Lectures are concerned with the nurturing of intellect by Maurice Freehill, a new concept in rehabilitation by Pert MacLeech, principles of residential therapy as a tool of rehabilitation by Edward L. French, the progress of special education by Pomaine P. Mackie, and behavior principles by Norris G. Haring. The priorities and territories of psychology, education, and special education are discussed by Jack I. Bardon and worldwide exchanges in special education are considered by Frances A. Mullen. References follow each discussion. Also included are biographical sketches of lecturers, topics and speeches of the lecture series in 1966 and 1967, and descriptions of graduate programs in special education at the University of Southern California. (LE)
WAITE PHILLIPS HALL OF EDUCATION
SEVENTH ANNUAL
DISTINGUISHED LECTURE SERIES
in
SPECIAL EDUCATION
and
REHABILITATION

SUMMER SESSION 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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PREFACE

In 1962, Dr. James F. Magary, Associate Professor of Education, University of Southern California, evolved the concept of an Annual Distinguished Lecture Series in Special Education. Over the years this annual series has served to honor outstanding leaders in Special Education and to focus attention on developments and problems in the field. The Series now is established as a permanent and continuing contribution of the School of Education and the University Summer Session which jointly sponsor the Annual Distinguished Lecture Series.

In 1967, the scope of the lectures was expanded to include outstanding leaders in the field of Rehabilitation.

As Dean Paul E. Hadley noted in the preface to the 1967 Series: "These annual events have maintained the highest standards of scholarship and have attracted leading national authorities as speakers . . . and an increasing number of distinguished teachers and research specialists as audience."

Among those of national and international reputation who have participated in the Distinguished Lecture Series from 1962 through 1967 were: Leo F. Cain, of the President's Commission on Mental Retardation; Rick F. Heber, Co-editor of "Mental Retardation: A Review of Research"; Richard Koch, Director of the Child Development Center at Children's Hospital, and currently President of the American Association on Mental Deficiency; Laurence J. Peter, author of "Prescriptive Teaching"; and Beatrice A. Wright, author of "Phys- ical Disability—A Psychological Approach."

The monographs of the 1966 and the 1967 Lecture Series are still available. They may be ordered from the University of Southern California's Bookstore. Lecturers, and their topics, are listed on pages 104-105.

The 1968 Distinguished Lecture Series is a worthy successor to those of the past. The opening lecture, by Maurice F. Freehill, on "The Nurturance of Intellect" is a provocative and stimulating presentation. Dr. Freehill deals with the necessity of the nurturance of intellect and the methods for so doing. He concludes: "If we stand for enlarged
intellectuality (and I think we must) then, we attend not only to skills, facts, and ideas, but to the organization of purpose, the significance of imagination, and the discovery of meaning."

Bert MacLeech develops the components for “A Forward-Looking Concept in Rehabilitation,” and analyzes the program of the Young Adult Institute as a prototype of this concept. Edward L. French deals with the “Principles of Residential Therapy as a Rehabilitation Tool.” Both of these lecturers have long records of pioneering work in the field of Rehabilitation.

Romaine P. Mackie opens broad perspectives in her lecture, “Cavalcade of Special Education.” Norris G. Haring, as one of the pioneers in Behavioral Modification, bases his lecture “Behavior Principles in Special Education” on a solid background of research. His lecture underscores the three P's of Education: systematic procedures, professional ethics, and pride of teaching.

Jack I. Bardon poses a challenge to school psychologists and to special educators in “Psychology, Education, Special Education: Priorities and Territories.” After raising critical problems regarding our perspectives, he concludes: “I am convinced that school psychology must become part of American psychology. I am also certain that Special Education is the best arena in which many disciplines can ultimately make their major contributions to all of education.”

Frances A. Mullen's “Import and Export Trade in Special Education” is a fitting conclusion to the 1968 Series. She brings Special Education into the international arena with an examination of some of the ideas from abroad that have shaped Special Education in the United States, and some of the contributions we have made to developments in other countries. Dr. Mullen ends with certain hypotheses or suggestions for making this interchange more fruitful.

The program for the Eighth Annual Series is announced on the inside back cover. Publication date for the lectures will be February 1970.

April 25, 1969

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Acknowledgements

Thanks are due: Irving R. Melbo, Dean of the School of Education; Paul E. Hadley, Dean of the University College and Summer Session; and Joe Coss, Chairman of the Department of Special Education, for their support; James F. Magary, who arranged for the Distinguished Lecturers who participated in this Series; Peter Harkins, Assistant Dean of the University Summer Session, who was of invaluable assistance; Pearl Maze MacLeech who was most helpful in assisting with the editing, the proofreading, and the many tasks which publication of the monograph entailed.
The Nurturance of Intellect

MAURICE F. FREEHILL

"Excellence" and "renewal" have been fashionable words for over a decade. These are goals commonly suggested for children and schools, while most adults would prefer to "sit it out." The goals of intellectual upgrading are limited by an established taste for money, health, cars, liquor and ease.

The technological giant sees his gains in space, his victories over poverty, disease and toil, dimmed boredom and darkened by violence. The simple remedies are near obsolete; it is short peace indeed which is gained through military power or from sharing natural resources. Old certainties have faded; in a quarter-century, nations which seemed to sleep in the Middle Ages have awakened and rushed to seats of power.

This could be the twilight of the scientific age, the dawn of a technically competent barbarism. A peaceful and humane future calls for the growth of intellect and consciousness. Human evolution has depended from time to time variously upon strength, fecundity, or courage. But contemporary human evolution is hinged specifically to the most unique of human qualities, to the development of intelligence. Learning has become a prime function of human existence, the life work of many. The case of the astronaut may illustrate. The public performance is largely a by-product, a test or demonstration; the chief assignment for the astronaut is learning.

It is no accident that education has become a prime criterion of both personal and community worth. Education, always important, has become essential. The school is a special arena for change, a test site for contemporary evolution.

Much quoted is Alfred North Whitehead's comment from 1929: "In the conditions of modern life, the rule is absolute: the race which does not value trained intelligence is doomed." Thirty years later, your own illustrious professor, Guilford, said, "The preservation of our way of life and our future security depend upon our most important resources: our intellectual abilities and, more particularly, our creative abilities."
Propositions and ideas about intellect elicit a sporadic and scattered popular consent, a lip-service but no strong mandate for a mindful world.

Following the Wisconsin idea in 1892, experts have periodically been called into public service for specific assignments and for term tasks, but rarely are they called to government as policy-makers. In 1952, while Bestor, Hutchins, Bell and Adler crusaded for an American Athens, their fellows repudiated Adlai Stevenson as an "egghead." In 1966, Eric Goldman bitterly abandoned his assignment as a presidential appointee, a special liaison between academia and the political arena. He reported that distrust and alienation between these groups made this an impossible assignment. We have acclaimed technology more than science; admired the operational man more than the thoughtful one and given authority to popular more than unusual men.

Americans have established no clear policy about matters of intellect. There are no public answers to such questions as: Shall we promote intellect as good in itself, or shall we promote it selectively in terms of its products? Is it the responsibility of the school to uncover and develop ability wherever it might be found in the population, or is the purpose to develop only a strategic few?

Let us consider five issues which impinge on policy and practice, particularly in higher ranges of ability. First, _intellectual function is an achievement, not a given horsepower_.

It can be accepted that IQ tests are indeed useful, scientific, and probably among the most reliable measures now applied to human functions, either physical or mental. Further, there are large, perhaps even phase differences in intelligence between phylogenetic classes and within any species. Further, we may agree that the data supporting genetic explanations of intelligence differences are good data. Galton, in 1869, Barbara Burks in 1927, and Cyril Burt in 1958, all marshal sound evidence of family determinants of intellectual level. They have not, of course, examined the equally powerful influence which families exert on the specialty or style with which the child expends his ability or manages his intelligence.

In 1966, the Nobel prize-winning geneticist, Dr. Herman Muller from Indiana University, suggested that we seek enduring peace by deliberately breeding for a creative and a loving people. Others, too, have suggested that we should exercise a germinal choice on our future, drawing from accredited frozen stores of deceased donors and perhaps planting these sperm in rented uteri. So Cyril Burt today restates the 1920 doctrine of American psychology, that the doors to a "Great
Society" will open only through the management of the chromosomal pool.

Despite significant proof of genetic influence on intelligence, there is overwhelming evidence that function, and probably structure, are greatly changed by experience. Even should the natural resources of intelligence be greatly enhanced and massive; even if incoming intelligence should become perfect, there would be a need to cultivate and nurture it.

Look for a moment on modern competence. Forty years ago, 43 per cent of the Terman children with IQ's of 140 or more read before they entered school. Today, children of equal natural ability and age read in much nearer 100 per cent of cases. The nonreaders are usually in some way deprived. For the majority, at this level of ability, the contemporary environment, libraries, colorful books, TV and travel have stimulated some reading.

A few weeks ago I talked with Henry, a bright eight-year-old; a disturbed and perhaps dangerous child. He has had exceedingly sparse parental nurturing, with some emotional hazards and physical deprivations. The chief source book in his world has been the magazine Popular Electronics. This magazine has shaped his thinking and his knowledge. He knows little of literature or history but much of applied science. When asked if he knew how a TV tube worked, he said, "let's make it color," and then he sketched an operational diagram on a paper napkin.

On another occasion, Henry chose to discuss the difference between analog and digital computers. He noted the adaptability of the "on-off" structure in the digital computer and its unique appropriateness for the "Yes-No" technique in social sciences research. His intelligence reflects the nurture drawn from a technical magazine. The Terman children, and Henry, are surely children with special relevance to their own environment.

British public schools, 1868, have been extensively applauded for intellectuality and logical reasoning. These schools produced many scholars and near-scholars, particularly in history, literature, and logic. Is there any other group of people, any other social class in Britain which has ever had such easy relevance, such natural connection with history, literature and debate? These were the subjects of table conversation and fields for adult accomplishment. The scholarship was not simply a matter of brains or ability.

Look on recent human history, say 650 years. There have been extensive changes in thought patterns and thought complexities. The early
scientific period ushered in a masculine, objective, and experimental mode of thought very foreign to scholars from the middle ages. Then the 1940 upturn in technology brought both specialized languages and an avalanche of data calling for new styles and significant departures from the scientific style of 1900.

There is probably no parallel between thought changes and physiological evolution of human competence. There is no evidence of a morphological change paralleling either the trend or the magnitude of the thought changes. In fact, the period of greatest intellectual change may be accompanied by small natural selection. Physiological adaptation may be reduced or suspended in a society which protects the dependent and incompetent. In any case, the Mendelian laws and the Darwinian insights predict eye color, incipient baldness or susceptibility to disease, but scarcely human outcomes. Such rules succeed in predicting what is purely physiologic, and they fail precisely in what is significant in the educational enterprise. They fail precisely to predict abilities which should be the goals of education, the humane and the imaginative outcomes of intelligence.

Human inheritance is a special case, for the human sets the evolutionary design. He creates an acceptable world, more than adapts to a given world. We tend, nevertheless, to assign to the human the same motivational system that we find in lower orders. These motives are dominated by the evolutionary three; growth, maintenance, and reproduction. Intelligence, then, is described as the handmaiden or tool of inherited motives, a special lever on the world, a special way of accomplishing comfort in matters of sex, aggression, or acquisition.

Is this a sensible view? Is intelligence only a tool—a more or less complex program for adaptation? Even sex seems to be a different need and serve different functions in the human and the animal. Is it then reasonable to insist that intelligence may be commonly defined from one level to another? Perhaps intelligence in the human is something else, a different function, not just a superior level.

Thought is as natural in man as sex or aggression is natural in the ape; thought is the most primitive or radical of functions in a being which can think. In other words, in *homo sapiens* intelligence is not simply a lever or a tool for something else, it is its own powerful motive, the drive to make life meaningful. It is both power and motive. In this view, competence makes appetite. Where there is a strong need to know, knowledge is both commanding and fulfilling.
The human organism, proportionate to its complexity, comes into the world comparatively empty, with little prescription, with a low program. Outside of a survival behavior, most outcomes in the human affair are only loosely tied to initial biology. Even in survival matters, Rene Dubos, the famous bacteriologist, claims that human drives have been so modified through evolution that they are now unrecognizable and probably only loosely relatable to either the original drives or to drives in other species.

