WILLIAM H. BROWN

Behind the Test Score

There is danger, this author states, in "sanctifying" the test score. Both teacher and specialist have a responsibility in coming to adequate understanding of a child's intellectual functioning and development.

INVITING a clinical psychologist to write for an educational journal is either a case of mistaken identity or it is a rare privilege and a great honor. I hope there has been no mistake and that my assumed cloak of privilege and honor is deservedly worn.

Clinical psychologists are great defenders of the individual psychological examination. They tend to condemn group tests chiefly because mass testing produces scores which actually reveal little or nothing about the individual obtaining the score. We complain that the score gives us none of the dynamics of the person tested. Only an individual evaluation will allow an understanding of the living person under consideration.

With some further reflection upon the matter, it occurred to me that this intense defense of individual evaluation might be a blind and grandiose struggle to maintain a professional bias. Suddenly I was shocked by the heretical thought that individual testing was simply group testing inefficiently administered to individuals, one at a time.

Such a thought, of course, had to be hurriedly dismissed. It was much safer to move to the premise that evaluators of people, whether their evaluations are accomplished individually or in groups, have knowledge to share. Since most of my training and experience has been in the area of individual testing, my inferences will be from unique to group applications.

Some portion of the training of a clinical psychologist is devoted to the developing of skills in "blind diagnosis." "Blind diagnosis" simply means this: with a bare minimum of historical data, describe a person you have never seen from the data of his test battery. Many become quite expert at making remarkably sound deductions from test responses, knowing only the age, sex and educational level of the person tested. It becomes apparent that this is really a process of drawing inferences from "group" or "standardized" testing procedures, albeit individually administered. If their success depends upon something more than artful intuition, then clinical psychologists should be almost as successful with "blind diagnosis" of group test data.

We would boast that a good clinical psychologist can write a valid personality description from the material obtained in group testing. We would hasten to add that he possesses no magic nor is he especially intuitive. Actually, and perhaps I should not divulge this secret, the clinical psychologist functions most soundly when he adheres to the Biblical wisdom contained in the proverb: "As a man thinketh in his heart, so is he." If we know thoroughly how a person thinks, the pattern of the development of his intellect and the manner in which it is

***WILLIAM H. BROWN** is chief clinical psychologist, Utah Child Guidance Center, and is associate research professor, Department of Psychiatry, College of Medicine, University of Utah, Salt Lake City.*

utilized, then we can describe his personality. It is not implied that personality and intelligence are one and the same thing but they are so inextricably intertwined that it is impossible to consider one without the other. There is no "pure" intellect nor is there any "pure" personality.

My rambling thus far has not been simply a defense of clinical psychology. It has been an effort to demonstrate that the clinical psychologist does nothing that a teacher cannot do as well, and perhaps even better. The teacher, through a wise use of the data from standardized tests and with the many opportunities for observation of thinking behavior in daily classroom situations, has an excellent basis for making very sound inferences about the personalities of each of his pupils. From his continuing contacts with each pupil, the teacher can achieve a knowledge and an understanding which will far surpass that obtainable from any test battery no matter how it is administered. With this understanding, the teacher is in the most effective position to bring to realization the intellectual potential of each child.

In spite of their vastly superior position for understanding their pupils, teachers often behave as if they have no such knowledge. They tend to accept the scores or the reports of the psychologist as absolute. The greatest danger in testing programs and procedures, whether group or individual, lies in this tendency of many persons to sanctify intelligence or personality measuring devices. There is nothing sacred or inviolate about any of the business of measuring the intellect of human beings. A score or a report upon a test is something sterile. Grave consequences can stem from accepting mental measurement as *the* last word.

Recently I tested an 18-year-old girl who obtained an I.Q. score of 115 on the Wechsler-Bellevue Intelligence Scale. Although it is probable that a subject will function beneath his maximum potential in a testing situation, it is almost impossible for him to perform above capacity on any of the good measuring devices. We must accept, then, that this girl was quite bright at the time of testing. Certainly, she could not be defective and obtain this high score. But she had spent the three prior years in the State Training School for mental defectives. During her stay at that institution, she had been surgically sterilized. On the basis of an I.Q. score under 70, she was admitted to the institution and sterilized because she was diagnosed by a test score as mentally deficient. You know the girl did not gain the intelligence represented by 45 points in an I.Q. scale either by her stay at the institution or by any operation. She was always a potentially bright girl. Whatever intruded upon efficient and effective use of her intellect at the time of first testing was buried beneath a sanctified score.

