

Intelligent Behavior in 4-H

**The task of 4-H is to create intelligence
in boys and girls**

ROBERT E. BILLS

FIFTY YEARS AGO when 4-H began our world was quite a different place than it is today. One of the most outstanding characteristics of that world was its slow rate of change. We could, with some degree of assurance, predict the qualities and other characteristics which young people would need for success beyond school. The job of both the school and 4-H was quite clear and simple. This job was to build toward the successful man—to give boys and girls the experiences, knowledge, and skill they would need to live successful, happy, and healthy lives.

This may still appropriately be described as the job of 4-H and the school. But today these institutions labor under a quite different set of circumstances—we are unable to produce textbooks with final answers. These “final” answers are likely to be obsolete by the time the book is in print. Consequently, we must examine our responsibilities for educating young people in a broader context than by simply identifying information they should master.

Part of this educational process is related to the ways we work with people—the kind of situations we arrange in which they can interact (young people with young people as well as young people with adults). For example, it has been discovered that there are significant differences in the behavior of leaders and teachers and that these differences cause significant differences to occur in people with whom they work in their different ways.

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This paper will explore ideas related to (1) a way of viewing our educational responsibilities to young people, and (2) different patterns of behavior of their teachers or leaders and their influence on young people. The contention of this discussion is that *the task of schools and the task of 4-H is to create intelligence in boys and girls*. By creation of intelligence I mean helping boys and girls become more intelligent behavers.¹ This should not be too difficult for Extension personnel to accept since it appears to be your desire that boys and girls act in a more intelligent manner as a result of being in your program. This can be illustrated in many ways. You hope that boys and girls will be more likely to use hybrid seed, to use select breeding stock, to have more adequate health, and to rear healthier families if they have been in the 4-H program than they otherwise would.

Were it not for the commonly accepted assumption that intelligence is an internal and probably an innate characteristic of the human organism, we might long ago have accepted intelligence as a qualitative description of behavior instead of a quantitative measure.² Actually, all we can ever measure is the qualitative aspects of a person's behavior and we do this when we ask a person to respond to standardized tasks, assuming that all people in the group on which the tasks have been standardized have had equal opportunity to be familiar with the testing material.

Intelligence is probably quite different from what we have believed it to be. It is not constant. It is a characteristic of a person's behavior and it can be created. In other words, I do not believe that we can think of intelligence as we have been thinking of it; we must see it as a characteristic of behavior and as a characteristic which can be changed. Furthermore, I am suggesting that Extension's job is to create intelligence in the boys and girls with whom you work. When the task of 4-H is stated in this way it becomes necessary to raise questions such as: What contributes to intelligent behavior and how can we improve the level of intelligence of boys and girls?

QUALITY OF BEHAVIOR

Intelligent behavior is possible when people have opportunities for experience, when past experience is available as needed and is

¹Robert E. Bills, "Persons or Process?" in A. J. Edwards and J. F. Cawley (eds.), *Kansas Symposium: Physiological Determinants of Behavior: Implications for Mental Retardation* (Lawrence, Kansas: University of Kansas, 1964), pp. 66-78.

²*Ibid.*

not distorted or denied, when the present experience of a problem is permitted to flow into the experiential field of a person without distortion or denial, and when a person is open to new experience or information and knows how to achieve it. In such a case, the relevant past experience of a person is immediately available to him to be used in his present problem in such a way that his behavior can most adequately match both his experience and the demands of the problem.

Obviously, numerous conditions can limit a person's intelligence. Some of the more obvious ones include a damaged organism which cannot experience or is limited in its capacity to experience. Equally obvious is the fact that a person without opportunity for experience cannot function intelligently in those situations which seem to require this experience.

But the quality of a person's behavior is not merely a function of his knowledge or information, in spite of what many of our actions in working with people would seem to indicate. I say this because of the concentration that many of our educational programs—both in school and out—place on information. A brief review of most of our efforts to teach other people would lead to the conclusion that the only thing we should try to affect is information or perhaps knowledge—and sometimes skill. However, the quality of human behavior rests on many bases and only one of these is information, and skill is also only one of many.