For a being of this kind, it seems fair to guess that meaning supercedes primitive drive. Meaning itself is a base for action. Behavior results from experience as a personal connection with environment. The human is peculiarly dependent on environment. It is exactly this openness to change, it is exactly this dependence on the external order of things which underlies the incomparable complexity and the incomparable capacity for change in human beings.

We may learn something by review of the old and well-known project in which the Kellogs raised a chimpanzee. They raised it with (and like) their boy, Donald. They kissed both good night, they fondled both, and they taught both. They raised the chimp like a human, but they didn't get a human—they didn't get anything Truman. Early development seemed more equal but soon the chimp stabilized and proved it is difficult to make a man from an ape (it leaves open the corollary). The point is clear, an initial nature which is open accommodates high change while an initial nature which is closed soon reaches maximum levels of accommodation. If this is reasonable, then experience has its maximum effect where the natural prescription is the lowest, in the human.

Of course, all animals change greatly as a consequence of experience. Levine, in Texas, experimented with highly selected strains of rats. He matched pairs, then manipulated one of each pair for a few minutes per day over a short period. The special experience of being placed in a different box once per day resulted in significant change. Two years later, with common intervening experience, the experimental rats learned mazes more rapidly, responded to stress differently, had a higher rate of morbidity under deprivation, and showed postmortem differences.

Kretch reviewed a number of similar experiments in the Saturday Review, January 20, 1968. He summarized the effects of chemical facilitators and inhibitors on brain development and then recounted his own experiments on experience outcomes in rats. He reports that experience changed both the bulk and the chemical structure of the brain,
and he concluded that the lack of an adequate educational fare for a rat, no matter how good the food, no matter how good the family, results in deteriorative changes in chemistry and anatomy.

We cannot transpose these data directly into human studies. We may not need to use them in such fashion because there is considerable evidence on human change, less on brain development than on function changes.

Nancy Bayley, from the Berkeley Growth Studies, reported a large first-year deficit in children who were badly mothered. Defective mothering, either smothering or neglect, seems to decline the potential of children, particularly the potential of boys. Boys are peculiarly vulnerable, and the damage appears less reversible. This is not surprising; the defective mother may have problem relations with all people, but most severe are likely to be those with males who are naturally more distant from her. So, too, the distance from son to mother is greater than from daughter to mother and in the long run the mother may be less reinforcing to a small boy than to a small girl.

Rheingold, across the continent from Berkeley, paired institutional children, and assigned one from each pair a 'round-the-clock mother (a person who stayed with the child almost constantly). The one who had the 'round-the-clock mother developed more rapidly than the pair-mate. This is particularly noteworthy because 'round-the-clock mothers were assigned from a home for the feeble-minded.

The total evidence tends to show that love is a peculiarly important variable in the growth of intellect, a predictor of intelligence. Educators know about this, even if they ignore the formal research. Behavior in a loving environment produces change because the loving one responds by providing a confirming or attentive environment. The child receives maximum reinforcements. He is both satisfied and stimulated, and builds himself into the world. The contrary seems also true. Intelligence declines when there is a low adult ratio in the life of the child. The lower levels of intelligence among the underprivileged may well reflect a lower ratio of mothering, a less positive experience.

The doctrine of G. Stanley Hall, Gesell and Rousseau, “wait on development,” is coming in for serious re-examination. It is being replaced by policies of “assisted growth.”

In the traditional view, intelligence has been treated as a single vertical dimension with potential achieved only under nurturing or supportive conditions. Schools were exhorted to screen and select children, modify
the educational rate and guide each into an occupation suited to his intellectual level.

This policy is archaic if intelligence is not only a tool but also the source of motive toward meaning. It is not simply something which negotiates a modicum of accommodation and comfort but the instrument of meaning which organizes other human motives. Lewis Mumford calls man the "mind-making, self-designing, self-mastering animal."\textsuperscript{12} John Gardner, former Secretary of Health, Education, and Welfare, in his book \textit{Self Renewal}, treats intelligence as motivational, not simply difference in level on some one or several vertical measures.\textsuperscript{14} He speaks of intelligence as willingness to define the risks of one's own development. In this view, development calls for the full exploration of one's own capacities for sensing, wondering, learning, understanding, loving and inspiring.

Second, \textit{achievement is related more to climate than to program; more to synthesis or massive meanings than to explicit conditions and explicit meaning.}

Highly intelligent behavior is highly unique behavior, peculiarly adequate and specifically adapted. Obviously, dull people cannot invent, they must copy. They imitate and repeat. Gifted behavior is, on the other hand, individualized, less easily related to common practice or accepted ideas.

A closed society, a closed culture begets people who are alike. A closed culture promotes common bonds, develops low variability between persons, and probably produces efficiency in the agreed goals of that society. It is fair to guess that children randomly selected from a society like that in Bornholm, the Danish Island, will reflect an accomplished and sophisticated society. In a community that is genetically, culturally, and geographically contained, children are likely to be more similar than American children who come from a divergent society, a society of strangers.

This is a society of strangers and divergence in part because there is genetic variation, in part because it is a high change culture, and in part because there are few clear, strong adult models. There is uneven flow from generation to generation with one generation deaf to the meaning of the other. The young reject the ideals, the sentiments and the goals of the old. This confusion and separateness leaves an impression of weakness and inefficiency.
The unifying forces in American society include the school, peer culture, the commercial agent of communication, and advertising. There is, however, little consistency between the teachings of school and the popular media. The latter may handicap development of intellect. They lean on loyalty as a reason for action, they depend on associative or less intellective forms of learning, and they enhance need or addiction with a companion unwillingness to wait or defer judgment. In short, the unifying agents support conformism, not uniqueness.

Television is the most obvious example of these influences. TV advertising promotes ambiguous and wooly-minded choice, conviction without supporting data, loyalty to product, not comparative evaluation of products. The chief criteria of value is saleability or popularity, not goodness, truth, beauty, or accuracy. It follows that these unifying agencies are in some conflict with both modes and standards of the intellectual life.

Research on achievement in the last 20 years shows that family and family syndrome contain the chief prods to achievement. This research dates from the Anne Roe studies on the making of scientists. She found that physical and social scientists were separated not so much by differences in level or structure of intellect, not by relatively high Q (or quantitative scores) for physicists and relatively high V (or verbal scores) for sociologists, but more by childhood experiences with fathers.

Recent studies of scientists tend to suggest that the majority of American scientists are from Protestant families with high expectations and standards. But so are businessmen. However, the scientists are from Protestant families with high standards and remote or impersonal parents while businessmen are from Protestant families with high standards but strongly reinforcing parents.

Goertzel and Goertzel, in Cradles of Eminence, examine the work of 400 outstanding people. They conclude that the creative focus for these individuals almost invariably was a family interest. The creative person came from a family with both strong intellectual bent and strong convictions. Many of the fathers were dreamers, failure-prone, more philosophic than productive. The mothers, on the other hand, were dominant, demanding, and sometimes managed the child as an outlet for their own natural abilities and ambitions.

Epochs of greatness in world history have been associated with great ideas. They are organized around commitments or ideals, not around a set of knowledges or a set of habits. Productive eras are associated with dedication, but we know also that certain modes of child rearing pro-
mote or inhibit productivity. For example, boys of authoritarian fathers are generally fine students in the first, second, and third grades. They are successful to 9 years, but they fail in the independence period. When they should begin to act on their own, they start on a roller coaster of small successes and significant failures.

We know, too, that family syndromes dominate college failure and college success. Levinson, from the William Allan White Foundation, studied dropouts among freshmen from 38 private colleges. He found not intellectual defects, but familial deficiencies as the prelude to failure. The dropouts live out a family pathology.

Roy Heath in The Reasonable Adventurer describes the successful undergraduate at Princeton. These were not students of unusual talent or ability so much as they were students who could involve themselves and then detach, students who could live with ambiguity, and students who had wide interests—all outcomes from early family relationships.

To develop intellect and intelligence we must produce variety with variability within the abilities of each person and variability between people. Invention, innovation and intelligence lead to things which are new, unique and different; and the growth of intellect increases the range both within one person and between people.

Variety, innovation or uniqueness depends on deeply personal development, on family influences and fundamental experiences. These outcomes are less the consequence of specific planning or deliberate method than they are integrations rising from very wide reference and total cultural experience.

There is a popular trend toward the idea that we could teach very exactly to high intellectual goals. This is an error. The psychologist or the educator can define and measure performance below a threshold of expectation. Indeed, tests are in large part an observation of whether or not the subject fails to reach a standard or criterion. Once a deficiency is demonstrated, educators have considerable competence in designing remedial education experience.

Optimum performance and full potential are quite different. The goals are ambiguous, the conditions of development are widely dispersed in the environment and the criteria are not standardized or established. We seek the best available measures and methods for dealing with inventiveness and high potential but these are not and cannot be as clearly preconceived nor as exact as are measures and methods for handling deficiency and correction.
We are not totally ignorant, however, on how to enlarge the flow, the precision and the compassion of thought. We know, for instance, the greatly enlarged effect of education which entertains the feelings and sentiments of students and we dimly perceive the power of models in the environment. Only the human elicits the humane. It is not chiefly accuracy or organization of content, but models and human relations which draw out maximum potentials.

Third, we can identify deficiency conditions which ought to concern educators.

One misleading force is the “cult of efficiency.” This cult sets a goal of expertness and falls into a vapid education for depersonalized competence. A hard look at modern society, at the large reservoir of knowledge, at the massive data and the role of computers seduces one into viewing man as the fully rational giant, the logic machine in a world of machines. Hypnotized by specificity and practicalism one accepts the suggestions for a curriculum defined by skills now utilized in the complex and automated world. Such a plan neglects the motivational nature of intelligence and the values of imagination. It promotes an expert so little acquainted with himself that he fails to recognize the motives or basis for his own judgment. He truly believes that he is objective. He becomes a technical giant ridden by the pygmy of self who needs but cover an ear or an eye to make the giant sometimes deaf and sometimes blind.

Youthful voices speak to us on this point. They often condemn the academic enterprise for its painstaking slowness, or because the data-loaded style is confusing, or because each subject has its own restrictive methodology with small chance for integration or involvement of personal style. They say the questions are too sharply focused, missing the larger world, and, above all, they claim the questions are adult, not engaging the young person’s mind.

The youthful and rebellious view has shortcomings, but it is not without sense. Much of what goes on in education, particularly education of the gifted, is anemic when the person is called to action. Faith in logic and expertise is dimmed by the inhumanities and bitter tragedies of human history. Youthful critics point out that the important events of history are more often acts of impulse or feeling than they are acts of logic.

Students complain that they cannot talk to professors because they speak an alien language, the professor is from Athens and the student
from Jerusalem. The professor values logic, objectivity and empirical study, he follows a sequence from outside; chronological or part to whole. The student values emotions or experiential facts, he is guided by a subjective frame of reference; the student is not anti-intellectual, but he is out of sympathy with political systems, religious regulations, and economic practices based on propositions which value rationality but neglect persons and personal insight.

The new or restored intellectual mood is found in many places. Sister Corrîta, famous for her seriographs, speaks most clearly to the radical or personal view. She celebrates the concrete, immediate, personal experience; favors a life of feeling, not a life managed by pre-stated propositions. This thoughtful, religious woman welcomes the unpredictable, urges that we allow words to fall into new places, not simply old orders. This message is sympathetically received in youthful and radical circles.

Another illustration may be drawn around the Peace Corps. Professors would surely ask for feasibility studies while the corpsman volunteers. He chooses involvement above observation, action above research, and art above science.

In short, youth, and many adults, are involved in a heartfelt rejection of materialistic practicalism. They seek to restore intellectual wholeness. They correctly charge that education, and particularly education at higher levels, has been unnecessarily restricted to facts, facts separated from values and impulse. They charge that education for gifted people has been an overdose of crystallized thought neglectful of the truth that development is a change in person more than in information.

The traditional scholar chooses a Gutenberg style, a linear, sequential fashion with a conviction that every part must fit with other parts. Marshall McLuhan is the chief spokesman for shifting that formalism. He would restore intellect, strengthen the imperfect but natural bonds between learner and experience, give back the massive wholeness available to more primitive man.

When we evaluate students we chiefly ask them to be correct. We rarely ask them to be significant, to make a thrust into the unknown, or to be vital—just correct. Our economic system, our industrial cities, and to some degree education, have served the technical and materialistic but have failed the personal and intellectual.

