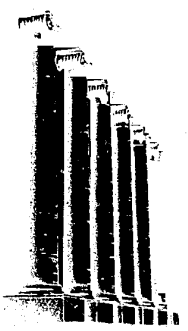

1972

THE MISSOURI CONFERENCE

THE LEGAL AND EDUCATIONAL CONSEQUENCES OF THE INTELLIGENCE TESTING MOVEMENT: HANDICAPPED CHILDREN AND MINORITY GROUP CHILDREN

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This conference was sponsored by the College of Education, Department of Special Education, School of Law, Missouri Law Enforcement Assistance Council, and the University Extension Division of the University of Missouri.

ACKNOWLEDGEMENTS

The planning of a conference involves large numbers of people. The efforts of some are obvious due to the nature of their participation. However, the contributions of others are often less apparent in spite of their significance. Appreciation is expressed to the faculty members and students for their participation in planning the conference. Special mention is due Sharon Wasserman and Linda Mann for their help with student registration and Mary Margaret Ainsworth and Peggy Bridges for their secretarial assistance throughout the conference.

We would also like to acknowledge the persons who presented papers and those who served as discussion leaders and reactors. Finally, appreciation is expressed to the Graduate School of the University of Missouri-Columbia and the Missouri Law Enforcement Assistance Council for their financial support and interest in the issue of this conference.

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FOREWORD

On April 13-14, 1972, University of Missouri-Columbia sponsored a conference on the "Legal and Educational Consequences of the Intelligence Testing Movement: Handicapped and Minority Group Children." This conference was the second in what is anticipated to be a series of annual conferences focusing upon critical issues relative to the education of exceptional children. The first conference was held in 1971 and dealt with the "Categorical/Non-Categorical Issue in Special Education." The topic of the 1972 Missouri Conference seemed an obvious choice in view of the emphasis in the literature and the significant court decisions which have been rendered in recent years relative to psychological testing, special education placement, and the rights of all children to appropriate educational services.

The planners of this conference made every effort to include as presentors individuals with experience and expertise appropriate to the issues involved; to this end, their efforts were highly successful. Most certainly, in the months and years ahead, there will be ever-increasing activity in the field of special education relative to the legal and educational implications of intelligence testing; hopefully, this second Missouri Conference will contribute to the initial thinking on the topic.

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PURPOSE OF CONFERENCE

The purpose of this conference was to involve representatives from the fields of education and law in a consideration of the significant educational and legal problems inherent in current intellectual assessment practices as they affect the educational placement of low achieving children from minority groups. The purpose was not necessarily to come up with a prescription for change, rather, the emphasis was on an attempt to articulate the legal and educational consequences of existing special education placement practices.

CONFERENCE DESCRIPTION

The conference was held over a two-day period and was structured to allow for a balance between formal input and interaction among participants. To accomplish this the conference included the following features:

1. Invited Papers. Six persons from the fields of law, special education, sociology, and psychology were invited to present formal papers. These presenters included Edwin Martin, Associate Commissioner, Bureau of Education for the Handicapped, United States Office of Education; Richard J. Whelan, Chairman, Department of Special Education, University of Kansas; J. McVicker Hunt, Department of Psychology, University of Illinois; Grant S. Nelson, School of Law, University of Missouri-Columbia; Elwood L. Thomas, School of Law, University of Missouri-Columbia; Jane Mercer, University of California-Riverside.

2. Selected Papers. A "call for papers" was released and resulted in the selection of four papers. These papers, given on the second morning of the conference, included presentations by Andy Fanta, University of Delaware, Walter Higbee, Black Hills State College; Rosalyn Rubin, University of Minnesota; Jerome Pauker, University of Missouri-Columbia.

3. Reaction Papers. Following the presentations, two reactors were invited to present their views of the issues discussed at the conference. The first reactor was John Kidd from the Special School District of St. Louis County, Missouri, who spoke from the perspective of a suburban special education program. The second was John Johnson from the Washington, D.C. Public Schools who reacted from the perspective of an inner city special education program.

4. Small Discussion Groups. Three times during the two day conference the participants had an opportunity to participate in small group discussions. These discussion groups were led by Stephen Lilly, Bureau of Education for the Handicapped, United States Office of Education; Paul Retisch, University of Iowa; Marvin Fine, University of Kansas; Reuben Altman, University of Missouri-Columbia and Marilyn Chandler, University of Missouri-Columbia. The purpose of this feature of the conference was to provide the audience with an opportunity to discuss the issues and to interact with presenters.

RATIONALE FOR CONFERENCE

The major issue of concern at this conference was the placement of children into special education programs, particularly when intelligence tests are used as the primary criterion. In recent years the courts have decided several important legal decisions related to this issue. The thrust of many of these decisions has been that current tests for assessing intelligence may be invalid when used with minority groups. The use of such tests has resulted in a disproportionately large number of minority group children being placed in special classes for the mildly mentally retarded, mildly emotionally disturbed, and learning disabled. The papers by Grant Nelson, Elwood Thomas, and Andy Fanta discuss some of the legal aspects of our placement practices.

Since intelligence testing is one of the major points at issue, several questions need clarification. What is the nature of intelligence? What are the variables which complicate the process of assessing a person's intelligence? What are I.Q. tests and what do they measure? What does a particular I.Q. score mean? What can be expected when we administer I.Q. tests to handicapped and minority group children? Information on these points is needed in any discussion of I.Q. based placement practices in special education. Papers by J. McVicker Hunt, Jane Mercer, Jerome Pauker, Rosalyn Rubin, and Walter Higbee discuss these questions.

One of the unfortunate by-products of placing a child in a special class is that it usually means he is assigned a label which may be perceived as being negative. Evidence is accumulating that this negative label often leads to low expectations for performance and results in a program that keeps the child from functioning within his capabilities. This is particularly unfortunate when we consider that many children may be assigned this negative label only because the procedures used to assess the child's ability are innappropriate. Whelan's paper presents a clear exposition on the problems associated with the labeling process.

Clearly, some changes have to be made and these changes are apt to disrupt the functioning of special education as we know it today. Of particular interest here are three papers. John Kidd presents the reaction of a suburban special education administrator to the issues. John Johnson, an urban special education administrator demands that we make changes. Jane Mercer offers suggestions as to how schools can change their assessment procedure.

It is hoped that this conference and the papers presented in this volume in some way contribute to a better understanding of the issue and provide data for the change process.

HANDICAPPED CHILDREN'S RIGHT TO TREATMENT

Edwin W. Martin, Jr.*

A little over two years ago we began to emphasize in the Bureau of Education for the Handicapped concepts that education for handicapped children is a right to which they are entitled. We tried to sharpen the distinction between such education as a desirable program, as a kind and charitable type of program, as a productive and cost-beneficial type of program, and viewing these programs as intrinsic rights which cannot and should not be denied. As our Bureau's program goes forward this year with planning for 1974 through 1978, it begins with the premise that the Federal Government views the education of handicapped children as an intrinsic right of these children. Furthermore, our posture must be to do everything that we can to bring about the fulfillment of that right.

We are at an interesting point in time where it is clear to see an intersection of forces on the problems of handicapped children. The Congress has passed legislation strengthening Federal education programs for handicapped children in almost every year since 1965. The executive branch position at the Federal level has been strengthened with both the creation of the Bureau of Education for the Handicapped and, last year, with the announcement by the United States Commissioner of Education, Sidney P. Marland, that education of the handicapped is a priority of the U. S. Office of Education and that we will begin the effort to establish a national goal of full educational opportunity for all handicapped children by 1980. Paralleling these Federal legislative and executive branch actions have been very similar kinds of activity at the state level. In a recent count, literally hundreds of bills affecting handicapped children and their education have been passed in state legislatures over the last two years, and more than eighty of these were judged to be of major consequence. In addition to this increased executive and legislative effort, we are seeing a tremendously significant effort from the judicial branch of government as well. In Bowman v. the Commonwealth of Pennsylvania, it was alleged that certain Pennsylvania laws and practices were unconstitutional under the Equal Protection Clause of the 14th Amendment of the United States Constitution. In essence, the Pennsylvania decision, now in final stages of being handed down by a three judge Federal panel, means that the diagnosis of mental retardation cannot be used as a reason for excluding a child from educational programs. It also makes a tremendously significant contribution in the area of developing procedures for identifying the change in status of handicapped children.

Since the Pennsylvania case, there have been two additional Federal court actions affirming the right of handicapped people to appropriate treatment. In Alabama and in Mississippi the Federal

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Years ago in Alabama I heard a very able man, at that time a professor in a law school and also the president of a local bank, give a speech on the defense of the Supreme Court as an institution. Besides being impressed with his courage, since the Supreme Court was a very unpopular institution at that time in Alabama, I was impressed with his analysis of the role and importance of the Court in our system. Later, since I've lived in Washington, D.C., and had a chance to watch the operations of the President and the executive branch, and of the Congress, and of the courts, I have become even more deeply impressed concerning the role of the courts in protecting the essence of what we think is the American way of life. The late Justice Black had a very interesting interview on television several years ago in which he held that the frequently criticized decisions protecting the rights of criminals represented to him a strict constructionist interpretation of the protections of the Bill of Rights. In his elaboration, he maintained that there was a conscious attempt on the part of the framers of the Constitution to make it extraordinarily difficult for the State the convict a man. He related his argument to the Fifth Amendment and various other Bill of Rights provisions. In the essence of this argument, which came home so clearly to me, is the intrinsic worth of a given individual and the necessity for his being given very strong protections for his personal uniqueness and for his unique rights. The general direction of all societal organizations, governments, schools, and so forth, is to infringe upon those uniquenesses and those individual rights. Obviously some kinds of checks and balances are necessary for social organization, but it must also be recognized that the predominate trend in society is to bit by bit erode the unique rights of an individual. From time to time there is expressed, in the press and other places, the results of polls in which the general public or high school students or others are asked a variety of questions involving such things as: Should a communist be allowed to present his position for overthrowing the basic nature of our democracy, and so forth, and so on. To no one's surprise, and perhaps everyone's horror, it is clear that most people do not subscribe to a freedom of speech and each time such a poll is announced it suggests a weakening of our concern for the kind of guarantees that the Constitution and the Bill of Rights afford. I am not really affirming the adequacy of such procedures for measuring the attitudes of the public, but it does seem clear to me that the issue to be discussed in this conference is basic and fundamental. It is the issue of the intrinsic rights of an individual and his uniqueness, and of the protections he is entitled to. Other things that I believe underly our efforts to identify children are: 1. Identification is relevant and germane to charting a positive course of action for the education of that child; 2. Analysis is unique and individualized to the child, and attempts to touch multiple aspects of his uniqueness as a human being, and of the environment in which he operates; 3. The entire process in which this identification takes place has as its highest concern the rights of the child and his parents, which is the spirit of the Bill of Rights.

judge described a state school for the retarded as a "warehouse institution wholly incapable of furnishing treatment to the mentally retarded" due to its atmosphere of psychological and physical deprivation. One of the witnesses in this case had testified that "residents who can talk, stop talking, and residents who can walk, stop walking" as a result of the kind of care they were receiving. Judges have already ordered emergency measures, including such dramatic steps as hiring 300 additional resident care workers within 30 days and hiring various professionals without regard to Civil Service formalities; other measures included removing all fire and safety hazards and taking steps to improve the sanitation conditions relating to preparation of food to improve health, etc.

In Ritchie v. Massachusetts, a Federal judge again followed a pattern very similar to the previous case. Essentially, these decisions are affirming the right of retarded citizens to a humane physical environment, their right to an individual program of habilitation and educational treatment, and their right to a staff that can offer appropriate programs.

I cannot tell you how tremendously pleased I am to see these human rights affirmed and how tremendously significant I think they are for all Americans, not just for retarded persons and their families. Out of this context of an affirmation of the rights of children to an education, I think we must view the question of the testing and identification of handicapped children as a step forward in bringing them appropriate services. Throughout the next two days, we will have the opportunity to hear, in considerable detail, presentations by experts in the area of psychological testing, sociological and multi-factor kinds of assessment, and by professors of law and special education. Their efforts will provide a much deeper analysis of the various concerns and problems we are facing in considering legal and educational consequences of intelligence testing. I want to share with you some personal feelings and attitudes in relation to this topic. We do not have a fully established Federal policy in this regard, and I don't think that we are on the verge of having one. We are aware, of course, of this issue and through participation in conferences such as this and through a variety of contacts with people in special education and other professions, I can understand full well what the foundations for policy should be. Meanwhile, I think back to my own experiences as a clinician and teacher as I come to terms with this area.

The futility that I felt as a speech clinician was in attempting to come to terms with a psychological or medical diagnosis. Frequently, elaborate reports were available to us in which we were bombarded with a mass of opinions concerning the appropriate labels with which to describe the etiological factors related to a child's speech problem and the proper terminology for describing his condition. You might learn that he had a certain kind of personality disorder, that his intelligence was within a certain range, that his velopharyngeal competence was achieving such and such a magnitude, etc. Having completed reading the report, we frequently felt somewhat more secure in our professional roles. We now had in

hand a thoroughly professional diagnosis. We then went back to the task at hand, which was attempting to teach the child to say an "s" sound more clearly or to teach him to be able to read a word or solve an arithmetic problem.

I do not mean to be overly critical with regard to usefulness of these kinds of test materials, but it is not realistic to ignore what seems to be a widely held basic assumption of practitioners, which is that many diagnostic materials are informative and reassuring but provide no guidelines for a remedial attack.

To me, then, one of the guideposts that must be considered as we move ahead in developing appropriate kinds of testing is to gather information which helps us program appropriately for a child--which focuses on what he can do. Years ago Curt Lawin emphasized the importance of ahistorical versus historical data. We operated for some time in the speech clinic following our understanding of that precept and frankly minimizing a great deal of formal testing which would have resulted in the child being identified and placed on a waiting list and, at some later point, put into the program. One practical reason for doing this was that the speech frequently changed by the time the treatment began. We used to ask ourselves a rather simple-minded question which was essentially, "Can the child perform the kinds of activities of which speech therapy is composed? Essentially 'can he play the game?'" When we determined that he could, in combination with the fact that his speech clearly was causing him difficulty, or causing other people difficulty, that really was enough for us to begin. As we went along watching him relate, we built the goals of therapy on the kinds of things he could do where we could extend his strengths. Out of that climate of success and accomplishment we reached out for other forms of behavior where change was desirable. It was felt important, however, to have total material collection available in the files to assure everyone of our professional integrity. We frequently gathered and developed formal measures as well. It was not long before that time that I learned about a young adult from a rural area of Alabama receiving a cleft palate treatment, or a young cerebral palsied person who could be operating in the program, receiving individual and group speech therapy, relating to the clinicians and the social and recreational activities, and in general, making a great deal of progress. If an intelligence evaluation came to light which indicated that that youngster had a 60 or 65 IQ, it frequently had a disheartening effect on the clinicians and, consciously or unconsciously, tended to affect their, and my, aspirations for the youngster.

I recognize that what I open here is a broad and complicated matter, one in which research evidence has been submitted and which I am sure will be the continuing subject of investigation. And so I raise it not as a matter of sophisticated analysis, but simply to affirm that in the solution to this problem we must counter a tendency to become increasingly academic, increasingly sophisticated, increasingly refined, without carefully considering the value of the grass roots, intuitive experience of teachers and parents and peers.

I'm sure in the next two days you'll hear a great deal about the necessity for individualizing the kinds of observations we make on children for applying to them very careful and unique analysis. I'm sure that we will hear about the need for having multiple inputs in this analysis from people with a variety of professional perspectives. I can predict, of course, that Jane Mercer will talk with you about this kind of pluralistic assessment and about the way children adapt in their environment as a key ingredient of our identification of children. And I'm sure that you will hear discussed fully the need for special language adaptations as a response to problems of cultural diversity. These and other suggestions for the development of more appropriate testing will fulfill one of the kinds of principles that has been apparent in the court orders that I have mentioned to you. That is, that the standards for identification of children for programs must be high; it cannot be arbitrary. Increasingly, we will be setting as our standards procedures which are consistent with what the best of expert testimony recommends rather than what might be seen as minimal standards. In addition to this best approximation kind of standards development, the key for increasing success in the area of placement lies in the development of the kind of due process to which children and their parents are entitled. Let me note for you in an informal style some of the key concepts in the Pennsylvania decision.

First, the parents are entitled to receive notice in writing, either through hearing or mailed to them, of proposed changes in the status of the child; for example, from the regular education program into a special education program. They may ask for a hearing or waive it at that time. Within the next 15 to 30 days a hearing must be held mutually agreed upon as convenient by the parents and the schools, and the parents are entitled to legal counsel at that hearing. Within twenty days following the hearing, a decision must be rendered. Particularly interesting here is that the hearing examiners, who in this case were representing the Secretary of Education in Pennsylvania, have really been picked by mutual agreement between the State and the plaintiff's representative. They will be college and university and local education personnel from the special education field. Parents will be entitled to examine the school records pertinent to their child and to offer their own evidence and expert witness. They will be able to compel the attendance of appropriate school employees at this hearing and to have the right to cross-examine those employees. They need to be informed by the school or organizations which can be of help to them, such as the National Association for Retarded Children. They are entitled to an independent evaluation at a local clinic, including State-operated mental health clinics, which they can use to offer alternative analyses of their child's behavior and abilities. They must also be informed of the procedures for asking for hearings, if they wish to challenge the school's recommendations. I think you can get a flavor from this accounting of the sense of concern for the parents and for the child and for the necessity of affording him full protection under our system of laws and regulations.

This is not going to be an easy problem to resolve; I think we are in for some troubled and disturbing times. This process may be marked by emotionalism, by frustration and bitterness. Most certainly, we as professionals do not have perfect answers to these problems. And so we must develop a climate of communication and trust; we must operate out of spirit of equality and a spirit of extra effort, to insure the rights of the child and his parents, and to communicate that sense of commitment to them. I look forward to the rest of this conference and to our continuing activities as professionals in this area. I want to congratulate Dick Schofer, Ed Meyen, Bob Harth and others in the College of Education and the School of Law, Missouri Law Enforcement Assistance Council, and the University's Extension Division, for bringing this conference to fruition. The conference topic is highly relevant and timely. I wish each of you good fortune and good luck in your efforts to provide equal rights for handicapped children.

PSYCHOLOGICAL ASSESSMENT IN EDUCATION AND SOCIAL CLASS[1]

J. McVicker Hunt*

Psychological assessment should guide teaching. It should tell a teacher what kinds of assignments and curricular materials a given child can utilize profitably to foster his psychological development and to pick up the knowledge and skills which he must acquire in order to adapt to his culture. The form of psychological assessment now most prevalent in education fails utterly to do this.

Psychological assessment as we know it is based almost exclusively on norm-referenced tests where the meaning of an individual child's performance comes from its position (percentile rank or standard score) among those in the group on which the test was standardized, or from the modal age of the children in the standardization group for which such performance is typical.

Recent years have brought social rebellion against such assessment practices and habit of thought upon which they are based. People in various minority groups have objected strenuously to the idea that an hour of performance in what they regard as an artificial testing situation can demonstrate and prove the inevitable and permanent inferiority of their children. They have objected loudly enough to be heard. Within the educational and psychological professions, moreover, these habits of thought about the IQ have led both to disappointment and confusion when gains in IQ from special educational programs disappeared shortly after the gainers were returned to the home and school environments from whence they came.

This scheme of assessment, with its unfortunate educational consequences and professional disappointments, is based, I believe, on serious misconceptions about the nature of psychological development and its causes. First of all, the scheme assumes that intelligence is a kind of learning power or capacity for adaptation (e.g., Spearman's--1904, 1923, 1927--g). It is this power which is presumed to be measured by the IQ tests. It is supposed to increase in essentially automatic fashion at an approximately constant rate with age. This rate is given by the IQ. Second, this rate is presumed to predict the ultimate level of competence which the individual can expect to achieve because the scheme assumes that the measured individual differences in this hypothetical power are essentially fixed by the individual's heredity. Third, it follows, as an automatic corollary, that the differences between the average IQs for races and social classes are biologically inevitable. So dogmatically strong have these habits of thought in this scheme become in many people that they serve to motivate questioning the validity of any evidence dissonant with them, and, for many years, they discouraged even the investigation of alternative conceptions of psychological development and of the

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achievement of the cognitive abilities and motivations which would lead to a scheme of assessment which could, at least potentially, serve to guide the teaching process (See Hunt, 1961).

What I wish to do today is to outline the historical origins of the scheme of norm-referenced testing, to synopsize the evidence which calls most convincingly into question the assumptions upon which the scheme is based, to look briefly at the implications of the interactionist's view of heredity and environment, and to outline alternative schemes for psychological assessment which, if developed, could serve to guide the teaching process and would encourage rather than discourage ingenuity in teaching.

Historical Origins

Inasmuch as Binet and Simon (1905) developed the prototype for the IQ test in the course of studying the problem of mental retardation among children in the public schools of Paris in order to determine how "the intelligence of children may be increased . . . with instruction" (Binet, 1909, pp. 54-55), the purpose to which the tests have been put is ironic. Unfortunately, Francis Galton had already taken what he considered to be, but were not, implications from his Darwin's survival theory of species evolution to set the conceptual trend with his book on Hereditary Genius (1869). Galton had also launched the measurement of individual differences in his anthropometric laboratory and published his Inquiries into Human Faculty (1883). Although the many simple tests of sensory and motor functions that Galton devised failed to show any appreciable relationship to the criteria of genius in which he was interested, his preconceptions about the role of heredity were quickly applied to variations in the measures of the more complex functions of "judgment, otherwise called good sense, practical sense, initiative, the faculty of adapting one's self to circumstances" devised by Binet and Simon (1916) and found to be roughly correlated with age. The IQ emerged when Wilhelm Stern (1912) suggested dividing mental age (MA) by chronological age (CA) to get the intelligence quotient (IQ) which more or less following the thought of the day, he considered to be a fundamental trait in which individuals differ.

Such a view was greatly reinforced by the influence of G. Stanley Hall whose ambition it was to become "the Darwin of the mind," and whose faith in the doctrine of recapitulation led to the assumption of predetermined development. Although Hall wrote much, it is likely that his influence endured more through the profound effect he had upon his students than through any direct effects from his writings. Hall's students include a majority of those names associated with the early development of intelligence tests in America. They are H. H. Goddard (Ph.D., Clark University, 1899), F. Kuhlman (Ph.D., Clark University, 1903), and L. M. Terman (Ph.D., Clark University, 1905). His students also include Arnold Gesell (Ph.D., Clark University, 1906) who exploited the normative approach to child development on the assumption that "the basic configurations, correlations, and successions of behavior patterns are determined by the innate processes of growth called maturation" (1945).

Such are the historical origins of the assumptions on which our dominant scheme of psychological assessment in education are based. They are the teachings of our teachers. They grew out of but were not necessarily implied by Darwin's survival theory of the evolution of species. They are correct for the evolution of species, but, as I shall show below (Plasticity and Heredity: Implications of Interactionism), it is a serious mistake to apply the principles of species evolution to the development of individuals.

Revisions in the Conception of Intelligence and Their Sources

Although I have never denied a primary role to heredity, I have been in the business of revising these conceptions of intelligence and of its origins for some time. A decade ago, in Intelligence and Experience (Hunt, 1961), I tried to alter our habits of thought about intelligence and the nature of cognitive development with both evidence and argument. On the side of evidence, I found and summarized a substantial list of studies which indicate that early and prolonged encounters with differing environments can have tremendous effects. In other words, development is not predetermined in rate and order. It is quite plastic. On the side or argument, I contended, in view of this plasticity, that IQs from tests of intelligence are valid only as a way of assessing the rate of past acquisitions, and that they have very little validity as predictors of future IQs or the ultimate level of competence to be achieved without knowledge of the circumstances to be encountered. I suggested also that we should think of intelligence as a hierarchy of learning sets, strategies of information processing, concepts, and motivational systems and skills which are acquired in the course of each child's ongoing informational interaction with his environmental circumstances. From the several lines of evidence and argument, I suggested that readiness is no mere matter of maturation that takes place automatically. Rather, it is a matter of information-getting strategies, of concepts and motivational systems achieved, and of skills acquired. There I also introduced what I like to call "the problem of the match" which I later elaborated (Hunt, 1963a, 1965, 1966). This is a problem especially for parents and teachers and for all those who would prepare circumstances to foster psychological development in the young. The nature of this problem is based upon the view that adaptive growth takes place in, and only, or at least chiefly, situations which contain for any given infant or child information, models, and challenges just discrepant enough from those already stored and mastered to produce interest and to call for adaptive modification in the structure of his intellectual coping, his beliefs about the world, and his motor patterns which are not beyond his accommodative capacity at the time.

Despite the highly publicized arguments of Jensen (1969) and Herrnstein (1971) to the contrary, a major share of the theorizing and investigating relevant to these views coming during the past decade have served both to strengthen them and to suggest

elaborations. An exception is Head Start which did fail to achieve the highly unrealistic goals set for it in large part because the kind of curriculum deployed in Head Start was unfitted for the compensatory task set. Let me mention a few of these newer theoretical developments and bits of evidence. The decade brought Humphreys' (1962a) demonstrative argument that tests of intelligence are basically like tests of achievement. Both call upon previously acquired percepts, concepts, motives, and skills. The fact that tests of intelligence call for older acquisitions for which the learning situations are more difficult to specify than do achievement tests fails to destroy their basic similarity. Moreover, Humphreys (1962b) has extended Ferguson's (1956, 1959) explanation of the abilities derived from factor-analysis in terms of positive transfer of training by showing how the various experimental manipulations which have traditionally been used to study the transfer of training can account for the obtained nodes of intercorrelation among test scores. Such analyses provide a clear theoretical basis for an important role of experience in the development of intelligence as it has been traditionally measured and statistically analyzed, but they provide parents and teachers with little in the way of guidance concerning how abilities and interests build dynamically one upon another. In fact, the statistical factors (Thurstone, 1935; Guilford, 1967) are of relatively little use in choosing the circumstances best calculated to foster the development of new abilities and motivation systems in children.

My notion of the "problem of the match" and its later elaborations (Hunt, 1963a, 1965, 1966) gives central importance to cognitive acquisitions in other domains, and especially in those of emotion and motivation. This notion has received considerable empirical support. Several studies of attentional preference in very young infants, done by my own group, lend support to the idea that emerging recognitive familiarity motivates the maintenance of perceptual contact with whatever is becoming recognizable (Hunt, 1970; Uzgiris & Hunt, 1970; Greenberg, Uzgiris & Hunt, 1970; Weizmann, Cohen & Pratt, 1971). Moreover, the motivational importance of what is becoming recognizable is less a stage of psychological development than it is a phase in the course of information processing. This is suggested by a still tentative finding that when infants nearly a year old are presented regularly in tests of four minutes with pairs of patterns, one of which is presented regularly test after test and the other intermittently every seventh presentation, they come to look longer at the regularly presented patterns before they come to look longer at the intermittently presented ones (Hunt & Paraskevopoulos, in preparation). In the course of developing our ordinal scale of imitation, Uzgiris and I (1966, 1968) observed that infants regularly show pseudo-imitation of highly familiar gestural and vocal patterns before they imitate unfamiliar ones. Moreover, our observations indicate a great motivational significance for the match between the model presented and previous acquisitions. Infants are strongly motivated to imitate only models which challenge to a proper degree their perceptual and cognitive grasp or their motor skills. They become distressed and angry with models which call

for either cognitive or motor adaptations beyond them. They withdraw in boredom from models which have become too familiar or too simple to be challenging. An infant will imitate only what interests him and only what he can understand. Thus, what he imitates of a given model typically serves to show what he understands of that model.

Other bits of evidence supporting this view that cognitive developments are of importance in other domains such as emotion and motivation have come from investigations in other laboratories. The role of cognitive achievement in emotion has been illustrated in a very recent study by Schultz and Zigler (1971). On the assumption that a clown presented on a stationary condition would be easier to accommodate perceptually than the same clown in motion due to a difficulty in following contours, these investigators predicted that such expressions of pleasure as visual fixation, smiling, and non-stressful vocalizing would occur earlier for the stationary than for the moving condition. Their findings clearly confirmed this prediction.

The role of cognitive achievement in motivation has been illustrated in the findings of Zigler, Levine, and Gould (1967), that children of school age appreciate and prefer cartoons near the upper limit of their comprehension. In my own theorizing, (Hunt, 1965) I have suggested that the self concept may well be the most important of cognitive constructs for the motivation of achievement in school and in social behavior. It was especially interesting to me, therefore, to find Katz and Zigler (1967) suggesting that the disparity between the concepts of self and ideal self should be related to developmental maturity. The finding of positive associations of both chronological age and IQ with the size of the disparities between self and ideal self lend support to this contention that cognitive development is especially important in motivation. In this same vein, Kohlberg and Zigler (1967) have suggested that a child's concept of his sex role results largely from having categorized himself as either male or female early in development. Inasmuch as cognitive development involves transformations of the mental constructions of a child's environment, they have reasoned that both mental age and IQ should be positively correlated with maturity of social development. Moreover, they have found mature trends in social development coming early in children with IQs above average than in children of average IQ.

Achievement and Motivational Autonomy

While such findings lend support to the theoretical contention that developments within the cognitive domain are of importance for development in emotion and motivation, they also raise questions. All too seldom have the gains on tests of intelligence and achievement from various systems of compensatory education persisted after the children returned to the environments of their homes and standard schools. Recent experiences with the evanescence of the effects of compensatory education are a case in point. One might argue from the traditional view that these gains have been obtained only in limited cognitive skills, and that their persistence awaits

maturation of the organism as a whole. I question seriously such an explanation because evidence which I shall synopsize shortly suggests that anatomical maturation itself shows considerable plasticity. I suspect that the failure of gains from many of the prevalent systems of compensatory education to persist resides rather in their failure to provide experiences which inculcate ideal self-concepts that include professed ability to learn readily along with pride in such learning. Such self concepts might well yield autonomous striving.

It is very likely that autonomous striving has roots in very early experience. Burton White (1971) has found the behavioral patterns marking outstanding overall competence already present in children by age three. Despite the evidences of greatest plasticity during the first year (Greenberg, Uzgiris & Hunt, 1968; White, 1967), his observations have led him to emphasize importance of the home-based education that occurs in the period between the ages 10 months and three years. During the period from ages 10 months to three years, White notes, the burgeoning capacity for infants' manipulation and locomotion puts stress on mothers, and mothers differ in their means of coping sufficiently to make the effects show prominently in the competence of their babies by age three. Moreover, our own observations of the joy which infants of only two or three months show in connection with making a mobile sway by shaking themselves (Hunt & Uzgiris, 1964; Uzgiris & Hunt, 1970) and similar observations by Watson (1966, 1967) suggest that the beginnings of the motivation to act upon the world to achieve ends anticipated by the infant come very early indeed. Robert White (1959) has characterized such motivation by the term "competence" and contended that it is associated with an emotion which he terms "effectance." I have described a mechanism for such motivation which is inherent in information processing and action (Hunt, 1960, 1963b, 1965, 1971a, 1971b).

The importance of perceptual feedback to self-initiated action in such early development was illustrated in a study reported last March by Yarrow, Rubenstein, and Pedersen (1971) at the Society for Research in Child Development. This system of motivation, which they termed "goal orientation" was assessed in infants at six months of age by a cluster of items on the Bayley Scales. Prominent among these were persistent and purposeful attempts to secure objects out of reach. Their measure of goal orientation correlated approximately +.4 with mothers' responsiveness to their infants' expressions of distress. According to standard operant theory, with its emphasis upon overt behavior, this contingency of maternal response to such indicators of distress as crying should reinforce the crying and make cry-babies. It did not. In such young infants, apparently the contingency of maternal response to crying reinforces not the crying, but a hope of change in the circumstances. It thereby contributes to the development of confidence on the part of the infant that he can control his circumstances. Such may well be the origins of that trust emphasized by Erikson (1950). Out of such experiences of being able to change conditions in anticipated ways through one's own action comes gradually, I suspect, a kind of learning set which we (not the infant) might verbalize as: "If I

act, I can get what I want and make interesting things happen." I contend that this learning set is basically cognitive in character. It is a piece of knowledge about the relationship between an infant's self-initiated efforts and what comes to him from his world. If a child has tried and tried to no avail, he derives another kind of learning set which we might verbalize as: "Struggling is useless." Such a set must be corrected if the infant who has acquired it is ever to achieve confidence and trust that he can achieve his ends. Such confidence, I suspect, is an important precursor of developing that pride in achievement which motivates competence.

We know exceedingly little about the successive landmarks in the development of these learning sets and concepts with motivational significance. Because we have thought of cognition largely in terms of such school skills as language, or reading, or numbering, our various systems of compensatory education have omitted any attempt to provide corrective experiences designed to inculcate autonomous competence motivation. Years ago, Andreas Angyal (1941) emphasized in psychological development a general dynamic trend toward increasing autonomy. We need to know more about the kinds of experience which foster and hamper such motivational autonomy.

Maturation and Experience

In the various conceptions of development which have prevailed during the last half century, learning and maturation have been domains as separate as Kipling's East and West (and never the twain shall meet). Since World War II, however, clear evidence has come that informational interaction, especially with information through the eyes, influences maturation within the central nervous system. Most of these studies have been inspired by the neuropsychological theorizing of Donald Hebb (1949) or the neurobiochemical theorizing of Helgar Hydén (see 1959). Riesen (1947, 1958) inspired by the former, reported that rearing chimpanzees in the dark resulted not only in behavioral deficiencies but also to diminish the number of nerve cells and glial cells developing in their retinal ganglia by adulthood. Then Brattgård (1952), inspired by the latter, reported that rearing rabbits in the dark caused a paucity of RNA production in their retinal ganglia as adults. Since then, a California group has reported that thickness of the cerebral cortex and the level of total acetylcholinesterase activity of the cortex, as well as rate of adult maze-learning, are a function of the complexity of the environment during early life (Bennett, Diamond, Krech & Rosenzweig, 1964; Krech, Rosenzweig & Bennett, 1966). More recently, studies of the effects of dark-rearing during early life have been extended through the visual system. Such dark-rearing produces a paucity of both cells and glial fibers in the lateral geniculate body of the thalamus (Wiesel & Hubel, 1963). Moreover, as a Spanish investigator, Valverde, and his collaborators have shown, dark-rearing also decreases both dendritic branching and the number of spines which develop on dendritic processes of the large apical cells of the striate area in the occipital lobes in mice (Valverde, 1967, 1968; Valverde & Esteban, 1968). In a still unpublished study,

Fred Volkmar, one of my own students, and William Greenough, have demonstrated that low-level complexity in the circumstances encountered rather than the absence of light is responsible for very substantial decreases in the branching of the dendrites of the large apical cells in the striate area in the occipital lobes of rats. Such evidence indicates that there is considerable plasticity in the maturation of the neuroatomical equipment for information processing, and that variations in the maturation are associated with variations in the environmental circumstances encountered during development.

