forth in *Encouraging Creativity in the Classroom* and are illustrated by such educational materials as the Ginn Reading 360 Program, the Imagi-Craft materials, and the idea books by Myers and myself.

what kinds of action?

There are many people who have given up hope of attaining a more creative kind of education through established schools. As a result, a variety of kinds of patterns have been emerging outside of established education as well as within it. I would like to suggest briefly alternatives at three different levels:

1. Within families;
2. Within communities — store front schools, day care centers, and similar places supported by churches, industry, and other community agencies;
3. Through reform and in-service education in established schools.

WITHIN FAMILIES: At the most fundamental level, parents help children learn creative behavior by leading the family in solving its own problems creatively. In doing this, they would inevitably encourage in the children constructive, creative behavior. Parents can do a great deal to create the conditions that encourage curiosity, exploration, experimentation, fantasy, questioning, and the development of creative talents. It is they who can see that children have opportunities for practising and developing the fundamental skills of creative expression and creative problem solving. Members of a family can help one another prepare for new experiences and develop creative ways of coping with them. Parents must show the way in transforming destructive energy into constructive, productive behavior and in finding creative ways of resolving conflicts between individual family member needs and the needs of the other family members.

LEARNING OUTSIDE OF ESTABLISHED SCHOOLS: Our desperate search for ways of educating disadvantaged and alienated children and young people has revealed that many children who refuse to learn in school really enjoy learning in non-school-like situations and that many of them are outstanding and highly creative learners. Many of the street or store front schools have been enormously successful. Community-sponsored programs involving learning through the creative arts have also proved effective. Young people who get started in these programs are in some instances going on to successful college careers and to creative careers without the benefits of college training. Through a twelve-year follow-up study of a high school population I tested for creative ability in 1959, I am finding that many highly creative young people drop out

of school, even though they are devoted to learning. They feel that they have to learn in their own way, yet they use a great variety of community resources in this process.

Many of these creative learning experiences outside of the school may have to be provided by churches, groups of churches, private associations, industrial organizations, and various other kinds of community agencies. We cannot count upon foundation or government support for these programs, except in very rare instances.

THROUGH REFORM IN SCHOOLS: My own preference would be for a more creative kind of education in established public and private schools — and I still believe that there is a chance. Furthermore, we have a few good examples that give us hope. The Des Moines (Iowa) Public School System reports some amazing changes in teacher behavior and in the creative development of children as a result of a mammoth and intensive program of in-service education.⁷ In his National Schools Project, Frank E. Williams reports some very promising work in several schools in New York, Illinois, Oregon, California, and Minnesota.⁸ Calvin Taylor and his associates report some amazing things happening in several elementary schools where he has worked with total school faculties over a period of several years.⁹

All such efforts, however, must be far more widespread and intensive before we can expect very much change of a sustained nature. Another possibility that seems to be gaining very rapidly in support is the establishment of alternative types of programs or schools. One alternative type of school would be one that emphasized creative ways of learning and teaching or that was designed to meet the special needs of highly creative children and teachers. Certainly, if you want to test or demonstrate the power of creative education, this would be one of the more promising approaches of action you could take.

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Commitment to Creativity?

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