Significant learning makes a conjunction between the “expert” and the “personal.” Jacques Maritain, in his little book On the Uses of
Philosophy, says philosophy is a mirror on the heights of intelligence revealing the deepest trends obscurely at play in the human mind. A similar theme is sounded by Dag Hammarskjold in *Markings*:

“At every moment you choose yourself. But do you choose your self? Body and soul contain a thousand possibilities out of which you can build man I’s. But in only one of them is there congruence of the elector and the elected. Only one—which you will never find until you have excluded all those superficial and fleeting possibilities of being and doing with which you toy, out of curiosity or wonder or greed, and which hinder you from casting anchor in the experience of the mystery of life, and the consciousness of the talent entrusted to you which is your I.”

We have long allowed ourselves to make an unnatural distinction between logic and feeling, between thought and emotion; a distinction which is false and one which interferes with the environment for intellectual development. Knowledge without feeling or caring is vain. It becomes vapid and shallow because it is out of step with what is real.

We cannot develop intelligence and avoid character. Ideas are part of the process from which they come. Ideas reflect the thinker, are the thinking itself. In summary, the chief hazard in development of intelligence is our social and educational commitment and restriction to objectivity and practicality; to a gospel of education for competence and vocationalism.

There are, of course, also minor hazards. Mental illness is an exceedingly visible problem. The mentally ill person is a fugitive from himself, and consequently never touches the central part of his knowledge. The patient fails to learn because he separates himself from potential experience. Mental illness is a freezing, a sabotage of thought and intelligence.

Perfectionism is also a hazard, a common stumble-point for talent. Error is the natural companion of innovation and intelligence. Children who are very competitive or who must be right cannot tolerate risk. They respond by following the model or habit and fail to be innovative or imaginative.

Another hazard is the suburban style, the college-place syndrome. The young suburbanite is busy, popular, and shallow; doing many things, but doing nothing long enough and intensely enough to do it well. Such children are in a crab-like hurry, fascinated with the trivial. They care too much about peer opinion, they care too much about success, they care too much about social sanctions, and they recoil from the risks and
uncertainties of intelligence. They become compulsive performers dependent on what is popular, alienated from what is true. Beyond all this, they are crippled by easy access to self-gratification. They are washed and dressed, going nowhere. They will not contribute proportionate to their natural ability.

Any list of hazards should include bureaucracy. Bureaucracy is an enemy of intelligence. Bureaucracy must treat individuals by categories, as nearly interchangeable units. Therefore, bureaucracy ignores individual differences. It is often said that schools are big business and should be run like big business. This is bad advice. It is not clear that big business methods are efficient in big business. Secretaries by the hundreds type multi-copies and no one discovers that the work is useless. Such business methods may survive not because they are efficient, but because they are supported by popular faith. Even if these are suitable methods for business, they are outlandish arrangements for institutions geared to raising children. Good schools for intellect are schools with a very low management index.

Fourth, there are some educational guides for the development of intellect.

The learner is no passive recipient. He is involved in a search for cognitive clarity. When things are incomplete or dissonant he is motivated to find the meaning or sense of it. He is more excited by mystery and incompleteness than by the text, worked and reworked to logical perfection and bland truthfulness.

A few years ago, in the middle of a class lecture to 158 college students, I paused and asked how the stripe on Stripe Toothpaste was put only on the outside but not through the ejected part. At that moment I returned to the lecture and frustrated those students who wanted to try an answer. Three days later I asked the same class "how many of you opened a Stripe Toothpaste tube in the last 2 or 3 days?" More than half the class had experimented! Once a question is in the intellectual system, the bent is toward a solution.

We treat brains as if they were blotting paper to be saturated with long-distilled, 100 proof, "good stuff." We err in evaluating the experiences a person has rather than the categories he puts experiences in. We essentially evaluate his response, not his solutions.

Schools for the intellect sponsor multi-styles. Let us see a simple illustration. A bright little boy with a busy or inattentive mother usually becomes a visual-motor learner. He climbs or moves rather than asks.
He goes to school and finds a new order, a verbal learning style. He has little readiness for this method and he may find the school unstimulating. He may choose: boredom, daydreaming, disobedience, or inept conforming. Any one leads to a reputation for stupidity.

Surely the school and scholars' style is superior. Sooner or later this child must learn that style, but he must begin where he stands. The effective school must provide many styles, many paths to knowing. If it does not, if it uses any single style, then what is being taught is surely passed inert to some. If the learner builds on what is inert, then he adds only pieces, not meaning, and he becomes a verbal idiot: one who knows all of the words and none of the meanings.

"Discovery" is the password in a contemporary educational cult. Nevertheless, discovery has high relevance or value, particularly for bright people. There is no single door to insight; each person comes from a different place, through a different door. Having come on any insight, then we can explain it to each other. The discovery is individual, the proof is common. Sensing and discovery are unique and individual behaviors, testing and proof are normative or public behaviors.

Curricula and textbooks are public or normative. They deal in proof. They are shaped to overcome every objection, overworked to be logically simple. As a consequence, they become bland, unstimulating, and they neglect intellectual appetite.

Discovery, on the other hand, provides for an "ah-ah" experience, for the welding flash of insight. There is a special meaning when a superior quality of intellect, when the deepest parts of the person are engaged. Whatever I learn for myself I learn best of all because it has maximum relevance, maximum ties to the structure of what I know. What I learn for myself has the greatest transferability and permanence in all that I know. Intellectuality calls for passion, for the full engagement of personality. Effective learning draws out the meaning, the conviction, and the commitment of the learner because the individual is the center of what he knows.

Subject matter needs to be valued, not simply for extent and difficulty, but for its appropriateness to thought or reflection. It should be alternatingly sparse and then full. It might be presented in massive sweeps with organizing concentrations. We should teach so that children are called on to infer, transfer, and estimate. The goal has been too much mastery, not enough relevance to the developing person.

One of the chief outcomes from effective schooling is a technology of
thought, a capacity to categorize facts, to organize and give meaning to experience. For some this is rigid recipe thinking, but when intellect is fully involved, the task is one of judging, altering, constructing, more than repeating.

I come to the fifth consideration: **significant and creative work are the fulfillment of intellect**.

We have too long talked of a special "something" which we call creative. In reality, creativity is the common goal, the highest outcome of intellectual work. "Creative" implies an unusual and effective unraveling and synthesizing of experience, but nonetheless a work of intellect.

Great learning is always passionate, is always a matter of moving from "not-caring" to "caring." It calls for truthfulness to an idea. It often requires a sort of ragged, bristling contact with life. It is an aggregate function joining the personal and the informational.

Creative work requires a special kind of orchestration. It is deeply marked with the signature of the author. So is the author marked by the work.

We have too long explained creativity as something apart from the knowledge and general style of the author, a special burst of primitive force, an eruption from some subterranean place, the special function of the untrained and primitive residuals of intelligence. This view depends on the idea that intelligence is in the service of unchangeable motive.

This is a popular view. Quite recently, A. A. Brill said that all poetry is an outlet of an oral kind, the consequence of primitive deprivation, that poets chew and suck nice words because they were deprived of the breast. Creativity has often been assigned to such archaic and irrational motives. Then it is a short step to the belief that creativity depends on release through alcohol, insanity or frenzy. People have sought to escape the learned rigidities, to touch the bigger world by prolonged fasting, by yogi-breathing, or by that instant Zen commonly known as LSD.

There is no question that some people have been creative only when inebriated or insane. Creativity is, of course, only an accompaniment and not a consequence of these pathological episodes. The liquor, the drug, or the frenzy may serve as a trigger, but nor the cause of innovative work. Archaic and banal impulses at best call out old behavior. The repressive and neurotic tendencies inhibit innovative or creative responses.
Creative behavior depends on the impulses to make sense, to find coherence. It calls for zeal to go out on the dizzy edge of knowing.

Schools and homes promote creativity by nurturing inwardness and self-awareness. Henry Murray, the psychologist, has deplored the American preference for tangibles, for appearance, and for techniques. He calls this the deficiency disease of our intellect—this addiction to superficials which cause a paralysis of creative imagination.

Parents and schools can assist growth through stimulating new thoughts and new feelings; encouraging new and varied modes of sensing; and encouraging children to be daring partners to the discordance in their own lives. They help children to grow in imagination and genius by assisting them, above all, in discovering who they are, what they would truly invest themselves in, by asking them to extend the meaning of their lives and their liberty.

Return for a moment to Henry the bright boy with interests in practical electronics. He asked to visit a university computer center. As he walked back from his visit, a graduate student asked, "which do you think are more complex, machines or humans?"

Henry responded, "By a long way, humans."

"Why?"

"The machines have more consistencies, are more regular."

Then, said the graduate student, "Since you are a very bright boy, why do you prefer to study machines? Why don't you study people?"

The answer was given in some surprise, "Well, that's why I'm here. Don't you know I'm not much of a person. I have no good way for understanding people."

This is remarkable insight, awareness that one must have personal development or a map of self in order to know his relation with others.

Parents and schools have a special and early role in establishing a conjunction between the person and the objects in his environment. Obviously they can increase the intimacy or insight a child brings to experience. If they teach fear, prejudice, hate, and pride they teach the child to stay out from experience. In effect, the child becomes stupid because he lacks experience. On the other hand, curiosity, interest, love, and self-awareness lead to entering-in, participating, and growing.

In conclusion, it seems that for humans the issue is meaning; the meaning of experience and the meaning of self. If we feed the memories and starve the sensibilities of children we assure their stupidity and our own impoverishment.
The fulfillment of intelligence is a personal and emotional voyage. Natural potentials are achieved and probably enlarged when children are surrounded by stimulation, affection and opportunities for self-knowledge. Outstanding development rises more from the total experience and from human factors than from some single experience or special teaching program. Adults may not stand aside for intelligence and intellectual work is deeply shaded by feelings shaped by values. There is no escape from the conclusion that the more significantly intellectual education becomes, the more deeply it is personal, moral, and emotional.

If we stand for enlarged intellectualty (and I think we must) then, we attend not only to skills, facts, and ideas, but to the organization of purpose, the significance of imagination and the discovery of meaning.

BIBLIOGRAPHY

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A Forward-Looking Concept in Rehabilitation

BERT MAC LECH

"Rehabilitation," as defined in 1952 by the National Council on Rehabilitation, is "the restoration of the handicapped to the fullest physical, mental, social, vocational, and economic usefulness of which they are capable." Although this definition today needs to be broadened to cover new areas and concepts, it will serve as a starting point.

We will divide the thoughts of this evening into three parts: 1) to provide a framework of rehabilitation, to understand the developments that have been occurring in this field; 2) to examine some of the components necessary for a forward-looking concept that will meet present needs; 3) to outline a pioneer program that has concretely embodied the concepts we are considering, and has shown them to be practical and capable of achievement.

Historical Development of Rehabilitation Services

Forces in our society which have motivated the establishment and development of rehabilitation fall into two broad categories: the subjective, and the objective forces. Ideals and ideas embedded in our culture, such as concern for the worth of the individual and his welfare, are more often than not unfulfilled in practice. However, they are present in the cultural pattern, and in our history, and have exerted powerful pressure for change.

Objective national and social needs have generated the major pressures for shaping rehabilitation, as is well illustrated by what happened after the First World War. During that war there were many more veterans who, although seriously incapacitated, were kept alive by medical science. This large reservoir of disabled war veterans, backed by veterans organizations and public pressure, brought about the first enactment of rehabilitation legislation in this country at the federal level. During the same period, the trade-union movement was pressing for workmen's compensation to cover the large number of workers disabled in industry. When these objective forces gained organization strength, and were reinforced by social ideas that were widely accepted, social development took place. This combination of forces resulted in the first Federal...
Vocational Rehabilitation Act in 1920. This Act was limited to the rehabilitation or the retraining of the physically handicapped, and it provided only one million dollars annually in federal matching funds for the whole of the United States.

Why had the response been so slow? Why was the legislation and the appropriation so inadequate? We need to look at the forces that impeded and blocked the forward movement in rehabilitation.

There are subjective forces rooted in our cultural patterns. Historically, there has been a fear, a prejudice toward the disabled—the deviant in society. It was present in early Sparta where the weak or handicapped child was placed out on a hill to die. And Sparta isn’t really so distant. Until very recently in this country Institutions, on the whole, were placed far away from centers of population so that the handicapped and the deviant were put as far away from us as possible. And, if you examine your own feelings, I think you will realize that some of this fear and prejudice resides even in those of us who are related to the field.