Ample evidence exists to show that what we perceive as important in a problem is at least partially dependent on what we value. Thus, 4-H cannot and should not avoid concern for values if it seeks intelligent youth as the outcome of its program. This is not to say that 4-H should attempt to teach people to value certain things and in certain ways—this I believe is in complete opposition to our way of life. But it is to say that values are learned, either directly or indirectly, and that 4-H must be concerned with opportunities for the learning of values and with the values our young people are learning.

The same can be said for attitudes, self-concept, concepts of other people, and a variety of other factors often lumped together under the heading of personality. As with values, attitude learning cannot and should not be avoided. If a person has a concept of himself as inadequate, he will not rely on his own experience to the extent he should in reaching adequate solutions to problems. Obviously, he cannot contribute as much to the solution of important problems as he might were he to trust himself more. If a person believes that other people are unimportant, he cannot use

their experience in solving problems. Thus, 4-H cannot afford to ignore personality development. But I would hasten to say that it would be equally ridiculous to say that the task of 4-H is only personality development as to say that the task of 4-H is only to teach certain skills and information. The development of intelligence involves the learning of information and skills; it involves personality formation and interpersonal relations. Adequate 4-H experience is not any one of these—it is all of them and all at the same time.

But here is the point of difficulty. Those of us who have attempted to help people learn and change realize that it is not possible to divide up a youngster and to teach him skills and information at one time, values at a second, and personality at a third. These are constantly interacting and as a child learns information and skills he also learns values and learns something about what he and other people are like. The big problem has been to develop methods that will permit the learning of all of the factors in intelligence at the same time.

INTELLIGENCE AND LEADERSHIP

What seems to make the real difference in the development of intelligence in people are (1) the qualities of the people who are their parents, their teachers, their 4-H leaders, and others who play significant roles in their lives, and (2) the ability of these people to communicate themselves as people. This statement obviously requires some amplification.

A basic quality of humanness is the desire to find meaning in experience—that is, to remain open to experience and the meanings it holds for us and to discover ourselves in our experience. A second basic quality of humanness is the desire to experience freely, and actively to seek new experience. For those of us who work with older people, these facts may have escaped us. When we receive older people into our programs much of the magical quality of childhood has disappeared or has been killed, or destroyed, or something else. At any rate it is no longer present. Most parents and most elementary teachers recognize that young children actively desire to experience freely and actively seek new experience. One of the most difficult tasks of adults is to deal with the exploratory behavior of children.

But this quality of eagerness seems to disappear for many people as they grow older. It has been suggested that the reason people encounter difficulty in receiving new experience or in remaining

open to the meaning old experience had for them is the factor of threat. We often fear to be what it is our experience tells us we are. Why? Simply because people who are important to us insist that we are not seeing things correctly or adequately.

We live in a culture which is characterized by evaluation. Attitudes of acceptance and regard for the other person's perceptions are not common in our relations with other people. Instead, the communication of the other person is more often countered with an evaluation than accepted as meaningful and at least momentarily truthful for him. Rogers has phrased it clearly:

Our first reaction to most of the statements which we hear from other people is an immediate evaluation, or judgment, rather than an understanding of it. When someone expresses some feeling or attitude or belief, our tendency is, almost immediately, to feel "That's right"; or "That's stupid"; "That's abnormal"; "That's unreasonable"; "That's incorrect"; "That's not nice." Very rarely do we permit ourselves to *understand* precisely what the meaning of his statement is to him. I believe this is because understanding is risky. If I let myself really understand another person, I might be changed by that understanding. And we all fear change. So, as I say, it is not an easy thing to permit oneself to understand an individual, to enter thoroughly and completely and emphatically into his frame of reference. It is also a rare thing.³

Each of us wants to feel important. If we cannot feel important in our own eyes, perhaps we can seem important in the eyes of another person. Even if we cannot do this, perhaps we can avoid appearing unimportant, inadequate, or wrong in the eyes of the other person.