Spurious Factors in the Longitudinal Validity of the IQ

The evidences of plasticity in early development which I described in Intelligence and Experience were sufficient to compel me to relinquish all faith in the longitudinal validity coefficients for the IQ. It has not been sufficient for others. In Intelligence and Experience, I distinguished criterion validity (correspondence of the rank of an individual's score on an intelligence test with his rank in that group in performance in school or on a variety of jobs) from longitudinal validity (correspondence between an individual's IQ from an early testing with his IQ from a later testing) which I called their "predictive validity" (Hunt, 1961, p. 312). Moreover, I have said elsewhere that "the plasticity which appears to exist in the rate at which human organisms develop renders longitudinal prediction basically impossible unless one specifies the circumstances under which this development is to take place" (Hunt, 1969, p. 128). Yet, both psychologists and educators ask almost routinely about the longitudinal predictive value of those measures of development from our ordinal scales (Uzgiris & Hunt, 1966). It seems likely that the failure of the evidence for plasticity to be more widely convincing resides in the fact that substantial correlations are regularly observed between IQs based upon early testings and those based on later testings widely separated in time. Bloom (1964) based much of his discussion of stability and change in various traits on such evidence. It has been presumed generally that the basis for the existence of such correlations resides within the differing natures of individuals and within their predetermined rates of development. This, to be sure, is one source of the obtained correlations, but I contend that there are at least two other sources of such correlation which are spurious for any such interpretation.

If the scores on tests of intelligence are based on past achievements, as I believe Humphreys (1962a) has demonstrated, then the correlation between successive testings must involve a part-whole relationship in which the size of the part from the first testing approaches the size of the whole from the latter testing as the time between testings decreases (Humphreys, 1962b). The portion of any longitudinal validity-coefficient deriving from this part-whole relationship is completely irrelevant to any assumption of inherent stability in rate of individual development. It is, therefore, spurious as an indicator of an inherent rate of psychological development.

The second spurious factor in these longitudinal coefficients is to be found in the consistency of the developmental impact of home and neighborhood environment. The recent investigation by Yarrow, et al. (1971) is relevant here. Pedersen, one member of this team, reports that measures of home environments--social and inanimate--which were based on merely two three-hour time samplings taken a week apart showed correlations with various measures of performance on the Bayley Scales ranging to above .5. The coefficient of .5 accounts for 25 percent of the variance in the measures of infant performance at six months of age. If merely two three-hour samples a week apart can represent the variations of impact of environmental circumstances in the homes for the first half year of the lives of infants sufficiently well to account for 25 percent of the variance in their test performances at six months, then the consistency in the developmental impact of home environments is much greater than we have ever conceived such consistency to be. Whatever portion of longitudinal validity coefficients derives from such consistency in the impact of home environment is also entirely spurious as an indicator of the variations in the inherent rates of maturation for individuals. These two spurious contributions, one from the part-whole relationship and the other from the consistency of the developmental impact in the environment, subtract substantially from the traditionally accepted import of these observed longitudinal validity coefficients for the IQ. Moreover, the existence of such spurious components of these coefficients renders more credible some of the investigative examples of variations in the IQ associated with encountering differing sets of environmental circumstances.

Especially interesting is an example from a still unpublished program of investigations under the direction of Professor R. F. Heber of the University of Wisconsin. The first step in this program was a survey of tested intelligence in the poorest census district in the city of Milwaukee. In this survey, both the mothers and the children of five or six in 500 families were tested. The results show that 80 percent of the children with IQs under 80 came from mothers with IQs under 80. Such a finding is precisely what would be expected from the assumption that heredity predetermines intelligence. But Heber and his collaborators did not stop there. Instead, they selected a sample of 40 mothers with IQs under 75 who also had infants aged under six months at the time this portion of the program began. The 22 infants of a randomly selected half of these 40 mothers served as controls who had been tested repeatedly at the corresponding ages of the children in a treated group. The 25 children of the other 20 mothers were given educational treatments by home visitors until they were six months old. At this point, they were taken to a day-care center where each child was cared for by verbally articulate women who had been trained to administer an educational program which was designed to foster the development of confidence and of cognitive and language skills. Heber and his collaborators have not described the nature of this program in detail. The mothers of these children in the treated group also got some attention and training, but it was not they who taught their children. The results of the treatment show in a comparison of the IQs based on

Stanford-Binet tests given when the children in the control and treatment groups were 45 months old. Those in the control group had an average IQ of 92, which shows in comparison with the mother's IQ of 75 or less an unlikely degree of regression toward the mean which may well have been based in part upon repeated testing. Those in the treatment group averaged 128. However evanescent this result may turn out to be, this difference of 36 points indicates that those receiving the day-care with educational treatment have developed much more rapidly during their first 45 months than did those in the control group.

Another example which shows how large the environmental influence on the IQ from at least one kind of test can be appears in a cross-cultural study by Wayne Dennis (1966). Dennis got the Goodenough Draw-a-Man test given to samples of typical children, aged between six and nine years, who were living in normal family environments in some 50 cultures over the world. The variations in mean Draw-a-Man IQs for these samples ranged from a high of 124 to a low of 52. Mean IQs of 124 were found for suburban children in America and England, for children of a Japanese fishing village, and for Hopi Indian children. In all of these four cultures, the children grow up in almost continuous contact with representative, graphic art. The low mean IQ of 52 came from a sample of children in a nomadic Bedouin tribe of Syria, and the mean IQ of 53 from a nomadic tribe in the Sudan. It should be noticed that the Moslem religion has been more effective in prohibiting contact with graphic art than either Judaism or Christianity. Yet, even among groups of Arab Moslem children, the mean IQs for the Draw-a-Man test range from 52 for the Syrian Bedouins who had almost no contact with graphic art, to 94 for the children of Lebanese Arabs in Beirut who see television and have considerable contact with the graphic art of Western civilization. The Draw-a-Man IQ probably calls for a less complex set of abilities as these are determined by factor analysis than does an IQ derived from either the Stanford-Binet battery or the Wechsler-Bellvue battery. For American children, however, IQs from the Draw-a-Man test correspond about as well with IQs from either of these two standard measures of intelligence while IQs from the two standards correspond with each other. It should be noted that the variation of 72 points in mean Draw-a-Man IQs holds for children reared in environmental circumstances which are typical for their various cultures. Moreover, these 72 points of variation in mean IQs from such typical groups of children fall only about 18 points short of the range of individual IQs (that between 60 and 150) which includes all but a small fraction of 1 percent of those individuals above the pathological bulge at the low end of the IQ distribution. Thus, variation in the mean Draw-a-Man IQ associated with circumstances of rearing have a "range of reaction" nearly equal to the variation of individual IQs. Where the variation in individual IQs is commonly attributed largely to genetic variation, this variation in mean IQ must be attributed to the differences in the cultural environments.

Highly significant even yet is the pioneering study in this domain by Skeels and Dye (1939). This study, to which Florence Goodenough (1939) referred with derision, came about as the

consequence of a "clinical surprise." Two residents of a state orphanage in Iowa, one aged 13 months with a Kuhlman IQ of 46 and the other of 16 months with an IQ of 35, were committed to an institution for the feebleminded. They were committed not only because of their low scores on the test; at 13 months the younger one had made no attempt to stand even with assistance and he displayed no manipulative or vocal play, and the older at 16 months could not walk even with help and could not vocalize or play with materials. Both, therefore, appeared obviously feebleminded. At the institution, they were placed on a ward with moron girls who ranged in age from 18 to 50 years and in mental age from 5 to 9 years. Some six months after this transfer Skeels, visiting the wards, noted with surprise that these two children had shown a remarkable degree of development. When they were tested again with the Kuhlman scale, the younger one had an IQ of 77, and the older one an IQ of 87. At the end of a year on the ward, the younger one had attained an IQ of 100, while the older one remained at 88. From a discovery that the older and brighter girls on the ward became very much attached to the children and would play with them during most of their waking hours, and that attendants took great fancy to the babies, brought them toys, picture books, and play materials, came the fantastic plan of transferring mentally retarded children from the orphanage nursery to an institution for the feebleminded in order to foster their development. A group of 13 with an average IQ of 64.3 and a range between 36 and 89, with chronological ages ranging from 7 to 30 months, were actually transferred to such wards. After periods ranging between six months for the youngest and 52 months for the 30-month-old youngster, these children were retested. All 13 showed a gain. The gains ranged from a minimum of seven points to a maximum of 58 points. All but four showed gains of over 20 points. On the other hand, 12 other babies with a mean IQ of 87, an IQ range from 50 to 103, and an age range from 12 to 22 months were allowed to remain in the orphanage. When these children were retested after approximately corresponding periods, all but one showed a decrease in IQ. One decrease was of only eight points, but the remaining ten showed decreases ranging from 18 to 45 points, with five exceeding 35 points. So long as the conditions that fail to foster psychological development persist for but a short time, the essential plasticity characteristic of infancy permits considerable improvement when development-fostering circumstances are provided.

Recently, after 25 years, Skeels (1966) has looked up the individuals who composed these groups. Those who were transferred from the orphanage to the ward for moron women in the institution for the mentally retarded he found to be average citizens in their communities. Their children had an average IQ of 105 and were doing satisfactorily in school. These 13 individuals actually had a median educational attainment of 12th grade, four had one or more years of college work; one had received a bachelor's degree and gone on to graduate school. At the time of follow-up, one of those who remained in the orphanage had died in adolescence following continued residence in a state institution for the mentally retarded; five continued as wards of state institutions; all but one of the remaining six were employed in work calling only for

the lowest of skills. One gleans from these studies that environmental circumstances which persist over time can make a tremendous difference. The effects of circumstances are fairly readily reversible early in life, but as circumstances of a given kind endure, their effects become more and more difficult to alter.

Race and Social Class Differences in IQ

Such evidences of large cumulative effects of prolonged encounters with environments of differing development-fostering qualities have clear implications for the inevitability of race and class differences. The mean IQs of children of unskilled laborers typically fall about 20 points below the mean IQs of children of professional men (Anastasi, 1958, p. 517). Moreover, the mean IQs for samples of Black children have typically been found to fall about 15 points (one standard deviation) below the means for white children (Shuey, 1966). These are descriptive facts. Yet, as Anastasi has pointed out, they provide "no information regarding the cause of these observed behavioral differences" (1958, p. 598). The existence of a 72 point range in mean Draw-a-Man IQs associated with development in differing cultures suggests that class differences and race differences in mean IQ could readily be accounted for through class variations in the development-fostering quality of the environments encountered.

Intelligence testing, in fact, has always assumed approximately equal opportunity for learning, at least in typical families. This past decade, however, has brought evidences of large variations in the basic nutritional requirements, in opportunities to acquire cognitive skills, in opportunities to develop the motivational systems required for competence, and in the opportunities to acquire those values and standards of conduct required for life in the mainstream of a complex organized society (See Hunt, 1969, pp. 202-214). The fact that such opportunities are lacking most often for children of the poor argues strongly against the biological inevitability of class and race differences. Moreover, inasmuch as higher proportions of the various racial and ethnic groups than of native white people are poor, one would expect to be able to explain at least a major share of the failure of children from these groups to perform at the standard level in terms of the factors associated with poverty.

I have made this last statement repeatedly. I have based it on the evidence and inferences I have been describing. Recently, however, it has received stronger empirical support than anyone has had any right to expect. In a study reported at the meetings of the American Psychological Association, George W. Mayeske (1971) described a special analysis of the data in the report on Equality of Educational Opportunity by Coleman, et al. (1966) in order to determine the degree to which these differences among racial-ethnic groups could be explained. Of the total variance among students in their academic achievement, 24 percent was associated with membership in one of six racial-ethnic groups (Indian, Mexican, Puerto Rican, Negro, Oriental, or native White). From regression equations, he took into account the socioeconomic status of each family, the presence or absence of key members of each family, assessments

of the aspirations for schooling by students and parents, beliefs about how students might benefit from an education, the region of residence, and the achievement and motivational levels of the students attending the school. These are all environmental circumstances associated in varying degrees with membership in these various racial and ethnic groups. When they were taken into account in his statistical analysis this percentage of variance dropped down to 1.2. This analysis was based on the achievement scores for sixth-grade students, but similar results were obtained for other grade levels and for each region of the country. Thus, the effects of racial-ethnic group membership on the academic achievement is almost completely confounded with a variety of conditions in the past or present circumstances of the students. Once these are taken statistically into account, race and ethnic differences become miniscule.

It should be noted that such considerations detract nothing from the cross-sectional validity of the IQ in terms of its capacity to predict the performance of children in standard schools. In the terms of what I call "the problem of the match," standard schools well achieve their educational purpose only in so far as children bring to the school those concepts, motivational systems, and skills for information processing which standard schools take for granted. This is another statement which I have been making on the basis of the evidence and inferences which I have been describing. It too gets strong empirical support from recent evidence reported by Jane Mercer (1971) at the American Psychological Association. She found that Chicano children with high IQs tend to (1) come from less crowded homes, (2) have mothers who expect them to have education through high school or beyond, (3) have fathers who were reared in an urban environment and who have had at least a ninth-grade education, (4) live in a family which speaks English much of the time, and (5) come from families who are buying their own homes; and that Black children with high IQs also come from families that have characteristics similar to those of the modal configuration for the white community of Riverside, California, where the study was done. She then used the findings from a multiple regression equation to group each Black and Chicano child of the elementary school within the city of Riverside, California, according to the degree to which his family conformed to the modal configuration of the total community. Each child got one point for each way in which his family background was like that of the modal configuration. If his family had all five of the modal characteristics, the child received a social background score of 5, and correspondingly for 4, 3, 2, 1, and none of these characteristics of the modal configuration. The IQs of Black children with scores of 5 averaged 99.5 and 104.4. Those from both ethnic groups with four points in common with the modal configuration averaged 95.5. As the social background scores decrease, the average IQ also decreased. Of those with no points in common with the modal configuration, the Black children averaged 82.7 and the Chicano children 84.5. From these latter come a major share of those who get into special education for the mentally handicapped. Jane Mercer suggests an improvement in this standard scheme of diagnosis which would take into account both IQ and the

degree to which the characteristics of a child's family fail to correspond with those of families typical of the dominant culture. Most of such children who get into special education encounter curricula geared merely to slowed rates of acquisition. What they need is help in the acquisition of those "entry skills" and motives taken for granted in standard schools. This term "entry skills" I have learned from my collaborator, Girvin E. Kirk, who is expert in such analyses.

Plasticity and Heredity: Implications of Interactionism

In presenting the results of the cross cultural study of the Draw-a-Man IQ by Wayne Dennis, I suggested that the 72-point range in mean IQs is the best indication that we have of what genetists, since the days of Waltereck (see Dunn, 1965), have termed the "range of reaction" or the "norm of reaction." This is the distribution or range in measures of any phenotypic characteristic from a given genotype which results from developing through interaction with diverse environments. It is a concept which should be much more familiar to educators and psychologists. In their concern with the relative importance of heredity and environment, they typically concern themselves rather with indices of heritability. Heritability is defined as the proportion of trait variance within a given population which is determined by the genotypic variation in that population. If one assumes additivity, the variation in a population is the sum of the variances due to heredity, to environmental variation, and to the interaction between these. In human investigation, all these must be estimated indirectly, and they are typically estimated from the correlations between the IQs of individuals with varying degrees of kinship ranging from identical twins reared together and apart, fraternal twins, siblings, half-siblings, parents and children, cousins and unrelated individuals (see e.g., Burt, 1957, 1966; Cattell, 1960; Fuller & Thompson, 1960, Ch. 7; Huntley, 1966; Vandenberg, 1968; Woodworth, 1941). These statistical estimates of heritability are typically based on groups of individuals living within the range of environmental variation of a given race and class who are tested at a single time of their lives. Even though such estimates are averages which hold only for the population sampled, they often are used as if they applied generally. The primary importance of the heritability of any trait is to provide an estimate of the rate of gain in measures of that trait from selective breeding, yet they get used to make inferences about the educability of individuals. The educability of an individual, in so far as it is dependent on the IQ, calls for solid evidence about the norm of reaction for the IQ. But a statistical index of heritability, to quote Hirsch (1970, p. 101), "provides no information about the norm of reaction."

Those who find and point out the evidences of plasticity in phenotypic measures of intellectual and motivational development typically get tarred environmentalism. I wish to point out, however, that evidences of plasticity are not dissonant with a primary role for heredity. Heredity is always primary. The genotype in the fertilized ovum constitutes the starting point for any individual organism. The DNA in the genes contains the information which

sets the main lines of development throughout life. Yet, this information serves to determine nothing in an environmental vacuum. Moreover, the information gets modified by variations in the environmental conditions encountered. The DNA is far from totally predetermining. Development comes dynamically in the course of a continuing process of interaction between the individual at any given time and its environmental circumstances at that given time. This is the interactionist's theme song. The theme originated with Johannsen, the Danish investigator, whose name is now paired with that of Gregor Mendel as fathers of scientific genetics. The norm or range of reaction is a product of interacting in the course of development with different circumstances. For many of the traits in which educators and psychologists are interested, the range of reaction is great. Even so, heredity remains primary in determining the size of the differences between phenotypic measures which will derive from a given genotype developing in any two sets of differing environmental circumstances. One may put this principle more simply by saying that the genotype determines the norm or range of reaction.

Unfortunately, the statement in this form is scientifically meaningless because neither the genotype nor the ultimate norm of reaction is directly measurable and knowable. One can probably best illustrate this principle concretely. Suppose, for example, the existence of two pairs of identical twins, one pair typical, or without pathology, the other mongoloid. Suppose that one twin of each of these pairs were reared from birth in the Syrian tribe of nomadic Bedouins for which Dennis found the mean Draw-a-Man IQ to be 52. Suppose the other of each pair were reared in one of the best suburban American homes where Dennis found the Draw-a-Man IQ to average 124. Which pair of twins, the mongoloid or the normal, would show the greater difference in IQ on the Goodenough Draw-a-Man test at age 3, 8, or 12? I believe you will see immediately that the difference to be expected for the normal pair will be considerably greater than that for the mongoloid pair. I have designated one pair as mongoloid here only in order to permit recognition at birth of a pathological limitation on genotypic potential. In principle, the same prediction should hold for pairs which differ in potential within the normal range. Thus, hypothetically at least, the genotype determines the amount of effect on phenotypic measures which ongoing interaction in two differing environments can have.

Despite the primary importance of heredity, the concern of parents and educators is to utilize to the full advantage of children their individual norms of reaction. The heritability coefficients are significant chiefly for those in animal husbandry concerned with selective breeding. There is also a growing place for genetic counseling in human meeting, but as educators we are concerned with utilizing the norm of reaction which is substantial in the case of human competence.

Toward a Revision of the Strategy of Assessment

The tests of intelligence are generally regarded as one of the great monuments of achievement by modern psychology. Their

widespread use so continually reinforces the conception of intelligence on which they are based that it adds to the difficulty of revising that conception with any combination of dissonant evidence and new conceptual alternatives. Yet, as I have already indicated, intelligence testing has left many problems in psychological development and education completely unsolved, and it has even distracted attention from them. For three quarters of a century these tests have focused attention on comparative assessments of individual differences in a power (the IQ or Spearman's g) or a multiplicity or factored abilities (Thurstone, 1938; Guilford, 1967). This focus, I believe, has distracted investigators from attempting to see how in the various lines of psychological development the actual landmarks of ability and of motivation build one upon another. I believe this focus has also distracted investigators from examining the nature of the successive learning sets which enable and motivate a child to process information and to solve problems at successive levels of complexity. Instead of helping to tell teachers how to prepare the curricular environment to foster the development of any given child, the scores from the tests have tended to destroy even the motivation for ingenuity in teaching. The saddest words in education, when applied to student performance, are "as well as can be expected." Fortunately, at least the beginnings of new strategies for the measurement of learning and development are appearing.

One of these new strategies consists of criterion-referenced tests described by Robert Glaser (1963) of Pittsburgh. This strategy derives from the hierarchical conception of intelligence as it was suggested by Gagné's studies of adult problem-solving (Gagné & Paradise, 1961). Criterion-referencing may be contrasted with the norm-referencing which is characteristic of the standard test-batteries for both intelligence and achievement (Glaser, 1963; Glaser & Nitki, 1971). In the traditional norm-referenced test, the performance of an individual acquires its meaning from some index of its comparative rank among the scores describing the performances of the various individuals in the representative group on which the norms for the test are based. In the case of criterion-referenced tests, on the other hand, the meaning of any individual's performance derives directly from the behavioral goal of the educational experience which has been provided for him. It is this behavioral goal which defines performance desired of the tested subject. His performance, in turn, determines the criteria of success for the educational effort. This strategy of criterion-referencing gives new meaning to the standard concepts of reliability and validity for test scores (Popham & Husek, 1969). Reliability derives from examiner agreement, and validity is inherent in the relationship between the examinee's performance and the educational goal. Thus, this strategy also has the very considerable advantage of focusing the attention and effort of both teacher and student on the educational goal and of avoiding the distraction which is almost inevitable from the interpersonal comparisons involved in norm-referencing. It should be noted that age and time figure not at all in this strategy of assessment. Missing from such a strategy, however, is any developmental or educational frame of reference which can help guide the choice

of learning experiences. One must wait for failure and then search backward for its basis. This leaves teaching based too completely upon clinical or intuitive skills.

A second new strategy consists of ordinal scales of psychological development. This strategy is at least illustrated by our own ordinal scales of sensorimotor development in infancy (Uzgiris & Hunt, 1966, 1968). These scales were inspired by Piaget's (1936, 1937) observations of his own three children. They consist of items based on sequential landmarks for six overlapping lines of development through what Piaget has termed the sensorimotor phase. Each of these landmarks consists of a specified behavior elicited by a specified situation. Inter-observer agreement on the criterion behaviors is typically above 95 percent. Test-retest consistency for examinations conducted within 48 hours is typically above 85 percent, and the great majority of changes which do occur are upward on the scales.

Theoretically when a child shows the behavioral criterion for one of these landmarks, it implies that he has achieved all of those steps below it on that scale. Empirically, for the sample investigated, the ordinality of the steps on the various scales as indicated by Green's (1956) index of consistency range from a low of .802, for the scale on the development of relating to objects, to a high of .991, for the scale on the construction of operational causality. For all but two of our six scales, Green's index of consistency is well above .9. These findings are based, however, on only one cross-sectionally studied sample. The issue calls for longitudinal studies[2] and, ideally, for longitudinal studies of infants developing under environments which differ as radically as possible. In some instances, the invariance of sequence implied in ordinality is logically built in and is of trivial significance, but in others its basis is not obvious. Contrary to the argument of Mary Shirley (1931), however, such invariance of sequence need logically imply no predetermined rate or even order of maturation. It can just as readily derive from transformations of cognitive structure which are a function of the infant's informational interaction with his environmental circumstances. Presumably these interactions produce developmental transformations which in turn permit other, higher-order forms of informational interaction.

The sequential ordinality of steps in these scales provides a novel strategy for the measurement of psychological development. One can compare the development of two infants, regardless of their ages, in terms of their positions on each of the scales. This permits one to reverse the traditional strategy of measuring psychological development. It permits making age the dependent variable, which varies as a function of the kind of experience,

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[2]Such a longitudinal study has recently been described by Uzgiris (1972). Moreover, the use of these scales in various orphanages and Parent-and-Child Centers for purposes of evaluation of programs of experiential enrichment will yield data of relevance to this issue of sequential invariance.

instead of the independent variable implied in our traditional concept of the IQ and of the normative descriptions of Arnold Gesell, et al. (1940). These sequentially ordinal steps permit one to define successive levels of development in terms of success on lower steps on the scale and failure on those above. One can then compare the means and variances of age for infants who have lived from birth under differing kinds of circumstances. The variations in age permit one to compare the educational or development-fostering quality of these differing circumstances. Measures based on ordinal scales may have the additional value of referring only to past experience and making no claims of persistence in the rate of development.

Let me illustrate these points. Paraskevopoulos and I have recently had examined with the scales of object permanence and of both gestural and vocal imitation, all the children aged between five months and five years who have lived from birth in one of two Athenian orphanages with differing regimes of child rearing (Paraskevopoulos & Hunt, 1971). The differing nature of these regimes can most easily be specified in terms of the child-caretaker ratio. In the Municipal Orphanage, this ratio is of the order of 10/1. At the Metera Baby Center, which attempts to be a model institution for children, this ratio averages approximately 3/1 through the day. We also had examined some 94 home-reared children from working-class families. The mean ages for the children of the Municipal Orphanage lagged progressively for those at successive levels of object permanence. Let me take, for example, that level at which children follow an object through one hidden displacement, but not through a series of such displacements. The mean ages of the children at this level was 33.2 months at the Municipal Orphanage, 21.8 months at Metera (note a difference between mean ages of approximately a year), and 20.3 months for those home-reared. David Schickedanz has been following the development of infants in a Parent-and-Child Center at Mt. Carmel, Illinois. There the mothers of poverty, who are also the caretakers, have been taught how to foster early sensorimotor development. Six successive infants from these parents of poverty who have been developing under this regime have now achieved this level of following an object through one hidden displacement before they were a year old. Their average age approximated 11.5 months. Here the differing regimes of child rearing constitute the independent variable, and the ages of children at a functionally specified level of development constitute the dependent variable. The norm of reaction in age for this level of object construction must be at least of the order of 21 months.

Ordinal landmarks in development need imply no position on the issue of whether psychological development is continuous or stepwise. We have identified more landmarks than the six sensorimotor stages described by Piaget. Our scale of object permanence, for instance, consists of 14 sequentially ordinal landmarks. From the evidence with which I am now acquainted, I believe that psychological development is continuous, and that the degree of consistency for measures of sequential ordinality are a function of the range of landmarks employed and of the developmental

distances between them. This domain is wide open for investigation. The landmarks which we have selected are little more than first approximations of what can ultimately derive from exploring behavioral development with such a strategy. Our ignorance of development from the standpoint of this hierarchical conception is immense. Yet, if we are even to have a basis for guiding and learning of the young in what Piaget has termed the preconceptual phase, I believe such a strategy must be extended upward from the sensorimotor phase through the preconceptual phase.

It should be noted that the examining operations which define the sequentially achieved landmarks in development resemble criterion-referenced tests. In neither case does the meaning of an individual child's performance derive from comparison with the performance of others. In ordinal scales of psychological development, however, there is no educational experience with a behavioral goal to give meaning to the performance. Once the sequentially achieved landmarks have been identified, the meaning of any child's performance derives from where that performance places him along the sequentially ordinal scale. From the educational standpoint, what is still missing from this strategy is solid knowledge of the kinds of experience which promote the acquisition of each consecutive behavioral landmark. Moreover, there is little experience to guide us in uncovering landmarks through the preconceptual phase. In the course of her own teaching of mothers and observing of children, however, my colleague, Mrs. Earladeen Badger, is gleaning a number of clinical suggestions which are helpful. For instance, once infants in their play with a shape-box have achieved the level where they put the blocks of varying shapes into holes with appropriate shapes without active experimentation but merely from visual inspection, they can be happily interested in picture-matching games. On the other hand, while they are still struggling with a rectangular block in a square hole or a square block in a circular hole, any attempt to introduce picture-matching games becomes a source of threat and distress. You can readily see how such procedures can be helpful in both devising and testing educational strategies for fostering the psychological development of children with atypical backgrounds.

Potentially, there is at least a third strategy which might yield information to use in the guidance of the teaching process. It would consist in asking and determining what understandings, what strategies of information processing, what motor habits, and what motivational interests are required before a child can respond with productive accommodations to a given curriculum or teaching situation. To make this potential strategy concrete, let me ask what background acquisitions do kindergarten teachers implicitly take for granted in those children coming to kindergarten? Let me answer this question with some of the items which I suspect they take for granted. I suspect they take for granted that children can process information about color, can understand color names, and can use these names in their own speech. I suspect the same for information about place which is typically couched in prepositional terms, and for shape with the names of shapes and for size with comparative terms. If we once knew what was taken

for granted, it would not be difficult to design criterion-referenced tests with which to determine whether a child has or has not the expected skill in information processing. With respect to color information, let me note that well over 90 percent of four-year-olds from middle-class homes can both identify the main primary colors when they are named, and about 80 percent can name them when they are pointed to. Yet, less than 20 percent of the four-year-old Head Start children from families of poverty have such mastery of the linguistic processing of color information. This is a finding from a study which my colleague, Girvin Kirk, and I now have underway.

Suppose we extend this strategy by asking yet other questions. What motor abilities, symbolic linguistic skills, cognitive abilities, and interests are required before a child can learn to read, or can learn to read by each of the methods of teaching reading? Let us repeat this question for numerical counting, for addition and subtraction, and for multiplication. Do we have systematic information on such matters that we can teach to prospective teachers?

Although I am confident that the answer is negative, skillful teachers have always made such diagnostic assessments of their pupils intuitively. One has only to observe a master teacher, such as Max Bieberman in mathematics, to glean that each pupil's response to a problem is for the master a kind of diagnostic test. The pupil's response serves him as a guide to the kind of illustration or new question which can provoke understanding. Such teaching is beautiful to watch, but it is now so completely an intuitive art that it is impossible to communicate and teach to those who would become master teachers. It is interesting to note in passing that Bieberman's methods of teaching, as they are now canned in textbooks, are less successful than he was as a teacher.

With the information required for these three new strategies of psychological assessment, and with appropriate tests of the criterion-referenced rather than the norm-referenced sort, we could have a form of psychological assessment which would be teachable and which could guide the teaching process. Getting the information about cognitive and motivational development, constructing the appropriate tests, and learning how best to teach--how to provide experiences which foster each kind of development--these are large tasks. Until we do them, however, assessment will do little to guide the teaching process, and teaching will remain an intuitive art. Moreover, in continuing as we are, what we teach in colleges of education is about as likely to damage as to improve the lot of socially atypical children in our standard schools.

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WHAT'S IN A LABEL? A HELL OF A LOT!

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The title of this document may seem to be flippant, crude, profane, catchy, provoking, enticing, relevant, irrelevant, etc. If it elicits such reactions, then at least one objective has been attained. A title, be it one word or several, is a label, and even though it is only a configuration of letters, it does elicit reactions or meaning from those who view the label. Differential reactions from people occur because of the differential historical experiences that affect meanings attached to a label. Individuals with unique past experiences react uniquely when presented the same stimulus pattern. Supposedly, most individuals would concur with this analysis by verbally agreeing that a single label can elicit many different meanings. They would probably also support the notion that if individuals react differently to a single label, then it would follow that it is not appropriate to classify individuals who react differently with a label that implies the absence of behavior differences among the individuals so labeled. It has been observed that intra-differences for a variable are often larger for a group assigned a specific label than inter-differences on the same variable for a group that is assigned a different specific label. Therefore, most educators and certainly all special educators, should be cognizant of the fact that labels do not solve problems or provide knowledge. Indeed, labels often detract from efforts to obtain knowledge relevant to the solution of important problems.

If labels create problems, rather than solve them, what do they mean and how are they learned? What are the consequences of using labels? Are there alternatives to using labels? These questions pertain to human interaction and the humanistic understanding of human behavior. Specifically, and for the content of this document, the questions are related to conceptualizing and implementing educational services for handicapped children. Several aspects of labeling are described. These aspects include label meaning, label consequences, and label alternatives.

Labeling

When a label is applied to an individual, or group of individuals, it actually functions to describe a complex interaction process between the "labeler" and "labelee." In human transactions, labels are used to describe personal meaning, attitudes, and feelings (Osgood, Suci, and Tannenbaum, 1957). Labels can have neutral meaning (car), positive meaning (brilliant), and negative meaning (dumb). For example, the label "car" usually conveys an image of a hunk of metal, with wheels, that is used to increase range and speed of mobility. That meaning is relatively

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neutral, but the usage of cars can be negative in that pollution is increased, or it can be positive as in when a car is used to rush a child to a hospital for emergency medical treatment. Most would agree that the label "brilliant" represents positive status. Who really objects to being called brilliant? Such a label can often function to enhance appropriate pride and positive self concept. However, to be labeled "dumb" conveys negative meaning and functions to promote a negative self concept in the individual so labeled. Brilliant is a status label; dumb is a stigma label.

Labels can be used to represent and assign values of status and stigma to people, objects, and events. Labels are simplistic representations of complex interactions. The process of assigning labels may culminate in correct or erroneous usage of these representations. If it is assumed that the correct use of labels will have beneficial effects and that the incorrect use of labels will have detrimental effects, then it is important to recognize that these different effects are determined by the same process. That is, the process of acquiring and applying labels must be identified and understood. From identification and understanding of the labeling process, it may be possible to decrease the detrimental effects that incorrect usage of labeling exerts upon individuals and human interactions. The process is neutral; it is the individual who uses the process in a facilitative or debilitative fashion.