Individualism has also adversely affected our attitude. It is as if we have accepted the fact that the burden for whatever befalls an individual is his responsibility, and, at most, the responsibility of his family. If he is mad, he is possessed of the devil. If he is poor, he is lazy and shiftless. The corrective action is up to him! Society and government have been very slow to assume their responsibility.

This devastating concept—so foreign to the actual context of our complex, interdependent society—was severely shaken by the experience of the Depression years. As a result, the “New Deal” evolved a philosophy of society’s responsibility which led to the passage of the Social Security Act of 1935. This was a landmark in acknowledging the nation’s responsibility for the welfare of all of its citizens—including the handicapped. However, for rehabilitation the results were minimal, in practical terms. Its immediate effect was to increase the one million to two million dollars for this whole country—a drop in the bucket in terms of need.

Unfortunately, the ideas which have helped impede the progress of rehabilitation have not been given the death blow they deserve and are still with us, clouding our perspective of social problems.

An objective factor that has impeded forward movement in rehabilitation has been the lack of available money, public facilities, and services. Even when there has been agreement on need and direction, there are still bottlenecks. Until financing, facilities tooled to need, and trained
professional staff are made available services will not be provided in sufficient quality and quantity. Until these bottlenecks have been tackled our forward-looking concepts will remain in limbo—unfulfilled.

We will return to these bottlenecks later because they constitute the practical problems that we, as professionals, must solve to make concepts become effective services.

Within this context I shall give you a brief outline of the more recent developments in rehabilitation.

In 1943, twenty-three years after the first Vocational Rehabilitation Act, the Act was rewritten as Public Law 113. For the first time it extended rehabilitation's responsibility to the mentally handicapped, the mentally retarded, and the mentally ill. More federal funds were authorized, but not nearly enough to fulfill the authorizations contained in the Act.

The bottlenecks of lack of facilities, trained professional staff, and appropriations, remained. Service expanded less rapidly than projected. At this time, however, rehabilitation was marshalling its forces in terms of not only the professional groups but of lay groups, and was exerting pressures that were more effective on Congress. One of the arguments made came from the very real successes achieved by rehabilitation over the years; proving that rehabilitation paid for itself—that the money which the government put into this came back as a result of productivity of the workers who had been rehabilitated. This is a valid argument but it is one that may well get in our way in terms of what rehabilitation demands of us as a society today.

In 1954 Congress passed Public Law 566—a frontal assault on the bottlenecks. Here were grants for extension and improvement of existing programs—grants for demonstration and research to initiate new programs and facilities—and, for the first time, grants to universities for training programs in order to provide the skilled personnel needed in the field.

In 1965 Congress passed Public Law 893 which expanded financial support. By this time financial support had grown from one million in 1920 to four hundred million dollars in 1968. This represents a tremendous growth but this is still not sufficient to meet the enlarged responsibilities and needs of rehabilitation in our time. The 1965 Act provided an improved basis for federal-state relationships, comprehensive planning, liberalized support for community facilities, as well as for expansion of professional training programs.
A particularly significant aspect of this Act was a provision for "extended evaluation." In the past, rehabilitation had been limited by certain legal concepts in the law: a person, to be eligible for services, had to have some kind of disability which hindered him from gaining employment. He also had to meet the criteria of "feasibility." In other words, there had to be a determination on the part of the counselor that there was a reasonable expectation that the client, given "x" amount of training, would be able to take a job. There were many who could not meet this feasibility criteria—particularly those in the area of the mentally handicapped who needed a longer period of training to raise their level of vocational readiness. "Extended evaluation" meant that the judgment on feasibility could be delayed, thus enabling the counselor to provide more appropriate services for many clients.

A number of organizations—professional, parents, and others—had pressured Congress for this extended evaluation provision. Now it has opened new doors to a segment of the population that had been rejected before in terms of the previously existing rehabilitation standards. This has particular meaning for our discussion this evening.

Progress occurred then, as a result of ideas and concepts which related to the values of our society and attracted public support. National and social needs and pressures were present. The combination of these factors with cohesive public groups to project relevant concepts and to utilize education and political pressure secured their implementation. New, forward-looking concepts that are projected will become reality only as these conditions are met. No progress comes without struggle. Implementation, or realization of goals in the field of rehabilitation, as in others, is the responsibility of those who care.

Factors Necessary For a Forward-looking Concept

What are some of the factors pertinent to a forward-looking concept for today in rehabilitation?

First, there needs to be a shift of emphasis from rehabilitation to habilitation. This is more than a matter of semantics. Basically, it is a different process, calling for specific approaches, necessitating the training of professional personnel and the provision of facilities equipped to focus on the categories of clients needing "habilitation." Rehabilitation is to restore lost functions; while this will continue to be important and necessary, the inclusion of the new categories of clients (such as the mentally retarded and the socially deprived) demands a different and a broader approach. The need is to prepare them to better utilize
existing abilities—to "habilitate." It involves moving in earlier with services, and usually extending services for a longer period in order to provide whatever is necessary to prepare the handicapped individual for leading a useful and productive life. Habilitation will demand even more emphasis on training, to cope with adjustment problems, to modify behavior, and to individualize the treatment plan for each person.

Second, the forward-looking concept must be increasingly focused on prevention. The history of rehabilitation, and most of our social services, has been largely that of "picking up the pieces," of moving in after the damage has been done, of "restoring" what has been lost. This is understandable because rehabilitation came into being in answer to this need. The concept of "picking up the pieces," of "restoring," is valid and will continue to be necessary. However, the suggestion is for a shift of emphasis toward prevention whenever possible. This would involve getting at the disability earlier. Rehabilitation agencies are moving in this direction through cooperative arrangements with schools and hospitals.

There is a further step implied. Rehabilitation personnel and agencies must give more attention to social and health conditions that are disabling. They will need to be concerned with preventive measures—i.e., earlier case-finding, diagnosis and treatment, improved family health, and prenatal care, etc. Professional and service organizations will become more concerned about such items that may now be somewhat peripheral to their primary interests. Those in the field of mental health and mental retardation, especially, will need to study their relationship to rehabilitation and to focus on community programs that will habilitate their clients and prevent, whenever possible, a breakdown and probable institutionalization.

Special Education, too, will have its preventive implication. Its programs and teachers will need to be alert to and prepared for the task of equipping the handicapped to cope with the problems and demands which growing up in our society entails.

The acid test of all our programs and endeavors rests on the increased effectiveness of those we serve, teach, or counsel, so that the handicapped are able to deal with their environment and to function in a more adequate manner. This is better and more easily accomplished as prevention rather than as cure.

Third, a forward-looking concept in rehabilitation should provide for the extension of services to new categories—the more difficult clients.
Dramatic changes have occurred in habilitation which have converted the “unfeasible” client of yesterday to the active and successful participant in today’s rehabilitation program. These changes have made the difference between the individual’s dependence on society for care, and the individual’s ability to achieve a greater degree of independence. Although there has been a rising tide of services to the severely disabled, including the mentally retarded and the emotionally disturbed, the rate of forward movement has been impeded by the special problems posed by many in these categories. The challenge at present is for the implementation of the existing legislation for extended evaluation. A pre-vocational phase of training is required for these handicapped groups to raise them to levels of vocational readiness. Then, they will, in large numbers, be ready and able to enter the world of work and to assume adult responsibility. Too many of this group now fall into a grey area—a twilight zone—with their potential for useful lives remaining untapped, and they are a source of frustration to themselves, to their families, and to society.

A fourth component of the forward-looking concept is the necessity of rehabilitation to focus more on total life adjustment—expanding its responsibilities beyond vocational goals. Training for work and occupation is a vital part of the total rehabilitation effort, and in many cases will remain the primary goal. The shift of emphasis to the whole of living is already underway but needs to be accelerated. It includes the attitudes and skills which are subsumed under present programs of personal adjustment training; it involves self-care, mobility, communication, interpersonal relations, self-concept, and all the areas necessary for increasing the individual’s ability to function independently. This principle was recognized in the reorganization of the federal services in 1967 where a wide range of programs were integrated under social and rehabilitation services. This trend is valid in that it includes the totality of an individual’s needs, rather than segmenting the needs into compartments. It reflects the social changes that are increasingly taking place with the growth of leisure time and attendant problems that such development creates.

The Young Adult Institute—A Prototype

Now, to reflections on the Young Adult Institute, in terms of providing a program which has concretely embodied the previous mentioned concepts, and has shown them to be practical.

In 1957, Mrs. MacLeech and I founded the Young Adult Institute
to test the feasibility of habilitating mentally retarded adolescents and young adults. We worked with rehabilitation "rejects" who needed a longer period of training for vocational readiness to remedy their personal immaturity, social inadequacy, dependency, and impaired adaptive behavior. It was not until 1965 that legislation was passed providing extended evaluation for this type of client. Yet, even today, few agencies are equipped to deal with the special kinds of problems involved.

Eighty percent of the Institute's clients had histories of serious emotional disturbance—often compounded by repeated failure, by rejection of family and of peer groups—and/or mental illness. Two-thirds tested in the "retarded" range—obviously some test results were influenced by emotional factors. Over one-third had medical and/or developmental histories which showed evidence of neurological impairment. These were multiply-handicapped young people for whom no adequate rehabilitation facilities existed.

Was their rehabilitation possible? Was it feasible? Could they have a future? Must they—and their number in this country is legion—remain in the grey area of dependence?

The Young Adult Institute addressed itself to their problem. Over the next decade we evolved, refined, and tested a habilitative, preventive, total-life-adjustment approach. What were the essentials of the program that was evolved? It was based on a structured group situation which provided acceptance for the individual—something new to them after a life history of being outsiders. It was vital to their acceptance of themselves and it enabled them to reach out for social relationships and to acquire greater self-confidence. Related to this was the status and dignity they acquired through being treated as young adults. Too often the handicapped, particularly the mentally handicapped, are treated as children regardless of their chronological age—a completely self-defeating approach. Emphasis was placed on the question of expectation of adult behavior. They increasingly tended to respond appropriately to this, and their maturation was promoted. Within the structured group situation the Institute provided them with a variety of successful life experiences—success experiences carefully planned and programmed. This procedure diminished fears and anxieties which had been rooted in past failures and enhanced personal and social growth. Within the group structure the Institute provided a model for the kinds of behavior that were expected and then reinforced those adaptive behaviors that were appropriate. The long-range consequence of these success experiences was
the emergence of a more positive self-image.

Behavior modification, in terms of building the adaptive behaviors that would better enable the young person to cope with the demands of the environment was at the core of the program. However, it was not enough to set up a model or a structure to elicit desired behaviors—it was not enough to do things to these young adults in order to reinforce the desired behavior—they had to be involved in the behavior modification. For the desired behavior to be generalized beyond the structured situation and to be carried over to general, unstructured social and work situations, those involved had to make the new behavior patterns a part of themselves and of their value system. They must be expected to make, and must be given opportunities for making decisions and judgments.

Everything that we did was aimed toward the independent functioning of the individual. The key to successful habilitation was the degree to which a young person was able to internalize, to be the monitor of his own actions and of his own behavior. As the desired behavior was accepted and understood by the individual, it became a part of him and he was able to function on his own. Without such internalization he is ill-equipped to cope with his complex external environment.

This approach is based on the assumption that mentally handicapped young people, including the retarded, are capable of developing insight, judgment, and critical thought concerning themselves and their behavior patterns. Too often, I feel, that there have been failures in dealing with these young people because of our own limiting attitudes. In programming for the mentally handicapped, professionals too often are bound in the straight jacket of a low level of expectancy—and the result is the product for which we have trained. Tending to put individuals into categories, we suffer from a "hardening of the categories."

The Young Adult Institute used small, homogeneous groups for the discussion of problems in various areas of disability, to achieve understanding and internalization. The small groups afforded the young people an opportunity to express themselves freely and to profit from one another's ideas and experiences. The sessions, more importantly, contributed to a growth in insight—to the internalization that made behavior modification "stick." Group sessions were reinforced and supplemented by activity-centered, individual counseling. In addition, a full-time professional staff was involved in every aspect of the client's life—family counseling, making indicated referrals to other community services, etc.—to the end that all factors bearing on the individual's growth were co-
ordinated. This type of full-time involvement, combined with the actual periods of programmed activity, assures maximum results in behavior modification and client growth. The Department of Vocational Rehabilitation counselors reported that the Institute, in cooperating on problems that arose on job-training programs, had been a contributing factor to successful rehabilitation.

