

## Toward a Qualitative Approach to Assessment

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Much of the impetus for the development of a technology of assessment related to intellectual function and achievement resulted from and has been maintained by a supply-and-demand approach to access to education and distribution of educational opportunities. Access to a limited supply of educational opportunities has been guarded by selection procedures that prior to the twentieth century were based on the prospective student's social status. In the pre-Reformation period access to education was limited to the political and religious nobility and later to other privileged classes, while the twentieth-century selection procedures have come to be dominated by the student's demonstrated or predicted intellectual status. Where the supply of opportunities has been limited great emphasis has been placed on the selection of students and the prediction of their performance when exposed to those opportunities. Binet's work in intelligence-test development was directed toward the creation of an instrument that could be used to identify those pupils who were likely to benefit from schooling. His admonitions that education also turn to treatment of those exposed as not likely to succeed were generally ignored. In a period of scarce educational opportunities, Binet's concern for the educability of intelligence did not gain favor. Society found greater utility in the promise of the predictive and selective validity of his new test.

This emphasis on selection and prediction has continued even though the social conditions that gave rise to it have changed. In recent years, we have seen in America a growing concern with universal access to secondary and higher education. The educational requirements of the nation are increasingly defined as post-high school educational opportunities for almost all youth and continued learning for most people. If this trend continues, selection and prediction can no longer be allowed to dominate in the technology of psychoeducational appraisal. Rather, the stage must be shared with an emphasis on *description* and *prescription*—that is, the qualitative description of intellectual function leading not to the selection of those most likely to suc-

ceed but to the prescription of the learning experiences required to more adequately insure that academic success is possible.

Psychological testing obviously can be used to measure achieved development. From those achievement patterns, subsequent achievement in the same dimensions of behavior under similar learning-experience conditions can be predicted with reasonable validity. Thus people who have learned an average amount during one learning period (high school) may be expected to learn an average amount in the next learning period (college). However, adequate attention has not been given to the facts that psychological testing can be used to describe and qualitatively analyze behavioral function to better understand the processes by which achievement is developed, to describe non-standard achievements that may be equally functional in subsequent situations requiring adaptation, or to specify those conditions in the interaction between learner and learning experience that may be necessary to change the quality of future achievements.

In the present situation confronting those concerned with access to higher education for larger numbers of young people and for youth from more diverse backgrounds than those from which college students were previously chosen, it is not enough to simply identify the high-risk students. The tasks of assessment and appraisal in this situation are to identify atypical patterns of talent and to describe patterns of function in terms that lead to the planning of appropriate learning experiences. It is therefore recommended that the College Entrance Examination Board immediately:

1. Explore possibilities for adding to its quantitative reports on the performance of students, reports descriptive of the patterns of achievement and function derived from the qualitative analysis of existing tests. The Board's existing instruments should be examined with a view to categorization, factorial analysis, and interpretation to determine whether or not the data of these instruments can be reported in descriptive and qualita-

tive ways, in addition to the traditional quantitative report.

For example, response patterns might be reported differentially for

- A. Information recall
  - (1) Rote recall
  - (2) Associative recall
  - (3) Derivative recall

or

- B. Vocabulary
  - (1) Absolute
  - (2) Contextual

2. Explore the development of test items and procedures that lend themselves to descriptive and qualitative analyses of cognitive and affective adaptive functions, in addition to wider specific achievements.

- A. In the development of new tests, attention should be given to the appraisal of
  - (1) Adaptation in new learning situations
  - (2) Problem solving in situations that require varied cognitive skills and styles
  - (3) Analysis, search, and synthesis behaviors
  - (4) Information management, processing, and utilization skills
  - (5) Nonstandard information pools
- B. In the development of new procedures, attention should be given to the appraisal of
  - (1) Comprehension through experiencing, listening, and looking, as well as reading
  - (2) Expression through artistic, oral, nonverbal, and graphic, as well as written symbolization
  - (3) Characteristics of temperament
  - (4) Sources and status of motivation
  - (5) Habits of work and task involvement under varying conditions of demand
- C. In the development of tests and procedures designed to

get at specific achievements, attention should be given to

- (1) Broadening the varieties of subject matter, competencies, and skills assessed
- (2) Examining these achievements in a variety of contexts
- (3) Open-ended and unstructured probes of achievement to allow for atypical patterns and varieties of achievement
- (4) Assessing nonacademic achievements such as social competence, coping skills, avocational skills, and artistic, athletic, political, or mechanical skills

3. Explore the development of report procedures that convey the qualitative richness of these new tests and procedures to students and institutions in ways that encourage individualized prescriptive educational planning. What is called for is a statement about the nature of adaptive function in each individual that lends itself to planning a way of intervening in and facilitating his development. Patterns of strength and weakness, conditions conducive to successful coping, conditions resulting in congruence and engagement or incongruence and alienation are examples of the kind of information required.

4. Explore the development of research that will add to understanding of the ways in which more traditional patterns of instruction will need to be modified to make appropriate use of wider ranges and varieties of human talent and adaptation in continuing education. It would be relatively useless to identify broader ranges of behavior if these did not have their representation in programs of instruction, and if opportunities for the use of these adaptive patterns in learning were not available to young people. Alongside modification of instruments of assessment and of procedures for appraisal there needs to be a considerable amount of attention given to modifying the curriculum and conditions under which teaching and learning occur.