Label Meaning

Labels have meaning to those who use them and to those who have been labeled. Meaning may be described as a product that evolves from the relationship between labels (words, pictures) and the object or event to which the label is assigned (Osgood, Suci, and Tannenbaum, 1957). Osgood, et al. designate labels as signs and objects that are labeled as significates. The meaning of meaning, therefore, is the discernment of conditions which are necessary and sufficient for an environmental event which is not a significate to become a sign of that significate. Significates are usually observable events, and signs become related to significates if they elicit the same idea or thought attached to significates. A significate may be conceptualized as an unconditioned stimulus which elicits meaning. A neutral stimulus such as a word (label), if it occurs contiguous with the significate stimulus, may become a conditioned stimulus that elicits the same meaning as the unconditioned stimulus. The conditioned stimulus becomes the sign, and therefore acquires the meaning of the significate. "Whenever something which is not the significate evokes in an organism the same reactions evoked by the significate, it is a sign of the significate." (Osgood, et al., p. 5).

The development of associations between signs and significates, as described above, is a classical conditioning paradigm. However, Osgood and associates believe that this paradigm is inadequate to explain the process of acquiring meaning. A sign (label), for example, may not elicit the same behavior reaction as its significate (object). The label "ball" does not elicit the

same behavior as actual contact or manipulation of a ball. A label evokes similar, but not identical, behavior in comparison to the behavior evoked by contact with the labeled object. A young child may throw, kick, or handle a ball, but upon hearing the label "ball" may only engage in a small replica of the actual behavior by making a small movement of the arm as if the ball were being tossed to another individual. The label "ball" elicits similar behavior as handling a ball because it has become associated with those behaviors which occur in the presence of a round object (ball). Labels, therefore, acquire the meaning of objects and events because they represent those objects and events. Attachment of meaning to a label is a function of an internal representational mediation process (Osgood, et al., 1957). A sign elicits a portion of the behavior that occurs in the presence of its significate, and therefore, is representational of that behavior. The representation aspect evokes an internal mediation process that stimulates and elicits a variety of behaviors similar to those which occur in the presence of the significate. Representational mediation processes provide a more complete understanding of label meaning than classical conditioning by providing a rationale for understanding that labels do not always elicit the same reactions as their significates.

Label Learning

It has been documented that label acquisition is a crucial aspect of developmental learning and self regulation of behavior patterns (Allport, 1955; Luria, 1961; Piaget, 1963; Skinner, 1957). Children can learn to cope with a variety of environmental events by using labels that enable rather exact discriminations and differential behaviors. That is, a label functions as a guide to what emitted behaviors are needed whenever a specific situation is encountered (Whelan and Jackson, 1971). Labeling is a behavior that may be described (labeled) as word responses under the control of stimulus and consequence environmental events (Staats, 1968). A child who says "ball" when presented with a ball obtains a great many positive consequences from adults in the form of smiles, physical contact, and verbal expressions of pleasure. In time, a child discriminates that these consequences do not occur when the label "ball" is said in the presence of a block or any other object. It also increased the probability that the child will learn that the label "ball" is associated only with round objects of varying size and usage. Labels are specific differential word responses that occur in the presence of specific stimulus situations. Other labels such as "dog," "cat," "mama," "daddy," etc., plus complete word sequences are learned in the same manner. With such continuous learning experiences, a child develops a lengthy and complex labeling repertoire.

Labels, and meanings attached to them, are acquired simultaneously. This acquisition process is crucial for cognitive development. Children who are successful in acquiring skills necessary for the solution of complex problems have developed very precise labels (vocal responses) for objects and events intrinsic

to problem situations. These labels, plus the labels attached to the manipulation of labeled objects, function to solve present problems and similar problems that may arise in the future (Staats, 1968). Through the process of interacting with environmental events, labeling behaviors which describe the meanings of such interactions are developed.

Staats (1968) believes that labels acquire meaning as a function of environmental factors present when labels are attached to individuals, objects, and events. A label may be associated with an environmental event when it occurs. If that label is used in the future, and in isolation from the actual occurrence of the labeled event, it can evoke a mental image (representational mediation process) of the past event. The mental image associated with the label gives meaning to that label. For instance, if a child's first encounter with a dog results in being bitten or mauled, any situation which evokes a mental image of that encounter, e.g., the label "dog," may result in crying, clinging to an adult, and maybe the label phrase, "bad dog." The meaning of the label "dog" in this instance is very painful and negative, something to be avoided. In contrast, if a child's first experience with a dog is pleasant, the label "dog" will evoke a mental image that has joy and positive meaning. Labels, therefore, that are used to describe environmental events also convey meaning, positive or negative, about those events.

Individuals also learn to attach meaning to a label without any previous experience with the event associated with the label. Children, as a function of watching TV, assign meaning to the label "cowboy." This label may mean a totally corrupt man who spends all of his time in Dodge City getting drunk, attacking local citizens, and getting bashed on the head, or shot, by the town marshall. "Cowboy," as a label, may be associated with a cruel, worthless, and essentially negative person. Unless children have read or heard about the true life of present and past cowboys, this distorted meaning obtained from indirect experiences will persist. The fact that most cowboys lead a difficult life, love their horses, do not "tree" towns every night, etc., would not be learned unless additional information to counteract distorted meaning is provided. A visit to a working ranch, or an accurate TV documentary, would be needed to elaborate upon and correct the original inaccurate meaning of the label "cowboy." It would also be possible to convey that not all cowboys were, or are, white and that winning the West was possible by the skillful contributions of black cowboys.

Children and adults can also learn labels and their associated meaning by hearing verbalizations expressed by other individuals. For example, one may hear that Indians are "lazy," "genetically prone to alcoholism," "enjoy only humor, and are not serious about daily problems," etc. Therefore, the label "Indian" may convey a totally distorted meaning to an individual who has never met an Indian, or who does not understand that social, political, and economic conditions can literally drive any individual into behavior patterns similar to those described. It is expected that non-Indians could form such inaccurate stereotypes

from the label "Indian" because of limited knowledge or experience. What is not expected, but what actually occurred, is that the quoted phrases were expressed, in all seriousness, by several Indians attending a workshop on improving Indian residential schools. When one realizes that even some Indians do not understand the forces that exert debilitative effects upon their people, the magnitude of the effort needed to transform erroneous meanings into correct ones becomes readily apparent.

Labels are acquired through direct and indirect experiences with environmental events. However, it is important to discern that a label may be completely inappropriate to describe the object or event. The label "Indian" is presently used to describe a minority group because of historical error originally made by a European sailor who really did not discover what was thought to be discovered and, therefore, labeled the inhabitants incorrectly. Over time, and with usage, the label "Indian" has evoked a multitude of meanings, positive and negative, among those who have associated the label with an individual, a group, or an indirect description of a group. The label will probably continue in use, but the example does illustrate the importance of assigning correct labels. To allow a child to label a round object as "block," when the common label is "ball," will only lead to many instances of failure for the child and will probably lead to the affixing of a stigma label such as dumb whenever a ball is called a block. The process of acquiring the labels "block," and "ball," as an association with a round object, is the same, but in one aspect that association will lead to successful relationships with the environment, and in the other will lead to failure encounters.

A single label can also elicit a variety of meanings, and it is important that children and adults discern this process. Different people can use the same label to convey different meanings, and individuals may also use the same label to convey different meanings in different situations. The label "apple" usually conjures a mental image of a red, juicy object that is very tasty. However, in a situation where an Indian may say that not all white people are evil, another Indian may label his colleague as an "apple." He is red on the outside but white on the inside. It is the Indian equivalent of the black "Uncle Tom" or the "oreo" cookie. When an Indian uses the label "apple," it would be important to know whether it means something edible, or means an individual who does not appreciate or have realistic, positive pride in Indian cultural custom and heritage.

The label and meaning acquired through direct and indirect contact with environmental events may be accurate or inaccurate, positive or negative. In both instances, however, the acquisition of a label and its meaning is through an identical process. Even though discrimination between and among environmental events is important for learning labels and the complex behavior labeled "labeling," the process of generalization also occurs. One negative experience, or hearing another individual describe a negative experience, with an individual may elicit a derogatory or stigma label which is then generalized to all similar individuals. If the experience is positive, the label may be one of status, and

this in turn is generalized to all similar individuals. The acquisition of labels and meanings requires fine discriminations, but their application to people, objects, and events may not be differential, and may, in fact, be quite general. That is, discrimination represents only one aspect of learning to use labels. Differential responses based upon specific discriminations are equally as important in learning the correct usage of labeling behavior.

It can be discerned that an extensive labeling behavior repertoire assists children in learning to read, solve arithmetic problems, and relate successfully to the school environment. Competent teachers convey effective discriminative and differential use of labels and their meaning to children, which in turn enables successful completion of school oriented tasks. It is not difficult to associate successful reading behavior with a positive approach reaction to the label "reading," nor is it difficult to visualize a child failing in school physically avoiding the school building or any verbal reference (label) to school. Labels such as "arithmetic" and "spelling" can elicit negative meanings and avoidance behaviors if a child fails in school, or such labels can also elicit positive meanings and approach behaviors if a child succeeds in school. The labeling process, whether it conveys positive or negative meanings, is redundant and self-sustaining unless efforts are made to decrease negative meaning experiences and to implement opportunities to increase experiences which have positive meaning.

Labeling Consequences

In the descriptions of label meaning and label learning processes several illustrations conveyed the positive and negative effects of using labels. Labeling is used extensively in planning and implementing instructional practices for school age children. School is the business of children. Children are the legal captives of one of society's institutions, labeled "schools," and if they are to be beneficiaries rather than the victims of school experiences, then it is necessary to ensure that educational labeling practices function in a positive rather than a negative manner.

Very complex behaviors are required of children when they enter school. They must possess the competence and confidence to leave home, establish new interpersonal relationships with individuals who represent a variety of roles (labels), and acquire knowledge that is thought to be related for successful societal functioning. Children are expected to change from various stages of dependent, unsocialized, self-centered behavior to points upon a behavior continuum which represent degrees of independent, socialized, and group centered behavior. Meeting these objectives requires investment and commitment from children and teachers. The business of children is school in which learning and growth must progressively occur. The business of teachers is to prepare the learning environment in such a way that when children interact with it, learning and growth occur.

The difficulty of making the business of children and teachers functionally possible is best illustrated by describing an encounter with an eight year old girl who is labeled as "normal" by the school and is not further labeled by anything more onerous than "robin," the name of a status reading instruction group. The child was asked to describe how she would conduct the classroom as a teacher. Comments such as "sit down and be quiet," "don't talk," "keep the walking line straight," "don't touch the equipment," etc., spewed forth at a high frequency. Not one comment was related to the joy of using newly acquired understandings or to the positive enabling role that teachers are expected to assume. The child was academically successful, but at what price? Unfortunately, advanced achievement was probably obtained at the price of behaving under the control of escape and avoidance behavior principles. One learns to read in order to avoid aversive environmental events, rather than because learning to read enables procurement of quantitatively and qualitatively more positive satisfactions from environmental transactions. Just as unfortunate is the suspicion that if aversive conditions are removed, progress in reading may terminate. That is, if a child's only motivation to progress is to avoid punishment, removal of the punishment threat creates a motivational void. In the absence of positive approach motivational variables reading behavior could diminish.

If this process occurs with a "robin," what happens to a child who is in the "sparrows," a stigma reading group? This child can't escape aversive events with demonstrated competence because of continuous failure. The child must endure, or perhaps with repeated failure plus some "acting out" behavior, the "sparrow" may lose the label of "normal," and obtain a new one such as "mentally retarded," "learning disabled," or "emotionally disturbed." These labels imply internal, personal defect, rather than inappropriate environmental arrangements and transactions. A new label may allow the child to escape from an inappropriate aversive situation, but there is no guarantee that a new learning environment arranged for children who are assigned a specific label will be pleasurable or rewarding. The risk is high, for the child must cope with a new label which may convey stigma and with only a chance that the new learning environment will be more positive. To the regular and special class teacher, the label, and subsequent administrative decisions related to placement in a different learning situation, may be accomplished with the best intentions, and with regard for the well being of the child. Nevertheless, such decisions are often made without a thorough analysis of environmental arrangements that could function to produce failure experiences and an attempt to change those conditions in order to produce success experiences. In essence, the conditions are assumed to be correct and, therefore, the problem must reside within the child. A new label is applied, and the child is assigned to a situation where conditions are arranged to remediate the internal defect. If remediation occurs, the child may be returned to the original learning environment in the hope that success will now be possible, even though the conditions

which produced original failure have not been substantially modified. The child is modified to fit the conditions, which in some instances is necessary. The crucial and debilitative aspect though is that learning conditions are rarely evaluted for possible modification.

It should be noted that the label, plus decisions made under the rubric of that label, occur without the consent of the child, and often without the parents' full understanding of the implications intrinsic to such decisions, especially the possibility of detriment rather than benefit accruing to the child. In a very real sense, a label functions to enable those who would "do good work" to do it without the consent of those so labeled (Szasz, 1970). It is accomplished under the guise of being in the "child's best interest," but the effect, whether it is positive or negative, will be obtained without the consent of the individual to be subjected to the supposed "good works." These practices are presently being challenged by parents and educators who clearly discern the explicit dangers involved in this usage of labels. Some of these challenges are expressed in pleas for reform of instructional practices, formation of child advocate procedures, and redress of legitimate grievances against schools through the legal system. Labels have positive and negative meaning, but it is specifically those educational practices prescribed by stigma labels that are being analyzed and changed in order to provide children a truly equal opportunity for humanizing learning experiences.

The March, 1972, issue of Exceptional Children contains the statement that the aim of special education is "to emphasize the education of the 'special child' - rather than his identification or classification." (p. 575). This aim was formulated in 1923, and even though 49 years have passed, special educators are just now beginning to realize that labels, particularly those that denote defect or negative personal attributes, may not be necessary to achieve this old, but relevant and very current, aim. Perhaps if this aim had been prominently displayed for all special educators to observe each day, the energies devoted to devising and using labels could have been added to those energies expended on the continuous quest for improved instructional practices. In any event, this historical lesson must be understood and heeded by special educators if past mistakes are to be avoided and discarded.

If past mistakes in regard to applying stigma labels are to be understood, it is necessary to describe the process through which a seemingly innocuous label can be subverted from its original positive intent into one that functions to the detriment of an individual who has the dubious distinction of being labeled. It is important to be cognizant that labels, or definitions, may serve as guidelines which are thought to be functionally related to subsequent behaviors. Given an exact label, it is reasonable to assume that this will prescribe certain procedures when interaction occurs with the object or person labeled. Unfortunately, labels are usually not that precise, nor have they directed exact or effective educational procedures.

Label Stigma

In the absence of tutoring instructional services for children, educators have attempted to devise instructional groups that would facilitate academic and social learning. These groups are specific categories, and are often labeled to distinguish them from other categories. Labeling and categorization skills are important for successful functioning in a very complex environment. These skills enable individuals to organize an approach that hopefully will lead to achievement of short or long range life oriented objectives. Without such skills, individuals "tend naturally to deteriorate and lose their distinctiveness, to move from the least to the most probable state, from a state of organization and differentiation in which distinctions and forms exist, to a state of chaos and sameness." (Wiener, 1954, p. 12). Educational groups are designed to prevent chaos, a very worthy design, but in application may obviate the probability for a child, as a unique entity, to achieve differentiation and distinction. Groups can function to condition sameness among their members and thereby cause an individual to lose distinctiveness.

A typical home is organized to obtain functional distinctions. Certain activities are identified with kitchen, living room, bedroom, bathroom, etc., in order to achieve organization and avoid chaos. In the world of work, specific jobs or roles (labels) are kept distinct from other activities. In schools, children are grouped by grade, age, ability, and then are often divided into sub-groups within a designated group. The crucial test of grouping practices is the awareness of whether the group has functioned to attain the purposes for which it was organized. Does it promote the attainment of humanistic learning objectives? For example, several children in a grade may need extra assistance in learning phonic skills. A group of these children is formed to receive daily instruction from a teacher in a small room down the hall from the classroom. If this process enables the group to become better readers, it has been facilitative of appropriate school oriented progress. However, is it necessary to obtain this process by labeling the group as "remedial," "compensatory," or "learning disabled"? The labels, as such, were at one time neutral, but may now mean that something is wrong with the children assigned to the group. Unfortunately, this meaning is quickly assimilated by the children, peers, and teachers, with the possible effect that the sub-group is categorized as stigmata and less than desirable. It should be possible to explain that "Johnny or Susie is going to spend some time on phonics with Mrs. Jones, just as some of the rest of you work extra on addition facts." Stigma meaning is not attached to that statement and will not be as long as teachers and children learn that being different in some way does not devalue individual worth or dignity. Most special educators would agree with the previous statements, but past behavior indicates that special education practices did not function in this fashion. Now that past errors can be recognized and corrected "special educators must become facilitative educators rather than categorical educators." (Kroth, 1972, in press).

The most frequent misuse of labels is caused by reification. Simply stated, reification is a process which individuals use to label a behavior pattern, or individual, and then use the label to explain the origin of the behavior pattern that is labeled. For example, there are classical behaviors associated with the label "autistic" (Kanner, 1943; Rimland, 1964). The label functions as a brief communication device to describe behavior. It circumvents the necessity for listing all of the observed behaviors. There should be agreement among those who use the label as to what behaviors are being described, since accurate communication is necessary in concerted planning of a program to assist a child labeled "autistic" to acquire more organized behavior patterns.

At this juncture in the reification process, a label has been used correctly as a general description of behavior. However, "autistic" is a label recognized by special educators as meaning that prognosis is guarded and that intervention programs have not been successful in changing the total behavior patterns associated with the label. These are realistic meanings as long as they are not extended to mean that a child so labeled is worthless and, therefore, not worthy of concern or realistic assistance. The question of why a child labeled "autistic" exhibits certain behaviors must arise in the planning of behavior change programs. If that question leads to formulation of procedures to change environmental conditions, rather than just change the child, then appropriate behavior change procedures can be instituted. All too often though the question is usually answered by saying "the child behaves that way because he is autistic." The label that was initially used to describe behavior has now been used to explain the origin of behavior. A label is merely a brief descriptive, organizational device, and should not be used as an explanation. If it is, the explanation is myth, fiction, and usually functions to the detriment of the labeled individual.

It may be asserted that using labels to explain behavior need not necessarily be detrimental. Reification leads to error, but it is human to err, and people who err are at least attempting to assist individuals lead a more productive life. Stigma need not be associated with error. However, many participants in a concerned society are committed to planning some form of assistance for children who are labeled "autistic." Special educators are among these participants. To err is not good or bad in isolation, but practices designed to assist individuals change behavior on the basis of error can be debilitative and result in stigmatizing those individuals. If a label is used to explain behavior, it follows that behavior deviance must be due to some internal defect that must be corrected. The label and the individual become fused. There is no distinction between the label and the individual, thus, the correction has to be focused upon the individual that is labeled. The correction may involve medical procedures and manipulation of several environmental variables. If the correction is successful the autistic child is made normal.

Unfortunately, using a label to explain behavior does not automatically identify the exact internal defect or precisely prescribe the correction to exorcise the defect. Heroic attempts

have been made to assist autistic children, but to date an effective correction has not been discovered. These attempts must be continued in the hope of eventually finding corrective solutions. It is not the attempts that convey stigma but the interpretation of the results obtained from the attempts. For instance, the absence of solution can confirm the original notion that the label accurately explains the behavior. If solutions are so difficult to identify, the internal defect rationale must be accurate. Therefore, the label "autistic," if assigned to other children, explicitly conveys the meaning that the internal defect is probably not correctable.

When confronted by repeated failures to discover solutions to complex problems presented by an autistic child, a special educator may make one of three decisions. The first decision involves the belief that error existed in formulating and implementing behavior change procedures plus the commitment to learn from the error by designing different procedures. Stigma, if it exists at all, is assigned to the intervention procedures and not the child. That is, the procedures did not fail because the child is autistic but because the procedures were erroneous. A second decision or choice is to give up in frustration. Again, the special educator may assert that the procedures were wrong, but the competence to devise more effective methods is not present; stigma is not associated with the child. The third decision is to not admit the existence of error, incompetence, or frustration because to make such an admission threatens personal self concept, esteem, image, and integrity. Therefore, the blame for failure must be assigned to the autistic child, and this functions to relieve the individual, who attempted to provide assistance, of guilt, frustration, and pain. Stigma is assigned to the child so that unwarranted status can be maintained in another.

It is the third decision which operates to sustain stigma labeling and scapegoating. This decision initiates the process of transferring burdens that threaten personal status or to others who do not have the opportunity or power to refuse to accept that transfer (Szasz, 1970). All too often this choice is made by special educators, as exemplified by statements such as "the child is brain injured and can't learn to count." Rather than admit that the procedures used to teach counting were ineffective, it is easier to assign blame and failure to the child. The ritual of stigma labeling and scapegoating is not unique to special educators. It is a practice that has existed, and still persists, for eons. "By sacrificing some of its members, the community seeks to 'purify' itself and thus maintain its integrity and survival." (Szasz, 1970, p. 260). Handicapped children, minority group citizens, poor people, and those who behave differently, or have a different life style, are the targets of stigma labeling.

Labeling and categorizing are essential to organizing efforts to promote successful functioning in school and society. This process and the variety of meanings that emanate from it need not result in labels of stigma. However, when the process does function in that manner it is vital that it be recognized, terminated, and changed to a process in which labels do guide efforts to assist fellow humans in a positive manner. It must also be discerned that

the perceived threats from the alienated, poor, and minority groups are projections, and denial of the threats to personal integrity that many members of this society fail to recognize, and for which moral responsibility is not assumed. Unless responsibility is assumed for personal actions, the perceived threats from the alienated, excluded members of society will become all too real. These historically stigmatized and scapegoated members now realize that it is not necessary to bear personal burdens, plus those assigned to them by others. They are insisting on basic rights to a livelihood, education, and participation in a society of which they are part, and from which they have been excluded. This insistence must be recognized as just, but more important, must be provided.

The problems intrinsic to stigma labeling are global in their ramifications and implications. Special educators and special education are a part of those problems and, therefore, must contribute to providing correct solutions. It is not difficult to recognize that one solution advanced to counteract the negative meaning associated with presently used labels such as "emotionally disturbed" and "special class" is to merely change the label. There may be some merit in this substitution strategy and indeed this behavior is already apparent in educational dialogue. Many special classes that formerly would have been labeled "emotionally disturbed" are now called "learning disabilities" even though children assigned to these educational administrative units have not changed exhibited behavior patterns. Learning disabilities is a label that has not yet acquired the social stigma associated with the label "emotionally disturbed," but in time, unless the label functions to foster child educational progress, it too will acquire stigma meaning. Different labels are also being applied to administrative instructional delivery systems. For example, the label "resource room" is being suggested as an alternative for the stigma associated with the label "special class." However, when it is discovered that one group of children can spend up to five hours a day in a resource room, it is difficult to discern the difference between that system and the special class model. For a time, a new label may function to remove stigma meaning, but unless the instructional priorities change within the context of the new label it will eventually be associated with stigma rather than status. Changing a label, without actually changing teacher-pupil interactions, is not only a misnomer, it is also basically debilitating to children who supposedly have been offered new hope for needed assistance. Euphemistic changes may be necessary and desirable, but they may also operate to subvert efforts to promote relevant changes in educational practices.

In order to conceptualize and illustrate the process of stigma labeling, the label "autistic" was presented. Other labels indicative of handicapping conditions could have been selected for illustration purposes since the actual label is relatively unimportant. The process of labeling is neutral; it is not inherently positive or negative. For example, very few special educators object to the use of such labels as "gifted," "creative," "divergent thinker," because these are labels of status. They are assigned to children in the same manner as labels of stigma such as

"emotionally disturbed" or "mentally retarded." Gifted children are usually quite responsive to instructional systems designed by educators, i.e., they achieve in school related tasks. With achievement, gifted children confer gratification upon the individual who labeled them since the label was confirmed as true by the subsequent achievement. If the label is confirmed, and if the achievement is valued, the label becomes associated with status. The fact that gifted children tend to achieve in spite of, rather than because of, instructional systems does not alter the labeling process sequence. In comparison, mentally retarded children may not respond as expected to instructional systems that have been devised. Since effort, energy, time, and personal investment are necessary to devise instructional systems, any failures to achieve as expected must be caused by defects intrinsic to children. The instructional system, by definition, has to have merit because it is devised by competent professionals. A dilemma has been manufactured. To recognize that instructional efforts are ineffective may be too painful and threatening to those who devised the efforts. If this alternative is selected, the recipients who failed become associated with a label of stigma, e.g., "mentally retarded."

As previously noted, educators rely upon the use of labels, status, and stigma to devise organization for instructional systems. The most ubiquitous techniques used for assigning labels to children in special education programs are tests which are designed to measure intellectual abilities (IQ). Historically, tests for intellectual abilities were constructed to assist educators in designing effective instructional systems. Application of tests and test results, as was true in labeling practices, was not always consistent with positive intent. In fact, test scores are now used to assign labels which confer status, but more often they confer stigma. An illustration of this process is as follows. A child is referred for intellectual ability testing because of failure to progress when exposed to a group oriented instructional system. If the child is a member of a minority group, does not know standard English, has not encountered test items supposedly representative of common learning environments, or is a member of a group not included in the test standardization procedures, an IQ of 70 may be recorded and filed. On the basis of this single score, an administrative decision for educational grouping labeled "mentally retarded" can be implemented. Reification is completed when it is asserted that this hypothetical child has a learning problem and an IQ of 70 because of an internal defect that is labeled "mental retardation." Even though school performance may improve and subsequent intellectual ability scores increase over time, the label "mentally retarded" may never be discarded.

Kagan (1971) asserts that extreme reliance upon intellectual measures functions as a rationale for assumption of power by the few over the many. It is similar to the conditions that existed in the middle ages when power to govern or make decisions which affected society was invested in those individuals who had the highest amount of religiosity (the middle ages IQ). At the present time, according to Kagan, the major power units in America, e.g.,

government, business, military, confer membership in these units to only the most intelligent. Those who wield power must have a higher amount of intelligence since that is thought to be a prerequisite for exercising control by the few over the many. Kagan does not deny that society must devise some realistic rationale for the limited distribution of some attribute that guarantees benevolent influence of the few by the many. He does challenge, however, the injustice intrinsic in using a highly biased cultural measure such as IQ as a realistic rationale. As examples of this bias, Kagan cites the problems in making inferences about IQ level from word meaning, problem solving items, analogies, arithmetic skills, and missing elements. If the child being tested has never been taught arithmetic skills, problem solution is not possible. While word meaning, problem solving, analogous thinking, etc., are important skills, the items that test these skills should have the probability of being familiar to, or exist in the environment of, the individual being assessed. To disprove the assertion that ethnic or economically poor children are biologically inferior, Kagan cites evidence from tests of memory span to indicate that performance variability is due to individual, and not class or ethnic, differences.

Using a test of intellectual ability need not be detrimental to organizing equal educational opportunities. Test scores are behavior samples that are obtained at a specific time, place, and in the context of complex human-environmental interactions. The directions for administering a test, and the score subsequently obtained, are essentially neutral phenomenon. It is only when scores, which may be correct or incorrect, are used to make decisions regarding children that negative or positive results can occur. There are many sources of testing errors besides biases in the test. An unskilled examiner, particularly one who is not familiar with the effects of language or ethnic difference, may not realize that the presence of a stranger, one with a different language style or color, can negate motivation to perform as well as possible. The effects of motivational variables on decreasing or increasing test scores have been documented (Zigler and Butterfield, 1968). An examiner may also note than an Indian child who is being tested may keep his head lowered and not establish eye contact. This behavior could be interpreted as evidence of emotional problems unless the examiner was aware that, in some Indian cultures, lowering of the head is an indication of respect for an adult.

Test usage should not be discarded, but it must be revised and improved. Data from tests can be constructive in devising educational programs for children. Tests can also be used to evaluate the effectiveness of educational programs in attaining realistic academic and social performance objectives. The necessity for revising and utilizing test scores in a more appropriate manner is not confined to those that only measure intelligence. Any type of test, be it educational, social, vocational, etc., must be administered and interpreted with competence if children are to benefit rather than become stigmatized from testing procedures. Substantial data to support this assertion has been documented and

disseminated (Gallagher, 1972; Garrison and Hammill, 1971; Hammons, 1972; Jones, 1972; MacMillan, 1971; Ross, DeYoung and Cohen, 1971; Whelan and Jackson, 1971).

There are many consequences of using labels; some promote benefit and others foster detriment. The focus of this section has been on the stigma that may become attached to labels, and more importantly, to those individuals who are labeled. Most special educators are oriented to providing the best humanistic educational opportunities for handicapped children. This orientation is laudable, but as was portrayed, can become distorted from original intent. Positive intent is not enough; it must be matched by observable practices. If special educators do not recognize the dangers in stigma labeling and poorly conceived or implemented educational practices, other public units in society will focus attention upon these dangers and prescribe legal remediation (Hobson v. Hansen, 1967). The legal system has been, and will continue to be, used to alleviate injustices practiced, often without awareness, by educators. At the present time, educators still have the opportunity to modify educational practices, but unless meaningful, responsible action is initiated in the near future, the freedom of educators to control action may be obviated by the legal system. Recent reviews of the legal implications of educational practices (Ross, DeYoung and Cohen, 1971; Whelan and Jackson, 1971) indicate that there is still time for educators to devise appropriate educational systems. Three important aspects have emerged from litigation. These are as follows:

1. Positive intent and motivation to provide quality educational services for children are not enough. Discrepancies between intent and actual motivational practices will be disallowed if those discrepancies deprive some children of basic constitutional rights, among them the equal opportunity to participate in educational activities that enable development of optimal learning capabilities.

2. If tests of intellectual ability or achievement are used for educational assessment purposes, the scores must not be biased by incompetent test administration nor reflect differences between ethnic groups based upon artifacts of test construction. Test usage has not been declared illegal, except in those instances where test scores are used for detriment rather than for the benefit of children.

3. Educational grouping for specific instructional purposes is legal. However, these groups must not operate to deny equal educational opportunity, assign organizational stigma to those in a specific group, deny basic constitutional rights to children or parents, or segregate children on the basis of ethnic or economic uniqueness.

The message in recent court decisions is very clear. It is now the responsibility of educators and special educators to respond to the message by matching humanistic intent with humanistic educational practices.

Labeling Alternatives

The third question listed in the introduction to this document concerns the issue of alternatives to labeling. As indicated, labeling can serve positive ends if the ordering of means to attain those ends does not result in stigma or detriment, rather than benefit, for children. One proposed alternative is the special education contract (Gallagher, 1972). This alternative does have merit since it provides for accountability, and it can be recognized as an extension of a rather common practice in special education labeled "contingency contracting" (Homme, 1969). Systems, contracts, and instructional practices are implemented by individuals who may, because they lack adequate understanding, use such devices to perpetuate and compound procedures which have in the past been debilitating to handicapped children. In order to return to the intent of the 1923 aim to emphasize education rather than labeling, the present philosophy of special education must be examined, reorganized, and revised. The statements which follow represent an initial attempt to approach the 1923 aim in terms of philosophy and practices. If the statements have merit, they should stimulate thinking, suggestions for change, and perhaps utilization of some of the basic concepts. If the statements function in this fashion, their formulation will have been justified.

Facilitative Education Programs[1]

Facilitative Education Programs are designed to assist school personnel in organizing educational programs that can be implemented to systematically provide instructional services based upon individual pupil needs or unique learning requirements. These programs are designed to provide functional assistance and services for pupils who have not progressed as anticipated in the areas of academic and social behavior development within the learning environment to which they have been assigned. Such programs provide facilitative learning environments for pupils whose academic and social behavior progress has been limited by the nature of past and present learning environments in which they have been expected to function.

The provision and implementation of Facilitative Education Programs for a pupil, or groups of pupils, is based upon the rationale that a pupil's educational development or progress has not been facilitated by past or present assignment to a specific and identifiable learning environment. This rationale and recognition of such conditions does not assign total responsibility for failure to achieve progress to either the pupil, teacher, or the administrative organization for the implementation of instructional services. It does stipulate, however, that educational progress

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[1]Contributions to the conceptualization of Facilitative Education Programs were made by Dr. Patricia Gallagher and Dr. Roger Kroth, Department of Special Education, University of Kansas, and Mr. Gerald Carder, Division of Special Education, Kansas State Department of Education.

has not occurred in the learning environment or conditions within which a pupil is expected to function. That is, the pupil-teacher-learning environment interaction has not operated in a manner that promotes expected and identifiable educational progress for the pupil. It further stipulates the requirement for a systematic delineation of those interaction patterns that have failed to provide for pupil educational progress, and the formulation of a specific educational service program that can be expected to facilitate the acquisition of academic and social behaviors necessary for expected and desired educational progress.

Pupils who may require services from a Facilitative Education Program can be described as those who exhibit behavior (academic and social) excesses and deficits in the learning environment to which they are assigned. Behavior excesses represent a class or list of observable behaviors that interfere with pupil educational progress in that the excessive display of such behaviors is incompatible with the acquisition of those skills and knowledge necessary for progress in academic and social learning environments. An example of a behavior excess is the pupil who frequently initiates a physical struggle with another pupil in the classroom. Another example of a behavior excess is the pupil who commits frequent errors on an arithmetic assignment. Behavior deficits also interfere with pupil educational progress. They represent a class or list of observable behaviors such as infrequent interaction with peers or withdrawal from interpersonal contacts and a deficit between expected and actual performance in reading comprehension.

Whenever a pupil exhibits behavior excesses and deficits to a marked extent and over a long period of time in a specific learning environment, it is important to initiate sufficient changes in the learning environment that will operate to reduce deleterious behavior excesses and promote the acquisition of those behaviors (academic and social) which will decrease the extent of behavior deficits. The chronic occurrence of behavior excesses and deficits, as exhibited by a pupil, can be expected to interfere with the educational progress of other pupils placed in the same learning environment, will require an unrealistic expenditure of teacher time devoted to an individual pupil in a group learning environment, and will have a debilitative effect upon the educational progress of the pupil if assignment to the same learning environment is continued.