To illustrate more concretely the kinds of responses and adaptive behaviors sought for, let us take one area, i.e. the prevocational—the raising of the level of vocational readiness. A key factor for the handicapped young person was realism as to what constitutes a feasible job goal. It meant knowing something about the nature of work, and what is required of the person who works well; some self-knowledge as to what kinds of things the individual could do, or could learn to do, and the fitting of the individual's capacities to possible available jobs. Another area was stimulating the motivation to work. Since a job was concrete evidence to the handicapped individual that he had "made it" and would have an acceptable place in the "normal" world, the motivation was rather easily strengthened as his general self-confidence was restored and asserted.

There was the building of basic work-patterns, habits and attitudes. One that is not easy to learn, or to teach, is "listening"—we found that many of the young people, through the years, had never learned to "listen." (I wonder, sometimes, when listening to adults, how much they are actually listening to one another. You may test it yourselves in some of the conversations that go on). It is true that our young people talk, sometimes constantly, but they are not listening—and this matter of listening is a key factor in being able to take directions, to follow through, and to work. Many of the young people who were neurologically impaired had patterns of extreme rigidity, yet without flexibility in response they could not hold jobs and could not benefit from vocational training. They had to be taught flexibility. This was rough for many who had been so much under the hammer of rejection and criticism. They also had to learn to follow routine, yet follow instructions from a superior even though this might at times change the routines. In other words, they needed to know how to respond appropriately to supervision. The young people had to be able to take criticism, to adjust to others on the job, to take ribbing, and to handle the whole area of interpersonal relations. It was important for them to be "on time" and to know the meaning of the passage of time in regard to productivity. They needed the
basics in the prevocational phase to raise them to the position where
they would be ready for vocational planning, training, and jobs. At
the Institute progress in these areas took place.

The program of habilitation at the Institute could not be covered in
detail tonight, but a few other comments may be useful. Mentally handi-
capped young people usually have serious experiential gaps. Their social
contacts, especially, tend to have been limited. The program at the
Institute offered a wide range of socio-recreational activities to fill in
some of the gaps. It developed patterns for the more effective use of
leisure time and how to do things with their peers. They got to know
the community, explored its museums, theatres, recreation areas, eating
places, the various means of transportation, and the places of general
interest. First they were oriented to the experience, then guided through
it, learning how to use it, and they then, on their own, duplicated the
experiences with these resources. Remediation, geared to the specific
communication and number skills they needed for adult functioning, was
part of the program. Most had had relatively unsatisfactory experiences
in school, with consequent learning deficiencies. Essential for them, in
terms of number skills, is the matter of understanding the appropriate
use of “time, and money.” It was surprising how some of their “blocks”
in arithmetic began to disappear when they were dealing with their own
money.

Family relationships often were at the core of problems, and handling
this was basic to any fundamental forward-movement for their growth.
Thus, family counseling—individual and group client counseling around
their common problems—was ongoing and an integral part of the In-
stitute program. The results could be seen in changing family attitudes
toward the young people, and the modified attitudes the young people
had toward themselves.

A research study, supported in part by the Vocational Rehabilitation
Administration, was conducted in 1966. It concluded that “a sizable
portion of the group studied achieved vocational and social benefits of
far-reaching significance in connection with their participation in the
Institute’s program.”

39% achieved success—defined as “a qualitative change from de-
pendent to independent functioning—from vocational un-
readiness to productive competitive work—and/or from
socially isolated to independent social relationships.”
39% achieved significant gains—defined as “significant changes in
level of functioning—the enhancement of vocational readi-
ness—and an increase in the areas of socialization and in-

dependence.”
76% held competitive jobs (not in workshops)
50% were fully self-supporting
10% were married (at the time of the study)

The Young Adult Institute demonstrated that these multiply-handi-
capped young people, who had been rehabilitation rejects, upon being
given the necessary training and services could, and did, become pro-
ductive workers and more self-sufficient individuals. It demonstrated
that their un:eadiness, their immaturity, and impairments in adaptive
behavior could be modified—that it was possible to open the door to a
more healthy, productive future for this group of mentally handicapped
young adults.

The University of Southern California’s School of Education will
be initiating a similar project. In addition to serving handicapped adoles-
cents and young adults it will have a further dimension—that of training
professional personnel to deal with the habilitation of these handicapped.
The project will provide a rich and varied range of supervised experience
for graduate students and professionals in an interdisciplinary setting—
these will range from internships and fieldwork placement to professional
institutes and workshops.

Summary

We discussed briefly what is needed to implement any forward move-
ment in rehabilitation—or, that matter, in any area of social service,
or education. 1) A clear concept of what is needed—a statement, a
rationale, a philosophy that meets the existing social need. In this in-
stance the concept has been spelled out in the components of the for-
ward-look program in the Young Adult Institute. 2) An understand-
ing of the need by the public, and the public’s support. In this case
legislation of 1965 mandating extended evaluation poses both the re-
sponsibility for developing services and the possibility of securing the
necessary financial support. We cannot close our eyes to the fact that
extended evaluation, as of this date, has not been extensively imple-
mented. 3) We need community agencies tooled to the new concept and
equipped to handle the special problems it poses. The Young Adult
Institute provided a prototype, and the service is being replicated in many
places throughout the United States. 4) Training of professional person-
nel to carry out the services: we are at the threshold of this step, and the
University of Southern California project will play an important role
in fulfilling this obligation.
Thus, with extended evaluation, we have one more door opened, leading toward a brighter and more meaningful future for an area of the handicapped. It would probably be more accurate to say that we have our foot in the door. It is an important door for these groups of handicapped who have been waiting outside the scope of existing rehabilitation services. We have a challenge and the obligation to continue the pressure and professional preparation that will open the door fully.

**BIBLIOGRAPHY**

“Overview of Evaluation of Mental Retardation,” Bert MacLeech, American Association on Mental Deficiency, Newsletter, Region II, Vol. 14 #1, February 1968.


Principles of Residential Therapy
as a Rehabilitation Tool

EDWARD L. FRENCH

Residential therapy is one of the newer developments in the treat-
ment and education of emotionally disturbed and mentally retarded
children. Residential facilities have, of course, existed for many years,
but it is only fairly recently that recognition has come of the potentiali-
ties for treatment, in contrast to custodial care, inherent in a twenty-
four-hour-a-day program. Yet it is an important approach. It would be
conservative to estimate that more than 250,000 emotionally disturbed
and mentally retarded children are in residential therapy.

What is Residential Therapy?

Residential therapy is a treatment technique in its own right, borrow-
ing from and using other treatment tools, but offering, in addition,
something unique, with its own indications for use, advantages, limita-
tions and problems. It is based on the principle that the environment
can have a beneficial therapeutic effect on a child's development. It is
not merely psychotherapy given in a residential setting. It is an integrated
program with many facets consistently designed.

It is an inclusive form of therapy, incorporating psychotherapy, recrea-
tion therapy, environmental therapy, relationship therapy, and other such
approaches. Possibly the least understood aspect is that part of resi-
dential therapy which we call environmental or microc therapy.

The concept of environmental therapy is that, ideally, the child's total
living situation is therapeutically planned—that every experience, every
relationship, every activity is designed for therapeutic purposes for each
individual child.

To approach this ideal, we need detailed knowledge of the child's
history, with particular reference to experiences and relationships which
have been traumatic in the past. We also need certain implementation
techniques which we will discuss later.

It is, for instance, obvious that we must use a multidisciplinary
approach, even expanded beyond the usual or the psychiatric team con-
cept.
The team, in a residential treatment center, provides the structure through which all disciplines—special education, psychology, psychiatry, pediatrics, neurology and social work—may be brought to bear on, first, an understanding of the child's problems and needs, and second—and of vital importance—the practical and specific residential treatment plans for the child. No single discipline, we feel, has "all the answers." The contributions of all are necessary.

**Indications for Residential Therapy.**

In general, residential therapy is indicated when a change in environment is needed for treatment, or when the child does not profit from types of therapies available in an outpatient setting. Specific diagnoses for which residential therapy might be indicated include:

1. **Mental retardation:** In the community, the child inevitably is faced with competition which he cannot meet, from peers and siblings, and on this basis could develop frustration reactions. Special classes and sheltered workshops may resolve the problem of daytime activity, but do not touch upon the social and recreational problems.
2. **Situational reactions.**
3. "**Acting-out**" problems, for which it is difficult to treat the child as an outpatient, because of community relations and the dissipation, through the acting-out, of the anxiety which is necessary for psychotherapy.
4. **School and learning problems,** because the flexible, individualized school program of the residential treatment center permits scheduling around the child's strengths and weaknesses, and because learning ability is so closely related to emotional maturity.

**Program Philosophy**

There are two major aspects to the implementation of residential therapy: a multidisciplinary orientation, and complete diagnostic study of the child as a basis for program planning.

The multidisciplinary team at Devereux includes representatives from the disciplines of special education, psychiatry, psychology, medicine (with emphasis on the specialties of pediatrics and neurology), and social service. The team chairman is appointed on a personal qualification basis, without regard to disciplinary orientation.

The team has the responsibility of studying all available information concerning the child and, on that basis, as well as knowledge of program opportunities, of designing a treatment plan, utilizing, to stated degrees, the variety of therapies available—and outlining, as specifically as possi-
ble, staff attitudes and procedures. In other words, the team draws up the therapeutic "program prescription," involving such factors as the types of therapies to be used, the amount of each, the types of staff and peer relationships to be encouraged, the amount and type of competition to which the child should be exposed, the degree of support to be given. As with a pharmacological prescription, the designed program is constantly reevaluated and modified to meet the child's changing needs.

In addition to the usual clinical evaluations by psychiatry, psychology, medicine and education, and the historical record, it is of great importance to include, as part of the total evaluation, direct observation of the child's residence and school adjustment, relationship to peers and authority, reaction to success and failure, and similar behavioral patterns.

Principles of Environmental Design

The least understood (or the least codified) aspect of residential therapy is probably the environment program. The basic assumption of environmental therapy is that the "living space" of an individual can be healthful or traumatic; that environmental experiences can contribute to emotional growth or can be stultifying; that such factors as interpersonal relationships with peers and adults and the degree of competition and success are important to personality development; and, finally, that environment experiences can be consciously structured so as to be therapeutic to emotionally damaged children.

Consistent previous failure is a common denominator of children in a residential treatment center, failure which has been ego-destructive. Therefore, a main task of the center is to give the children the experience of consistent, but realistic success, through such techniques as the control—not the elimination—of competition, encouragement of the child's participation in activities in which the staff feel he can succeed and the furnishing of just enough support to ensure success.

A major factor in environmental therapy is group dynamics, for group balance, the relationship of children with each other, can be either negative or positive.

The role of staff is, obviously, a vitally important one. Through staff attitudes of acceptance, realistic understanding, and individually measured support, the child must come to feel that the staff are sincerely interested in him as an individual and accept him as such, even though they may not always condone his behavior. Staff attitudes and decisions must be consistent and "non-manipulatable," based on full understanding of the child's emotional needs.
CONSCIOUS ATTENTION must be given to the setting of goals. Disturbed children find it very difficult to work toward long-term goals. Therefore, short-term, realistic, attainable goals must be established for motivational purposes.

Environmental therapy involves the gradual substitution of internal behavior controls for external. As ego is built by consistent successes, the child will be able to exert greater control over his impulses. To the degree that he is unable to do so, external limits must be set for him. The child unconsciously welcomes such limits as a protection to him and finds in them a feeling of security. However, as he grows in ego strength, he must have the opportunity for an increasing degree of freedom to control his own behavior at the level at which he can handle it.

The above general principles of environmental design are only a few samples, but time does not permit the description of more. They may be implemented in a variety of ways, a few examples of which follow. The physical facilities must be related to the program needs. Indicated are small cottages; relatively small schoolhouses; adequate athletic fields, gymnasiums and swimming pools. Residences and classrooms should be designed with the ages of the children and the types of problems in mind.

There should be ample opportunities for promotional transfers in both the home and school settings, with adequate provision for a wide range of individualized programming, to meet the range of children's problems and the many stages in the growth process.

To overcome the difficulty encountered by the children in maintaining a long-term goal set, weekly or even daily report-and-reward systems can be helpful with built-in provisions for carry-over of grades to motivate toward the strengthening of the goal-set.

The educational program presents many opportunities for ego-building through skill acquisition. In a residential treatment center the purpose of the educational program is not skill acquisition as an end in itself. Education becomes therapy when the goal is ego-building. Flexibility in programming and scheduling to meet the problems of short-attention spans, etc., is mandatory.