You may protest that this is a dramatic instance and not too pertinent to school testing situations. We agree that rarely will anyone be committed to an institution for mental defectives upon the basis of scores obtained in standardized school tests. We know this girl was hurt; it is difficult to determine whether she experienced more pain than the lady in the next illustration.

A 32-year-old mother of four children was being seen in a parent-child counseling situation. She was a college graduate; her excellent vocabulary, her good logic and easy insight were ample evidence of

a fine intellect. But repeatedly she protested that she was just too "dumb" to raise a family. At first, this was thought to be a cover-up for other felt inadequacies. When she persisted in lamenting her lack of intelligence, the source of her notions of inadequacy was investigated and elicited this explanation: "I know I'm not bright. When I was in the ninth grade, I saw my I.Q. in the teacher's grade book." She sobbed uncontrollably as she blurted out: "It's only 102." For almost twenty years this poor woman was haunted by a score which was proved wrong by her good academic record in high school and by her graduation from college. My efforts to reassure her were of little avail; she was sure the score in her teacher's roll book bound her to mediocrity.

So it was twenty years ago that this lady saw her score and got a fixed idea about it. Does this sort of thing happen today? I am certain the incident which I am about to report is not unique to our city. It probably would be duplicated in every school district in the country.

Just a few weeks ago, a local high school girl whose report cards always included a majority of A's was over-protesting her lack of intelligence, much in the same manner as the young mother. "I know I have an I.Q. of only 105." She told this story: "A few months ago, one of the kids in my algebra class received a fairly low grade on a test. When she asked the teacher about it, he said he would see if she could do any better. He looked at a score in his roll book and commented: 'No, you're doing about what you are able to.'" My friend, of course, took her first opportunity to sneak a glance at her own so-called I.Q. score with the discovery of the 105.

Each of these instances represents abuses attributable to the sanctifying of I.Q. scores. My emphasis throughout has been upon the term "score." An intelligence quotient is a score; a mental age is a score. Actually, a chronological age is really a form of score-keeping and it is susceptible to the same abuses as "mental" scores. We all know what certain age scores can do to us. A very depressed woman I know is that way chiefly because she suffers from a chronological age score of 42.

A Starting Point

Thus far it seems I have only said that testing procedures are not very reliable. Although I have stressed the dangers of absolute acceptance of test scores, measures of intelligence and of intellectual achievement do have great value. Even the scores of which I have been critical, have definite significance. We must recognize, however, that the single I.Q. score is simply an averaged computation of the several scores obtained in a limited sampling of intellectual performance. The score of one subject allows us to compare his performance with that of a general population which took the same test, supposedly under identical conditions. Test scores, then, provide a beginning basis for understanding the person who obtained the score. They tell us where he stands in relation to others of the same age.

It must be emphasized that the score is only a starting point. To stop here would be somewhat the same as a physician who begins and ends his diagnosis by simply confirming the patient's symptom: "Ah, yes, we have discovered your trouble—you have a pain which keeps you awake all night." Of course, the more important job, with scores anyway, is to discover *how* the score was obtained, *why* the subject performs in the manner he does and *what* his performance means in relation to his total functioning pattern. Still the most important of these

quintuplets is left out. When we know *who* took the tests and obtained the scores, then we are not losing sight of the person, the living human being.

Suppose you had a pupil in your class who scored high on a group test but was performing poorly in class. The only valid conclusion you may draw is that the student is not functioning in keeping with his ability. *Why* is he performing poorly in school? Don't ever jump to the conclusion that he is lazy, for this is simply a descriptive but unenlightening term which tells us nothing. The teacher, without excessive expenditure of time, is in an ideal position to explore the *why*. Does he already know what is being taught? Is he rebelling against a parent who puts an overly high premium upon intellectual achievement? Is he hypersensitive about demonstrating "brain," deciding in effect that it is dangerous to manifest too much intelligence? There can be a great variety of reasons *why* he is not achieving. An observant teacher will receive many cues in the daily classroom situation which will enable her to understand the source of a particular child's difficulty.