Behavior excesses and deficits may be directly related to inappropriate assignment to a classroom instructional group or learning environment. That is, a pupil may exhibit excess or deficit behavior in reaction to behavior or performance expectations that are not consistent with the pupil's level of educational development or past opportunities to learn requisite skills. A pupil should not be expected to perform a criterion task unless skills needed to complete that task have been previously taught and mastered. When behavior excesses and deficits occur, the learning environment should be analyzed for purposes of identifying aspects for change. A specific change in a present learning environment may be sufficient to promote continued pupil educational progress,

or analysis may indicate that assigning the pupil to an entirely different learning environment is the most appropriate decision.

Pupils who need the services of a Facilitative Education Program usually exhibit simultaneous or concurrent academic and social behavior excesses and deficits. Assultative and overt attacking verbal or physical behavior may represent a pupil's attempt to avoid an academic task assignment that is too difficult to complete, or one that the pupil believes would require too much time and effort. In other instances it may be established that a pupil has the requisite skills to complete an academic task adequately, but because the task requires sustained effort, the pupil may behave in a manner designed to avoid interaction and completion of the task. That is, such a pupil may only need facilitative assistance in developing behavior self-regulation, and once this is acquired can proceed to achieve academic progress without major revision in tasks or materials presentations. The major purpose of Facilitative Education Programs is to organize and design learning environments that will promote pupil educational behavior (academic and social) progress. Intrinsic to this purpose is the objective of promoting many experiences and instances of pupil success with task (academic) completion and interpersonal (social) relationships.

A school system committed to the philosophy of providing educational services for all pupils will recognize the need to establish Facilitative Education Programs. These programs can function to provide educational services that will promote successful learning experiences for pupils by arranging learning environments that serve the unique needs or behavior characteristics of the individual pupil and small groups of pupils. Establishing such programs requires concerted efforts from administrators at all governmental levels, teachers, teacher preparation personnel, and community agencies. The educational benefits will be visible in that many pupils will be enabled to progress as a result of participation in Facilitative Education Programs.

Public School Facilitative Education Programs

The types of programs described ensure maximum administrative and instructional efficiency for changing learning environments to assist pupils in attaining educational progress. Changing learning environments should function to reduce or eliminate those behavior excesses and deficits that interfere with pupil educational progress. Such changes should produce congruity between pupils' expectation of, and what is actually provided by, the environment by designing facilitative education programs that ensure mutually beneficial and productive transaction between pupils and the environment in which they function. Program types are designed to provide an administrative organization that facilitates the development of a continuum of instructional services and learning environments for a continuum of identifiable pupil educational progress needs that require implementation of such services. Learning environments are arranged to serve and meet variability of pupil educational progress needs.

A pupil may require any one or all of the program types at various times. These program types are planned learning environments that will operate to promote the educational progress of those pupils who are exhibiting behavior excesses and deficits when they are expected to function in presently assigned learning environments. For example, if the instructional services offered in a regular class learning environment do not promote the educational progress of a pupil (or groups of pupils), modification of that learning environment may be instituted, or if needed, a different type of learning environment can be arranged for the pupil (or groups of pupils).

Figure 1 is a schematic or graphic representation of Facilitative Education Programs. Public schools which are committed to promoting the educational progress of all pupils should plan and organize for the operation of one or all of the described program types.

Consultant and Resource Classroom Services

This type of program is organized to deliver instructional services to those pupils who require some changes in regular class programs and/or assignment to another type of program for a maximum of two hours per day. A consultant teacher may be assigned to one or several responsibilities. For example, this teacher may be assigned to one elementary school building for the purpose of assisting regular class teachers. This assistance may take the form of materials and task development for a pupil who requires extra assistance in order to maintain educational progress in a regular class setting. The consultant teacher may also advise regular classroom teachers on curricular and classroom behavior management procedures. Other consultant teachers may function on an itinerant basis for pupils temporarily placed in hospital and home situations. For those pupils who exhibit severe or gross behavior excesses and deficits, it may be necessary to retain them in home or hospital settings until provisions for assignment to a type of facilitative education program can be completed. In these instances, a consultant teacher can provide pupil instructional services and guidance to the parents and hospital staff members during the interim planning period.

School districts should also plan and organize resource classroom instructional services. A resource room should be equipped with a variety of instructional media and materials. A consultant teacher in cooperation with curriculum consultants can ensure that the resource classroom is equipped appropriately. This type of facilitative education program should be flexible in the range of instructional services provided to pupils with behavior excesses and deficits. One pupil, or a small group of pupils, may leave the regular classroom for specified periods of time each day in order to receive instructional services from a consultant teacher who functions in the resource classroom. At other instances, the consultant teacher may assist the regular classroom teacher by interacting with a pupil who has momentarily become deficient in application of self-control. At such times the consultant teacher

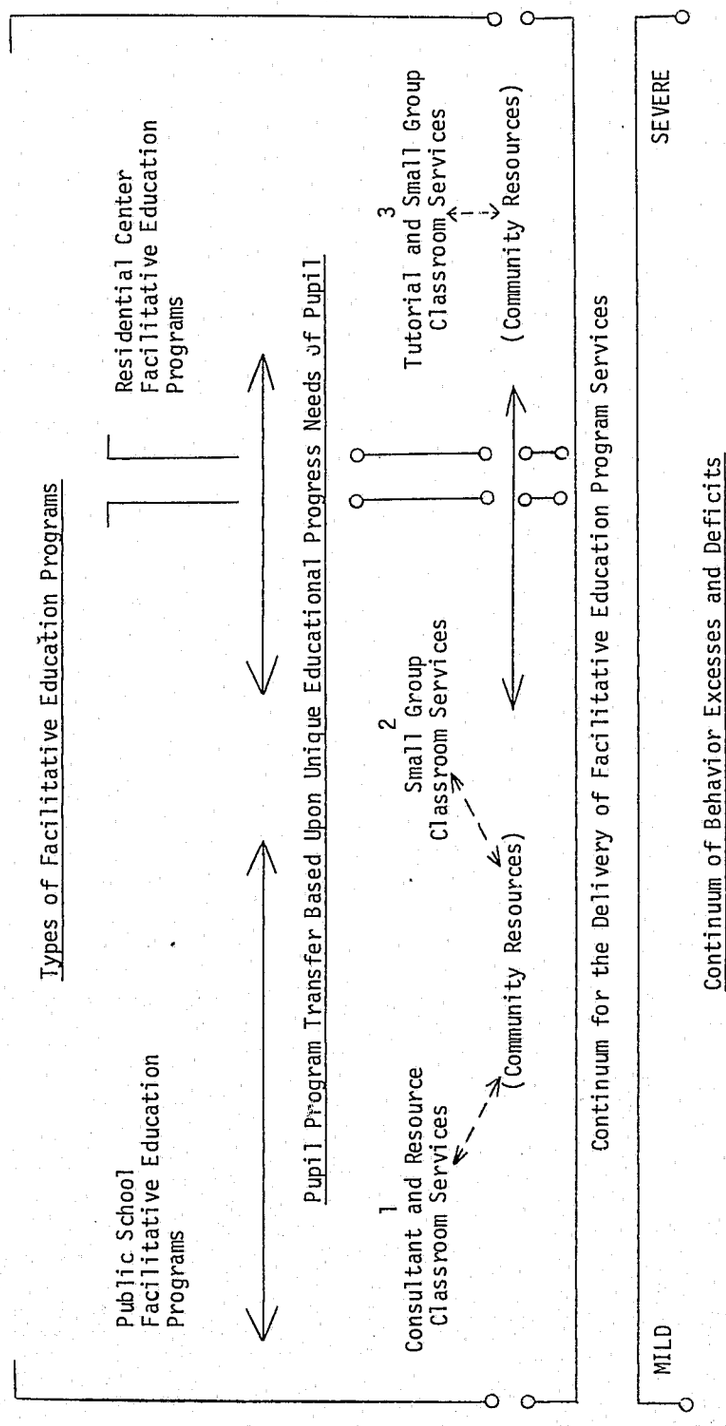

Figure 1. Schemata of Facilitative Education Program Services based upon the educational progress needs of pupils.

could provide one to one teacher-pupil interaction until such time as the pupil regains enough self-control to return to the regular classroom environment.

For this type of Facilitative Education Program it is important that the regular classroom teacher retain involvement and responsibility for pupils. That is, the consultant teacher and resource classroom provide services to the regular classroom but do not function to replace it.

Small Group Classroom Services

There are some pupils who exhibit behavior excesses and deficits to an extent that neither regular classroom nor consultant teacher services can operate to provide facilitative learning environments. These pupils should be assigned to self-contained small group classroom services.

In general, pupils should not be assigned to small group classroom services until alternative service programs have been implemented. Based upon the results obtained from these services, a decision can be reached regarding pupil assignment. Consultant teacher and resource room services should be initiated as a first attempt to provide a Facilitative Education Program. If pupil behavior progress is not noted within a reasonable amount of time, assignment to a small group classroom should be implemented.

The teacher of this pupil group should use the services offered by the resource room and should also maintain continuous liaison communication with the regular classroom teacher. It can be anticipated that pupils assigned to these groups will remain there for several months or even a school year. However, the goal for each pupil so assigned is to facilitate return to the regular classroom whenever skills and behaviors necessary for successful educational progress within that environment have been acquired.

A major purpose or function of small group classroom services is to provide a pupil with systematic, organized, individualized instruction experiences. This learning environment provides the pupil with opportunities to experience successful functioning in structured academic and social situations. As a pupil acquires competencies in meeting expectations associated with a responsive learning environment based upon individual pupil educational progress needs, provisions for small group learning experiences and projects may be implemented within the classroom. While academic or task completion achievement is stressed, this occurs concurrently with an emphasis on pupil acquisition of interpersonal relationship competencies with peers and adults. That is, academic and social relationship skills that are necessary for successful functioning in regular classrooms are learned, acquired, and applied in the small group classroom services.

Whenever possible, pupils assigned to the small group classroom should participate with regular classroom pupils in instructional activities. The criteria used to determine such participation should be based upon a pupil's progress of ability to function successfully in an activity. When a pupil has progressed sufficiently for consideration of return to a regular classroom,

either the small group teacher or a consultant teacher should initiate such arrangements with the regular classroom teacher. Continuous monitoring of the return process is necessary to ensure successful culmination.

Residential Center Facilitative Education Programs

There are some pupils in public school programs who exhibit severe behavior excesses and deficits and who do not achieve behavioral and educational progress even when assigned to public school Facilitative Education Programs. In some instances the parents of such pupils cannot or will not cooperate with school personnel in implementing appropriate programs. If these conditions exist, a pupil may be placed in a residential center treatment program. Within the total context of treatment, many centers provide an educational program. The goal of such total and intensive programs is the same as that described for public school Facilitative Education Programs.

Educational services provided in residential centers essentially replicate those existing in public schools. Resource rooms, tutorial instruction services, and small group classrooms are usually available. It is important that residential center and public school education personnel plan for the implementation of extensive cooperative liaison services. Consultant teachers from both programs should function to facilitate the return of a residential center pupil to regular education programs. The pupil may continue to reside at the center for a variety of reasons but may be able to function successfully in a public school operated Facilitative Education Program. In addition, if a public school district that is proximal to a residential center can provide small group classroom services for pupils that reside in the district, such arrangements should be organized. Figure 1 provides a graphic display of this type of interagency cooperation.

Facilitative Education Program
Entry and Departure Procedures

As stated previously, the purpose of Facilitative Education Programs is to provide learning environments and services that are responsive to pupil educational progress needs. Before a pupil is assigned to one of these program types, systematic assessment of presenting problems and recommendations for specific educational services should be instituted. In general, every effort should be made to retain a pupil in the regular classroom environment by changing that situation in a manner that facilitates pupil academic and social behavior progress. For example, a consultant teacher may be assigned to a regular classroom to assist the pupil and the teacher in developing procedures that will function to maximize retainment. Admission to other types of program services should be determined on the basis of continuous evaluation of the effectiveness of prior services in decreasing pupil excess and deficit behaviors. The importance of clearly defined entry procedures should be emphasized in organizing and implementing educational or instructional services.

Of equal importance is the delineation of a specified plan for departure procedures from a type of Facilitative Education Program. Each program type is designed to ensure maximum responsiveness of the learning environment to the unique academic and social behavior progress needs of each pupil.

Continuous evaluation and analysis of pupil functioning within a specified learning environment should be the basis upon which program entry and departure decisions are determined. For example, if it is determined that a pupil assigned to a small group classroom service has progressed to a level where additional progress can best be facilitated by the regular classroom learning environment, then placement in that setting should be arranged. Subsequent and frequent evaluation of pupil functioning in that setting would provide information to substantiate the presence or absence of anticipated educational progress. If progress has not occurred, then utilization of consultant teacher services should be considered. In order for the program types to be facilitative to pupil requirements for instructional services, maximum flexibility in utilization of service delivery systems must be implemented.

In order to provide the most effective organizational structure for administering Facilitative Education Programs, a committee to function as child advocates and expedite effective entry and departure procedures should be named and duly authorized to function. Membership on the committee is as follows:

1. Director of Facilitative Education Programs or designated staff member.
2. School psychologist or qualified replacement such as a consultant teacher, or other staff qualified in assessment, facilitative instructional procedures, and evaluation as these competencies pertain to providing appropriate instructional services.
3. Teacher of Facilitative Education Program to which pupil may be assigned.
4. Teacher of program types to which pupil is presently assigned.
5. Staff from other service programs in the school, parent organizations, and from a variety of community and state agencies that can provide contributions to decisions regarding pupil entry and departure in the total operation of Facilitative Education Programs.

Reflections

This document has attempted to provide some understanding of labeling practices and the consequences of such practices. To elaborate upon these practices would be redundant. However, the information contained in the description of Facilitative Education Programs deserves comment. There is no guarantee that children who are assigned the label "facilitative" will not become stigmatized in the same manner as they have by current labels. Perhaps it is only necessary to assert that all educational endeavors should be facilitative of pupil progress, but if labels do provide

organization instead of chaos, it is doubtful if they can be discarded. Labels must be used to provide beneficial educational experiences and not as devices to excuse failures of individuals or instructional practices. Verbal intent to implement quality programs must be matched by responsible and accountable educationally oriented behavior. The crucial aspect, since it involves the most important element in the educational process, children, is in what manner need for services is established and how these services are provided in actual day to day learning transactions.

As is true with contracts, or systems, a philosophy of special education is functional only if it promotes instructional services that reflect its intent. A philosophy can be distorted to meet personal or selfish ends, just as a behavior change technique (contingency contracting) can be used for detriment or benefit. A philosophy, however, does provide a foundation for planning, implementing, and evaluating what educational systems do for, to, and with children. If the foundation is relevant and functional, it should be reasonable to expect that educational practices which emanate from it will promote children's educational progress. Labels, be they philosophical labels, technique labels, etc., can assist educators in this endeavor. However, labels must be the servant of educational activities and not the master which dictates practices to which children are exposed. For educators to commit themselves to less than quality education, and to defend that which is unequal education, is tantamount to irresponsibility, and even more important, results in the neglect of those children who are in need of, and deserve, the most effective educational program available. In answer to the question, "What's in a label?" there is indeed "a hell of a lot." The continual quest must be to make what's in a label function for the educational benefit of children.

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PLURALISTIC ASSESSMENT: A BASIS FOR EDUCATIONAL DECISION MAKING*

Jane R. Mercer**

Eight years ago we became interested in developing a measure of adaptive behavior which would provide standardized data for a representative population of persons living in the community. We were designing an epidemiology to study the distribution of mental retardation in the population of a medium-sized American city (population approximately 100,000) both from a traditional clinical perspective and from a sociological perspective.

We planned to locate persons with the "symptoms" of mental retardation, to count them, to describe them, and to calculate prevalence rates for various subpopulations. We used two approaches to case finding: a field study in which we contacted a representative sample of 6,907 persons under 50 years of age, and an agency survey of 241 community organizations providing services to retarded persons and their families.

For the field survey, we selected a representative sample of 3,000 housing units located within the city's limits, approximately 10 percent of the population. We screened all persons in each housing unit under the age of 50 for possible mental retardation, approximately 7,000 persons. In order to determine the "symptoms" of mental retardation, we used the definition of the American Association on Mental Deficiency in which a mental retardate is defined as an individual who is subnormal in intellectual performance and adaptive behavior when compared to his age peers. These deficiencies may be related to biological abnormalities, but evidence of organic involvement is not mandatory to an evaluation as a mental retardate. Intellectual subnormality was operationalized by using the Stanford-Binet LM for older children and adults and the Kuhlman-Binet for young children.

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Because there were no standardized measures of adaptive behavior which were applicable to the general population of the community, we developed a series of 28, age-graded, scales for this purpose. The scales for young children contained many items modified from the work of Gesell and Doll. The scales for school-age children and adults consisted of a series of questions concerning social role performance. From these two measures, we generated a four-fold typology for screening the population in the field epidemiology.

The typology defines mental retardates as those who fail both the IQ test and the Adaptive Behavior Scales. This two-dimensional definition of mental retardation generates a type of individual not identified in one-dimensional taxonomies, those who fail the intellectual dimension but pass adaptive behavior. Under a two-dimensional definition, such persons are not mentally retarded although they would be labeled as mental retardates under a one-dimensional typology. We have called them the quasi-retardates.

A third group in the typology consists of those who pass the intelligence test but fail adaptive behavior. We hypothesized that this group would consist of behaviorally maladjusted persons. However, this category is not of central importance in the epidemiology and will not be discussed further. The fourth group are those who pass both dimensions, the "normals."

There were two phases to the field survey. In the initial interview, phase one, all members of each housing unit were screened using the Adaptive Behavior Scales. Usually one respondent answered for all members of each household. In most cases, the respondent was the spouse of the head-of-household who answered questions for those individuals in the housing unit to whom she was related. Unrelated individuals were individually interviewed.

In phase two, a subsample of the phase one sample was selected for intelligence testing. This subsample was designed to select a disproportionately large number of those persons in the population who have a high risk of having the clinical symptoms of mental retardation.

Conclusion 1: When we compared the characteristics of the mentally retarded with the quasi-retarded, we found that the clinically retarded came from significantly lower socioeconomic levels; had parents with significantly less education; were more likely to come from families in which the head-of-household was divorced, separated, or widowed; and were more likely to live in deteriorated housing. On the other hand, the quasi-retarded were more likely to come from homes in which English was spoken all the time and in which the head-of-household was born in the South. We found that the quasi-retarded were more likely to be Mexican-American or Black than the clinically retarded and that they were significantly more likely to be performing their educational, occupational, and family roles in a manner indistinguishable from the rest of the population. We concluded that a two-dimensional definition of mental retardation is a viable concept worthy of conceptualization because it does differentiate a group of persons who show adequate social competence even though they score low on an intelligence test.

Conclusion 2: A second question addressed by the study asked whether it makes any difference which criterion level is used as the cutoff for subnormal--the traditional criterion of the lowest 3 percent; the educational criterion of the lowest 9 percent; or the AAMD criterion of the lowest 16 percent? We found that the criterion level used is relatively unimportant for middle and upper status Anglos. Their rates of clinical retardation were not materially increased by raising the cutoff level. However, rates for low status Anglos, Mexican-Americans and Blacks were greatly inflated when the higher criteria were used.

We also found that rates of clinical retardation based on the traditional criterion more closely approximated rates from other major epidemiologic studies of mental retardation than did rates based on the educational or AAMD criteria. The traditional criterion is also the criterion which most closely approximated the actual rate of labeling in the community of Riverside as revealed in the case register of persons nominated by the 241 agencies. Therefore, we concluded that there is a significantly higher level of diagnostic consensus among clinicians and researchers in the field of mental retardation when the traditional criterion is used than when either of the other cutoff levels are employed.

We looked at the actual social-role performance of adults screened in the field survey as "borderline retardates" and compared their performance to that of persons identified as clinical retardates at the traditional criterion level. We found that most of those adults who failed only the educational or AAMD criteria were filling the usual complement of marital, occupational, and community roles played by adults. Unlike those identified as clinically retarded under the traditional criterion, there was little in the role performance of the adult "borderline retardate" that would warrant calling him either subnormal or mentally deficient. Therefore, we concluded that the traditional criterion approximates the actual labeling practices of the community and produces more convergence between clinical and social system definitions of deviance. At this criterion level persons are least likely to be labeled as retarded who, as adults, will be able to fill a normal complement of social roles.

Conclusion 3: Another question addressed by the epidemiology was that of the relationship between sociocultural factors and rates for clinical retardation. Both in the field survey and in the social system survey of community agencies, persons from ethnic minorities and lower socioeconomic levels were over-represented among those identified as mentally retarded. Using a two-dimensional definition of retardation and adhering to the traditional 3 percent cutoff level reduced these disproportions but did not completely eliminate them.

Using data for Mexican-Americans and Blacks in the field survey, we did a stepwise multiple regression in which an intelligence test score was used as the dependent variable and 18 sociocultural characteristics of the family were used as independent variables. It was possible to predict 37 percent of the variance in Mexican-American scores from these sociocultural factors and 27 percent of the variance in Black scores. When a

similar analysis was done for elementary school children in the Riverside Unified School District, 15 percent of the variance in Full Scale WISC IQs of 598 Mexican-American elementary school children could be accounted for by sociocultural characteristics of their families. Nineteen percent of the variance in the Full Scale WISC IQs of 339 Black children could be accounted for by sociocultural background characteristics.

Mexican-American elementary school children who scored higher on the WISC come from less crowded homes and have mothers who expect them to have some education beyond high school. They have fathers who were reared in an urban environment (over 10,000 population) and had a ninth grade education or more. They lived in a family which spoke English all or most of the time and was buying its home.

The primary variables for Black children were similar to those found for Mexican-American children. Instead of overcrowding, the size of family emerged as the most important single variable for Blacks. Educational expectations for the child appeared as the second most significant variable after the common variance with size of family was taken into account. Marital status of the head, socioeconomic index score for the occupation of the head-of-household, and whether the family is buying or renting its home appeared in that order. Thus, the more a Black child's family resembled the modal sociocultural configuration of the community, the higher the child's score on the WISC.

The five most predictive background characteristics in the multiple regression were used to form an index. Each child was given one point for each of his family background characteristics which were like the majority Anglo society on the five primary sociocultural variables predicting Full Scale IQ for his group. Each Black and Mexican-American elementary school child was assigned one of five groups according to the extent to which his family background conformed to the modal configuration for the total community of Riverside. The mean Full Scale IQ for that group of Mexican-American children whose families were most like the dominant cultural configuration was 104.4. The mean Full Scale IQ for the Black children whose homes most resembled the modal cultural configuration of the community was 99.5. Differences between both means and the national norms for the test can be accounted for by chance.

On the other hand, those children in the group least like the sociocultural mode for the community had a mean score almost one standard deviation below the norms for the test. The 127 Mexican-American children with 0 or 1 characteristics of the sociocultural modal group had a mean Full Scale IQ of 84.5. The 47 Black children in that category had a mean Full Scale IQ of 82.7. The average child in the 0-1 group would run the risk of being labeled as a borderline retardate.

Two major conclusions from this portion of the study, the clinical epidemiology, are basic to our continuing research. First, we concluded that a one-dimensional diagnosis for retardation in which only an intelligence test score is systematically used as the basis for evaluation is not equitable for persons

from non-Anglo backgrounds. There is a real need for a standardized measure of adaptive behavior. Second, we concluded that pluralistic assessment procedures, which take the sociocultural characteristics of the individual's background into account when evaluating the meaning of a particular intelligence test score or adaptive behavior score, would produce greater convergence between clinical diagnosis and social system definitions. Such procedures would eliminate the ethnic disproportions which result from present clinical procedures.

Our present study, which we are calling the Pluralistic Assessment Project, has been funded for three years by the National Institute of Mental Health. The first year of the study, Phase I, has been spent in elaborating, pretesting, and refining measures of adaptive behavior, health and impairment, and sociocultural modality.

The conceptual framework from the Riverside epidemiology of mental retardation will provide the foundation for the expanded framework to be used in the present study. Our current project is studying the full range of exceptionalities identified and labeled in public school children. Because the Riverside study was concerned primarily with subnormal behavior, our earlier conceptual framework focused on the negative tail of the statistical distribution and lumped all persons scoring higher than one standard deviation below the mean as an undifferentiated group of "normals," approximately 82 percent of the population of the community. For the Pluralistic Assessment Project, the framework will be expanded to differentiate at both extremes of the normal distribution for intellectual performance and adaptive behavior.

"Subnormal" is defined as scoring in the lowest 3 percent and "supranormal" is defined as scoring in the highest 3 percent. "Normal" refers to scores ranging from the fourth through the ninety-seventh percentile.

Seven major categories of persons will be identified. Three of these major types are identical to types identified and studied in the Riverside epidemiology--the comprehensively retarded, the quasi-retarded, and the behaviorally maladjusted. Four new types have been added to differentiate along the entire statistical distribution. The "normals" are those who score in the normal range on both an intelligence test and on adaptive behavior. The "social role gifted" are those who score among the highest 3 percent in adaptive behavior and in the normal range of intelligence test scores. The "intellectually gifted" are those who score in the highest 3 percent on an intelligence test but in the normal range in adaptive behavior. The "comprehensively gifted" are those who score in the supranormal range for both measures.

Intellectual Performance will be operationalized by using the Wechsler Intelligence Scale for Children (1973 edition) because it is the most widely used, individually administered, intelligence test and presents a more differentiated report of the child's performance than other standardized measures.[1]

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[1]We wish to thank Dr. J. H. Ricks, A. G. Wesman, and J. E. Doppelt of the Psychological Corporation for agreeing to make the new edition of the WISC, which is now being standardized, available for the study.

Sociocultural Modality will be operationalized using a series of questions concerning the characteristics of the child's family background. These questions will include those found to be most highly correlated with intelligence test scores and adaptive behavior in the Riverside epidemiology plus others suggested by related research. Each child will be classified into one of five sociocultural groupings within his own ethnic group according to the extent to which his family background approximates that of the modal configuration of the community on the five characteristics most highly correlated with clinical measures for his group. These indexes, one for each ethnic group, will comprise the three sociocultural modality measures for the study. If a single index can be developed which applies equally to all three groups, only one series of norms will be developed.

Adaptive Behavior will be operationalized by means of an Adaptive Behavior Inventory for Children (ABIC) which will use the adaptive behavior scales of the Riverside epidemiology as the basis for a more extensive and refined scale directed at children five through eleven years of age.

The working construct of adaptive behavior developed for the earlier field survey corresponded closely to that of the AAMD but incorporated the sociological concept of the social role as a unifying focus (Mercer, in press).

When clinicians speak of social adjustment, social maturity, or social competence, they refer to an individual's ability to perform successfully in the social roles considered appropriate for his age and sex. Therefore, adaptive behavior is conceptualized as an individual's ability to play ever more complex social roles in a progressively widening circle of social systems. As a person matures, the behavioral standards of society become more demanding and the number and complexity of social roles which he is expected to play increases. His ability to cope with these increasing expectations for social role performance constitutes his adaptive behavior.

The individual's success in learning the roles expected of him in the family, neighborhood, peer group, school, and community is the basis upon which judgments of his social adequacy are made by persons playing reciprocal roles in those systems. It is this sort of judgment which is implied in legal codes describing a feebleminded person as one who is "incapable of managing himself and his affairs," as one who cannot make "proper adjustments to life for one of his chronological age," or as one who is not able to assume "those responsibilities expected of the socially adequate person." It is this kind of judgment, made informally and unsystematically, which was systematized in our clinical epidemiology.

The construct of adaptive behavior for the Adaptive Behavior Inventory for Children (ABIC) is conceptualized both as the development of skills in interpersonal relations and as an expanding, age-graded dimension in which the individual gradually increases the number of social systems in which he participates and the number and complexity of the roles he plays in those systems. Thus, it incorporates the sociological concept of the social role, described earlier, as a central construct. A child's

ability to interact amicably with others and to cope with increasing societal demands by playing social roles in his family, neighborhood, school, and community comparable to others in his age and sex constitutes his adaptive behavior.

Five primary spheres have been delineated for the purpose of developing the Adaptive Behavior Inventory for Children. At the hub of adaptive behavior is the individual's skill in interpersonal relations as a member of various role sets--the interpersonal sphere. We have identified eight sets of significant others who are present in the role sets of most children: A mother or mother substitute; a father or father substitute; adult neighbors; teachers; sisters or sister figures; brothers or brother figures; peers in the neighborhood; and peers at school. Skill in interpersonal relationships with these significant others can be rated irrespective of the age of the child.

The four primary social systems in which the child operates are the family, the neighborhood, the school, and the community. In these social systems, the number of roles and the level of expectation for performance increase with age. Increasing societal expectations are conceptualized as having three underlying themes: Increasing complexity in the nature of the performance expected; the expectation that role performance will be progressively more motivated by internal than external controls; and expanding independence and freedom from adult supervision in role performance.

The clinical procedures and normative framework currently used by school psychologists in assessing and placing children in special public school programs has resulted in the placement of many children from sociocultural backgrounds which differ from the Anglo mode for American society into inappropriate educational programs. We anticipate that the Pluralistic Assessment Project will provide one approach to developing a system for taking sociocultural differences into account in assessing lower status Anglo children, Chicano children, and Black children. Such a pluralistic assessment should result in more appropriate educational placement and programming.

REPEATED MEASURES OF IQ AND ELIGIBILITY FOR SPECIAL CLASS PLACEMENT

Rosalyn A. Rubin*

The use of intelligence test results as the major if not the sole criterion for special class placement for the mentally retarded is predicated upon the assumption that such instruments individually administered by competent examiners yield valid and reliable estimates of the current and presumably potential intellectual functioning of children.

In recent times basic questions have been raised regarding intelligence test validity, whether or not the traditional concept of general ability remains viable as well as whether available tests can provide accurate estimates of this general ability factor. Prior presentations at this conference have been concerned with questions regarding the relevancy of using instruments normed on one population in estimating the capacities of members of another population. Yesterday Dr. Hunt set forth the fallacies inherent in assumptions that present test performance can yield a direct measure of innate ability independent of an individual's life experiences and independent of the language and the setting in which the instrument is administered.

Severe limitations regarding the use of traditional IQ measures with minority racial and ethnic groups have been reviewed. In addition serious questions have been raised regarding the practical use of these instruments in developing educational curriculum and teaching strategies for the retarded. However, it appeared in yesterday's General Sessions as well as in the small group discussions that most of us continue to accept standard IQ measures as reasonably accurate estimates of general mental ability within the English speaking white population on which they were originally normed.

The issue to which I wish to address myself in this paper is not that of intelligence test validity per se, but rather the question of whether these tests are consistent in their measurement of whatever underlying variables they may be tapping. Can we anticipate with a high degree of confidence that repeated measures of intelligence administered over a period of years will yield IQ scores of comparable magnitude for the same individual? Can we assume that results of two different widely used individual IQ tests administered to a group of children over a period of time will result in the same rank ordering of individuals within the group? The consistency or reliability of measuring instruments is a necessary though not sufficient foundation for the establishment of test validity.

The "constancy" of the IQ has been repeatedly investigated in the past. Major longitudinal studies such as the Berkeley Growth Studies, the Fels Institute Study, and the Harvard Growth

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Study have reported results of repeated IQ measures administered to groups of children over considerable periods of time. Test scores of subjects in these studies have spanned most of the IQ continuum although the distributions were typically skewed in a positive direction. Results of these earlier studies suggest that IQ scores of individuals beginning at approximately age four tend to remain relatively stable over time. Nancy Bayley (1949) found that correlations between 3 and 4 year IQ tests and tests at later ages ranged from .46 to .82, the size of the correlation "depending largely on the elapsed time between tests." The longer the time period between tests the lower the correlations. However, what is frequently overlooked is that these same longitudinal studies reveal that the scores of individual subjects do indeed fluctuate over time, sometimes enormously. I will return to this point a little later.

The general effect of previous research findings has been to leave psychologists and educators reasonably well satisfied with the consistency of scores obtained on individually administered IQ tests. Most of us feel quite comfortable with instruments such as the Binet and the WISC for both of which the Standard Error of measurement is approximately 4.5 IQ points for the ages at which these tests were administered in the present study. If a child obtains a score of 105 on the WISC and we mentally acknowledge (or even write in a psychological report) that the probabilities are 2 out of 3 that his true score falls somewhere between 101 and 109, this is satisfactory to all concerned since the academic expectations and educational program for this child would not be significantly altered were his "true" IQ eventually found to be 100 or 110 rather than the initial 105.

However when one approaches this same topic with a different frame of reference it appears that problems in this area have not been totally resolved. In the present instance we are concerned with the effects of establishing arbitrary cutting points on a continuously distributed variable such as IQ which result in classification of individuals as mentally retarded or not. Lack of equivalence of measuring instruments, regression toward the mean, errors of measurement, and individual fluctuations in scores all take on an added dimension of meaning when one focuses upon their implications for individual children whose assignment to specific educational programs, often for the duration of their school careers, may depend upon one single test score out of all the possible scores which the same individual might obtain through repeated measurements over time or through measurement with a different instrument.

Procedures and Results

The present report is based on an analysis of IQ data obtained through administration of the WISC and the Short Form of the 1960 Stanford-Binet (L - M). These are the two most highly regarded and widely used instruments for assessing children's intelligence and are frequently used as the criterion measures against which other tests seek to establish their own validity.

This report is based upon data obtained as part of the Educational Follow-Up Project, a continuing prospective longitudinal study of the educational and behavioral sequelae of prenatal, perinatal and early childhood conditions and events (Balow et al., 1969). Study subjects are also participants in the national "Collaborative Project for the Study of Cerebral Palsy, Mental Retardation, and Other Neurological and Sensory Disorders of Childhood" which is a major investigation in 12 medical centers (including the University of Minnesota Hospitals) of the antecedents of neurologically related childhood disorders.

A total of 1,613 children born at University of Minnesota Hospitals from 1960 through 1964 who were subjects in the Minnesota branch of the Collaborative Project were included in the Educational Follow-Up Study when they reached the age of five.