In a residential treatment center, it is necessary to have a strong vocational evaluation and counseling program and a service-oriented work plan. Few children come to a residential treatment center with vocationally useful skills and an important aspect of treatment is the development of such skills. In addition to therapeutic values of such a program, there is the fact that, although many graduates of treatment
centers go on to further academic training, there are many others who possess performance abilities much higher than verbal, or who cannot be motivated academically.

When the time comes for a child to leave a residential center, separation anxieties frequently are quite severe. Planning, therefore, is necessary for a smooth transition from center to community. For this purpose, half-way houses, in which the child maintains his relationships with the center but increases his community contacts and responsibilities and assumes an increasing degree of freedom, have proven very beneficial.

The Family

From the beginning of the treatment of the child to the final rehabilitation, planning must include the family, in three interrelated aspects: the relief of guilt reactions; the development of a role for the family in the treatment process itself; and the preparation of the family for the child's ultimate return.

Parents, placing a child in a residential treatment center, almost inevitably experience feelings of failure and guilt. From these obvious defense mechanisms may emanate: denial, projection, self-recrimination, overprotection or rejection of the child, and many others. These mechanisms may, and often do, result in specific behavioral patterns which interfere with the treatment of the child.

The staff of the center must work with the family to alleviate the guilt by establishing confidence on the part of the parents in the professional integrity and judgment of the staff, and by developing a feeling of participation by the family in the child's program.

When the family constellation has been contributory to the child's disturbance, efforts must be made to modify the environment to which he will, presumably, return. There are several ways in which this may be aided, as, for example:

1. Removal of the child may, in itself, be therapeutic for both the child and the parents;
2. Close communication between parents and center will, hopefully, assist the parents to a greater understanding of the child's needs;
3. Certain members of the family may be encouraged to seek treatment for themselves in their local community.

Costs

With its necessary individualized approach, wide program range, low student-staff ratio, and inclusion of high quality specialists, residential treatment programs are expensive for families in low and middle income
brackets. Because the program is necessarily costly, the problem is not one of how to reduce costs, but of how to help families meet the costs. It would appear to be obvious that one approach must be for states to establish tax-supported residential treatment centers. However, further elaboration indicates that this is not necessarily so. There is a drastic shortage of trained personnel, and the construction of additional facilities, without considerable increase in professional training programs, can only exacerbate this problem. Also, the initial costs to provide adequate facilities are extremely high.

It would, therefore, appear that first consideration might be given to the full utilization of existing facilities, both public and private, with families being given state financial aid for enrollment of their children in the latter. This principle—"purchase of service" by states and other governmental agencies from private treatment centers—is gaining increasing acceptance.

The necessity for investment of funds for the treatment of emotionally disturbed and mentally retarded children can gain public acceptance with recognition of the fact that untreated children are and will remain a public liability of considerable magnitude, whereas with indicated therapy—residential therapy being one of the treatments of choice—not only might a child cease to become a liability, but he has a reasonable chance of becoming a contributing member of society.
The Cavalcade of Special Education for the Handicapped

ROMAINE P. MACKIE

A cavalcade is a procession in which there is usually much of glory to be seen. There are exciting sounds to be heard and there is action! In likening the movement of Special Education for the Handicapped to a cavalcade one imagines a procession currently made up of many contingents, marching with such dedication and power that this cavalcade promises to continue into the future with greater strength and with increased technical competence and skill. But it will continue to change as it has in the past. Even the kind of child who needs special education is constantly changing. Some handicapped conditions are being prevented. Other new ones are coming to light.

Education of handicapped children did not begin in so spectacular a way that it could have been described as a cavalcade or procession. It was the response to parents who came to schools and to community agencies asking for help. Some said, “My child can't hear, will you teach him to speak?” Some said, “My child does not see well enough to read ink print.” Others brought children in arms who could not walk, and still others had children who seemed to be mentally retarded. From all, the cardinal question was, “Can my child get an education?” The response began in small ways in scattered parts of the world and was championed by individual courageous pioneers who believed unequivocally that children with handicaps could be educated. From small, scattered, but sound beginnings, through the years, these have developed a uniqueness and singularity of purpose which gives special education some of the characteristics of a procession. In the United States it has developed within the broad framework of our political, social structure as well as within general education. Here, as elsewhere in the world, it has been aided by many forces beyond the confines of professional education—forces concerned with the welfare of mankind.

As we find ourselves in 1968 at the reviewing stand watching the cavalcade we must ask: Who are the children considered handicapped?
for education? What is the size of Special Education today? Where did it originate? Who, besides the children, are in the procession? Can one hear the steps of those who have traveled in this cavalcade? More importantly, can one anticipate the steps of those who will walk in the procession in the future? Are there other human welfare movements which will alter and help to shape Special Education of the future? Are there today thousands of American children functioning as handicapped who do not have true capacity handicaps but instead are simply the victims of environmental deprivation? Although many of these children are or may be labeled handicapped which of these really need special education for the handicapped? Are there new forces at work to help serve some of these children? The importance of such questions cannot be shrugged aside because the fate of several million school-age children is at stake.

And now back to the current reviewing stand. In the procession one sees important information on banners. This one says that in the light of present knowledge and practice, about 5,000,000 school-age children in the United States are so handicapped by serious physical, mental, emotional and/or social problems that they require some form of Special Education. And 2 per cent are so highly gifted that some form of Special Education should be available to them. Another banner says that by 1968 almost half of the estimated number of handicapped children, between 2 and 3 million, are in need of some form of Special Education. Still another banner reports that approximately half the nation’s local public school systems now make some provision for the education of one or more types of exceptional children either by maintaining a program or by providing for pupils in some other program, but only a relatively few have programs for all types of handicaps. Of the school districts that reported Special Education in 1963, two-thirds of them were relatively small districts, each with an enrollment of fewer than 5,000 pupils. This shows that Special Education is now reaching children outside the metropolitan areas in small communities. Expanding roles are also being played by residential schools, both public and private, in the nation’s effort to give suitable opportunity to handicapped children.

With the foregoing questions and these few statistics let us now flash back to the long cavalcade and view it for (1) origin, (2) progress and (3) new directions.
The Past

Actually, a few handicapped children have been given opportunity for education almost as far back as one can trace history, but in the early days such children were mainly the elite of the handicapped. They were the sons and daughters of the socially, politically privileged classes.

In general, the plight of the handicapped has been a tragic one through the ages. It was necessary for the able bodied to come to their aid in order for them to have a chance.

As Frampton and Rowell stated in their survey:

"The history of the care and training of the handicapped must of necessity follow social and education trends rather than create them. The wounded do not form the advance guard for an army. . . . With the handicapped there are physical or mental barriers to be crossed which do not exist in normals. It is the crossing of these barriers that actually constitutes the special education of the various types of the handicapped. To cross such barriers, their nature must be known. "Having learned the physical or mental barrier to be crossed and something of its nature, the next step is to find a means of crossing it. In the work with the blind, for example, carved letters and other devices were invented and tried unsuccessfully until the advent of braille produced a medium by which the barrier of lost vision could be hurdled."

One is tempted to report many of the sad conditions in which handicapped persons have lived and died but these are well known facts of history. The sorrow and emptiness of their lives was usually due not to the brutality of their fellowmen but rather to the hardships of primitive peoples, who could not afford to care for such burdensome persons. It was also due in part to ignorance. The able bodied shunned the handicapped because of psychological fear of the abnormal. This was a reflection of general social conditions.

Time, however, will not permit further review of the world story. Let us look instead at the handicapped in the United States. The efforts to give suitable opportunity, including education, to vast numbers of children is an expression of democracy at work and is fairly recent.

In the United States even in the days of the colonies and visibly in the eighteenth century a few individuals were pointing to the fact that some handicapped children could be educated. Pioneer Americans were influenced especially by the French and the English leaders. Some deaf and blind drew early attention and because their handicaps were so
visible, some found their way into a few residential institutions. In France, and especially as the result of the influence of the French Revolution there was some social recognition of the handicapped. In Britain and Germany there were philanthropists and pioneer educators and these persons influenced American leaders who studied in Europe. Samuel G. Howe, the founder of the Perkins Institute for the Blind, and Thomas H. Gallaudet, famous leader in behalf of the deaf, were American leaders. They studied and traveled in Europe and brought back ideas and skills.

In the United States the Congressional enactment known as the Northwest Ordinance of 1787 concerning the vast territories west of the Ohio River contained, among others certain measures to protect public education and common schools. These measures, too far-reaching to be discussed here, gave education a forward thrust in American life which helped inestimably the development of the American culture and education. These measures were most certainly not conceived with the thought of aiding the handicapped but the inherent emphasis on the maintenance of public (common) schools was destined to help the handicapped later on. The fact that the Ordinance stressed public (common) schools probably laid the foundation for eventual public support of Special Education. As it worked out, the handicapped began to be included and it soon became evident that the task of educating them was too enormous and too expensive to be accomplished by private means. To illustrate the change in trend the early pioneer residential schools established in the East were private and were administered by boards of control. But west of the Ohio River, and by 1850, several states—notably Ohio, Virginia, Wisconsin, Indiana, Illinois and Missouri—had established state supported residential schools for at least one type of handicapped child. To accomplish this many pioneers stepped into the long procession to answer the pleas of parents. They carried banners designed to enlist support of citizens and especially state legislators. The handicapped child—the blind, the deaf—had a right to public education. A new attitude was beginning to develop.

Units of the procession in behalf of public-day-school-instruction were beginning to form in the late 1800's. These units were in several states but they were still small and scattered and they could barely be heard and seen as the enormous elements of a glorious cavalcade. But their leaders were beginning to band together. There were pioneers in such places as Providence, Rhode Island, Chicago, New York and in Cali-
fornia. They undoubtedly said: if a deaf, blind, or even feeble-minded child can gain education in a residential school, can't something be done by local schools for the thousands upon thousands of little ones who are no. in need of residential schools or even in need of 24-hour care but who sit at home because they don't hear, speak, see, walk or behave well enough to progress with the normal child? What about those with speech problems, mental deficiency, and the delinquent? They were beginning to understand what the parents of such children were pleading for. By the turn of the century a few local schools had made places for some of these pupils.

People with interests over and beyond educators and parents of the handicapped saw and heard the developing cavalcade. By the last decade of the nineteenth century the attention of some health authorities had focused on children with tuberculosis, and other below par conditions and by 1900 a number of philanthropic activities had developed especially in the area of the orthopedic. Several pioneer physicians played a leadership role at this time. They recognized the value of education in a total rehabilitation process, increased cooperation with school authorities and social workers in devising programs for children in wheel chairs, on braces and in need of therapies. Some teachers began to help in a few cities by taking the school to the hospital wards and even into the homes when no other opportunity for education was feasible.

It is perhaps difficult for the present generation to realize how serious and how prevalent orthopedic and other below-par health conditions were and that thousands of children died from pulmonary tuberculosis, malnutrition, and that still other thousands were severely crippled in grotesque forms from poliomyelitis, tuberculosis of the bone and other orthopedic conditions. Of all the areas of the handicapped this was probably most in the forefront from about 1910 to 1940.

In the midst of the philanthropic effort to help physically handicapped children came the first World War. Adult soldiers became health and orthopedic problems—and the talents of outstanding physicians and welfare workers were turned to the tedious task of rehabilitating the war victims. Although unanticipated this proved a boon to children with physical handicaps. Public interest in physical restoration mounted and brought about a more enlightened attitude which extended especially to children and youth of school age. The dedication of talented people to the war-handicapped, together with new technical knowledge in treatment and care, was destined to aid all handicapped.
The time was ripe. Contingents of the procession had begun in the second decade of the twentieth century to secure state legislation which would not only assure financial aid to some children in residential schools but also in local school systems. For example, both Ohio and New Jersey were successful in enacting in 1917 state legislation in behalf of the education of the crippled. In New York State similar but wider legislation included all the physically handicapped. Thus the public trust for its handicapped children began to be statewide and a pattern for state education agency support was set.

Falling into the cavalcade one hears the footsteps of members of service clubs who pledge to help the movement and to aid in securing public laws and programs. Among them were Rotarians, Kiwanians, Shriners, Elks, Lions, and individual leaders. These attracted others and thus the philanthropic movement within education grew. In the area of the crippled, the Ohio Society for Crippled (later the National Society) gave the cause a powerful impetus forward. Its influence was and still is nationwide and international.