Because of the evaluative threats which people face, they begin to defend themselves and, although defenses vary remarkably from one person to another, certain qualities can be abstracted which permit generalization. The person who is seeking to defend himself from change, from reorganization of the meanings of old experience, and from incorporation of new experience often approach situations and people with negative attitudes. The same negative attitudes may be expressed toward self. The defensive person probably will locate the locus of responsibility for doing something about his problems outside himself. He probably will be more concerned with symptoms than with the problem.

A number of years ago I was struck by the similarity between the qualities of people who emerge from successful psychotherapy and the qualities I thought were essential for success in teaching and

³ Carl R. Rogers, *On Becoming a Person* (Boston: Houghton Mifflin Co., 1961), p. 18.

leading. My notions were based in part on the thinking of Rogers who has conceived of what he calls a process continuum which exists in successful psychotherapy.⁴ This continuum extends from the end of stasis, where a person is more or less "running" in the same place without progress, to the end of process where change and openness to experience is the most distinguishing characteristic.

As I puzzle through the amazingly complex process of psychotherapy, I cannot help but be impressed by the similarity of outcomes from successful therapy and those which many people seek as a result of most educational efforts, including 4-H work. I see no other alternative than to conclude that psychotherapy has helped the client to become a more intelligent behavior. His behavior is more intelligent and he is capable of continued change, growth, and development.

Process and the Helping Relation

Since we had noted what appeared to be a similarity between process people and successful teachers and other leaders, we started investigating the idea. Our basic approach was through a study of the problems of teachers. We polled about five hundred teachers in graduate classes and asked them to describe, briefly, the most pressing problems they had as teachers. Included were problems such as the following: "My most pressing problem is teaching boys and girls who have neither the desire nor the ability to learn." This evidently deals with a symptom rather than a problem since to solve it the children will have to change their learning ability. A more central problem would be one of the nature, "Considering the capacities of these boys and girls, how can I be most helpful to them?" The problem is also negative in attitude; seemingly these boys and girls are not really worthwhile or are less worthwhile than some other children. The problem is oriented to the present and is obviously non-self in nature since the boys and girls must change for the problem to be solved rather than for the change to involve the teacher.

Also included were problems of this type: "My most pressing problem is continuing to become a more effective teacher." This problem deals with the self of the teacher; it is oriented toward the future; it implies a positive attitude toward boys and girls (they are worth trying to teach); it is a central problem; and the responsibility for its solution rests with the teacher. Teachers who tend to describe their problems in this manner have been judged in our

⁴Carl R. Rogers, "A Process Conception of Psychotherapy," *American Psychologist*, XIII (April, 1958), 142-49.

research to be more process-like than teachers who tend to describe their problems as indicated in the previous paragraph.

Our next step was to test groups of teachers with our problems. We then compared the results of our testing with estimates of the teachers' success. We found that the more process-like the teacher the more often he was seen as successful by his administrators. The less process-like the teacher the more often he was seen as less successful.

We then asked ourselves the question, "Are the attitudes of students toward self and others influenced by the process characteristics of their teachers?" The answer was a definite "yes." The more process-like the teacher, the more positive were the attitudes his students held toward themselves and others.

We followed this study with another which has been repeated since with a more precise and expanded design.⁵ The question of this study was, "Are process teachers seen by their students to have a different quality of relationship than less process-like teachers?" The conclusion was that the more process-like the teacher the more were his relationships seen as helpful to students in their fuller development. Furthermore, the more process-like the teacher, the more the locus of decision making in the classroom was centered in the teacher *and* in the students. For less process-like teachers, decisions were made more often by either the teachers or the students, but *not* by both.

These results are most significant for our discussion. The relationship variables studied by Emmerling are those which are known to differentiate between successful and less successful therapists. We know that successful therapists cannot be distinguished from less successful therapist on the basis of the techniques they use. (I doubt that 4-H leaders can be so distinguished.) But successful therapists, teachers, and leaders are distinguished on the basis of the qualities of the relationships they are able to establish with the people whom they seek to help.