The study population is almost exclusively (96.5%) white, and the socioeconomic index scores of families of study subjects closely approximate the distribution of socioeconomic index scores of the urban population of the north central states. Although the Minnesota study sample was not initially drawn in a random fashion from the general population, examination of sample characteristics along the dimensions of IQ, SES, pre-school language development, school readiness, neonatal neurological abnormalities, and proportion of birth anomolies all attest to the essential normality of the study sample on these variables. At the present time study subjects are aged seven through twelve and are enrolled in grades one through six.

All available study subjects were administered the Short Form of the Stanford-Binet at age four and the WISC at age seven.

Table 1
S-B and WISC IQ Scores
for Total Educational Follow-Up Study Population
(N = 909)

IQ	S-B Freq.	S-B Cumulative %age	WISC Freq.	WISC Cumulative %age
151 +	2	100%	-	-
141-150	6	99.7%	3	100%
131-140	35	99.0%	14	99.6%
121-130	88	95.2%	50	98.0%
111-120	153	85.5%	173	91.4%
101-110	257	68.7%	282	72.4%
91-100	173	40.4%	214	41.4%
81-90	130	21.4%	109	17.9%
71-80	49	7.1%	54	5.8%
61-70	11	1.8%	10	1.1%
51-60	5	.6%	0	0
50 & below	0	0	0	0
X̄	103.5		102.6	
SD	15.8		13.7	

r = .600 (N = 909)
r = .281 (N = 65)

IQ data are reported in Table 1 for the 909 Follow-Up Study subjects who were administered both the four-year Binet and the seven-year WISC. Most subjects born in 1964 had not yet been administered the seven-year WISC at the time these data were obtained. The scores for the total group were normally distributed on both the S-B and the WISC with a mean of 103.5 and a SD of 15.8 on the Binet and a mean of 102.6 and a SD of 13.7 on the WISC. The correlation between these two measures for the total population was .60 which is comparable to previous findings of .67 reported in the literature for the same instruments over a similar age span (Schacter & Apgar, 1958) and .59 for repeated testings with the S-B at these ages (Honzik, Macfarlane and Allen, 1948).

In the state of Minnesota it is mandatory that school districts provide special instruction and services for school age EMR children. The state guidelines for special education (Minnesota Department of Education, 1963) specify that children with IQ scores in the range from 50-80 are eligible for EMR special class placement while those with scores falling beyond these limits may be considered for trial placement under special conditions. For this reason we analyzed our data separately for those subjects who would legally be classified as EMR in Minnesota, their state of residence.

We then computed the correlation between Binet and WISC scores for subjects who scored below 81 on the S-B. Within this restricted range we obtained a correlation coefficient of .281. This presents quite a different picture of the consistency of test results from the overall correlation of .60 particularly when one is concerned with classification of children at the lower end of the continuum.

Surprisingly few studies have been done on the reliability of either the 1960 Binet or the WISC with retardates (Baumeister, 1964; Himelstein, 1968) and even fewer studies (Rohs & Haworth, 1962) have been directed to a comparison of the Binet (LM) and the WISC on a retarded population. Earlier investigations summarized by Littell (1960) into the relationship between the 1937 S-B and the WISC utilizing mentally retarded children were based upon subjects already placed in institutions or in special school programs for the mentally defective. Therefore there is a strong probability that only those individuals who consistently functioned at a relatively low level would have been included in the study samples with a resultant reduction in the magnitude of score changes from one test to another.

In the studies noted above the intervals between testing periods were relatively brief and the subjects were considerably older and duller (C.A.s up to 16 and mean Binet IQs from 56.3 - 62.5) than the subjects in the present investigation. All of these factors may have contributed to the relatively high correlations which they reported.

Table 2
Discrepancy Scores
S-B IQ minus WISC IQ

Discrepancy Scores	Total Pop. (N = 909)	S-B ≤80 (N = 65)	WISC ≤80 (N = 54)
31-35	2	0	0
26-30	14	0	2
21-25	33	0	2
16-20	54	0	6
11-15	100	1	7
6-10	126	0	10
1-5	149	11	12
0	25	1	1
- 1-5	124	13	8
- 6-10	112	10	5
-11-15	69	8	1
-16-20	62	11	0
-21-25	22	1	0
-26-30	10	3	0
-31-35	3	3	0
-36-40	2	1	0
-40-55	2	2	0
$\bar{X}$	10.0	12.0	9.3
SD	7.4	10.6	7.0

As may be seen in Table 2 the discrepancies between the two IQ scores earned by individual study children (S-B IQ minus WISC IQ) ranged from 0 discrepancy in 25 cases where subjects obtained identical scores on the two measures to as much as 44 points. The mean discrepancy between these measures was 10.0 with a SD of 7.4. Approximately the same number and magnitude of discrepancies were found in each direction so that pluses, indicating higher Binet scores, and minuses indicating higher WISC scores were approximately equal.

The discrepancy scores for subjects scoring at or below 80 on the first measure administered, the Binet, range from 0 to 44 with a mean discrepancy score of 12.0 and a SD of 10.6. Twelve (18%) of the 65 subjects scored higher on the Binet, 52 (80%) scored higher on the WISC while one (1.5%) subject obtained the same score on both measures.

Of those subjects scoring ≤80 on the WISC 14 (26%) had scored even lower on the S-B while 39 (72%) earned higher scores on the Binet. These changes in score for subjects identified as low scorers, as measured by either instrument, in the direction of higher scores on the other measure were in the anticipated direction on the basis of regression toward the mean since an individual selected on the basis of a single deviant score would be expected to score closer to the mean (in this case a higher score) on another similar test or on a re-test with the same instrument for that matter.

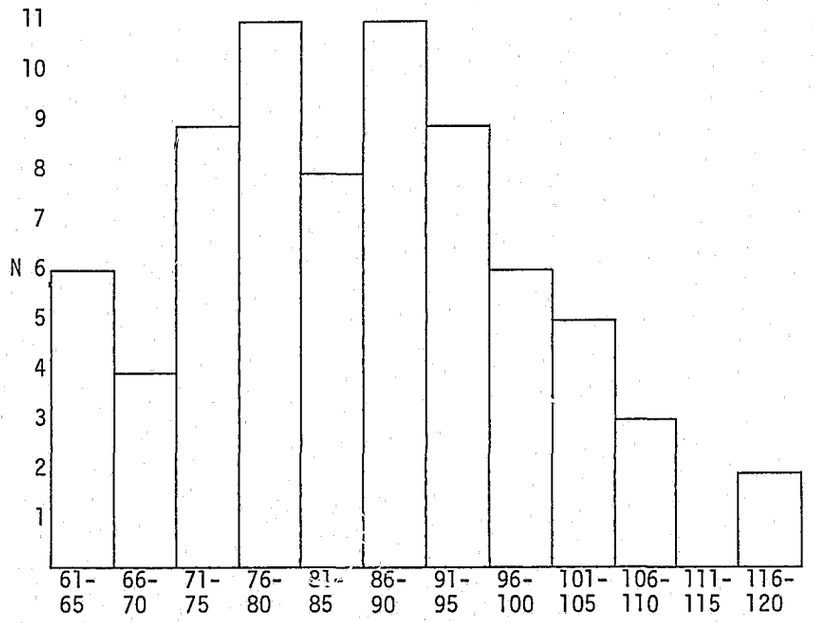
It is important to note that of the seven individuals whose scores increased by more than 30 points from initial to final

testing, six were members of the group with initial Binet scores under 81. If we analyze these data without breaking them down into IQ levels we find that the seven subjects represent less than 1% of the total population of 909. However, six subjects out of 65 represent 7 1/2% of the 80 IQ and under group.

Table 3

WISC IQ Scores for Subjects
with Stanford-Binet IQ Scores ≤80

(N = 65)

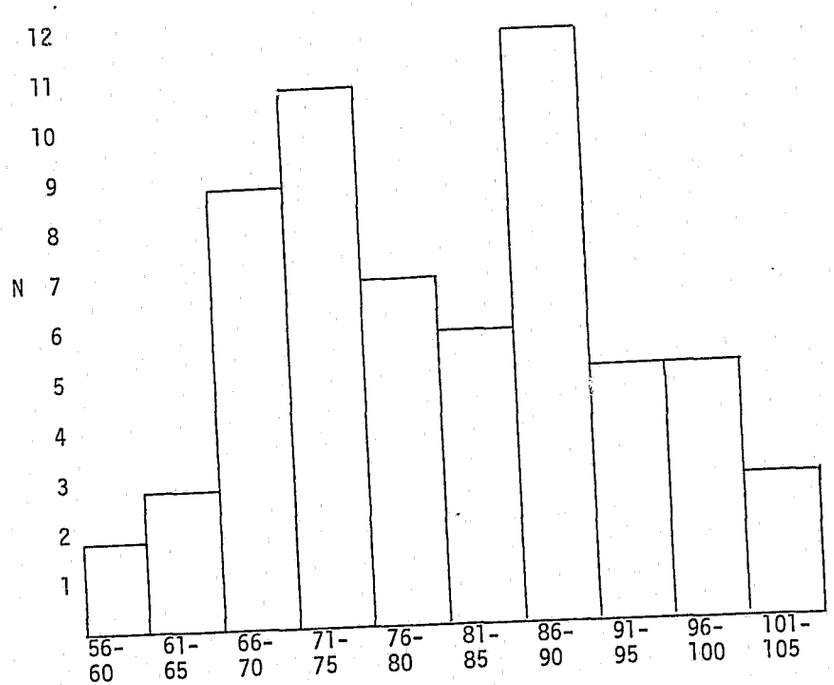


S-B	WISC
$\bar{X}$ = 73.7	$\bar{X}$ = 84.4
SD = 6.03	SD = 11.9

Table 4

Stanford-Binet IQ Scores for Subjects with WISC IQ Scores ≤80

(N = 54)



WISC	S-B
$\bar{X}$ = 73.5	$\bar{X}$ = 80.8
SD = 5.06	SD = 11.10

When we attempted to identify those subjects eligible for EMR special classes in the state of Minnesota on the basis of a measured IQ of 80 or below, we found that when subjects were identified on the basis of their S-B IQs, 38 (60%) of them were misclassified on the basis of their WISC scores. Conversely when subjects were identified on the basis of WISC IQ scores ≤80, 27 (50%) were misclassified on the basis of their Binet IQs.

Summary and Discussion

The fact that IQ scores do not remain absolutely constant over time, particularly when obtained on different instruments, does not come in the nature of a profound shock to anyone who has been exposed to introductory courses on tests and measurement. We are constantly admonished to remember the SE of measurement associated with all testing instruments. We are warned of the treacherous phenomenon of regression toward the mean which has confounded the results of all too many studies of populations which initially were deviant on one or more characteristics.

What is graphically illustrated here is the effect of this unreliability of scores, measurement errors, etc., upon the categorization of children as retarded or not retarded. In the presence of an arbitrary cut-off point relatively minor fluctuations in score can assume enormous significance. An individual who scores 76 on an IQ test may be categorized as retarded even though we are aware that there exists a reasonable possibility that his "true" score is 81 or even higher.

A previous study reported in the literature in which the data were analyzed in a similar fashion was conducted by Klapper & Birch (1967) in which the WAIS was administered to 54 young adults who had been tested 14 years earlier with the S-B (M) at a Cerebral Palsy clinic. The initial S-B scores for this group ranged from below 50 to 120. The correlation between Binet and WAIS scores for the entire group was .64 whereas the correlation between these measures for subjects whose initial Binet scores fell between 75 and 89 was .31. The obtained r of .31 for subjects at this level was not significantly different from zero given the relatively limited size of their sample.

Klapper & Birch also analyzed the changes in absolute scores for each individual and concluded that the "accuracy of score prediction varied with the level of the initial IQ . . . The least stable individual scores were obtained when initial IQ was between 50 and 89 and most particularly between 75 and 89 . . . The greatest amount of change occurred in those children whose initial IQ placed them in the mildly subnormal or borderline normal range. These changes were largely in the direction of improved levels of IQ." This score range, 50 - 89 is where our study subjects fell, and the area between 75 and 89 is one of the most ambiguous in terms of educational programming and expectations on the whole continuum. In the Berkeley Growth Study it was found that between six and eighteen years of age the IQs of almost 60% of the group changed 15 or more points and a third of the group changed 20 or more points (Honzik et al., 1948).

The period from four to seven years of age is a crucial age range for educational planning particularly in view of increasing emphasis upon early identification and early intervention to prevent or ameliorate later cognitive and educational impairment.

Whether the observed discrepancies are due to differences in the two measuring instruments, actual changes in abilities relative to the subjects age mates over time, regression toward the mean, or any combination of these or as yet unidentified

variables cannot be ascertained from the present data. Knowledge of the exact source of these discrepancies is not actually requisite to realization that IQ scores obtained through the administration of instruments considered to be comparable may fluctuate widely during the course of the early school years.

The foregoing data clearly indicate that long-term educational decisions, and categorization of children, based upon single IQ test scores even though derived from the most highly regarded instruments in the field administered by competent examiners are not sufficiently consistent to warrant uncritical reliance upon such data as determiners of differential educational placement.

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THERE IS MORE TO THE Q THAN MEETS THE I: THE APPROPRIATE USE OF STANDARDIZED INTELLIGENCE TESTS***

Jerome D. Pauker***

It is a shame that the misuse of standardized intelligence tests has brought upon them so much justifiable criticism. If we were to survey the qualifications of all those in psychology and education and counseling and speech therapy who administer intelligence tests or similar tests and who interpret test scores, I think we would find striking deficiencies in training and in understanding of what standardized intelligence test scores mean. And if these people do not comprehend fully the relationships of test scores to behavior, it is not surprising that so much distortion and nonsense sometimes appear in the guise of test score interpretation.

The IQ, or intelligence test score, at times may indicate a lot more than most definitions of intelligence would suggest, and at times may relate very little to the traditional concepts of intelligence. The fact that this may be so is ignored much too often, or forgotten, or never considered in the first place.

The concept of intelligence, itself, may have caused more trouble than it is worth. It is talked about too often as though it operates in isolation from emotion, temperament, interests, motivation, energy level, stimulation, and the like. These may be just as important as intelligence, or more important than intelligence, in determining what a person will do, how well he will succeed, how far he will progress, as well as what score he will earn on an intelligence test.

Many interpretations of intelligence test scores are based on oversimplified, over-abstracted conceptions of what intelligence is. Such interpretations may ignore the fact that intelligence is an operationally-defined concept. The operations generally used to define intelligence are certain kinds of problem-solving tasks which are grouped to form an intelligence test.

The operations in the test devised by Binet and Simon were apparently not intended by them to define intelligence, but were meant to serve the purpose of providing a more objective means of predicting who would do well in the schools of Paris and who would

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need special educational attention. Standardized intelligence tests such as the Stanford-Binet and the Wechsler Intelligence Scale for Children still do that admirably well for U. S. schools, and do it well regardless of the child's race, creed, culture, religion, sex, or country of origin. A white, middle social class girl, a black, low social class boy, a mainland Chinese classless hermaphrodite, a blind and deaf child in the Kalihari bush--all would probably do poorly in the average U. S. elementary school if their scores on the Standord-Binet or the WISC were low. The problem is that many persons who should know better, or who should be required to know better, would take the low IQ scores as evidence of low intelligence. The very simple fact that IQ score and intelligence are not the same often remains a piece of information in a tests and measurements course which does not trickle down into test score interpretation. This makes it very easy, then, to blame the child or his parents' genes for his poor school performance. The IQ score, by itself, does not tell if a child can learn; it does predict reasonably well whether he will learn in the typical U. S. school.

Not only is the IQ score used as though it were the same as intelligence, but it is also often used as though it were something static. We do not necessarily use other scores in that way. When we give a person a chronological age score of five years, for example, we do not imply that he has lost the ability to reach six.

"Norms" is another term that often gets left behind in the tests and measurements course. The use of the norm to mean "normal" is a legitimate definition if it is clear that this is one of many possible definitions of normal and if the limiting implications of this particular definition of normal are also clear. Unfortunately, norms are often used in test interpretation in such a way that they imply all definitions of normal. This becomes all the more unfortunate because it raises opposition to the use of norms as scoring standards in cross-cultural work, and raises a cry for both culture-specific norms and culture-specific tests. The use of such tests could result in problems. For example, if a white, middle-class test such as the WISC were adapted to fit a Sioux Indian culture, which test, or which of several tests, would one use to test the child of a white father and a Sioux Indian mother? The choice might be clearer if the family lived on an Indian reservation (and if there were a clear Sioux Indian culture on that reservation), but what if they lived off the reservation?

The fact that norms can be applied, as such, only to persons drawn from populations which are the same or similar to those from which the norms were derived does not mean that scores based on norms are devoid of meaning in any other populations. Such cross-population or cross-cultural use can be justified if the following are assumed and understood: (1) that the test scores do not necessarily have the same behaviors associated with them in all populations, or in the same population under different circumstances; (2) that if similar behaviors are associated with the test scores in more than one population, it does not follow that the probabilities of these behaviors will be the same in all populations or under all circumstances; and (3) that any hypothetical constructs,

intervening variables, or other influences presumed to be underlying or affecting the test scores in one population or in some circumstance will not necessarily be operative across all populations or in all circumstances.

Still another problem in the interpretation of standardized intelligence test scores is that the aspect of probability is not given enough importance. We do not deal with absolute truths in test score interpretation, we deal in probabilities, and the implications of probabilities in intelligence testing seem as difficult to get across as are the implications of probabilities in weather reports. A ten percent chance of rain does not mean that it will not rain. In fact, if it is an accurate prediction, a ten percent chance of rain means that it will rain on an average of one out of ten days on which the probability of rain is ten percent. When one deals in probabilities, one tries to better the odds by judicious weighting of other factors and one pays close attention to the relative effects of being right and wrong. Test results are used too often as though they signified in themselves some direct, absolute, immutable general truth; this may be the reason that test scores are relied upon too often to make decisions and to provide causes and answers, instead of being used as aids in decision-making and to provide information on which to base appropriate further investigation.

Standardized intelligence tests have been used for a number of purposes other than the prediction of school performance and the evaluation of intelligence. They have been used, for example, in job selection, the diagnosis of brain damage, the partial and sometimes entire definition of mental retardation, the evaluation of personality, and the diagnosis of mental disorder. The ways in which such uses have been investigated have sometimes left much to be desired. For example, one popular approach in research on diagnosis is to select two types of children, give them the WISC, find out how they are different in test patterns, and then use these patterns to try to identify these same types of children among other children who are tested. This is just the opposite of what we do in clinical work. We are not given children of a certain type and asked to predict what their test scores will be like; we get test scores and try to determine what the child is like. The fact that test patterns derived from two groups of children do not generally cross-validate when the patterns are then used to identify similar children is not very surprising. If we were to compare apples and bananas on a test of shape, we would find them to be different and we would find that apples scored high on the roundness scale. If our shape test were a valid one, we would expect that if we were to take two new groups of apples and bananas, they would again be differentiated by the test scores. If, however, we were to use the test to diagnose everything round as being an apple, then we might find ourselves in trouble when we would try to bite into doorknobs and other round things.

After having said all of this, I will now say that I still advocate the use of standardized intelligence tests, provided that we do more to let people know what standardized intelligence test scores mean and do not mean, that we inform the general public

about what we consider to be reasonable qualifications of people who can best interpret test scores, and provided that we continue to do the research necessary to find out more about what test scores describe and predict in different populations.

The IQ score has been found to have a variety of correlates. Irving Gottesman (1968) has listed some of them as being basal metabolism rate, EEG alpha frequency, height, weight, anxiety level, race and warmth of examiner, father's occupation and years of schooling, mother's attitude toward achievement, home cultural level, mother's concern with language development, degree of anoxia at birth, and the desire to master intellectual skills.

I want to give an example now of a research approach I am taking to determine the behavioral correlates of standardized intelligence test score patterns.

The records of the Psychometric Laboratory at the University of Missouri Medical Center were searched for boys who had WISC Performance Scale IQs at least 15 points higher than their WISC Verbal Scale IQs and who could each be matched for age and WISC Full Scale IQ with another control boy whose WISC Verbal and Performance Scale IQs did not differ by more than nine points. Twenty-two pairs of boys were so identified.

The Medical Center records of these boys were abstracted and coded, using a method devised by J. O. Sines (Sines, 1966) and developed by Sines and Davis. Psychological reports were not abstracted. The frequencies of statements appearing in the charts of the boys with large differences between IQs were compared with the frequencies of those statements in the charts of the control boys, using a statistic for the significance of the difference between two sample proportions.

Sixty-two statements were found to appear more frequently in one or the other group of charts. The group of statements may be summarized as follows:

> As compared to their controls, the group of boys whose WISC Performance Scale IQs were much higher than their Verbal Scale IQs was described as having developed somewhat slowly, but with no apparent major developmental problems during pregnancy, delivery, the neonatal period, or early childhood. They did have a more frequently reported history of measles and mumps. The boys appear to be easy to get along with and are less likely to have many behavior problems listed. They are reported more frequently to have poor verbal ability and trouble reading (which fits in with the lower Verbal Scale IQs), and they also have some gross motor problems. They try hard to do well, but failure seems to throw them. The question of organic brain damage arises more frequently in this group, and despite the fact that the groups are matched for Full-Scale IQ, both the question of mental retardation and the diagnosis of mental retardation appear far more frequently in the charts of the target group than in the charts of the controls.

It would be inappropriate and unethical to take these statements and apply them to the next child who comes along with a WISC Performance Scale IQ much higher than the Verbal Scale IQ. These statements came from the charts of University of Missouri Medical Center patients who were referred for psychological evaluation and who vary relatively widely in age as well as in other characteristics. I do not know to what extent these statements might apply to a six-year-old Chicano schoolboy in Los Angeles or to a ten-year-old Columbia schoolboy or even to a ten-year-old boy in the University of Missouri Medical Center, since I have not yet cross-validated these findings and I do not know which statements might be age-specific or might even appear again. It should be clear that we have here an example of the appropriate use of standardized intelligence test scores in research, and the potential for their misuse in practice. With additional appropriate research, there is also the potential for appropriate use in practice.

I am also identifying groups of children who are very similar across all the WISC subtests, who fit WISC profile types. The preliminary results of an analysis of their charted statements look very promising.

Another piece of research which I would like to describe briefly is an attempt to develop a psychometric indicator of acculturation and to use this measure to investigate the relationship of acculturation to standardized intelligence test scores. The indicator of acculturation is a provisional scale of the Missouri Children's Picture Series (MCPS). The provisional scale has the name "Dominant White American Culture Scale."

The Missouri Children's Picture Series (Sines, Pauker, Sines, 1963) is an objective, non-verbal test of personality for children. It consists of 238 cards, each one with a picture on it. The child is required to sort the cards into two piles: those which look like fun to him and those which do not look like fun to him. Test responses are scored by counting for eight different scales. The additional, provisional scale, the "Dominant White American Culture Scale," is made up of 29 MCPS pictures to which black and white schoolboys were found to respond differently. The "Culture" Scale items are scored in the white boy direction, so that the higher the score, the more the child is responding in the white direction. The scores on this scale were then correlated with the WISC IQs of two small samples of black boys and one small sample of white boys, all school children in a suburban St. Louis elementary school in which the ratio of blacks to whites is approaching 50-50.

To summarize the results briefly, the only correlation of note was between the MCPS "Culture" scale scores and the WISC Verbal Scale IQ scores of a group of 18 seven- to eight-year old black boys. The correlation of .78 indicates that, for this particular group of black boys, the more they were like the middle-class white children in their sorting of the pictures of the MCPS "Culture" scale, the higher was their score on the verbal part of the standardized intelligence test.

These results suggest the possibility of the use of appropriate, measured, moderator variables to make adjustments in the

scores of persons who are not from the major groups which contributed to the standardized test norms. If, for example, our "Culture" scale really is related to cultural differences and to intelligence test scores, then it may be possible to develop a correction factor to apply to the standardized intelligence test scores of those black children who have been culturally deprived by not having grown up in middle-class, white settings. Or, alternatively, with the "Culture" scale scored in the black direction, we might have a correction factor to apply to the new black intelligence test scores of those middle-class, white children who have been culturally deprived by not having grown up in black settings.

Again, there are implications here for the use and misuse of scores. There is no purpose served by either adjusted or unadjusted scores until it can be shown that there is behavior which is reliably associated with the scores. And nothing can even start to be said about the findings I have presented here until they have been adequately expanded and cross-validated. I can add here, too, that for another group of black boys who were younger and of higher IQ score than the original group, the original results did not hold.[1]

If we are going to continue using standardized intelligence tests, and I think that we should, then it is our ethical, moral, and scientific responsibility to investigate thoroughly the relationships between behavior and intelligence test scores. This means more than using armchair analysis, more than reasoning by analogy, more than basing conclusions on what is theoretically so, more than playing other such intellectually satisfying games with peoples' lives. It means getting in and doing the tedious and grubby work which is necessary to do in order to find out what, indeed, may be related to intelligence test scores. It means that we must be aware at least of what the possible ranges of the probabilities are in the case of particular groups and to what extent we are justified in applying them to individuals.

There is a medical rule of thumb which says that you do not use a treatment which is more likely to be harmful to the patient than his disease or injury. At the risk of being accused by my colleagues in clinical psychology of harboring medical-model deviationist thoughts, I would like to suggest that perhaps we ought to have some similar maxim for those using psychological tests, something to the effect that we ought to think carefully about offering a test score interpretation when the probability of

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[1]The following Psychology Technicians of the Psychometric Laboratory, sponsored jointly by the University of Missouri Medical Center and the Mid-Missouri Mental Health Center, administered and scored tests in various phases of the research reported in this paper: Sue Bowie, Sue Cook, Mary Daugherty, Judy Goldberg, Glenda Hood, Ellen Horowitz, Carol Wood. Their generosity with their time and effort, their expertise in their work, and their enthusiasm and interest, make one wonder about the validity of the "sub-" in "sub-professional."

being wrong is greater than the probability of being right and when the effects of being wrong are likely to do more harm to the person than the effects of saying nothing at all. If we do not make some moves in that general direction, then we may end up with a law which says that all tests must have printed on them the statement: "Caution: This test may be injurious to your future well-being."

When we characterize a person by numbers, we dehumanize him to a certain extent. We are justified in doing this only if we have valid reasons for it, if we can demonstrate the validity of the reasons not only to our colleagues' satisfaction, but also to the satisfaction of those who will be most affected by it, and if we can translate the numbers back again into human terms and humane practices.

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DO BANANAS TELEPHONE?

Walter Higbee*

Two years ago the writer accepted the responsibility of conducting some research on language processes of young Sioux Indian children living on the Pine Ridge Indian Reservation in South Dakota. Preparatory to initiating the research project, it was necessary to meet with a delegation from the Tribal Council to get permission for the project. Following my presentation to this group, in which I outlined my method, talked about my statistical design, and speculated about the implications of the study, I called for questions. One of the members raised his hand and commented, "You say you're going to conduct another study of the Sioux? Do you know what I think you should do when you finish this one? I think it would be time to conduct another study. This time you should make a study of all the studies that have been done on the Sioux, number them in chronological order beginning in 1890, compute the total cost involved, and publish this as a study in waste and futility."

Since Custer's time the Sioux have been victims of overstudy. Anthropologists, sociologists, psychologists, and educators have lined library shelves from Berkeley, California, to Geneva, Switzerland, with research reports on the descendents of Sitting Bull and Crazy Horse. This accumulated research has, for the most part, had negligible effect on improving the anthropological, sociological, psychological, or educational "plight" of the Sioux.

Despite the objection raised at the Tribal Council meeting, my research was initiated, conducted, and will soon be presented under the title, Psycholinguistic Characteristics of Sioux Indian Children. Before it takes its place on our and other library shelves, we hope to be able to extract findings from it that will make significant contributions to the curricula for the Parent-Child Centers and Head Start Programs on the reservation. We have determined, for instance, that on the Illinois Test of Psycholinguistic Abilities, young Sioux Indian children do demonstrate intact basic memory processes on both the Visual and Auditory Sequential Memory subtests. We have noted, as have others, that Indian children score especially well on the Visual Memory subtest which, interestingly, uses distinctly Indian-like designs on the memory test objects. We have also determined that these Indian children have a great deal of difficulty responding to Grammatic Closure and Auditory Association test items--items which call on language processes most closely related to the subtleties and intricacies of the English language.

Our suspicion that tests which include much language based content may be biased against Sioux Indian children, many of whom come from Lakota-English speaking homes, was demonstrated rather dramatically by one particular incident. I had employed a Lakota

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speaking Indian to assist me in working with some of the young children who might relate better to an Indian examiner. We were attempting to translate some of the ITPA Auditory Reception subtest items from English into Lakota. He had no particular difficulty in translating "Do dogs bark?" but when he came to "Do bananas telephone?" he suggested that in order to make a proper translation from English to Lakota and then back to English the item would come out something like this, "Does the yellow, oblong apple that grows in a distant land use the way of talking where ropes are put between poles?"

Intrigued by this instance of language confusion on a test that is used primarily for diagnostic purposes, I became further interested in the possibility that tests such as the Stanford-Binet or Wechsler, which are used for classification purposes, might include content that serves to penalize the bilingual Indian child. Further, I became interested in the speculation that such tests might include items that could be misinterpreted because of cultural confusion.

Calling on my Indian friend again, we arranged to take a critical and penetrating look at particular items from the Wechsler Intelligence Scale for Children. We chose the WISC because it is used extensively in South Dakota to classify Indian children for eligibility for admittance to special education programs. The first item we looked at was number nine from the General Information subtest. The item reads "Who discovered America?" My friend looked at the suggested correct responses and said, "I see you have two choices, Columbus and Leif Ericson and, of course, they are both wrong."

Following this initial discovery of rather definite cultural confusion, we turned our attention to an item-by-item consideration of the WISC General Comprehension subtest. As I had suspected we came up with several glaring examples of cultural misinterpretation. For purposes of this presentation, I will give the WISC test item, give the expected correct response, and then give the possible response that a Sioux Indian child might present, and the suggested justification of that response from his traditional background.

Item 1: What is the thing to do when you cut your finger?
Put a band-aid on it. Wash it with soap and water.
Nothing. (The Sioux warrior attitude of bravery might be stronger than the need to ask mother for a band-aid).

Item 2: What is the thing to do if you lose a ball that belongs to one of your friends?
Give him one of mine. Try to get it back.
I wouldn't have to do anything. (The concept "friend" in Sioux is a very intimate concept. The Indian child might not find it necessary to replace the toy because the act of replacement might endanger the friendship).

Item 3: What would you do if you were sent to buy a loaf of bread and the grocer said he did not have any more?
Go to another store.
Go home. (There is only one store on the reservation).

Item 6: Why is it better to build a house of brick than of wood?
It is safer. It is more permanent.
I don't know. (There are no brick houses on the reservation. A brick house means an institution or an agency of some kind).

Item 9: Why is it better to pay bills by check than by cash?
It is safer. It is more convenient.
I don't know. (The Indian child's father probably does not have a checking account because there is no bank on the reservation).

Item 10: Why is it better to give money to an organized charity than to a street beggar?
A more orderly way of giving money. It assumes that the money goes to a worthy person.
I would give it to the beggar. (The Indian child can identify more closely with the beggar, and he may have been taught to be suspicious of organized charities).

Item 14: Why should a promise be kept?
An agreement between two people is a contract and should be honored.
People would laugh at you if you didn't. (Persons who break promises are subject to ridicule. Also, there is the fear of harming the deity).

The preceding examples should be sufficient to demonstrate that test bias does exist on tests that are used to classify Indian children. They also add to my suspicion that the demonstration of test bias with minority group children can be accomplished best not by the analysis of global measures of intelligence such as IQ scores, nor by the more refined analysis of subtest scores, but by the careful analysis of individual test items.

One last example should serve to emphasize this point. While browsing through the General Information subtest of the WISC one last time, my Indian friend came across item number 17, "What is celebrated on the Fourth of July?" He asked me, "At what age would a child be expected to answer that?" I replied that the item would probably be appropriate for about a 12-year old. He responded by saying, "Now, let me ask you something. What is important about the date, December 29?" I had to admit that I didn't know. He then said, "Any 12-year old Sioux Indian child could tell you that is the anniversary of the Wounded Knee Massacre. Why don't you ask us something like that on your intelligence tests?"

SPECIAL EDUCATION PLACEMENT: THE FEDERAL CONSTITUTION AND ITS IMPLICATIONS

Grant S. Nelson*

The current controversy and intellectual ferment over the placement of children in classes for the mentally handicapped, especially those to the educable mentally retarded, illustrates vividly, both from the educational and legal perspective, how commonly the reforms or innovations of a few years past become viewed in the contemporary setting as anachronistic and unjust. While special classes for the development of the "exceptional child" were once considered progressive and sensible, they are in many contexts today perceived as "burial grounds" for substantial numbers of children. Ross, DeYoung and Cohen, "Confrontation: Special Education Placement and the Law," Exceptional Children, Vol. 38, September, 1971, 5, p. 5. Where track systems were developed as an arguably desirable method of developing and stimulating each child's intellect to a maximum degree consonant with the child's ability, such systems today are not only often considered educational suspect to many, but from a legal perspective, constitutionally defective as well. See e.g., Hobson v. Hansen, 269 F. Supp. 401 (D.C. 1967). Terminology such as "exceptional," "special education," and "emotionally disturbed," while once considered neutral and humane, in many contexts today are often perceived as harmful and invidious labeling.