During the first two decades of the twentieth century community efforts were also extended to the mentally retarded. The Benet test, first published in 1906, and followed by the work of Goddard and Terman in the United States, laid a foundation for classification of children for learning and opened the way especially for Special Education of the mentally retarded.

By 1920 the United States Government’s Bureau of Education saw the CAVALCADE OF SPECIAL EDUCATION and made some surveys which throw new light on the movement. The placards which they saw in the procession give a picture of the quantitative developments. The reports also show uncertainties about the scope of the program and relevant terminology, both problems which remain even now. For example, one category surveyed was “feeble-minded and subnormal” (some children and some adults) in public and state institutions and in city day schools. The survey did not give a count of people, children and adults, but reported that by 1914 there were about 1100 instructors of the feeble-minded and subnormal. One might infer from these statistics that the number of “pupils” was as many as 10,000, only a small per cent of those in need. In contrast the number of deaf pupils on the 1914 statistics placard was more than 10,000 which was perhaps almost all the deaf children thus far identified.
One is tempted to tarry with these figures. They reflect small beginnings of less than 50 years ago and they pronounce loudly the task before the leaders of that day and since. But growth was beginning to accumulate. To illustrate, similar Bureau of Education statistics on the mentally retarded showed a triple increase in instructors during the seven-year period from about 1920 to 1927. The increase in instructors was four times as great in city day schools as in residential institutions thus forecasting the rise of classes for the mentally retarded in public school systems. The day schools were supplementing the work of residential institutions for the feeble minded by the organization of opportunity classes. A beginning was also being made for the delinquents. The visiting teacher movement was pressing the schools to identify the emotionally disturbed and those who had serious social handicaps. Fascinating as these statistics are, more time cannot be given to them here. Instead attention should now focus on activities of pioneer leaders.

In the third decade of this century a very important professional organization, The Council for Exceptional Children, was formed. The banners it carried in the procession were for all types of handicapped children and for the highly gifted. The members of the organization were relatively few but they brought two new strengths to the procession. One was dedication to teaching the child with a handicap. The other was their grass roots connection with people in almost all parts of the United States and Canada. They were destined to influence thousands of other teachers, laymen and legislators.

The White House Conference of 1930 on Child Health and Protection gave full play to the problem of handicapped and brought many new interests into the Cavalcade of Special Education. The Conference prepared and disseminated recommendations that were so thoroughgoing as to constitute guidelines for action during many of the years that followed. Prior to the Conference, committees were at work on the broad topic of Child Health and Protection. These recommendations in behalf of the handicapped stressed the importance of early discovery; nursery schools and kindergarten education; medical care; research; and the duty of local public schools for special classes, thus placing responsibility on all the nation’s schools. In 1932 and 1933 two Conference reports were published specifically on the handicapped, one concerned with national, state and local organizations and the other the problem of both physically and mentally handicapped children.5, 6

The enactment of the Social Security legislation in 1935 placed in the United States Childrens’ Bureau certain mandates for the health and
care of crippled children. This resulted in services with federal aid in every state. Because of these health services it became possible to speedily identify many more children in need of Special Education for the handicapped. Thus the problem of the crippled child began to come under control, but other handicapped such as those with cerebral palsy came to light and gradually the Childrens' Bureau extended its services to all handicapped—the epileptic, the speech handicapped, the diabetic, even the mentally retarded. But this long and happy story cannot be told here. Its favorable influence on Special Education is so great as to be immeasurable.

By mid-century, 1950, more people are stepping into the cavalcade and it is moving more rapidly. It can be seen! It is moving and being heard in American life. One observes the cavalcade in units or sections with its members carrying posters and taking on militant characteristics. They asked, "Do all children have the right to opportunity for education?" By this time dramatic change had occurred! The cavalcade is no longer motivated solely by sentiment, philanthropy, charity. It is motivated by the concept that all members of mankind have a right to human dignity, and to a sense of human worth! As applied to children it means the right to healthy bodies, educated minds and social competence. More persons coming into the procession represent enlarged grass roots interests. Parents' groups are forming. Professional educators are organizing (such as the United Cerebral Palsy Association), and older and established organizations such as the American Association on Mental Deficiency are expanding.

At mid-century the procession was cheered and encouraged by another (1950) White House Conference on Children and Youth, called again by the President of the United States, which, among other things, reported the status of children in need of Special Education. The Conference again provided facts about handicapped children, pointing to the enormous gap between the number of children served and the number who appeared to be in need, then about 1 in 10, and reaffirmed through recommendations the citizens' expectations of what could be done by public and private agencies. It also showed foresight by pointing to other children in our society whom the Conference described as disadvantaged. These children, the conferees said, were handicapped by environment. Thus, even then the war against poverty and environmental deprivations was beginning.
A very important group entered the long march about this time. It was destined to become the National Association for Retarded Children. It came in as a contingent of parents, a truly grass-roots effort, dedicated to the rights of their children and to the purpose of fostering research on mental retardation, and improving services—medical, social and educational. The strength of this organization was its unfailing focus on the child. Its motives were gentle and humane. It was persistent and it has had far-reaching influence. Its journey was with many groups, one of which was Special Education through which it helped not only the mentally retarded but improved education for all children. Also at the mid-century point the Council for Exceptional Children must be viewed again. It is now a loud and effective segment of the Cavalcade. It had chapters in most states; it was holding professional meetings annually and publishing the professional "Journal for Exceptional Children."

1950 to 1970—The Current Period

So much happened between 1950 and the present—that is to say, 1968—that we should review the cavalcade as a whole during those two decades. The period has been one both of attainment of new goals and the consolidation of old gains.

The most significant new development has been the changed role of the federal government. The relevant alterations in the Office of Education's function provide an example for the discussion.

Although attempts had been made to secure federal aid for education of handicapped children, at least since 1925, none was enacted until 1957. Until this date the Office of Education had been a consultative and information-giving agent but in that year influential groups (especially the National Association for Retarded Children) induced the Congress to earmark budget funds for research in mental retardation. This law, not previously implemented, was made active with a million dollar appropriation, two-thirds of which was for research in the education of the mentally retarded. Thus began the development of a nationwide search for new knowledge.

Another nationwide problem which was holding back the development of educational progress was an acute shortage of qualified special educators. It was so acute that no amount of money or legislation could solve the problem unless more persons were promptly trained to be special educators. The federal research funds had kindled new hope and so in the meetings of the local chapter of the Council for Exceptional
Children, in statewide conferences, in the chapter meetings of the National Association for Retarded, one person after another took the platform in behalf of federal aid to solve this problem. Members of the procession went to Congress and some testified at hearings. There was a struggle because most people in the nation still felt that the funding of education—all kinds of education—should be left to the states. But the banners for scholarships carried by many segments of the great procession had their results. In 1958 just before the adjournment of Congress it passed P. L. 85.926 designed to Encourage Expansion of Teaching in the Education of Mentally Retarded Children through grants to institutions of higher learning and to state educational agencies. No appropriation was made possible until 1959 when $1,000,000 was authorized. During this interval national leaders in the country met again and again to advise the U.S. Office of Education on the most effective use of funds. To make a long and dramatic story brief it was agreed that the financial aid should be used during the first year to train leaders, e.g. college instructors to teach the teachers, directors and supervisors to conduct state and local programs. In all about 150 graduate students carefully selected by their states and institutions entered about 20 universities in the year 1959-1960. The plan was a wise one for nearly all the persons who received fellowships remained in Special Education. Today there are additional hundreds (and now in other areas of the handicapped) who have more recently received similar fellowships, who are in positions of leadership. Thus the usefulness of the fellows trained under the federal program has been multiplied many times. From the beginning the program was a success!

Today there are in the nation about 300 colleges and universities that offer at least a minimum sequence of professional preparation for teachers of one type of handicapped child, or for speech and hearing specialists. Due to the federal support for professional preparation and relevant, federally supported research, colleges and university programs have expanded and improved at a remarkable rate.

The Mentally Retarded Act was soon followed by the passage of P. L. 87-276 to make available to children who are handicapped by deafness the specially trained teachers of the deaf needed to develop their abilities, and to make available to individuals suffering speech and hearing impairments, the specially trained speech pathologists and audiologists needed to help them overcome their handicaps. The first two acts were categorical, that is, restricted to the mentally retarded or the
deaf, but they had been so successful that in the fall of 1963, the Congress broadened the scope of the legislation for Special Education in P. L. 88-164, to all the other traditional categories of the handicapped. And in 1966 P. L. 88.164, Section 301, Professional Personnel, gave expanded authority to prepare personnel not previously included: hearing and visually impaired, speech impaired, seriously emotionally disturbed, crippled and other health impaired, in addition to the already covered mentally retarded and deaf.

While these federal programs were developing what was happening to the procession at the state and local level? Had there been a retrenchment of effort as had been feared? Actually the reverse occurred. Processions within the states were going to their own legislatures for state and local help.

Whereas at mid-century although 41 states had some form of legislation to aid local school districts, only 34 states included state financial participation. Today all states have laws which make it necessary for the state education agencies to aid local schools in providing Special Education for the handicapped. Even more important, all have directors or supervisors of Special Education who give leadership to the programs throughout their states and most carry on other programs such as inservice education. All have professional standards for special educators in their states.

Theoretically specialized state laws might not have been needed—for every state even by 1950 had compulsory attendance laws—but the handicaps of children created problems for the schools. The cost of educating such children was higher than that of educating other pupils so that budgets needed protection. An even deeper problem existed. The schools were not versatile enough nor did they have the resources to educate such children. Hence the special feature of education, the Education of the Handicapped, was born of necessity. It flourished as a boon to children and their parents.

But with all this progress there is still a wide gap between the number of children in Special Education and the number requiring it. In 1963, when the Office of Education made a statistical survey about half the nation's school systems either maintained a program of Special Education in one or more areas of the handicapped or made arrangements for pupils to be enrolled in a school system that did so. But these programs were most frequently limited to children who were mentally retarded or speech handicapped.
Let it be assumed roughly that in 1968 about 50 per cent of the number of children in need of such a program have access to some kind of special education. Viewed historically, this is a remarkable achievement—but it could also be viewed otherwise as an indictment of our social progress.

During the period under consideration—1950 to 1970—social changes have occurred in the world and these are vigorously expressed in our nation. In a period of such marked social change, education, that is instruction of the young in school, is bound to be altered. In the United States more is expected of the American schools than ever before! The mounting concern of parents and citizens is continually reflected in the magazines and newspapers of our times. Shall we say summarily, schools are changing in order to (1) improve the quality of instruction and (2) individualize the school curriculum so that it is more creatively suited to the needs and capacities of each child. Actually, special educators are fond of believing, and with considerable justification, that the special education emphasis on the individual child has spilled over into general education.

But there are also other forces, human welfare forces, at work in society which have helped to shape American schools and to bring about favorable changes. One of these, related to the nationwide, anti-poverty thrust is sufficiently organized and active enough that it may also be thought of as the procession of the educationally disadvantaged. This procession is within general education, a part of a total welfare movement which is aimed at eradicating poverty and cultural deprivations and at improving opportunities for all. The procession is destined to benefit some persons who, although probably not truly handicapped in capacity, are functioning as if handicapped and more will be said about this matter later in this paper.

The movement is aimed at making first-class citizens of slum dwellers, rural poor, the uneducated and the sick. The movement was long overdue. Its importance to the welfare of the Nation cannot be over dramatized—for the strength of our democracy—of the Republic itself—depends upon the best possible development of all its people. It is not in keeping with the ideology of the United States of America to have vast numbers of below par citizens and especially those who because of poverty, ignorance, poor health conditions, yes, and even inadequate, unsuitable schooling remain educationally disadvantaged.
This movement came into sharp focus when the Economic Opportunity Act was passed in 1964 and began to effect school-age children directly through such programs as Head Start.

Insofar as education is concerned it became nationwide through the passage of the Elementary and Secondary Education Act of 1965 (P.L. 89.10). All of the titles of the Act are designed to bring changes and improvements to the schools but Title I has most significance for today's discussion. It is frequently referred to as Compensatory Education which brings financial assistance for educationally disadvantaged children in local public schools in communities where there is a concentration of low-income families. This program because of its (1) broad social purposes and (2) extensive and nationwide funding (somewhat more than a billion dollars annually) is making a wide impact. The funds go directly to local educational agencies and thus immediately reach the children. Innovation is encouraged, and the evaluation of programs is mandatory.