It is at the other end of the scale, perhaps, that the more grievous errors are made. A child's test score is low, he does poorly in class, he seems dull, so you conclude that he just doesn't have it. This conclusion is all right, if it is true, but it should never be reached on the basis of the test score. *Why* did he obtain such a low score? Let us say the test was one which depended heavily upon reading ability and our subject doesn't read. Now we all know that many poor readers are potentially bright. Maybe this child is bright. So you give him a non-reading, non-verbal test and he still does poorly. Is this proof positive that the child is dull? No, it may not be so. Most non-verbal tests utilize a symbol analogy and spatial relation method of measuring. Efficiency in this area depends heavily upon a visual imagery facility. Learning to read, with present methods of teaching, depends to a great extent upon the capacity to gain, retain and reproduce a visual image. One can be lacking in this capacity and, therefore, fail the tests and fail to learn to read, but still he may be bright. Perhaps William James, Thomas Edison and some others who were thought to be dull in grade school were deficient in this area but there is no question now of their high intellectual ability.

Using the Test Score

What we are saying to teachers is this: "Don't accept test scores provided by your school psychologists or testing personnel—make them prove the scores." What is the pattern of functioning of a pupil's intellect?

The pattern of functioning of an intellect probably needs some explanation. It might most easily be explained in test terms. Most intelligence tests regardless of their form are constructed so as to tap the several generally accepted areas of intellectual functioning. Usually scores are obtainable for each portion of a test battery. In some areas, a subject may do very well; in others, he may do poorly. To illustrate, let's say there is a two area test designed to measure a subject's general fund of information and his arithmetic ability. Suppose his information score, by itself, would yield an I.Q. score of 60 and his arithmetic alone yielded an I.Q. score of 120. His total I.Q. score is an average of the two which is 90. This score would say he possesses low average intellectual ability. It's not so—he's a bright and perhaps a potentially superior pupil. Something is interfering with his acquisition of general knowledge. This nicely opens a series of "why" questions

which should help the teacher to free his intellect for effective and efficient use in all areas of functioning. When a teacher knows the potential of his pupils, he can easily rise to the challenge of bringing it to realization. Equally so, if the test evidence (not the scores) and the teacher's evaluation of the pupil yield no shred of evidence for better than a borderline defective level of functioning, then the teacher can be spared the fruitless effort of trying to develop an inadequate intellect.

Make the tester prove the score. Insist that he describe the pupil's pattern of intellectual functioning. This understanding of a child's intellectual development, coupled with the teacher's great advantage of daily observations, will enable the teacher to arrive at those rare common sense solutions to many of the learning problems of his pupils.

CORDELIA L. STILES

Creative Use of Space, Time and Materials

Attention to children's needs and expanding interests can furnish many cues to creative living and learning in the classroom.

CHILDREN need to live in environments rich with opportunities. As they move about and explore, question and discuss, select and choose, doubt and believe, laugh and enjoy, make friends and construct objects, listen and observe, children show in various ways their desire and need for change in themselves and in things around them.

In recent years more attention has been given to providing new buildings with larger classrooms and more space inside and out-of-doors. Apparently, though, not enough effort has gone into the actual planning for the use of these extra spaces. This, of course, is not surprising because until very recently most school people did not exercise more than traditional concern regarding the use of school buildings and school grounds.

In many places today there are not enough classrooms to go around and often the school day seems too limited for dealing with the many areas of the curriculum with which each child who passes through the elementary school must have contact. It is, therefore, all the more necessary for those of us who are responsible and accountable for school programs to make certain that the content and experiences selected are those needed for the development of specific understandings and attitudes that will result in acceptable behavior in the children who are currently attending school. Educational leaders themselves must seek clearer insight if they would attempt to help children and teachers increase their understandings and improve their levels of performance. Almost any classroom of average size, if creatively used, may become a place of challenge and