More particularly, attacks on current placement practices are focusing on the use of intelligence testing as a basis for the assignment of children to special classes or tracks for the mentally retarded, classes that too often for many children represent a terminal status and the admission of defeat. While many of the objections directed to these procedures would have equal application to children of all backgrounds, racial or economic, there is increasing concern and analysis being focused on the impact of such procedures on minority group children. Of course, educators, lawyers and most laymen are probably familiar with the substantial arguments that cultural bias in intelligence testing renders the result of such testing educationally suspect as to members of certain minority groups such as the Blacks or Mexican-Americans. On the other hand, it may well equally be argued that such tests, notwithstanding cultural bias, are useful devises to aid in evaluating a child's ability to cope with and adjust to the sophistication and complexities of modern society which, after all, is probably permeated by cultural bias. In other words, such testing may well be of value if used with common sense in developing an educational program tailored to the needs of the individual child and in fostering maximum development of that child's abilities. Yet the facts cannot be ignored. The use of

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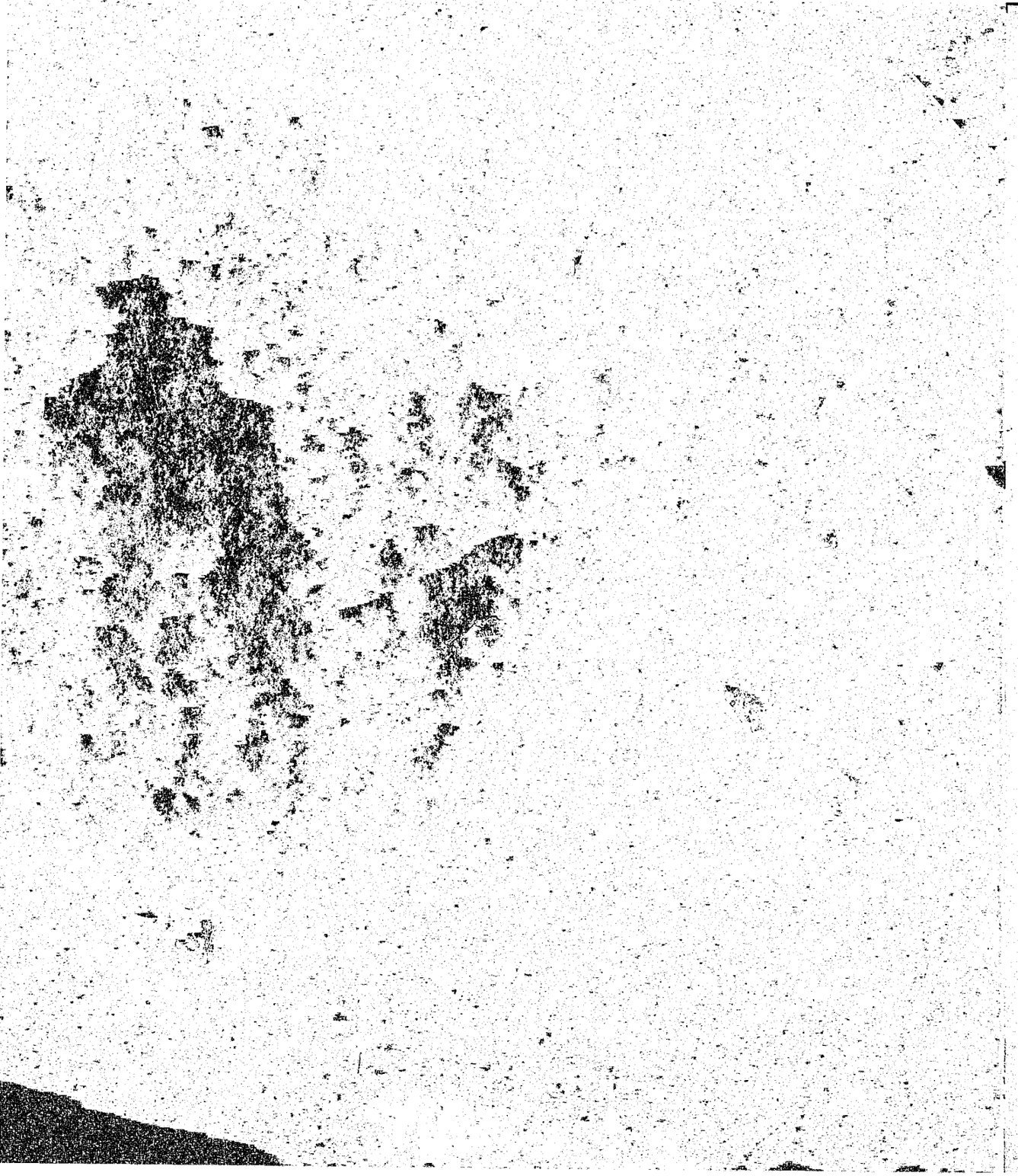

intelligence and achievement tests has apparently resulted in disproportionate numbers of minority group children being assigned to classes for the educable mentally retarded. One scholar, for example, has suggested that over half of the children enrolled in classes for the mentally retarded at the time of his study were from minority group backgrounds. See Dunn, "Special Education for the Mentally Retarded--Is Much of It Justifiable?", Exceptional Children, Vol. 35, September, 1968, 5, p. 6. More importantly, however, the claim is made that, once assigned to such classes, students never reemerge and in all probability will remain imprisoned throughout life by labels attached to them very early and perhaps prematurely in their development. Three commentators have recently very succinctly delineated the pertinent arguments:

> Special education programing is inadequate. Once a child is placed in an educable mentally retarded class, there is little chance that he will leave it. Insufficient attention is given to the development of basic educational skills and retesting occurs infrequently, if ever. Contributing further to the lack of upward mobility is the student's poor self-image which is reinforced by such placement and contributes to the self-fulfilling prophecy of low achievement.
>
> The personal harm created by improper placement is irreparable. Special class placement becomes a basic factor in a self-fulfilling prophecy, frequently relegating the victim to an economic, educational and social position far below that which he has the ability to achieve. The social stigma surrounding the label 'mentally retarded' remains with the individual his entire life. Obtaining a job may be difficult if not impossible and even if adequate employment is found, the psychological damage created by improper placement persists. Ross, DeYoung and Cohen, p. 6.

The main purpose of this paper is to explore the legal implications of this placement procedure. In this connection, primary emphasis will be placed on the placement decisions, and assignments made on the basis of testing, rather than on the validity of the tests themselves. This is because the primary injury to the child, if any, results more from the placement assignment than from the test in and of itself.

From the legal perspective the situation described above generates at least two substantial questions of more than threshold constitutional significance: (1) Is the Equal Protection Clause of the United States Constitution violated by public school testing and placement practices that have the effect of assigning a substantially disproportionate number of minority group children to special classes for the mentally retarded? and (2) Does the Due Process Clause of the 14th Amendment require that a public school child and his parents be afforded the opportunity for a hearing before a child is assigned to such special classes? What follows is an analysis of the above questions together with a consideration

of the developing case law and its possible impact on current practices in the special education area.

The Equal Protection Problem

The United States Supreme Court has consistently held under the Equal Protection Clause that racial classifications are constitutionally suspect and that such classifications must be not merely rationally related to a valid state objective, but must be necessary to the accomplishment of an overriding state purpose. See McGlaughlin v. Florida 379 U.S. 184 (1964); Loving v. Virginia, 388 U.S. 1 (1968). In other words, the burden is very heavily on the state to justify racial classifications and, in effect, they create a strong presumption of invalidity. However, the Supreme Court applies the above principles normally only to state legislation, regulations, or practices that create racial categories on their face or that are enforced on a racially discriminatory basis. Where a state legislature's practices are neutral on their face and neutrally enforced but discriminatory in effect, it has generally been assumed that such legislation or practices do not raise substantial Equal Protection Clause racial discrimination issues. An exception to this general notion may be found in situations where a racially neutral regulation or practice has discriminatory effect and there is a past history of legally imposed racial discrimination. In Lane v. Wilson, 307 U.S. 268 (1939), for example, the Supreme Court struck down a racially neutral Oklahoma voter registration rule where the effect was to prevent substantial numbers of blacks from voting and prior voting legislation on its face discriminated against blacks. See also Meridith v. Fair, 298 F.2d 1696 (5th Cir. 1962). Moreover, there are, for example, several cases where the federal courts have disapproved the placement of black students in certain classes or schools based on scores from achievement or aptitude tests. However, in these cases more than discriminatory effect was involved because in each instance the school district involved had been legally or dejure racially segregated prior to the landmark desegregation decision in Brown v. Bd. of Education, 347 U.S. 483 (1954) and in some instances the tests were applied only to blacks. In these cases, the courts simply believed that the testing devices were used to achieve the result of racially separate schools accomplished by the now invalid segregation laws. See e.g., Green v. School Bd., City of Roanoke, 304 F.2d 118 (4th Cir. 1962); Singleton v. Jackson Municipal Separate School District, 419 F.2d 1211 (5th Cir. 1970). There was no suggestion, absent the above special circumstances, that discriminatory effect alone in placement resulting from a testing program would raise Equal Protection problems. Much legislation that is neutral on its face and uniformly applied hurts some groups in society more than others. For example, the sales tax, although racially neutral on its face, impacts more heavily on poor people. Does the fact that a disproportionate number of poor people are black mean that the sales tax is a violation of the Equal Protection Clause? Since it is unlikely most courts would invalidate such measures

as the sales tax it is understandable that they generally avoid involving themselves in pure effect cases. See James v. Valtierra, 402 U.S. 137, 142 (1971).

Parenthetically, it should also be noted that normally courts say they will not consider possible racial "motive" behind state legislation or regulations neutral on their face even though such enactments are racially discriminatory in effect. See Palmer v. Thompson, 91 S. Ct. 1940 (1971). The closest the courts have come to violating this approach is in the cases previously noted where otherwise neutral testing procedures were being used to sustain the prior legally imposed segregation. The reasons for the general rule against examining motive are obvious. How does a court determine, for example, why each legislator or school board member voted in favor of a testing program?

One other type of "effect" case should be mentioned and distinguished from our situation. The United States Supreme Court recently held in Griggs v. Duke Power Company, 91 S. Ct. 856 (1971) that where a test or similar device used as a basis for employment has the effect of substantially excluding blacks from employment, the employer must establish that the tests are demonstrably job-related. While the theory of this decision logically could be extended to the educational setting the Griggs rationale is currently only of peripheral value to our consideration because that decision was interpreting Title VII of the 1964 Federal Civil Rights Act which is applicable mainly to employment situations. Moreover, it is not a judicial interpretation of what the Equal Protection Clause requires in "effect" cases.

To set our problem in perspective then, what we are probably dealing with in most instances in the special education area is a racially discriminatory effect caused by the application of procedures and programs that are non-racial on their face and their administration. The assignment and retention of disproportionate numbers of minority group students in special classes for the educable mentally retarded, for example, results in most instances from the utilization of testing, regulations and other devices causing discriminatory effect, but which although arguably culturally biased, are nevertheless non-racial on their face and in their administration. Thus in terms of traditional equal protection analysis there has been little to suggest, in the past, that the racially discriminatory effect alone of testing and placement procedures normally creates a substantial Equal Protection constitutional question. However, some recent lower federal court decisions concerning these and analogous problems suggest some expansion of the traditional Equal Protection analysis. This tendency in lower federal courts seems more pronounced in situations where the court is convinced that the testing devices used for placement contain cultural bias and, therefore, cannot accurately reflect the intelligence of minority group members.

One of these major decisions is Hobson v. Hansen, 269 F. Supp. 401 (D.D.C. 1967), aff'd, 408 F2d 175 (D.C. Cir. 1969). In that case, in a decision by J. Skelly Wright, the district court declared that school testing practices and pupil placement

procedures constituting the "tracking" system in effect at that time in the District of Columbia public schools had the effect of discriminating against black students and were, therefore, violative of the Due Process Clause of the Fifth Amendment. (In this case the Due Process Clause is used as equivalent of the Equal Protection Clause which in theory is applicable only to the states). The track system then in effect was a form of ability grouping under which students were divided in separate, self-contained tracks ranging from "basic" for the slow student or academically retarded to "honors" for the gifted. The court believed that the tests used to create the tracks were based on white middle class values and did not relate to the Negro and disadvantaged child. The court stated:

> . . . track assignment based on such tests relegated Negro and disadvantaged children to the lower tracks from which, because of reduced curricula and the absence of adequate remedial and compensatory education, as well as continued inappropriate testing, the chance of escape is remote. Id., p. 407.

Under the circumstances, the court concluded that the tracking system violated its own premise because true ability was not being reflected in the track system and that, therefore, "the track system amounts to an unlawful discrimination against those students whose educational opportunities are being limited on the erroneous assumption that they are capable of accepting no more." Id., p. 514. What Hobson seems to be saying is that tracking per se is not bad, but that the testing methods used did not correctly establish the members of the track. Thus, if tests free of culture bias were utilized, presumably no equal protection claim would be present even if the effect of the test were to place disproportionate numbers of certain racial or ethnic groups in the lower tracks.

Along similar lines as Hobson, the Federal District Court in Spangler v. Pasadena City Board of Education, 311 F. Supp. 501 (D.C. Cal. 1970) noted the racially discriminatory effects of the Pasadena interclass grouping practices which, in large measure, were based on the results of intelligence testing considered by the court to be racially discriminatory because of the emphasis of such tests on verbal ability. The court, however, apparently took no action because of the delicate issues involved but urged "the people of Pasadena to examine carefully the grouping policies of the District." Id., p. 504.

Commentators have also recently referred to cases where class assignments have been challenged because testing devices which assumed an understanding of English were used on children who had predominantly Spanish speaking backgrounds. See Ross, DeYoung and Cohen, p. 8. These are relatively easy cases even assuming that a very narrow equal protection viewpoint is followed. In any event, the application of testing devices in such a manner should probably be considered so irrational as to violate the Due Process Clause of the 14th Amendment, which requires that state regulations have some "rational basis."

What the foregoing recent cases do suggest is a rather strong tendency on the part of the courts to invalidate class assignment or groupings that result in disproportionate numbers of minority group children being assigned to "slow" or "stigmatized" groups where it is concluded that the testing devices used are culturally biased or do not reflect the minority group child's true ability.

One recent federal case, however, suggests a standard, by analogy, to the effect that if racially disproportionate grouping occurs as a result of a testing program substantial equal protection claims may yet exist even though the test is arguably culturally unbiased. In Chance v. Board of Examiners of the City of New York, 330 F. Supp. 203 (S.D. N.Y. 1971) two plaintiffs who were respectively Black and Puerto Rican, brought an action challenging the constitutionality under the Equal Protection Clause of examinations prescribed and administered by a city board of examiners to those seeking licenses for permanent appointment to supervisory positions in the New York City school system. The court noted that the tests to a large extent called for the regurgitation of memorized material and that the application of the tests resulted in disproportionately fewer Blacks and Puerto Ricans passing the examinations and becoming a principal than was the case for white candidates. Thus, the court concluded that the examinations in this case had the "de facto effect" of discriminating against Blacks and Puerto Ricans and issued a preliminary injunction against their use. Perhaps more important than the result in this case is the constitutional standard the court enunciated for such cases. "Such a discriminatory impact is constitutionally suspect and places the burden on the Board to show that the examinations can be justified as necessary to obtain principals . . . possessing the skills and qualifications required for successful performance of the duties of those positions." Id., p. 223. See also, Armstead v. Starkville Municipal Separate School District, 325 F. Supp. 560 (N.D. Miss. 1971). Note that the court would appear to treat an "effect" case as a traditional race classification case. In other words, even in the absence of defects in the examination such as those mentioned above, the court may be suggesting that where there is a substantial discriminatory effect, the state must show that examinations are necessary to obtain qualified principals.

The implications of applying the reasoning of the Chance case to our instant problem are substantial. It is doubtful that the Chance court would hold that school authorities have a heavy burden to justify use as such, of testing simply because the results show a racially discriminatory effect. After all, testing in and of itself is not objectionable, it is the decisions made based on the testing that cause problems. On the other hand, the reasoning of the Chance case might very well mean that school authorities will be required to establish that where the placement of children based on intelligence testing results in minority group children being placed, for example, in substantially disproportionate numbers in classes for the educable mentally retarded, such placement is necessary to the proper functioning of the education system. In other words, school authorities may

have to show that there is no other feasible way to educate these minority group children without the imposition of the permanent stigma of detrimental labeling. This may be true even though culturally neutral testing is used.

Are there other ways, for example, to avoid the track system and its consequential labeling process and yet not substantially impair the smooth functioning of the education of normal or gifted children? If such other methods are not feasible, the Chance reasoning may not require the abandonment of special placement for minority group children no matter how disproportionate the assignments are on a racial basis. However, such courts may very well require the optimum practicable use of other methods such as mainstreaming before they will permit any discriminatory effect to exist in special education placement. Indeed, such a policy is being promoted by the United States Office of Education, Bureau for the Handicapped. In other words, while mainstreaming may be valid educational policy, it is not wholly inconceivable that courts like the Chance court could very well in some instances require it as a matter of law.

In speculating about how far the courts will go in applying the Equal Protection Clause to special education placement procedures, several caveats must be emphasized. First, it should be noted that decisions such as Hobson and Chance are not as yet the law of land; rather they represent lower federal trial court or appellate decisions that are, strictly speaking, the law only in their federal districts or circuits. The issues they dealt with have not been considered by the United States Supreme Court, which, of course, ultimately determines the meaning of the Federal Constitution. J. Skelly Wright, for example, the author of the Hobson decision, is considered by many legal scholars to be too much of a judicial activist and his views as to the meaning of the Equal Protection Clause are not necessarily shared by all judges, state and federal, in or outside the District of Columbia. There is a substantial body of opinion that such issues are primarily educational rather than legal and, as such, better left to the educators. For example, Chief Justice Warren E. Burger, then a judge on the Court of Appeals, District of Columbia Circuit, dissented in the Hobson v. Hansen appeal and noted that the "Hobson doctrine . . . can be criticized for its unclear basis in precedent, its potentially enormous scope, and its imposition of responsibility which may strain the resources and endanger the prestige of the judiciary." Smuck v. Hansen, 408 F.2d 175, 196-197 (D.C. Cir. 1969). State Courts tend to avoid getting involved judicially in such highly specialized areas as educational placement and advancement. See, e.g., Pittman v. Board of Education Glen Cove City School District, 287 N.Y.S. 2d 551 (1967). Moreover, legal scholars are often critical of the sweeping approach and judicial activism represented by such cases as Hobson. For example, Professor Phillip Kurland, of the University of Chicago Law School, a renowned Constitutional Law Scholar, has observed generally as to the Hobson case that it "assure [s] that the brighter students receive no better education within the system than the other

students." 35 U. Chi. L. Rev. 583, 595 (1968). Finally, there is some tendency on the part of some educators in very scholarly and analytical articles, to place undue emphasis on the implication of cases filed, rather than those actually decided. There is, after all, no limit on the imagination of plaintiff's lawyers in their claims for relief. Indeed, sweeping claims are often made by lawyers for plaintiffs even though they are clearly willing to accept a much more modest result.

The Procedural Due Process Problem

The law traditionally has treated any attempt to have a person declared legally incompetent, either for purposes for confinement or simply for purposes of the appointment of a legal guardian, as a serious proceeding requiring most of the essential attributes of due process. It is almost universally accepted in state statutory or constitutional provisions that such a determination of mental incompetency requires an opportunity for a hearing with notice to the accused. In most instances, the hearing provided for is judicial. Moreover, in many states a jury trial is required on the issue of mental incompetency. See generally, Alexander, Brubaker, Deutsch, Kovner, Levine, Surrogate Management of the Property of the Aged, 21 Syracuse L. Rev. 87, 94, 133-134 (1970). Indeed, the presence in most states of at least minimal hearing requirements has meant that the United States Supreme Court has had generally little opportunity to consider whether the Fourteenth Amendment Due Process clause requires some minimal type of hearing. Rather, it seems generally assumed that some type of hearing is required as to the issue of incompetency. See, e.g., Pearson v. Probate Court of Ramsey County, 309 U.S. 270, 276-277 (1940).

As has been previously pointed out, in any determination that a child be placed in "special education" or, in particular, in any type of class for the mentally retarded, there is a strong possibility that the placement may be terminal. The social stigma associated with the label of "mentally retarded," aside from its possibly being a self-fulfilling prophecy in some instances, may very well permanently relegate the child so labeled to an inferior economic and social status in life. He may very well be cut off from normal job opportunities and social intercourse. In view of this probable substantial detrimental impact on the child's future caused by such a placement determination, does the Due Process Clause of the Fourteenth Amendment require that the child and its parents be afforded the opportunity for a hearing before some impartial person or panel as to the validity of such a proposed placement determination by school authorities? Some educational scholars seem to intimate an affirmative answer. See Ross, DeYoung and Cohen, p. 6.

An interesting case that may well have a bearing on this problem is Wisconsin v. Constantineau, 91 S. Ct. 507 (1971). The police chief of a small Wisconsin town, pursuant to a state statute, caused a notice to be posted in all retail liquor stores in the town that sales or gifts of liquor to Constantineau were

forbidden for one year. The statute provided for posting without notice or hearing as to any person who "by excessive drinking produces certain conditions or exhibits such traits as exposing himself or his family 'to want'" or becoming "dangerous to the peace" of the community. The United States Supreme Court noted that the label or characterization given an individual by "posting," though to some "merely the mark of illness, to others . . . is a stigma, an official branding of the person." Id., p. 510. The Court held that under those circumstances, procedural due process requires notice and an opportunity for a hearing.

Few reasonable men would argue that hearing should be required every time a child is retained or denied advancement in the normal school setting. On the other hand, if the Constitution requires the opportunity for a hearing before a person may be labeled "an excessive drinker" and before a person may have a guardian appointed for him based on incompetency, it does not strain logic to suggest that a court may well conclude that a child and his parents must be afforded the opportunity for a hearing prior to the placement of the child in a clearly stigmatized class such as one for the mildly mentally retarded. The placement decision may well have a much more adverse impact on the child than the branding as an alcoholic would have on the problem drinker. Indeed, although I have not been able to examine the final written opinion prior to presenting this paper, it is my understanding that a three judge federal court, in a case entitled Bowman v. Commonwealth of Pennsylvania, has applied procedural due process standards to placement determinations in the mental retardation area. Note that the due process theory is not tied to minority group discrimination and thus, if applicable, the concept would apply to all children regardless of minority group status. This is not to say that a full blown judicial hearing would be required, but perhaps at least a hearing before some disinterested party other than the school official making the decision. Indeed, most school systems consult very carefully with parents before such a decision is made, and there is constant monitoring to make sure the decision was a correct one. Some may even provide for a hearing. Whether the Supreme Court, however, will apply procedural due process standards to special education is open to question. In any event, where the parents are not convinced by the school authorities' conclusions, to provide for some minimal type of hearing before a third party may well be a prudent policy to avoid such Due Process claims.

[Author's Note: It should be pointed out that in an appeal of the Chance case, reported after the delivery of this paper, the Court of Appeals for the Second Circuit affirmed the result reached by the trial court, but specifically avoided an endorsement of the trial court's "effect" reasoning. See 4 F.E.P. Cases 602 (April 22, 1972). The Second Circuit analysis was more in line with the traditional approach referred to in the first paragraph of the Equal Protection section of the Paper.]

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SPECIAL EDUCATION PLACEMENT: THE LEGAL LIABILITY AND IMMUNITIES OF SCHOOLS AND SCHOOL PERSONNEL

Elwood L. Thomas*

Professor Nelson has discussed with you some of the substantive constitutional law principles which will be involved in litigation arising from intelligent and achievement testing and special education placement procedures in the schools. As litigation develops in this area, it is most likely that the vast majority of these suits will be based on the federal civil rights statute 42 U.S.C.A. 1983 (hereinafter called Section 1983). As has been pointed out, this federal statute can be the basis of a civil action by any person whose federal constitutional rights have been violated by the utilization of a power or status created by state law.

In this paper, I propose to discuss with you some of the additional difficulties a plaintiff may encounter in bringing such an action, even assuming that he can establish that in a testing and placement procedure there in fact was a violation of his federal constitutional rights. I would point out that the cases I will be discussing will not actually involve school testing and placement factual situations because litigation in this area is only beginning to develop. We do not have significant case precedent at this time in these particular types of cases on the problems I propose to discuss. What little litigation has developed is at a level where it would not generally be looked upon by courts or lawyers as furnishing any significant precedent. For this reason it will be more useful to our discussion to look at more or less established precedent in other types of Section 1983 cases and consider the extent to which that precedent may offer some prediction of how the decisions will develop with respect to the particular problem under discussion; i.e., special education placement in the schools.

In particular I want to discuss the matter of immunity from suit for various types of defendants under Section 1983. By use of the term "immunity" I am referring to a principle of law which for one or more of a number of policy reasons, provides that a particular type of defendant will not be subject to suit under the statute even though it is shown that his activities have been such as to apparently bring him within the purview of the statute. In other words, these are situations where the courts have created an absolute defense for certain types of defendants in certain situations.

I wish to divide my discussion into two particular categories and to first discuss immunities which may be applicable where the suit is against the school itself as an entity and to then consider the matter of suits against individuals which would include members of the school board, school officials such as superintendents and principals, and of course people directly

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involved in the testing and placement practices such as counselors, teachers, and other testing personnel.

Within the above two categories, I will be discussing litigation where the plaintiff is asking for two different types of relief. On the one hand, I will consider the matter of immunity where the plaintiff seeks a court order prohibiting or requiring certain specified conduct. This type of remedy, referred to as equitable relief, is normally prospective in nature only. On the other hand, I will also discuss immunity defenses where the plaintiff in the litigation seeks money damages as compensation for the deprivation of his constitutional rights.

A plaintiff is entitled to recover actual out of pocket expenses under Section 1983. He can also recover a monetary amount for such things as humiliation, embarrassment, and mental suffering. Further, even if actual damage is not shown, nominal damages are presumed and may be recovered. In a case where the plaintiff can show a wrongful act by the defendant done intentionally and without just cause or reasonable excuse, the jury is also entitled to award punitive damages. These are damages, not dependent on any injury the plaintiff has sustained, but are merely for the purpose of punishing the defendant. Unlike most other litigation in American courts, the judge also has discretion to allow the plaintiff attorney's fees as part of his judgment against the defendant, provided the defendant's conduct was in bad faith. Hill v. Franklin County Board of Education, 390 F2d 583 (6th Cir. 1968).

In considering first the matter of a suit against the school district itself, the most important and basic case with respect to immunity is Monroe v. Pape, 365 U.S. 167 (1961). In Monroe, the plaintiff sued the City of Chicago and thirteen police officers as individuals alleging that plaintiff's constitutional rights had been violated in connection with an unreasonable search of his home followed by arrest where he was held on an open charge for more than ten hours. The City of Chicago moved for a dismissal of the case against the city before any evidence was offered on the ground that a governmental body could not be sued under Section 1983. The city's particular argument was that the statute (paraphrased) says:

> Every person who . . . subjects . . . any citizen . . . to the deprivation of any rights . . . secured by the Constitution . . . shall be liable to the party injured . . .

The city contended that they were not a "person" within the meaning of the statute and, therefore, no recovery could be had against it. It supported this argument by citing the court to the legislative history of Section 1983 which included two amendments, ultimately defeated, which would have included specific language in the statute to make a county, city, or parish liable for any damages resulting from certain acts which occurred within the boundaries of the governmental unit. The United States Supreme Court, in an opinion by Justice Douglas, held that in view of the defeat of these amendments, "we cannot

believe that the word 'person' was used in this particular act to include them" (a governmental body), and the case against the City of Chicago was dismissed.

The Monroe case is important to our discussion today because it is fairly clear that the doctrine set forth there is not limited to just cities and towns but extends to other governmental bodies which would include public school districts. However, see Scher v. Board of Education of Town of West Orange, 424 F2d 741 (3d Cir. 1970), a suit for damages for expulsion of a student without hearing, where with no discussion, Monroe is distinguished from this school board case simply because Monroe involved a city. Therefore, we might start by saying that the school itself is not a "person" under Section 1983. However, it is necessary to look further and see how the lower courts have subsequently applied Monroe.

We might first ask whether it makes a difference if the suit is for money damages or is for equitable relief. In Adams v. City of Park Ridge, 293 F2d 585 (7th Cir. 1961), a case handed down in the Circuit Court of Appeals in the same year as Monroe v. Pape was decided, the court stated:

> We are aware that it was said in Monroe v. Pape . . . that a city is not within the ambit of Section 1983. However, in that case only damages were sought and were held recoverable from the individual defendants, who were police officers of a city. The facts in Monroe v. Pape suggest several inherent reasons for excluding municipalities from liability for damages, such as unauthorized misconduct of the officers, lack of power of city to indemnify plaintiffs for such misconduct, and a city's governmental immunity in the exercise of its police powers, from liability for injuries inflicted by policemen in the performance of their duties. However, the case at bar is not an action for damages for torts committed. It looks to the future only and asks for a declaratory judgment and an injunction against invasions of plaintiff's federal constitutional rights contemplated by a municipality's ordinance. None of the reasons which support a city's immunity from an action for damages for tortious injuries already inflicted by its officers, agents or servants applies to this case. No reason is apparent why a city and its officials should not be restrained from prospectively violating plaintiff's constitutional rights pursuant to its own legislative enactment, and an injunction not be granted as provided in Section 1983.

Although a few courts have applied the Monroe immunity to injunction cases (see Liability of Public Entities, 45 So. Calif. L. Rev. 131, 147) most have not.

These courts are in effect saying that while a governmental unit is not a "person" when sued under 1983 for damages, it is a "person" when the plaintiff seeks an injunction limiting or

prescribing future conduct. Assuming this reasoning continues to be followed, it is relatively clear that it applies with equal force to both the public school district and the municipality.

A line of cases is beginning to develop which appears to further limit the doctrine announced in Monroe and open the governmental unit to still further liability. It so happens that these cases involve school districts as a defendant. They arose in situations where black schools were closed when the school system was desegregated. In Harkless v. Sweeny Independent School District, 427 F2d 319 (5th Cir. 1970) the ten plaintiffs, black teachers whose contracts had not been renewed, sued the school district for an injunction ordering that they be reinstated and for damages by reason of lost back pay. The defendant school district argued that the action was prohibited by Monroe. In refusing to dismiss the case, the court first pointed out that in spite of Monroe, many courts have allowed injunctive relief; and with respect to the prohibition of Monroe, that the case only involved damages in the nature of a recovery for tort. This court proceeded to distinguish damages for back pay on the ground that these damages are simply one additional feature of the equitable relief sought by the school teachers. Although the court does not expressly discuss the distinction between damages sounding in tort and damages sounding in contract, the case could be viewed as turning on this distinction. In that event, we would be saying that the school district is not a person under Section 1983 for the purposes of being sued for tort type damages but for other purposes and particularly for purposes of responding in damages for contract as well as for injunctive relief, the governmental unit is a proper defendant under the statute. Other cases allowing the recovery of back pay of school teachers have been approved without discussion of the governmental immunity problem. Smith v. Board of Education, 365 F2d 770 (8th Cir. 1966) and Wall v. Stanley County Board of Education, 378 F2d 275 (4th Cir. 1967).

Assuming that the case law may develop to clearly approve the recovery of damages sounding in contract from the school itself, what is the impact of this in a special education placement case. It will be most difficult for the plaintiff to cast his claim for damages in the nature of contract. Financial reimbursement for diminished achievement and development as a result of being improperly placed in special education would clearly be a tort type recovery. Any damage based on alleged stigma or improper label would be in the nature of damage to reputation and would also appear to be of the tort type. Any damage based on contract would have to be based on some type of implied contract to furnish education reasonably suitable to this particular child. Even if the contract could be established, the damages in contract for the failure to furnish the agreed type of education would probably be distinguishable from the back pay type of damages in the teacher severance cases. As such, the "back pay" exception to governmental immunity under Section 1983 does not promise a great deal of hope for the plaintiff who seeks to recover damages from the school as an entity in the type of factual situation under discussion here today.

In summary, with respect to the liability of the public school, we can probably say that the action for equitable relief in the form of an injunction prohibiting or prescribing certain future conduct is available to the plaintiff; but the recovery of money damages against the school is highly unlikely under the present interpretation of Monroe v. Pape.

Let us turn then to actions under Section 1983 against individual defendants such as school board members; principals or superintendents; and teachers, guidance and testing personnel and the like. In particular, I want to examine various immunities which may exist in the law to protect these individual defendants from suits under Section 1983. Such an immunity for an individual is sometimes labeled with the generic term "official immunity." As in the governmental immunity area, if such an immunity exists, it affords an absolute defense to the applicable individual provided the individual can bring himself within the specified perimeters of the immunity relied upon.

The matter of immunity defenses by individuals in equitable relief cases is easily disposed of since the individual has no immunity against injunctive relief. If the court finds that Section 1983 is being violated it is free to correct the situation for the future by court order.

In looking at official immunities in damages cases, there are three types of immunities which are well illustrated and find their most significant judicial authority in two important United States Supreme Court cases. In Tenney v. Brandhove, 341 U.S. 367 (1951) the court recognized the validity of immunity under Section 1983 for individual legislators. The case involved the activities of the defendant, a member of the California Senate, in connection with a legislative committee investigation. The language of the court also approves this absolute immunity to the legislator in connection with the more traditional law making activities such as introducing bills, voting and debate on pending legislation. The case makes it clear that the immunity is absolute. This means that is applies even though the legislator may have an unworthy purpose. The rationale for the immunity is that the law maker must be free to execute the functions of his office without fear of prosecutions, civil or criminal. The privilege is absolute rather than qualified so that the legislator will be free not only from ultimate judgment but also from the time consuming necessity of defending any litigation, whether otherwise meritorious or not. This case firmly established the existence of what is commonly called "legislative immunity."

The other very significant United States Supreme Court case in this area is Pierson v. Ray, 386 U.S. 547 (1967) which clarified and enunciated two other types of official immunity. In this case the plaintiffs, fifteen white and black ministers, were arrested and convicted under a Mississippi statute for integrating an interstate bus terminal in Jackson, Mississippi. After the statute was declared unconstitutional, they brought this suit for damages under Section 1983 against the three policemen who arrested them and against the municipal police judge who convicted and sentenced them. The judge contended he was immune under the long standing principle of "judicial immunity." The court, relying on its case of Bradley v. Fisher, 13 Wall. 335, 20 L. Ed. 646 (1872) restated

the proposition that a judge has absolute immunity from liability for acts committed within his judicial jurisdiction. Like legislative immunity, judicial immunity is absolute and applies even when the judge is accused of acting maliciously and corruptly. The rationale for judicial immunity is that the judge must be free to decide all cases brought before him, even those which are so controversial as to arouse the most intense feelings in the litigants. If he is wrong, the parties may appeal, but he is not and should not be required to make these decisions under the fear that unsatisfied litigants may hound him with litigation.