It must be recognized that the proposals advanced in this brief are, at the present stage of development in human ap-

praisal, very much in the conceptual stage. There is some research but little completed work that can be used to implement such a program. Yet a serious commitment to the achievement of symmetry in the continuing-education entry process, to the broadening of opportunities for access to continuing education, as well as to the greater adaptation of continuing-education programs to the requirements of the extremely varied populations to be served—this commitment demands that answers be provided to the problems implicit in these proposals.

### *Recommendations*

It is recommended that the College Entrance Examination Board:

1. Explore possibilities for adding to its quantitative reports on the performance of students, reports descriptive of the patterns of achievement and function derived from the qualitative analysis of existing tests.
2. Explore the development of test items and procedures that lend themselves to descriptive and qualitative analyses of cognitive and affective adaptive functions, in addition to wider specific achievements.
3. Explore the development of report procedures that convey the qualitative richness of these new tests and procedures to students and institutions in ways that encourage individualized prescriptive educational planning.
4. Explore the development of research that will add to understanding of the ways in which more traditional patterns of instruction will need to be modified to make appropriate use of wider ranges and varieties of human talent and adaptation in continuing education.

Record of Endorsement, Comment, Reservation,  
and Dissent on the Recommendations in  
*Toward a Qualitative Approach to Assessment*

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*Endorsed by 18 members:* Abelson, Blocker, Carroll, Coleman, Foster, Friedenberq, Gordon, Hersey, Holtzman, Hoy, Marland, Pace, Pearson, Prentice, Schlossberg, Shirley, Thresher, Tiedeman.

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*Foster:* "This needs to be done, but the Board is not the proper agent to do it; it would be presumptuous for the Board to do much research in this area."

#### *General Comments*

*Carroll:* "This is an excellent statement, and I find that it accords quite well with my own ideas as to the ways in which research might be directed to yield more meaningful procedures whereby student characteristics are reported.

"There may be some semantic difficulty with the word qualitative. Any quantitatively expressed score can be said to have a qualitative aspect as soon as it is accompanied by a statement about the *kind* of function being measured. Already the SAT score reports imply qualitative information in the sense that they refer to two *kinds* of cognitive performance—verbal and mathematical. This concept could be extended to the various cognitive and affective functions alluded to by Gordon—that is, the scores would be quantitatively expressed but would be identified in qualitative terms. I would want to know whether Gordon accepts this interpretation.

"Anything more qualitative than what I have suggested would take one into the realm of purely verbal description. Several years ago Carl Helm at ETS experimented with computer-written SAT reports that interpreted the quantitative scores in purely verbal, qualitative terms. The machine would write a

prose paragraph based on the student's scores and other information. Perhaps Helm's technique could be extended to a much wider variety of test performances, but one would have to avoid the danger of making the resulting prose appear too mechanical and stereotyped. I wonder whether this kind of computerized score report would be satisfactory to Gordon."

*Hersey:* "If there were to be a rank order of undertakings proposed in various briefs of the Commission, I would place those proposed here very high on the list.

"Under (2), B, 3 and 4, it seems to me that a most vital appraisal would be of something within the categories of 'characteristics of temperament' and 'sources and status of motivation,' and combining them—namely, the factor of persistence, called 'drive,' the combination of interest and mobilized energy, which will not die and refuses to be denied. It is the underlying force of most achievement, and it is something that includes but is different from motivation."

*Hoy:* "A significant paper that supports the notion that the present tests are becoming not only irrelevant to the educational needs of American students but also obsolete.

"The brief significantly addresses itself to what must be done to change testing so that it can regain a contributory role in education. The problem emphasized here is the need for a new approach to testing that is neither destructive of the testing establishment nor utopian in vision, but rather a realistic way to move the College Board into more significant areas of endeavor.

"In several ways this brief sums up the central theme of the Commission's deliberations, especially Recommendation 4."

*Marland:* "The first three recommendations, in addition to calling for major reform in the College Board, call for a corresponding reform on the part of admissions officers in colleges. Should some attention be given to this in the brief?"

*Prentice:* "I think we are years away from useful instruments of this type. 'Exploring' such developments is fine, but some limits should be set to the open-ended search for useful measures.



Dollars? Time? I am not sure, but there should be some kind of cost-benefit analysis."

*Shirley:* "All these recommendations call for research, and this is certainly badly needed. Even with the answers in hand, however (and those may be years off), the implementation of these new educational ambitions would call for rather drastic changes in the educational (and social) patterns of our nation. This may be desirable, but the task is difficult."

*Thresher:* "These are all valid long-range goals, and they reflect Gordon's admirable insistence on educational goals that can be clearly defined and methodically arrived at and measured, in contrast to sporadic experiments too soon abandoned. But in the long, intervening period there will have to be a great deal more resort to loosening and broadening entrance requirements. Some rough-and-ready randomization of the admissions process will be needed, as a practical expedient. The Commission's report should reflect the concern to mitigate excessive and ill-directed selectivity."