In another study, Engle tested 110 graduate teachers, supervisors, and administrators who were entering a summer workshop.⁶ He separated them into two groups of 55 each—those with higher and those with lower process scores. The groups were then compared on the basis of a number of tests and other information. Although the two groups were not different at the beginning, they

⁵ Frank A. Emmerling, "A Study of the Relationships Between Personality Characteristics of Classroom Teachers and Pupil Perceptions of These Teachers" (unpublished doctoral dissertation, Auburn University, 1961).

⁶ Harry A. Engle, "A Study of Openness as a Factor in Change" (unpublished doctoral dissertation, Auburn University, 1961).

were significantly different six weeks later. Furthermore, all of the positive change in the students was centered in the process group. There was little reason to believe that the less process-like group had changed at all as a result of the workshop.

In an interesting study Freeze related changes in the process characteristics of student teachers to the process characteristics of their supervising and cooperating teachers.⁷ He concluded that student teachers placed in relationships with supervising and cooperating teachers, both of whom were below average in process, decreased in the extent of their process. Elliott has established that significant changes in process occur during student teaching and that these changes are a function of the process characteristics of cooperating teachers.⁸

Recently, I conducted a study which seems to summarize much of the results of our earlier studies. Two schools were selected in which we thought there would be a significant difference in the process qualities of the faculties. The schools were also selected from comparable socio-economic groups, for being about the same size, and for having practically no teacher turn-over between the 1962-63 and 1963-64 school years. All faculty members in the two schools were measured for process. Students were measured for attitude toward school, perceptions of the qualities relationships with their teachers, academic achievement, and intelligence.

The teachers in one of the schools (school A) proved to have higher process scores than those in school B. It was found also that better communication existed among the teachers in school A than in school B. Furthermore, student attitudes toward school in A were far more positive than those of students in B. Students in school A saw their teachers as offering more helpful relationships than those in school B. Finally, it was determined that students in School A were achieving significantly more than students in school B, as measured by objective achievement tests.

Conclusions There are many important conclusions in these studies. The first is this: The success of a leader lies in his ability to free people to become their past experience, to be able to experience more freely, to have certain experiences, and to actively seek new experience. Obviously, this means that successful leaders are those who aid the development of intelligent behavior in the people with whom they work.

⁷ Chester R. Freeze, "A Study of Openness as a Factor in Change" (unpublished doctoral dissertation, University of Alabama, 1963).

⁸ Richard J. Elliott, "Changes in Openness of Student Teachers as a Function of Openness of Supervising and Cooperating Teachers" (unpublished doctoral dissertation, University of Alabama, 1964).

The second conclusion is that the quality of the relationship of the leader with his group makes the difference in whether members of the group will be helped to develop more intelligent behavior, not the techniques or the methods used by the leader. Successful leaders and teachers use a greater variety of techniques and approaches than less successful leaders.

The third conclusion is similar. The quality of the relationship a leader has with a group is determined by the inner qualities of the leader. Where the leader is on the process continuum determines how he will experience people. How he experiences people is closely related to how he will behave toward them. Most important is the conclusion that the potential for the creation of intelligent behavior in a youth resides both in the process qualities of the youth and of the leader. If the leader is open to his experience he provides a relationship in which a youth can become more open. The more open the youth the more he is able to change and to become more intelligent.

SUMMARY

First, I have tried to say that the goals of education and 4-H should not be different, although the vehicles of learning will be considerably different in some respects and quite similar in others. One of the differentiating features will be the greater latitude of the 4-H program to open experiences in areas not traditionally touched by the school. The criterion for inclusion of an activity into 4-H should be the opportunity it provides for opening children to experience and for helping them become more active seekers, thinkers, and learners.

I have attempted to show that the adequacy of a young person is related directly to his intelligence. He will be prepared for the future to the extent he is an intelligent behavior. The intelligence of his behavior is a function of many things: his information, his skills, his attitudes, values, personality, his desire to seek new experience, and his openness to his past experience.

But more important, when we talk about the intelligence of another person, we must immediately look at our relationships to this person; what we are as we attempt to lead or to teach determines how successful we will be in creating or perhaps even in destroying intelligence in youth. This way of viewing work with young people suggests more about us as professional workers than it does about boys and girls. This is consoling: We can do far more about what we are than we can about what the other person is.