In Pierson v. Ray the police officers also asserted a claim to immunity. Their claim was based on different rationale, i.e., that they had made the arrests in good faith believing the statute to be constitutional and they should not now, after the statute has subsequently been found to be unconstitutional, be liable for damages under the statute. The Supreme Court held that if in fact the officers acted in good faith, believing the statute to be constitutional and made the arrests with probable cause, that no action for damages would lie against them. It is important to note two distinct features of this immunity; first, it is not an absolute immunity as in the case of the legislative and judicial immunity but is a qualified immunity only applicable if the defendant in fact was acting in good faith. Second, it literally injects a new element for recovery into Section 1983. Where by its terms, 1983 requires only a showing that the defendant violated the plaintiff's constitutional rights under color of law; we now add the factor that certain defendants will not be liable for damages if they act in good faith even though there is violation of the plaintiff's constitutional rights. We will refer to this immunity as the "good faith immunity." The rationale for the doctrine is that if the defendant was doing what the law or the rules and regulations of his job required him to do without any reasonable basis for knowing that he is doing something which will violate another's constitutional rights, then he should not be held liable for damages. If this immunity applies and the defendant acts in good faith, he is safe from damages.

The question then is, to what extent will these immunities extend to the school case and protect individual defendants, particularly in intelligent and achievement testing and special education placement litigation. Initially, if you review the rationale for the three immunity areas, I think you can envision individuals in the school setting functioning in situations where their duties include activities which involve characteristics which would support the rationale for all three types of immunity; judicial, legislative, and ministerial. For example, the school board in the establishment of rules and regulations clearly performs a legislative function. Can't you argue that in that endeavor they need the same freedom from fear of litigation as is afforded the legislator by legislative immunity? Further, the school administrator who is called upon to decide upon the expulsion of a student performs a quasi-judicial function; doesn't he need the same freedom of decision as is afforded the judge by judicial immunity? In fact, when the testing counselor takes

the results of intelligence and achievement testing and makes a determination with respect to the placement of a student; isn't this person engaged in judicial type decision making? Finally, in any school case where all the individuals involved in the chain of conduct which results in the deprivation of the plaintiff's constitutional rights are joined as defendants, there will be many and perhaps all who will simply be following orders or established procedures in good faith without any reason to believe that constitutional rights will be infringed. Are not these persons entitled to the "good faith" defense afforded the policemen in Pierson v. Ray?

In considering the application of these immunities into areas not touched by the Supreme Court decisions, the lower court cases are in hopeless disarray. One author has stated that "there appears to be a holding on either side of every immunity issue under the Civil Rights Act. Damages under Section 1983: The School Context, 46 Ind. L. Journal 521. Even when the courts are more or less consistent in results, lawyers are often sporadic in raising the immunity defense so that it is not unusual to read a case where from all appearances some immunity could be argued but the case is decided without discussion of immunity.

What about applying legislative immunity to members of low level legislative type bodies such as school boards? As an example of the confusing precedent, consider Gillibeau v. City of Richmond, (9th Cir. 1969) where the court stated that the members of a county board of supervisors would enjoy absolute legislative immunity if all the acts charged in plaintiff's petition were in the sphere of legitimate legislative activity. Compare this with Nelson v. Knox, 256 F2d 312 (6th Cir. 1958) where another court held that the members of a city council could not enjoy the absolute liability of the legislative immunity against the plaintiff's claim that the council members destroyed his garage business by passing illegal licensing and regulating ordinances even though this is clearly a legislative function. Also consider Gouge v. Joint School District No. 1 310 F Supp. 984 (W.D. Wis. 1970) where members of a school board were denied broad legislative immunity in a suit for damages under Section 1983 brought by discharged teachers. It is difficult to generalize and be accurate, but the precedent at this time appears somewhat weighted against the use of legislative immunity for school officials.

With respect to judicial immunity, this doctrine has been extended to judges at all levels of the judiciary (Pierson v. Ray involved a police judge) and it has also been extended to include ancillary court personnel such as prosecuting attorneys, clerks of court, court reporters, parole board members, and a medical examiner for a Superior Court in California. On the other hand, the absolute judicial immunity has not generally been extended to persons operating in situations unassociated with courts even though such persons are engaged in a decision making process which resembles the judicial function. The defendant who undertakes the development of case authority in this area will be charting new ground.

This leaves then the "good faith" qualified immunity and its availability to school personnel. Here, the case precedent strongly favors the defendant. In McLaughlin v. Telendis, 398 F2d 287, (7th Cir. 1968), a suit for damages against the school superintendent personally, by non-tenured teachers who alleged they were not rehired because of union activities, the court refused to grant legislative or judicial immunity to the school superintendent. However, the court stated that if the superintendent showed good faith conduct he would be immune under the same rule which granted immunity to the policemen in Pierson v. Ray. Likewise in Gouge v. Joint School District No. 1, supra, the court recognized qualified good faith immunity for individual members of the school board and in Nelson v. Knox, supra, they afforded the individual members of a city council the good faith immunity as a defense. These cases clearly demonstrate the availability of the good faith defense to individual school personnel involved in the testing and placement process.

In summary, it can be said that a plaintiff in this type of case has two classes of potential defendants; the individuals and the school as an entity. The plaintiff can obtain injunctive relief for the future against either class of defendant without serious difficulty in the form of immunity defense. On the other hand, if the plaintiff seeks money damages he probably cannot recover against the school as an entity because of governmental immunity and his action for damages against the individual defendants will probably also be unsuccessful unless it involves a situation where the individual acted in bad faith, i.e., he either knew or should have known that the procedures he followed and the conduct he engaged in would deprive the plaintiff of some constitutional right. It can be said to those engaged in intelligent and achievement testing and special education placement that if you act in good faith by keeping up to date on developing testing and placement procedures and make reasonably good faith efforts to apply these in your day to day activities that it is unlikely that a judgment for money damages would be returned against you individually or against your school as an entity. On the other hand, both you and your school are always subject to judicial review and prospective court order if your activities, even in good faith and with the best of intentions, should invade the protected perimeters of Section 1983.

A look to the future in this area calls for a few words of caution. As one reviews the current legal literature with respect to the matter of immunities in Section 1983 actions, it is reasonable to predict that we may see a limiting of some of the immunities and a resulting broadening of the situations in which a defendant may be subjected to liability for money damages. Many persons writing in the area at this time are of the view that injunctive relief, which is nearly always prospective in nature, simply does not motivate broad compliance with procedures to assure that constitutional rights will not be invaded. The argument is that if the only serious threat of litigation is that the court will tell you to change your procedures for the future, the potential defendant is inclined to wait for the litigation

and then change as directed. On the other hand, the threat of recovery of money damages can serve to bring the attention of all persons engaged in activities which might produce such damage actions directly and immediately to an examination and evaluation of existing procedures. To this end, some authors urge the limiting or elimination of governmental immunity under Section 1983. (See Developing Governmental Liability under 42 U.S.C.A. Section 1983, 55 Minn. L. Rev.; Liability of Public Entities under Section 1983 of the Civil Rights Act, 45 So. Calif. L. Rev. 131; Suing Public Entities under the Federal Civil Rights Act: Monroe v. Pape Reconsidered, 43 Colo. L. Rev. 105). The solution of opening the governmental entity to liability for damages is more attractive to plaintiffs than efforts to develop broader freedom from immunity with respect to individual defendants since it is the city, the county, or the school board that has the money; the individual defendant is often uninsured and many times judgment proof. It is the age old attraction of going after the deep pocket. Nevertheless, some have recognized the possibility that the limitation or elimination of the good faith immunity would also bring increased attention to the demands of Section 1983. (See Damages under Section 1983: The School Context, 46 Ind. L. Journal 521). It is possible that these pressures for change in immunity defenses will be sufficiently persistent and forceful to generate some re-examination of the precedent discussed.

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THE TESTING MOVEMENT: SOME SELECTED SOCIAL AND LEGAL POLICY CONSIDERATIONS*

A. L. Fanta**

The thesis of this paper is that we ought to avoid the establishment of rules, regulations, and legal guidelines with regard to the classification, measurement, and testing of exceptional children in our school systems without first taking a deep and long look at the social processes leading to the establishment of future policy in this area of educational activity. It is only by a critical examination of these social processes that we can learn if we are in fact being truly responsive to a social need or if our efforts, no matter how well conceived, will ultimately contribute to ill will, social distrust, and educational problems of a greater depth and scope than those we face today. It is to this process that I will turn my analysis, and hopefully in the body of the paper, in the course of sketching out the social processes involved, the pitfalls to be cognizant of, as well as the benefits and rewards that accrue, I will make a few cautious suggestions regarding items I deem it advisable for us to consider.

Question of Power

Ultimately in this area we are dealing with questions concerning power. The exercise of power always commits one to share responsibility for the uses of such power in the broadest sense. We call this social process cooperation. The special educator, the user of technical educational skills, because of this cooperation cannot escape identification with the social patterns of political power that encompass and transcend his occupational tasks.[1] Sanford, in his study, points out that organized social science is part of the Establishment from which its researchers are usually drawn and from which research is often dependent for financial support.[2] In this context, we also know that the social

*I am indebted to Professor Claude Marks, Chairman of the Department of Special Education, University of Delaware, for his helpful suggestions and critical comments in the preparation of this paper.

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[1]For an interesting report concerning the field of psychology, see S. L. Halleck, "Therapy is the Handmaiden of the Status Quo," Psychology Today, 1971, 4, 30-34, 98-100.

[2]N. Sanford, "Whatever Happened to Action Research?" Journal of Social Issues, 1970, 26, 3-23.

scientist often serves a legitimizing function for both the norms of conduct and the patterns of taste either approved by or overlooked by society at large.

In serving this normative function, the special educator and the legal scholar are in effect, not so much agents of the status quo, but rather are themselves subservient, in terms of cooperation, to the existing power relationships in society.[3] Through the combination of information control, normative sanctions, and research design special education teachers and legal scholars possess the power to cause changes in the beliefs, attitudes, values, and behaviors of those with whom they interact.[4]

It does not seem to be a valuable expenditure of energy to dwell upon questions of who possesses what powers to cause what social change.[5] Rather, I suggest that our analysis should study how that power is applied, and as a result of examining the social process see if social patterns appear and what their meaning appears to be.

Establish a Clinical Perspective

A first step in this social process, I suggest, is to desensitize the political universe. This has limits, but as much of the universe (social and political) as is possible will be seen not in political (ideological) terms but will be placed in a format that I choose to call the Clinical Perspective. The process of the application of clinical language and structure to political questions can be both misleading and dangerous.[6] It ultimately suggests that political conflicts can somehow be resolved apolitically: by the dispassionate intervention of experts, instead of through the healthy growth of political action.[7]

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[3]See Marilyn Gittell, "Participants and Participation: A Study of School Policy in New York City," The Center for Urban Education. New York: 1967.

[4]In our mass society it should be noted that interaction can be an "illusion" but nevertheless "real" in terms of felt social influence. This is most obvious when one considers the array of technological media in our daily lives.

[5]This would be institutional sociology and would not enable us to focus on the dilemma presented by the social relationship between social problems and social programs. See footnote 25, supra, page 116.

[6]For Marcuse, ". . . (T)he functionalized, abridged and unified language is the language of one-dimensional thought." Herbert Marcuse, One Dimensional Man. Boston: 1966, p. 95 et. seq.

[7]Thus, the Lockean vision of man is seen in ascendency over the Puritan notion of individual will. See, supra. page 115.

The question to which our remarks are addressed today, the classification, measurement, and testing of children in our schools, is a political question. The fact of increasing redress being sought through the court structure, in this context, recognizes it as such.[8] The court is called upon to make social policy from specific policy from specific cases. It could be argued that the court works backward from our accustomed academic patterns. We make social policy and apply it to individuals. The former goes from the specific to the general, while the latter goes from the general to the specific.[9]

Though we ought to both recognize and represent our political positions when we are formulating broad social policy instead of biding them as received clinical truths, the attractiveness not to do so is overwhelming. A conflict, after all, requires one to take a stand. A problem, on the other hand, is something everyone can be safely against, or most certainly favor the resolution thereof. At this juncture we should state what it is that passes for the resolution of a social problem. This can best be done in this instance by looking at our issue under discussion. The evolution of standards of conduct (rules, perhaps even laws) with regard to the classification and measurement of exceptional children is really an extremely delicate and demanding task of determining how conflicting interests can be accommodated with a minimum of political explosive protest from any side.[10]

I do not mean to suggest that there is anything inherently wrong with the application of expert skills, legal or educational, to the formation and execution of social policy. What is disturbing, however, is the idea that technical expertise can obviate or circumvent the political issues inherent in supporting any given social policy and can somehow avoid the painful act of taking sides in these social conflicts that go by the name of social problems. Let me be more specific by first being more general as we turn our

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[8]Note how law courts deal with political questions, while administrative tribunals deal with depoliticized issues of social fact that fit a predetermined social policy. Efforts to set up new administrative tribunals as well as efforts to politicize those in existence are both met with resistance. In the former instance one has the record of opposition to "New Deal" government regulation, while in the latter case one has the "radicalization" of government agencies proposed by the new left.

[9]This is most obviously seen in the school desegregation cases. Here a right "won" by an individual inures to all in similar circumstances. Thus, social policy is made which was based on individual decision.

[10]What after all do we mean when we say that something is "hot" or "ripe for analysis" or "ready to break." I suggest that we mean nothing other than the fact that it is ready for depolitization, a process preceding its entry into the profession.

examination to an outline of the problem solving process, keeping in mind the social policy question of classifying and measuring exceptional children.

In terms of social process, the prevailing view seems to be that for every problem there is (exists) a policy. If the problem is relatively new (under development), such as ours is, two things can happen: (1) the social system involved can be faulted for a lack of foresight in failing to recognize the problem sooner,[11] or (2) individuals can be indicted for taking inappropriate action, i.e., engaging in unsuccessful problem solving activity.[12] Overlying these two definitive stage processes is the fact that those who resist placing the question in a problem solving context are often those for whom the social policy is made.[13]

Not everyone who resists these policies made for them has values in opposition to the social problem solving social process. Quite the contrary, they may have the same values. Where values are in opposition, the objections are qualitative and substantive; where the values are in agreement, the objection is pragmatic and procedural.[14] Let me give an illustration. A young, white suburban middle class couple who believe in and use a high degree of social classification and social measurement as a means of both differentiating their social universe and predicating anticipated interaction upon those measurements, might find themselves in easy agreement with a school policy that ranks and orders children according to learning abilities and/or disabilities. That exceptional children could be located and given special education and treatment would surely meet with their approval. When they do object, it is over the fact that their child has been classified as exceptional. It is vital to note that the objection

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[11]This is what we are doing at this conference. It forms a preface to our remarks on the subject, which seek to establish, in one form or another, my own included, new social policy in education.

[12]Fault is used in a collective (social) sense, while blame retains an individualistic perspective. Note here when individuals are made vulnerable they are usually in a pattern of interaction that places them in contact with those for whom the social policy is fashioned. The teacher obviously fits this position with exact precision.

[13]For example, community organizers often represent and reflect community interests which are "against" a social policy designed to "help" them. Part of the reason may be an atmosphere of suspicion and distrust between policy maker and client. See A. Billingsley, "Black Families and White Social Science," Journal of Social Issues, 1970, 26, 127-142.

[14]This brings up the point that due process and justice are not the same things. See footnote 38, supra, page 120.

is not a what (substance) objection, but a when (procedural) objection.[15]

In this context, it is illusory to see expanded social policy of problem solving as making an inroad on an educational problem. As we have shown, there are dynamic aspects to any policy, such that it expands the problem, changes or transforms it, and generates further problems. For example, in classifying and measuring children we may be able to increase the effectiveness of our educational intervention by developing specific materials, media, and structure, but these changed social processes can create problems in the educational environment that will be reflected in subsequent learning and conceptualization difficulties.[16] These subsequent difficulties could be either overt or covert. If in the latter category, they would be subsequently "discovered" in the process of perfecting social policy.

Social Process of Classifying Children

Let us now turn from general social policy considerations to the social process of classifying children for special education intervention. Since we are examining process, issues will be disclosed only as a by-product of this process analysis.

The social policy of classifying children for special education intervention is an effort to deal with the breakdown of traditional ways of handling classroom distress. This distress involves the difficulties of teaching children with pluralistic backgrounds, children with social and mental differences, and children with difficulties in learning and mastering classroom materials and accepted or approved school behavior.

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[15]Here I will suggest is where our initial efforts to establish corrective measures will be found. Our activities will deal with procedural matters for two reasons: (1) our own value commitment, and (2) an articulate client community that shares these values but faults our procedures.

[16]For example, experimenter effects in the testing process is an area commanding close examination. Stewart Page in his study of social interaction and experimenter effects in a verbal conditioning experiment found: "that experimenters behaved somewhat differently for positively biased as opposed to negatively biased subjects." The study reveals that this means that an individual reluctant to participate in a test, for whatever reason, receives negative sanction from the tester and this sanction in turn effects (damages) his performance. See Stewart Page, "Social Interaction and Experimenter Effect on the Verbal Conditioning Experiment," Revue Canadienne De Psychologie, Vol. 25, No. 6., December, 1971, p. 463 to 473. See also R. Rosenthal, Experimenter Effects in Behavioral Research, Appleton Century-Crofts, 1966, and N. Friedman, The Social Nature of Psychological Research, New York: Basic Books, 1967.

In this effort to deal with the breakdown of these traditional structures, however, social policy that further specifies standards in measurement and classification techniques tends to encourage the further weakening of these very structures that were initially sought to be protected because the separation of children within the school system can be and often is counterproductive to the development of the traditions (patterns of interaction) necessary for the healthy development of children--a strong family structure located in a viable community. As Kuriloff states:

> It is possible that many children, possibly even the majority now that do have problems are more often children involved in a disturbing child-peer-teaching-curriculum interaction. If so we should study the interaction processes.[17]

Trow, in an article concerning the function of school psychologists in education reform, states that:

> It is now time for them (school psychologists) to be less preoccupied with their testing kits and report blanks and to begin to take a leading part in determining educational policy in restructuring education organization and in improving the pattern of instruction.[18]

Moreover, our efforts in dealing with educational policy, in restructuring educational organization, all too often take the form of increasing the number of individuals trained to deal with the problem, in this instance developing, administering, and reassessing the tests. This process reveals two things: (1) Initially, we reflect with academic hindsight that one of the reasons the problem exists is because of a lack of trained personnel in this part of our educational system. (2) The increase in trained personnel will be a requisite to successfully managing (solving) the problem of classifying fairly the children in our school systems.

Concomitant with the above, but, ranked in order for clarity, is the process which reviews the qualifications and experience of those experts currently dealing with the problem in the field, i.e., those persons classifying children for educational intervention. As we all know, no review process is complete (successful) without measures for educating or re-educating the experts. Thus, training or re-educating the educated often becomes the prime social process in "dealing" with the social problem of testing procedures and the

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[17] P. J. Kuriloff, "Toward a Viable Public Practice of Psychology: A Psycho-ecological Model." Unpublished Doctoral dissertation, Harvard University: 1970.

[18] W. C. Trow, "What Should be Expected of Psychologists in Education Reform" Journal of School Psychology 7, 1968-69, p. 64.

standards governing their use and application.[19] I am not implying tainted motives, so much as I am alluding to a kind of self-induced political pressure, often of a subtle, creeping nature, that causes us to prepare ourselves with increased extensiveness educationally, while not inducing us with the same degree of magnitude to be receptive to the educational issues existing on the other side (the client side) of the juncture point where our skills interact with our clients' educational needs.

Professional Benefits

In light of the above mentioned processes, an additional dimension that should be discussed is the benefits of the expanded social policy of classifying and testing children that would accrue to special education and ancillary educational professions. In order to be brief I shall enumerate them as follows:

1. Institutionally the ambiguity implicit in the role of being a teacher would be decreased. Certainty in terms of duties, teaching functions, and curriculum development would be increased. Simply stated, the more we know, the better we would be able to plan our educational policy.
2. Teacher vulnerability vis-a-vis parents, community groups and administrative personnel would be decreased. The legal benefits would be obvious and would be accelerated by the promulgation of policy in this area. Thus, while not completely removing legal issues or the possibility of their being a threat of litigation, the area in which law suits could be mounted would be narrowed. Administrative caprice, absence of standards, as well as unfair application of standards, vagueness of testing processes, and use of unqualified personnel, if non-existent, would greatly reduce the areas of social contact legally, but not necessarily solve the problem. As Doris says:

> It is possible to have a poor social action program--in the sense that it does not solve the problem or that it creates problems of greater severity in other areas of social life--which purports to be based on adequate and sound scientific knowledge.[20]

Thus, the relationship between social action programs and scientific knowledge by no means automatically assumes that if the knowledge is correct that the program will in fact work toward a solution of the problem. In other words, cleaning up ambiguities, unfairness, and sloppy testing procedures is not an assurance of a good social policy. In our instance I fear we might create a situation where due process is synonymous with justice. After all,

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[19] Short courses, seminars, workshops and conferences are the most common methods employed for such purposes.

[20] John Doris, "Science, Action, and Values in Familial Retardation," Journal of Special Education, Vol. 4, No. 2, p. 162.

we are all acutely aware that a great issue lingers after the constitutional safeguards have been meticulously provided for when a man is condemned to death. That issue, of course, is capital punishment. So, too, in our instant situation an issue of unusual and cruel punishment by testing may exist after all developed due process safeguards have been realized.

3. Professionalization and increased expertise among members of the profession would multiply. Professionalization means simply that a certain point of view is developed about the nature of the problem solving process.[21] Simple, practical, but nevertheless important measures such as additional jobs, both at the teaching and graduate level would be developed and on the intellectual edge of the profession we can certainly envision merger with other fields involved in the promulgation of social policy in the testing area.[22] However, it should be pointed out that the inherent weakness in all social policy is that its effectiveness is limited by the inevitable professionalization of services.

Though we have mentioned three professional benefits, not without self-contained issues, from expanded social policy in this area, there also exist three liabilities, pitfalls, or what I choose to call evolving ambiguities. These are:

1. Will rule formulation with regard to testing and measurement necessarily aid in the teaching of the student population that is so classified? Perhaps we will be narrowing both the kinds of and quality of human interaction by and between the teacher and the student. As testing becomes more "relevant and sophisticated" to meet the "needs of the children" by locating their "abilities," will not teacher training and preparation be increasingly responsive specifically to these needs? The human relationship of teacher-student can easily be transformed into a functional relationship between expert and client.

2. Will the setting of our own house in order necessarily promote the kind of educational programs that will encourage community development and family social health that will help us alter an all too often endemic cycle that is innocently repeated and professionally fostered by our social pathological view of the world?

3. Who will be responsible for the administration of the expanded and sophisticated testing and measuring process? The question involves the internal issue of testing as well as the external feature of all of the due process, hearing and notice provisions. Clearly psychology is becoming more action oriented,

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[21] I do not mean to imply that we all have uniform views within the profession. There are obvious differences in theory construction, methodology, and teaching styles. What I do mean is that there is a distinction between these approaches and say the recognition of political action outside the profession, though allied with the profession.

[22] In this context, literature would be developed, added to, read, and would perform a legitimating function to these new academic combinations.

and without too much difficulty one can foresee academic warfare in the not too distant future between school psychologists and special educators as to who should be responsible for testing and measurement.[23] These professional disputes would raise questions of accountability, as well as issues of intellectual stature regarding the philosophical nature of man and the teaching process.

Philosophy, the Law, Social Science and Educational Policy

Philosophically the law is faced with a situation where one has two interacting concepts of man's malleability. The first emanates from our Puritan heritage while the second is a philosophical body of thought that dates back to John Locke. The Puritan ethic, which sprang from a theological base, issued a concept of man, who in God's image, creates his environment through acts of will. This freedom to make what one wants out of one's life is one of the most cherished of our ideals. The Lockean notion is radically different. It consists of the notion that the human psyche is an empty slate; a tabula Rasa--something passively waiting to be filled by various environmental stimuli. It is the former concept which often prevails in the ethnic and minority communities and is exemplified in the following remarks of Stokely Carmichael when he says that Blacks:

> . . . (M)ust begin to think of the black community as a base of organization to control institutions in that community. Control of the ghetto schools must be taken out of the hands of 'professionals' most of whom have long since demonstrated their insensitivity to the needs and problems of the black child . . . Virtually no attention is paid to the wishes and demands of the parents, especially the black parents.[24]

The Lockean concept of man dominates the social sciences for no other reason that the value neutrality so frequently espoused avoids the honest recognition of the ideological nature of the problem solving process at interaction as well as institutional levels. As Gouldner states:

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[23] Simplistically the argument could be briefly stated as follows: The special educators would argue that they would be in a preferential position because of longer contact with the child. They would approach the matter in terms of developmental holism. The school psychologist on the other hand would argue that this would promote experimenter bias and, in addition, by performing the testing and measurement he would free the teacher for teaching and curriculum development duties.

[24] Stokely Carmichael and Charles V. Hamilton, Black Power: The Politics of Liberation in America, New York: Vintage Book, 1967, pp. 166-167.

> A theory is conservative to the extent that it: treats . . . institutions as given and unchangeable in essentials; proposes remedies for them so that they may work better, rather than devising alternatives to them, foresees no future that can be essentially better then the present, the conditions that already exist; and, explicitedly or implicitly, counsels acceptance of or resignation to what exists, rather than struggling against it. (emp. supp.)[25]

The Lockean perspective is also reflected intellectually in the influence of modern psychology which has developed into a science of teaching in general in such a manner as to be wholly emancipated from the actual material to be taught. This emphasis on the mastery of teaching, or technique, means that the teacher is a passive person, a vessel through which data is transmitted (information processed) to an also passive student or client.[26]

It is also true that this process goes beyond technique, as where technique and content become interchangeable, but this focuses only on an inconsequential portion of the process. The important feature to note here is that intellectual policy (aims thereof, as well as means and subjects) becomes social policy through the agency of institutional contacts and as a result these policies are separated from man--the very subject upon whom these same policies will eventually act.[27]

The interaction between these two concepts of man, the Puritan and the Lockean notions have given us in education some paradoxical situations. Let me mention one instance. One has, for example, a situation where the education-researcher tries to combine the concepts; individual freedom and the plasticity of human nature. Often this combination is attempted hierarchically; that is, one on top of the other.

At worst, one has the freedom of the expert to design mechanisms of social control for or over whomever his clients will be. On the bottom strata one has the client-subject material passively waiting new environmental factors that will shape (read educate) him. In this hierarchical system we should note that

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[25] A. Gouldner, The Coming Crisis of Western Sociology, New York: Basic Books, 1970, p. 332.

[26] Educational teaching machines, media included, also fit the Lockean perspective in that the illusion of interaction (pressing buttons, turning knobs, and simulated voice encounters) still reveal a passive man reacting to pre-established environmental stimuli. In this case the stimuli is pre-existing educational programs.

[27] Institutional contact implies interaction with both persons and other institutions. This passivity of modern man finds its ultimate expression in the words of Franz Kafka. See The Trial, Modern Library Book, New York: Random House, 1957. The Castle, London: Penguin Modern Classics, 1966.

positive legal activity can be viewed as the fashioning of the standards of conduct (rules governing the patterns of interaction) for these new environmental factors.[28]

At best one has a social situation where freedom from environmental constraints is a social reward offered for assuming approved patterns of interaction and the individual's behavior has received positive normative sanctions. The individual freedom is illusive because of the increasing time spent in prior socialization with what to do with that freedom. Freedom of the individual is concomitant with successful mobility patterns in the social hierarchy and not on a priori social fact.[29]

With this apparent philosophical inconsistency, one finds a social situation where our faith in both individual as well as collective efforts to change the environment is rapidly being eroded.[30] Educational policy makers (intellectual and social) and school administrators and teachers often do not see the dilemma that lies at the heart of the relationship between social programs and social problems. The dilemma of life in the technological society is the social process of treating the institutional means by which a social need is met as if it were itself the need. Thus, for example, medical treatment is synonymous with health care,

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[28] Negative legal activity here would be that activity that threatened to change or alter the existing social processes from other than institutionally approved sources. Thus, a lawsuit challenging the schools' authority regarding student classification procedures would be viewed in a negative manner because the institutions and professions involved would not have the functioning of the social processes under their complete control. The legal decision could be socially disruptive and alter the social processes involved in testing children. The institution could feel threatened and the professions vulnerable.

[29] This statement is an explicit functionalist viewpoint. See R. K. Merton, Social Theory and Social Structure, Glencoe, Illinois: Free Press, 1957. Note how Merton's scheme (ritualist, retreatist, rebel, etc.), lends itself to the conceptualizing of social control. It would seem that the control of the deviant behavior (the deviant) is, by definition, a cultural goal.

[30] Phillip Slater puts the matter as follows: "On the one hand there is increasing experimentation with communes and communal arrangements, and a serious awareness of the Nuremburg Trials and their proclamation of man's personal responsibility to all men. On the other hand, there is a great fascination with the concept of anarchy--with the attempt to eliminate coercion and commitment in any form from human life." P. E. Slater, The Pursuit of Loneliness; American Culture at the Breaking Point, Boston: Beacon Press, 1970, p. 148.

industrialization with economic development, individual success with consumption, and more importantly in our area of concern, schooling with education, success in school with testing and measurement, and due process with justice.

This process, this dilemma, as well as the institutional assumptions regarding social need, has more dimensions than the previously discussed philosophical implications. It has an action focus. The process can and should be examined in terms of the systems of proof available to and used by the professions of special education on the one hand, and law on the other. This comparative overview would enable one to find out if there is a relationship between different systems of proof, and what values inherent in the respective social processes in fact exist.

Law has a theory of proof that is different from that of the special educator's theory of proof. Without going into great detail the point to note is that modern social scientific theory did not develop in connection with the study of human behavior as the law did. Rather its beginnings were in mathematics and its methods were brought to us through the physical sciences.[31] The special educator in trying to achieve scientific accuracy in the measurement and testing of exceptional children faces a dilemma as a result of this "system of proof."[32] He has a choice among a bewildering array of scientific instruments of varying precision and immense versatility. Those instruments he finally selects, as well as the method of their use, are determined both by scientific and institutional policy. These considerations are often much too restrictive and limiting, and can in fact contribute to future difficulties.[33]

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[31]Not all social scientists recognize the "legitimacy" of this boundary, nor seek refuge within its perimeters. See C. W. Mills, The Sociological Imagination, New York: Grove Press, 1959.

[32]". . . (O)ne must recognize that the soundness of the 'scientific knowledge' upon which a given social action program purportedly rests may be quite independent of the soundness of that program." See John Doris, "Science, Action, and Values in Familiar Retardation," Journal of Special Education, Vol. 4, No. 2, p. 162.

[33]Those who would counsel against an examination of the legal process, the theory of proof in operation because the methods of gathering data are often "antique," react prematurely and emotionally. The fact is not that the law lags behind in method, for example, in prohibiting the polygraph test (sodium pentothal) as means of determining the veracity of allegations; but rather the fact to note is that the law is a tradition setting and tradition maintaining social process, and this process transcends its truth seeking function. Frequently, in order to function, the process creates legal fictions; and by the fact of being fictions, these doctrines in fact become vehicles for social change.

In this context, it may well be that the law is the theory of proof has something to offer the special educator. The law has gone about the job of collecting data upon which to base its decisions for social action for a much longer time than either the physical or social sciences. A critical examination of the law's methods of finding out on which of the many sides of a disputed issue in fact the truth is more likely to lie would be most beneficial. True, this type of truth will not split atoms, nor will it specifically yield accurate testing and measurement procedures, but it may reveal necessary elements in the social process that contribute to the maintenance of traditions that by their very existence (maintenance) mitigate against the social disorganization actually contributed to by the problem solving social policy we have been discussing.[34]

In the end, it may be that we are not kept healthy by the things we have always assumed contributed to our general welfare and overall well being. Modern communication facilities, more effective medical cures, new scientific knowledge, and sophisticated measurement and testing procedures for exceptional children may not only guarantee us nothing, but may in fact simply transfer the risks they sought to insure us against to other no less worrisome areas.[35]

On the other hand we may find that our best guarantee of social health is and lies in the maintenance of certain patterns of social life. For example, the college drug problem will not be cured by initiating massive drug education programs, staffing dormitories with psychological personnel, creating encounter groups (rap sessions), or by providing a telephone number for students to call. The problem might be cured, however, my making

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[34]Another position that presents yet an additional aspect of this process is the position that urges an alliance (merger) between social science and law. The reasons underlying this proposal are based on the joint grounds that the law needs the methods of social science to strengthen its data gathering processes while social science needs law to control or coerce experiments in human behavior. See, for example, T. A. Cowan, "The Relation of Law to Experimental Social Science," 96 University of Pennsylvania Law Review 484, 1948, for an excellent discussion.

[35]It is even arguable in an absolute sense if things do in fact get better. Much of the energies of the medical profession today, for example, deal with the recognition and treatment of patient conditions that exist because of reactions from previous medical-pharmaceutical cures.

the universities exciting, dynamic places where involved people can turn on to fields of inquiry and where imagination is excited and trust in youth reaffirmed.[36]

This latter suggestion focuses on the maintenance of certain patterns of social life as the key in dealing with the issue, while the former reacts to the problem with policy measures that change and alter these patterns as a requisite condition for the operation of that social policy. Management, measurement and trust are not so much inconsistent, but rather are confusingly blended together to form the benevolent custodial care system that characterizes many aspects of our modern world.[37]

In the daily workings of our professions the doctrines with which we are dealing surface as a legal expression of laissez faire in terms of educational social policy and a no less vital expression of individualism in terms of the scope of due process in educational policy. Laissez faire may conceivably proceed from a cherishing of individualist values, that is an arguable point and not germaine to our discussion, but it should be distinguished from individualism. Individualism is a social philosophy, while laissez faire is a legal mandate.

In another sense, by viewing educational policy in laissez faire terms we are discussing the establishment of individual rights by authority, that is, by the establishment of authority. For example, when the court in the Constantineau case established the rights of the defendant to due process protection (notice, hearing, and appeal) it do so by authority, i.e., the authority of the state to post such notice with regard to habitual drunkenness.[38]

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[36]The maintenance of these social processes is more than an alteration of social structure. Traditions and social process involve value questions encompassing the teaching-learning process, including what should be taught. A course on how to cope with problem x (passive view of man) is radically different from a course where the sustaining traditions of inquiry and creativity can lead to student conclusions (active view of man) that take issue with the functional demands of the social order.

[37]See Thomas Szasz, Ideology and Insanism, New York: Doubleday-Anchor, 1969.

[38]Wisconsin v. Constantineau, 400 U.S. 433, 27 L.Ed 515. "Generalizations are hazardous as some state and federal administrative procedures are summary by reason of necessity of history. Yet certainly where the state attaches 'a badge of infamy' to the citizen, due process comes into play." 518-519. See also Anti-Fascist Comm. v. McGrath, 341 U.S. 123. "The right to be heard before being condemned to suffer grievous loss of any kind, even though it may not involve the stigma and hardships of a criminal conviction is a principle basic to our society." p. 168.

Countless other examples of individual rights being established by authority as a result of laissez faire legal mandate exist. Regulations regarding snowmobiles, pollution standards, ecology policies and perhaps soon, birth control programs and population management schemes.

In each of these areas the question of whether or not it was proper for the state to act, to create a policy, is not at issue. The issue is how and in what manner the activities (the state action) effects the individual.

It is easy I realize to read our own educational dilemmas into the phrases of the day, to make an identification of a historical trend where there is room only for a brief comparison, but the fact remains that we are still faced with the question as to what are the chances, for example, that the courts will reverse the secular trend of their collective decisions and adopt an attitude toward education and educational policy such that they will not tolerate experiments in the direction of a government supported, expertly controlled and well articulated educational environment?[39] The courts, I suggest, will protect educational laissez faire policy for the simple reason that the court does not desire in an active sense to make institutional social policy. The court will continue, however, to make social policy where

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[39]Hobson v. Hansen, 269 F. Supp. 401 does not contradict this statement. In this case the track system was held to violate the equal protection clause of the constitution. In saying that:

> Apart from such intentional aspect, the effects of track system must be held to be a violation of Plaintiff's constitutional rights. As the evidence in this case makes painfully clear ability grouping as presently practiced in the district school system is a denial of equal educational opportunity to the poor and a majority of the negroes attending school in the nations capital . . . at p. 443 (emp. supp.).

The court did not state that experimental educational design and innovative school programming was per se to be limited or controlled but only that this specific program as presently practiced violated the constitutional rights of the Plaintiff's, i.e., its effect was unfair.

individual rights are concerned in that the procedures of these developing social processes are unfairly applied, denied, abused, or for technical reasons, are not fair.[40]

We are living in a period in which educational enterprise is on the aggressive and the individualistic ideal sweeps everything before it. As a result, the courts I feel are not likely to read anything but individualistic philosophy into the constitutional law. In this context I suggest that the meaning of American education, its direction and the attendant rights, responsibilities and duties of those concerned with its development will be most securely found in the developing social processes and not in the specific remedies sought in particular legal cases.

Allow me now to turn to some final items for consideration, that hopefully contain both a strategy and content of relevance. Initially, I suggested that we take a good hard look, a deep breath, as it were, before moving in the area of establishing standards, developing rules, even laws governing our conduct with regard to testing and classifying children for educational intervention. Then I endeavored to sketch the problem solving process, showed how that process might be seen to operate in testing and measurement, alluded to some anticipated professional benefits as well as some lingering ambiguities. Lastly, I placed the social process in a philosophical perspective, compared and contrasted legal and social scientific methods of proof and finally discussed the legal process as it works with regard to both institutions and individuals. In terms of this holistic perspective let me offer a few cautious suggestions.

1. It is quite possible that the poor and the minority groups will still not be treated fairly even with due process protections simply because they will lack the political base necessary for the entrance of their views and desires regarding education and schooling into the system. Politization of these groups is not an answer because the politization is not self-generative but rather reactionary in form (counterveiling institutional programs) and ultimately functional to the needs of those making social policy. Thus, freedom in terms of a pluralistic approach may not lie in further organization.

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[40] In the second Hobson v. Hansen case, 327 F. Supp. 844, such was the case when the court ruled that disparit disparities in pupil expenditures could not vary between schools in the District. As the court said:

> Notwithstanding contentions that discrepancies were random, were due to technical reasons beyond defendants control, and were inconsequencial, right to equal educational opportunity was being denied and it would be ordered that per pupil expenditures for teachers' salaries and benefits in any elementary school not deviate except for adequate justification, by more than 5 percent from mean per pupil expenditure for teachers' salaries and benefits at all elementary schools in the District. n. #1, p. 844.

2. Special educators, lawyers, psychologists and members of other professions cannot escape the necessity of using information control in the pursuit of professional and social objectives. Nor do I think they should do so. I do not think that the issue is whether or not the power should be used, or how the information could be most effectively used, but rather how the information should be shared before it is used.

3. Ultimately there exists a social theme in America that transcends all the issues we have discussed. This theme is nothing short of that unquenchable desire of mankind, all mankind--in any categorization--Black, Chicano, poor, female, youth, and handicapped; for liberation. To respond to this dynamic social theme solely in terms of due process rights, institutional programs, and structural changes will be, I fear, to fall far short of a most noble task that awaits us and to appear a little smaller in the eyes of our fellow citizens. In the end the ultimate liberation of man and answers to the issues raised in this paper may lie in recognizing and protecting man's ambiguities.

THE AGONY AND ECSTASY OF BEING A SPECIAL EDUCATOR

John W. Kidd*

Everyone knows our business; everyone tells us what to do and how to do it; the agony is in having to hear it from the lawyers and the sociologists and the psychologists and the parents and the pupils and the aides; but the ecstasy is in the attention we get and the occasional nugget which crops up like a Jane Mercer or a Grant Nelson or an Elwood Thomas.

My fellow panelist, Dr. Johnson, has agreed that I shall react to the content in Thursday's presentations and that he shall react to today's content in addition to whatever generalized reactions either desires to express.

Dr. Edwin Martin's initial presentation here set the stage for the multi-faceted look which has been given to the complex topic of our conference which, I remind you, is "legal and educational consequences of the intelligence testing movement . . . handicapped and minority group children." Dr. Martin reminded us of USOE's priority for education of the handicapped. He recognized the temptation in the face of certain critics to take the position that since special education, including intelligence testing, is something less than perfect it should be abandoned. He clearly warned against this "throw out the babies with the bath" retreat. In similar circumstances, others have reminded us that mainstreaming of many of the children with special need promises only their drowning.

I thought that Dr. Martin implied that the imperfections and biases in tests, like other arenas and vehicles of pollution such as air and water and automobiles and proposed Alaskan pipelines, need cleaning up.

Dr. Richard Whelan's insight relative to the nature and nurture of labels was a needed reminder. Perhaps I may oversimplify his message by suggesting that it is not words which derogate people but people who derogate people. If our labels are to be changed, it should be for greater precision. If they are to be abandoned, so will their subjects . . . the handicapped. It is only through symbols that the presence of anything can be acknowledged. It is only through labels that the handicapped can be the topic of communication, appropriation, and special education. If mainstreaming them made sense, none of what has become special education would have emerged.

Some of our critics, I think, have become enamored of change . . . any change. I suggest our continuing to welcome change as a means to progress but not as an end in itself.

I have long awaited the opportunity to partake of the wisdom of Dr. J. McVicker Hunt. It was a rich offering that he made. It is presumptious of me to accept the role here which I did. It

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is audacious to pretend to the capacity to constructively react to Dr. Hunt's paper.

Suffice it to say, I hope, that the analytical study of the child as the basis for school curriculum, which he espouses, we impatiently await. That intelligence testing falls short of this ideal, there seems to be no doubt.

If this conference's first day had content which raised the intellectual goose bumps of many educators present, it had to be the scholarly summaries by Grant Nelson and Elwood Thomas of the principles and procedures of applicable federal law. Perhaps the written record of this conference will be held in greatest esteem by more people due to the inclusion of their papers than for any or all the rest. How nice it would be, many of us must have mused, if when we are sued these two could be our defense attorneys.

Have we missed something here about the efficiency and effectiveness of instruction being to some extent contingent upon the homogeneity of the learners? No educator proposes chance grouping such that a teacher's class consists of boys and girls whose names were drawn from a hat . . . the hat containing the names of all the pupils age 5 to 21, IQ 0 to 200, who reside in the area served by her K-12 consolidated school. Yet some educators denounce homogeneity of grouping. Whatever their purpose, it certainly is not for the purpose of improving the efficiency and effectiveness of the learning experiences of children . . . just as some educators denounce where it happens without the inconvenience of knowing what happens there.

Have we missed something else along the line that public school programs for the mentally retarded are being attacked simultaneously for diametrically opposed purposes? One attack we all expect and some have received demands for admitting more children to such programs . . . more at the less able end . . . younger both mentally and chronologically than is currently done in most of the states; and more at the older and more able end . . . beyond 16, 18, even beyond 21, and above IQ 68, 70, 75, even in some states now to 85.

The other attack says that we have no right to classify, homogeneously group, and/or specially program for "slow learning children" as though they are handicapped. This plaintiff says, "How dare you call my child retarded?" and the other says, "How dare you deny that he is?"

It is heartening to me, and with this I close, that the only public school system I know about which literally attempts to operate the world's finest program for the mentally retarded experiences rare criticism for mislabeling. This system not only aspires to the highest quality program but is affluent enough to implement it. These two ingredients may be present nowhere else. In little more than a decade this system has bought and built in excess of $20 million worth of buildings and such without paying a penny of interest. The point is that in that system, dozens of boys and girls attend classes for the educable mentally retarded by parental petition and State approval even though their measured intelligence significantly exceeds State standards. Demands

on that system are for including more children . . . not fewer children.

It may be that much of the disenchantment with public school programs for the retarded and for the disadvantaged comes from public schools doing it reluctantly and poorly rather than doing it with the full intent of highest quality and the full support by an otherwise affluent society.

COMMENTARY

John L. Johnson*

My commentary will be geared toward the theme of this conference. There have been legal and educational consequences of intelligence testing movement for all children, but probably more markedly for handicapped and "minority" children. The rich body of data generated and presented by this and other conferences is ample evidence of the serious concern shared by professionals, laymen, and parents on the one hand as individuals but seemingly not of similar concern to institutions, schools, and professional regulating bodies, including the political forces who maintain a consequence laden status quo. It is ironic, in fact, that there is such wide spread sympathy for the negative consequences of professional IQ'ism but so little behavioral science professional action which is directed toward alleviating the negative consequences we all abhor. Rather, our behavior seems to be characterized by a pseudo-scientific - "objectivity" stance which permits, legitimizes and sustains the noxious practices of intelligence testing, labeling, and stigmatizing of public school students.

Professionals, educators, psychologists, psychiatrists, and others of us assembled for conferences such as this one, all bear part of the responsibility and guilt for the accumulated incompetence, inaction, and ignorance which is inbedded deeply in the intelligence testing movement, as a general issue within the scope of American educational practice. It is no wonder that the law, the courts, and the legal profession have become the forces which must be invoked if the rights of children are to be differentiated from those of the institution and professions. This is a serious question of politics and one which few professionals have the courage to confront in a political context. Rather, we convene, discuss, generate data, present papers all in the hope that the social condition we wish to change will do so as a result of what we know best how to do; that is convene, gather data, discuss and present papers.

To illustrate my point, I cite for you two papers, neither of which are popular, but both of which address the specific issue of intelligence testing and race. Both are quite potent, and in my own thinking each contributes a great deal to the issue of this conference and both call attention to the underlying structure of the issues in this conference. The first, "Racial Factors in Intelligence--a Rebuttal, published in Transaction, June 1969, clearly sets forth a position which brings environmental factors into scrutiny when intelligence and IQ are discussed. Yet, few professionals are willing to address the system of values and the American-patriotic-white-nationalist ideologies which systematically relegates segments of the society to something called "minorities," and then utilizes a pseudo-scientific mechanism such

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as intelligence testing and IQ to maintain the oppression, and the inability to control environment and behavior. In the case of the African-American, slavery was the primary mechanism utilized to oppress and diffuse their original culture and in the case of the native American, the Indians, outright wars of annihilation were the mechanism of oppression. Both peoples suffered cultural denigration and were taught to hate themselves. In conventional professional language both are now designated as minorities and thus subject to the bigots' query about such factors as intelligence and IQ and its extensions into compensatory education, including the use of bankrupt notions such as "cultural deprivation" and the utilization of persons of the same race as IQ examiners. What is systematically repressed is the overwhelming and still potent oppressive ideology in the white professional mentality, whose main concern is to justify what their forefathers did and the benefits of which they now enjoy. In this context, many Black professionals see the recent revival of the "IQ issue" as DuBois saw it in his Crisis editorial of 1920 (the second paper I cite). "Race intelligence" was an instrument of oppression then as it is now and its present form is one of mechanisms for relief of inter-generational guilt.

It is from this perspective that the conference papers on intelligence must be viewed.

First, Higbee's research on the Sioux, his meeting with the tribal leader, and his test results showing differential findings on visual memory and auditory closure and Rubin's findings from repeated measures both contain data which answer frequently asked empirical questions but neither report comes near the ideological issue. Higbee's analysis of the WISC sub-tests clearly shows the effect of socio-cultural and even physical environment on how the questions would be answered, but will repeated measures of the same tests without environmental intervention, tell us anymore than we know now?

Pauker's paper on the difference between IQ and intelligence, I believe, was quite a humanistic approach, yet strongly empirical. His discussion of norms is extremely valuable and his notions about the static nature of certain characteristics was quite good.

Mercer's presentation on pluralistic assessment to include adaptive behavior and her typology of disability were well received by most conference participants. The notion of adaptive behavior, from a socio-cultural context is an important one and we all await the publication of her inventories, the Adaptive Behavior Inventory, the Socio-cultural Modality Index, and the Health History and Impairment Inventory. How, in fact, these new assessments will be utilized is a matter of serious concern.

Mercer's work has an intellectually provocative character, but placed in the hands of those who now administer the schools her work, like that of others, can be utilized to maintain the status quo in educational ideology and to identify new types of surplus populations within the context of American education. Many of us, with particular interests in educating Black children, see Mercer's work as a positive step toward re-construction of the educational decision process. While pluralistic assessment research will alleviate the present situation by which children are labeled and assigned to inferior educational arrangements, we must view it with caution, until the political consequences become overt.

The second element of this commentary has to do with special education and the law. It relates specifically to Fanta's paper dealing with the issue of power and social processes as imbodied in the law. There has been no more significant educational change agent than the development of this new authority for change in values and attitudes. Fanta's very good analysis of the role which social policy and law must take on to fill the void which is left by the professional educators. Education is too important a social policy to be left to educators alone, thus the law as authority and as impetus for reform of all of education, regular and special is a hope for the future. Recourse to law and the courts is perhaps the only solution to the issues brought forth at this conference. It has been, in fact, one of the significant factors in shaping public education in the District of Columbia. I will, as requested, review the major points of two cases.

First, in Hobson v. Hansen, the court gave redress to Hobson against the school system. Among other issues, the court prohibited the placement of children into a tracking system of studies, based mainly upon results of group administered ability and intelligence tests on the grounds that such procedures were discriminatory toward Negro students. In the decision, specific notice was made of the particular methods used by the school system to segregate whites from Negroes, i.e. ability and intelligence tests results which relegated Negroes almost exclusively to the lower educational track. In this system of grouping, special education, per se, was not provided since the lower or basic track was a separate, stigmatizing unit. The irony of this case is in its specific relationship to the need for conventional special education. As long as tracking was policy there was no established Department of Special Education and shortly after tracking was eliminated Special Education was established in a formal manner.

Second, in Hobson v. Hansen - II, the court gave redress to Hobson against the school system over the manner by which resources (per pupil expenditures) were allocated in various sections of the city of Washington. One need not think very long to know that Blacks received the short end of the stick. The court ordered that pe upil expenditures be equalized throughout the system to within five percent of the city mean. The school system was ordered in the first stage of compliance to equalize teachers salaries, school by school. This necessitated the shifting of teachers with low salaries (i.e. relative experience) between schools who were above and below the city wide average. This effort addressed, in Washington, the age old problem wherein teachers in poor and Black schools were mainly new and inexperienced. The second stage of the court order has to do with supplies, special resources, and so forth. In the long run, theory would hold that such a step would prevent a large share of the "special education" need be-

cause as general education improves its teaching and affords good education for all, then there will be less need for special arrangements. Time will tell. The major special education implication is in the provision for equal opportunity for classes of students, using fiscal resources as a baseline variable, although special education is growing by leaps and bounds and the shifting of fiscal resources may constitute a future problem for legal redress.

The second case, and probably the most important is Mills vs. the Board of Education. It addresses the problems of handicapped children and is developed out of the same matrix of educational neglect and noxious public educational policies which caused the need for Hobson vs. Hansen. The one difference is that the D. C. Board of Education and school administration have entered into a consent agreement, thereby recognizing the substance of the issue and setting in motion a voluntary process for assuring the rights of handicapped students. Mills vs. Board of Education provides for the following:

A. That children were labeled "exceptional," as behavioral problems, mentally retarded, emotionally disturbed or hyperactive, and denied admission to the public schools or excluded from the school, with no provision for alternative educational placement or periodic review.
B. That the school system excluded, suspended, expelled, reassigned, and transferred "exceptional" children from regular public school classes without affording due process of law.

It is noteworthy that all seven of the plantiff children for whom the class action was established are Black. While this factor is important, the class they represent is not limited by race, rather when the precise description of their handicapped condition is reviewed, they represent the range of problems to which schools must "equalize" their educational programs.

The suit itself, provides for:

1. Free publicly supported education regardless of degree of physical, mental, or emotional disability.
2. Adequate educational services, suited to the child's educational need. (underlining mine.)
3. A procedure for due process, including prior hearing and periodic review of the childs status, progress, and the adequacy of any educational alternative.
4. The possibility of a court-appointed master, to assure adequacy of services to handicapped children.

One point in the suit, bears extrapolation. That is the due process hearings and their implication for testing and labeling procedures. Mills establishes a set of hearing procedures to be developed out of the presumption that "among the alternative programs of education, placement in a regular public school class with appropriate ancillary services is preferable to placement in a special school class." It is worth citing verbatim the proposed

hearing procedures, particularly that section involving placement. It follows: (Citation: paragraph 13.e., Mills vs. D.C. Board of Education, Civil Action No. 1939-71).

> Whenever defendants take action regarding a child's placement, denial of placement, or transfer, as described in Paragraphs 13.b or 13.c., above, the following procedures shall be followed.
>
> 1. Notice required herein before shall be given in writing by registered mail to the parent or guardian of the child.
> 2. Such notice shall:
>
> (a) describe the proposed action in detail;
> (b) clearly state the specific and complete reasons for the proposed action, including the specification of any tests or reports upon which such action is proposed;
> (c) describe any alternative educational opportunities available on a permanent or temporary basis;
> (d) inform the parent or guardian of the right to object to the proposed action at a hearing before the Hearing Officer;
> (e) inform the parent or guardian that the child is eligible to receive, at no charge, the services of a federally or locally funded diagnostic center for an independent medical, psychological and educational evaluation and shall specify the name, address and telephone number of an appropriate local diagnostic center;
> (f) inform the parent or guardian of the right to be represented at the hearing by legal counsel; to examine the child's school records before the hearing, including any tests or reports upon which the proposed action may be based, to present evidence, including expert medical, psychological and educational testimony; and, to confront and cross-examine any school official, employee, or agent of the school district or public department who may have evidence upon which the proposed action was based.

The issue this section raises are of relevance to the conference, that is, which of our procedures now in use (intelligence testing) and projected (pluralistic assessment) will stand the test of due process? Which of our reasons for placement will hold when a parent represented by legal counsel questions them? What will be our recourse when parents are able to present their own expert medical, psychological, and educational testimony?

Those issues, perhaps this conference can address in its next

session, for surely it cannot at this one.

I wish to conclude this commentary by citation of the words of Julius Nyerere, from his paper, "Education for Self-reliance." (In Resnick, I.N., Tanzania: Revolution by Education, pp. 49-70. Longmans of Tanzania, LTD, 1968) The views expressed by Nyerere are those many of us seek for they represent, I believe, a goal which American education must seek.

> The educational system...must emphasize cooperative endeavor, not individual advancement; it must stress concepts of equality and the responsibility to give service which goes with any special ability; whether it be in carpentry, in animal husbandry, or in academic pursuits. And, in particular, our education must counteract the temptation to intellectual arrogance; for this leads to the well-educated despising those whose abilities are non-academic or who have no special abilities but are just human beings. Such arrogance has no place in a society of equal citizens.

It seems to me that we must all be about reforming our thinking and our practices so that we can, in our educational systems, whether by law or by political action, reach the lofty goal of a society of equal citizens. We, in special education must, of any interest group, set aside our noxious labeling and intellectual arrogance of intelligence testing for the good of the children, and conferences without action plans seldom accomplish that task.

APPENDIX A

Conference Registrants

Reuben Altman
Columbia, Missouri

Gerald D. Ascue
Gardner, Kansas

Karen J. Aslin
Columbia, Missouri

Frances Bainter
Hannibal, Missouri

Maude F. Belton
Grambling, Louisiana

Linda Bluth
Urbana, Illinois

Afton C. Bridges
Springfield, Missouri

Rufus Burrus
Independence, Missouri

Donald L. Carr
West Des Moines, Iowa

Calvin D. Catterall
Bexley, Ohio

Marilyn R. Chandler
Columbia, Missouri

Herman Cline
Olathe, Kansas

Jim Cole
Belvidere, Illinois

John D. Collier
East Alton, Illinois

Austin J. Connolly
Denver, Colorado

F. Corydon Crooks
Bowling Green, Kentucky

Fanny Lu Davis
Columbia, Missouri

Ron D. Dittemore
Savannah, Missouri

John R. Eichorn
Framingham, Massachusetts

John W. Estelle
Jefferson City, Missouri

Ira Eston
Farmington, Missouri

Daniel Faherty
St. Louis, Missouri

Andy L. Fanta
Newark, Delaware

Lloyd Farley
Fulton, Missouri

Marjory J. Farrell
Kansas City, Missouri

Virginia Lee Fisher
Columbia, Missouri

Harold Frazee
Maryville, Missouri

Cyrilla A. Galbreath
Columbia, Missouri

C. Maia Gallaher
Edwardsville, Illinois

Sandra W. Gautt
Columbia, Missouri

Robert C. Gibson
Des Moines, Iowa

Gloria J. Gilbert
St. Louis, Missouri

Tom Good
Columbia, Missouri

Joav Gozali
Milwaukee, Wisconsin

Judith K. Grosenick
Columbia, Missouri

Howard Gross
Creve Coeur, Missouri

Gloria Grotjan
Jefferson City, Missouri

Larry Grove
Belleville, Illinois

Larry Hapeman
St. Louis, Missouri

Veralee B. Hardin
Columbia, Missouri

William B. Harrison
Albany, Missouri

Robert Harth
Columbia, Missouri

Walter Higbee
Spearfish, South Dakota

Marshall S. Hiskey
Lincoln, Nebraska

Kent Holcomb
Albany, Missouri

Earle F. Hollis
St. Louis, Missouri

Norman Houser
Kirksville, Missouri

Robert L. Huckins
Pierre, South Dakota

J. McVicker Hunt
Urbana, Illinois

Kenneth W. Imhoff
Springfield, Missouri

John F. Jacobs
Carbondale, Illinois

Arthur G. Jillette, Jr.
Concord, New Hampshire

Chet R. Johnson
Waukegan, Illinois

Douglas P. Johnson
Albuquerque, New Mexico

John L. Johnson
Washington, D. C.

Carolyn H. Kearns
Urbana, Illinois

John W. Kidd
Rock Hill, Missouri

Thomas J. Kowalski
Fairview Heights, Illinois

Elveria S. Kuergeleis
Granite City, Illinois

Steve Lilly
Silver Spring, Maryland

Clifford J. Magnusson
Columbia, Missouri

Claude H. Marks
Newark, Delaware

James E. Marshall
Topeka, Kansas

Edwin W. Martin, Jr.
Washington, D. C.

Margaret E. Martin
Minden, Louisiana

Tansie J. Mayer, Jr.
University City, Missouri

Alan D. McClain
University City, Missouri

Allen C. McCormick
Grambling, Louisiana

Judith A. McElmurry
Columbia, Missouri

Alfred E. McWilliams
Denver, Colorado

Jane R. Mercer
Riverside, California

Edward L. Meyen
Columbia, Missouri

Ed Miluski
Columbia, Missouri

Darrel G. Minifie
Bowling Green, Ohio

R. J. Mitchell
Kirksville, Missouri

Clifford Moore
Iowa City, Iowa

Larry L. Muir
Kirksville, Missouri

Gloria P. Myles
Grambling, Louisiana

Grant S. Nelson
Columbia, Missouri

Thomas Noffsinger
Mentor, Ohio

Nancy Noftsinger
St. Louis, Missouri

Bob Ohlsen
State University, Arkansas

Carol Osip
Belvidere, Illinois

Robert E. Painter
Mokane, Missouri

Jerome D. Pauker
Columbia, Missouri

Kenneth L. Pearce
Savannah, Missouri

Gary R. Pennell
Nevada, Missouri

Joseph J. Perica
Arlington Heights, Illinois

Douglas Prillaman
Williamsburg, Virginia

Paul Retish
Iowa City, Iowa

Heida Richardson
Webb City, Missouri

Edward Rockoff
Iowa City, Iowa

Edna Rogers
Jefferson City, Missouri

Gerald H. Rothschild
Newton Centre, Massachusetts

Thomas D. Rowland
Monmouth, Oregon

Rosalyn A. Rubin
St. Paul, Minnesota

Dale A. Samuelson
Omaha, Nebraska

Thomas V. Schmidt
Greeley, Colorado

Richard C. Schofer
Columbia, Missouri

Roy H. Schreffler
Knox, Pennsylvania

Mark Schulzinger
Joplin, Missouri

Judy U. Seeley
Denver, Colorado

Kenneth R. Seeley
Denver, Colorado

George Sheperd
Eugene, Oregon

Daniel K. Shirey
Clarion, Pennsylvania

Clif Shryock
Los Angeles, California

John Solomon
Jefferson City, Missouri

Henry Tanners
Coralville, Iowa

Elwood Thomas
Columbia, Missouri

Richard L. Thurman
St. Louis, Missouri

Gary Tunnison
Lincoln, Nebraska

Bill E. Weaver
Statesboro, Georgia

Elizabeth Carroll Welch
Englewood, Colorado

Richard J. Whelan
Kansas City, Kansas

William R. Whiteside
Cottage Hills, Illinois

Willis R. Wright
Champaign, Illinois

Deane Yancey
Hannibal, Missouri

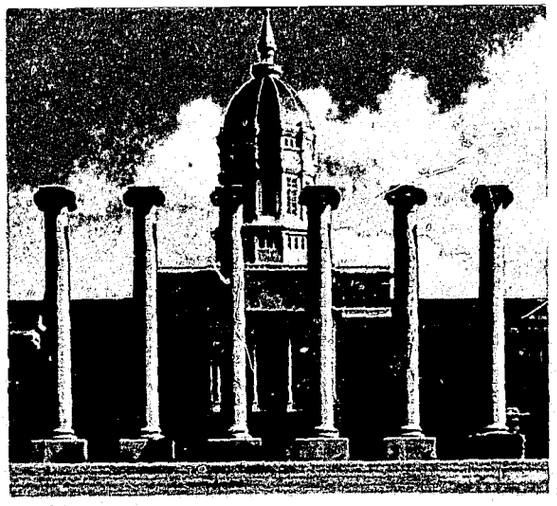
George J. Yard
Manchester, Missouri

Alice C. Zimmerman
Forest Park, Illinois

APPENDIX B

University of Missouri Student Registrants

Kathy Abell
Joseph Alder
Teri Arnold
Douglas F. Baum
Raymond A. Bepko
Cindy Bialock
Janice Blankenship
Jo Brock
Shelley Brockman
Judy Brown
Sandra Brown
Cheri Buckaloo
Susan T. Burke
Bob Busch
Judy Canion
Helen Carter
Lou Ann Clark
Anne Coffey
Maria Da Giua Lima
John Denton
Judy Dillard
William R. Doss
Barbara Edwards
Mark Elbom
Kathleen A. Fischer
Celeste Freytes
Charles Gaulden
Colleen Gibbons
Karla Goebel
Linda Gwinn
Linda J. Hargrove
Ellen Harter
Pat Hedges
Cynthia Herrick
Jane Horzmann
Dorothy Hutchins
Ellen Jaeger
Toby Lamb
Cathey Lasterni
Dale Lawver
Carol Long
Linda Mann
Rita Mawson
Cassandra K. Meents
Carol Meyer
Richard D. Naumann
Charles Neuman
Michael M. Norman
Bill Novinger
Susan Overkamp
Janet Paul
William F. Peick
Margaret Presson
Alfonso G. Prieto
Rick Ramirez
Deborah D. Reese
Donald Reinken
Andra Ritcher
Charles E. Robinson
Meg Sauer
Elaine Schieber
Sharon Schneeberger
Linda Sears
Michael Sears
Debbie Spaur
Janet Struharik
Cheri Sullivan
Mary Tanner
Don Tibbits
Lyn Warder
Sharon Wasserman
Bonnie Whitaker
Christine E. Wilckens
Sharon Winterman



APPENDIX C

A Conference on the
Legal and Educational Consequences
of the Intelligence Testing Movement:
Handicapped and Minority Group Children

Program

Thursday, April 13, 1972 - Memorial Union

A.M.

8:00 *Registration* — *Memorial Union*
Coffee and Conversation — *2nd Floor Lobby*

9:30 First General Session — Auditorium

Session Chairman . . . . . *Edward L. Meyen*

Welcome from College of Education . . . . . *Richard C. Schofer, Chairman, Department of Special Education*

Welcome from Law . . . . . *Willard L. Eckhardt, Dean, School of Law*

Introduction of Speaker . . . . . Richard C. Schofer

Presentation:

Edwin W. Martin, Jr.
Associate Commissioner
Bureau of Education for the Handicapped
U. S. Office of Education

Topic: "The Law and the Handicapped: A National Perspective"

Introduction of Speaker . . . . . Judith K. Grosenick

Presentation:

Richard J. Whelan, Chairman
Department of Special Education
University of Kansas

Topic: "What's in a Label? A Hell of a Lot!"

Announcements

10:45 *Coffee Break* — *2nd Floor Lobby*

11:00 *Small Group Discussions*

Group No.	Leader	Room
1	*Steve Lilly*	*S204*
2	*Paul Retish*	*S206*
3	*Reuben Altman*	*S207*
4	*Marvin Fine*	*S208*
5	*Marilyn Chandler*	*S3*

12:00 *Lunch (On Your Own)*

P.M.

1:30 Second General Session — Auditorium

Session Chairman . . . . . *Robert Harth*

Presentation:

J. McVicker Hunt, Professor
Department of Psychology
University of Illinois

Topic: "Psychological Assessment and Social Class"

Presentation:

Grant S. Nelson
Associate Professor of Law
University of Missouri-Columbia

Topic: "Special Education Placement: The Federal Constitution and Its Implications"

Presentation:

Elwood L. Thomas
Professor of Law
University of Missouri-Columbia

Topic: "Special Education Placement: The Legal Liability and Immunity of Schools and School Personnel"

3:15 *Small Group Discussions*

Group No.	Leader	Room
1	*Steve Lilly*	*S204*
2	*Paul Retish*	*S206*
3	*Reuben Altman*	*S207*
4	*Marvin Fine*	*S208*
5	*Marilyn Chandler*	*S3*

8:30-9:30 *Social Hour (Dutch Treat)*
VIP and Signature Rooms *Ramada Inn*

Friday, April 14, 1972

A.M.

8:30 *Registration* *Memorial Union 2nd Floor Lobby*

9:00 Third General Session Auditorium

Session Chairman . . . . . *Edward L. Meyen*

SELECTED PAPERS

Presentation:

Andy Fanta
Assistant Professor
Sociology of Education
University of Delaware

Topic: "Student Placement in Special Education: Law, School Policy, and Social Conflict"

Presentation:

Walter Higbee, Professor
Black Hills State College

Topic: "Do Bananas Telephone?"

Presentation:

Rosalyn A. Rubin
Associate Professor
University of Minnesota

Topic: "Repeated Measures of I.Q. and Eligibility for Special Class Placement"

Presentation:

Jerome D. Pauker
Professor of Psychiatry
University of Missouri-Columbia

Topic: "Intelligence Tests: There is More to the Q than Meets the I"

10:45 *Coffee* *2nd Floor Lobby*

11:00 *Button Hole Session* *Auditorium*

11:30 *Luncheon* *N201-202*

Introduction of Speaker Clement Brooks, M.D.

Presentation:

Jane Mercer
University of California-Riverside

Topic: "Pluralistic Assessment: A Basis for Educational Decision Making"

P.M.

1:30 Fourth General Session Auditorium

Session Chairman . . . . . *Robert Harth*

Reaction Panel

John Kidd
Assistant Superintendent
Special School District of St. Louis County

John Johnson
Associate Superintendent
Division of Special Education Programs
Washington, D. C., Public Schools

END