As we stand at the reviewing stand of Special Education we see the impact of this new welfare-oriented movement in all education. In its procession is a big banner calling attention to the several million children in these low income areas and their needs. Many of the children in the procession of the Title I community are not truly handicapped by capacity. Fortunately, some new ways of meeting the children's problems are developing.

Traditionally, it seems fair to say that the philosophy of Education of the Handicapped has been to try to help the individual child by adjusting him to his society. For example, if a child tested low in intelligence he might be trained to work in an occupation where he gave promise of functioning productively as a mentally retarded adult.

In the war on the Educationally Disadvantaged the effort is now focused on mass problems and with the idea that some of these environmental conditions can be altered and more people can be removed from the categories of the deprived or handicapped.

True, the focus is not so much on the individual child. It is, in contrast, a mass approach. It is on the problems in sub-standard environments—illness and disease, poverty, ignorance, low education levels and on prevention. As one views this with the possibility of changing these environmental conditions it is necessary to take another look at the children in both processions, e.g. Education of Handicapped and Education of the Environmentally Deprived.

Are substantial numbers of children functioning as handicapped children but who are not truly handicapped?
What are the effects of poverty, deprivation in the home environment such as no reading material, bilingualism; racial discrimination or simply different cultural backgrounds? Many of the activities in schools in the United States, especially under compensatory education, suggest that large numbers of such children, especially educable, mentally retarded children might function well—perhaps even better in some of these programs and thus never need to be labeled handicapped. Examples could also be drawn from other areas. Many children, handicapped or suspected of being handicapped, have been found early in Head Start or Follow Through groups. Some, it has become evident, did not have capacity limitations—they were only functioning as handicapped due to environment. It would be a gross error to evaluate such children as handicapped, the goals are different.

Another relevant question relates to the changes going on in American schools.

Is the modern school changing sufficiently to provide for large numbers of children who have functional handicaps due to environmental conditions?

The answer is "Yes, in many places it is." There is evidence that it is. Many schools are increasing diagnostic and medical services; reducing class size; adding teacher aides or volunteers, and enrolling pupils at an earlier school age. There are vacation schools and camps. There are after school recreation programs. There is more community and parent participation. Parents are brought into the schools as learners, aides and advisors. The modern school is changing. As special educators have often said, it is adopting many of the activities which have traditionally made Special Education successful.

The Future

Ah! There are people bold enough to step onto the reviewing stand and foretell the future of the Great Cavalcade of Special Education. They do not tell us how the new status will be achieved but they tell us some things the next decade may bring. What will be on the banners of 1969 to 1980? Let us look at a few.

1. Here is a big banner in the Cavalcade which says every American child is to be appropriately educated. Thousands of citizens, singly, and in organizations, have fallen into the procession which marches toward this goal. The nation's resources promise to support the movements which will give each child this right and reinforce him as a respecting, well-developed member of society.
2. The Cavalcade of Education of the Handicapped which has done so much to improve the life of the handicapped child and to free parents of guilt and fear will continue its glorious march. Its banners are there. It will, if it is fully wise, mingle with the other great processions in American education struggling to gain a better education and life for the less fortunate. Special Education of the Handicapped has much to give to the anti-poverty programs in education and it has much to gain from them. For example, from its long experience with individual differences and special curricular construction it has skills to give to general education. From the new programs for Education of the Environmentally Handicapped it has much to learn concerning the community and mass attempts to alter and prevent environmental deprivations.

3. The quantitative gap between the number of handicapped children in need of something special from the schools and those who receive it will in some way be closed before 1980. This will be accomplished by more careful placement of children, some in Special Education for the Handicapped and some in General Education in such programs as Head Start, Compensatory Education and Follow Through. It will limit itself to those who appear after careful diagnosis to have true capacity handicaps such as limitation in mental ability, vision, hearing, perception, speech, neurological defects, multiple handicaps, and to children who are so disturbed as to need a special education. There will be many banners calling for help for emotionally disturbed children.

4. The focus of the next decade will be increasingly on the improvement of Special Education. The need for this has been recognized, and in recent decades, new knowledge about the learning and development of various kinds of handicapped people has become available. This is now in the hands of the best prepared special educators and will be applied more scientifically during the next decade.

5. There will likely be some resolution of terminology and classification problems in Special Education probably with the effect of less program labeling of children for administrative purposes but more accurate description of the child's problems. Special Education will work notably with General Education but also with leaders in other professions.

6. Thousands upon thousands of children who would have previously been classified as handicapped for education will not need to be so labeled but will find their way into some of the diversified programs within the main stream of General Education. Banners in their proces-
sion will carry slogans for children from the slums, the rural poor, the drop-outs, and minority groups. These are mainly the ones who in days gone by would have functioned as handicapped due to environmental deprivation. They will be screened more carefully before even being referred to Special Education. They will overcome through Head Start, Follow Through, Compensatory Education and even through Elementary Education many problems which would have caused them to be labeled handicapped. They will acquire better language, systematic habits of living, better health and ways of life. The whole improved community in which many of them live will contribute to this.

7. In conclusion, the role of Special Education itself will need to alter rapidly. It has altered in the past. Some of the handicaps of bygone decades no longer plague us. New problems continue to come on the horizon. To maintain its vigor and its glory Special Education must assume the instruction of the children with serious education problems. Many are there with multiple handicaps, many who are seriously emotionally disturbed, others already delinquent with problems calling for resources beyond them. It must continue to search for scientific answers. It must stay close to the parents and other citizens dedicated to the enormous challenge of each child who requires a somewhat different education or something in addition to the usual kind of schooling. This is the challenge on the banners of the Cavalcade as it moves forward.

BIBLIOGRAPHY

Behavior Principles in Special Education

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When we walk into a classroom for observation and are met with the almost overwhelming task of rearranging the environment to establish conditions which promote more effective instruction, solutions are hardly comprehensible. Solutions seem not only difficult to envision but probably impossible in one effective step. That multitudes of teachers have been taught to approach the classroom behavior of children through an underlying causal frame of reference makes the task of changing the behavior of children toward improved patterns of performance difficult if not impossible.

An alternative to viewing behavior as representing some underlying cause, however, is a strategy which encompasses procedures to identify, measure, and change systematically the events and conditions arranged to affect performance within the classroom. This strategy for changing behavior, involving a number of specific responsibilities, incorporates established principles of learning that define lawful relationships between behavior and the immediate environment.

There are two views of the behavior problem: the view of the disordered behaviors observable in the child, and the view of the disorder caused by these behaviors. One must begin with the premise that no behavior problem is totally unresolvable, with a formidable strategy and with the cooperation of the administration and supporting school personnel. The strategy of this talk is designed to guide the way, tactic by tactic, to modify behavior toward concisely defined objectives. To facilitate clarity of direction as well as content, several basic teaching premises and a set of terms will be presented.

BASIC TEACHING PREMISES

With the incorporation of four basic premises into the teacher's procedures, behavior modification within an educational setting can become an established fact, observable in the performance of the child.

1. The teacher holds within her classroom all the power to change
these behaviors from the inappropriate and disturbed behaviors she observes to any behavior she wants, if she makes the correct responses in planning procedures and conducting the program.

2. Correct teacher responses in planning the conducting programs for behavior modification require the systematic arrangement and presentation of classroom events, that is, stimuli temporally related to the child's specified performance.

3. Behavior modification requires the use of scientific procedures for measuring the performance of the pupil in order to evaluate the effectiveness of procedures arranged for the specific program for learning.

4. Teachers can be more scientific.

CLASSROOM VARIABLES

These premises suggest that the teacher must become accustomed to a different, or possibly just a more accurate, view of the child in her classroom. She must observe his behaviors and performances and all the things that happen in her classroom with a more refined view in order to gain an awareness of the effect of these happenings on the child's performance.

Dependent Variables

Everything the child is observed to do in the classroom can be listed as his classroom behavior. Writing spelling words or arithmetic answers, pointing to a choice of letters following auditory cues, picking up the correct object following verbal or written directions, talking to the teacher or to another child or to the class, jumping out of his seat, sharpening his pencil, throwing a paper plane, hitting another child, or staring out the window are all movements he makes, behaviors he exhibits in the classroom.

Any instance of behavior observable from the child is a response. For example, writing an answer, hitting a child, pronouncing a word, or cranking the handle of the pencil sharpener each represent one unit of behavior—one response. Turning a page in a book, raising one hand, pointing to the correct answer, smiling at another child are also each an example of a unit of behavior, i.e., one response. Each unit of behavior has specific definable characteristics and the characteristics defined represent the topography of that unit.

Any one of these types of responses can be made a number of times during an interval. During an arithmetic assignment, for example, a
child can be observed to write many answers. If each of these writing responses is similar in that they are made to the same type of arithmetic problem, they can be grouped into a response class because they have similar topographies, similar definable physical characteristics. For instance, all answers to three-column, two-digit addition problems might be considered as one response class. All hitting responses might be grouped into one response class, though hitting responses that vary in topographies could be considered different response classes.

**Independent Variables**

The child’s classroom environment is everything in the room that can be observed: the teacher and what she says and is observed to do, the children individually and in various group arrangements, the words the children say, their observable behavior, the books and materials, assignments on the board, signs and posters and posted work, display equipment, noises from inanimate objects, and furniture, closets, and cupboards.

Some things in the child’s environment are always constant. For instance, the color of the walls is always the same, as are the lighting and temperature of the room. The closets and cupboards are always in the same place, and in some school rooms the desks and chairs maintain immovable positions.

Easily outnumbering the constants in the classroom, however, are the things that vary, that change in any number of ways, any number of times. Think of the number of times a teacher speaks to a child, a small group, or the whole class. Think too of the number of movements she makes around the room each day, from child to child, from cupboard to desk, from child to group, and innumerably more. Think of the number of times a child says or does something in the classroom or the number of times a group of children make a verbal or physical movement. Every time a different book is put before the child, or a different piece of paper is given him to write on, or a piece of display equipment offers a new presentation, the child’s environment has varied. These are all variables, rather than constants, in classroom environment.

Any physical event or condition within the classroom environment can be a stimulus to a child—all constants and variables within the room, including the child’s own behavior, are stimuli to that child as well as to any other child and the teacher. Stimulus events can be viewed from many degrees of identifiable scope, from very microscopic to very macroscopic. Each single action of the teacher, each arithmetic problem or
printed letter, each musical note, each tick of the clock, is a microscopic stimulus event. Each school book, assignment, musical recording, or workbook page are viewable as more macroscopic stimulus events.

All classroom events can be viewed as temporal events since by occurring either before or after a specified response, they are related in time to that response. An arithmetic book placed on the child's desk before he begins to write arithmetic answers or instructions given to the child before he begins reading a paragraph are stimuli which temporally occur before the writing or reading responses. Similarly, the teacher's reprimand following the child's hitting another child is a stimulus which temporally follows the hitting response, just as a spelling assignment following an art lesson is a stimulus which temporally follows the art lesson.

Any such stimulus which is presented before the child makes the specified response is an antecedent stimulus event. Antecedent stimuli can be observed in many degrees of refinement. They can be observed grossly, as the type of material presented to the child before he begins a task (an arithmetic book, a workbook page in reading, or a list of spelling words). An antecedent event may also be viewed microscopically, as when defining the precise stimulus event which occurs before each single response observed. When identifying a microscopic antecedent event, the observer may note that many times this event may simply be the previous response of the child.

Any event which occurs immediately after the child makes a response is viewed as a subsequent stimulus event. For example, a "look from a peer" following the dropping of a pencil is a subsequent event to the child who dropped the pencil. Or again, a frown from the teacher is a subsequent event to whatever the child was doing immediately prior to the frown. As with antecedent events, observation of subsequent events can also range from a gross to a microscopic view depending on one's purpose and/or skill. A gross view might be observation of the stimulus event which occurs when the child has completed an assignment. For example, if an art lesson immediately follows an English assignment, the art lesson is the subsequent stimulus event for the responses the child made during the English assignment. As another example, losing the opportunity for physical education class tomorrow because of too much screaming during the class today is the subsequent event which followed a half-hour of screaming. A subsequent event may also be viewed microscopically, as when identifying the precise stimulus event which occurs
immediately after each response emitted. Here again, as when microscopically identifying antecedent stimulus events, the observer may note that the subsequent event following any response within a series of responses is simply the next response. For example, with the child who is writing answers to arithmetic problems at a rapid rate, the subsequent event to one answer written is simply the next problem.

Further, each stimulus event actually has two temporal relationships to each of the child's responses. Each stimulus event is (1) subsequent to the response just made and (2) antecedent to the next response to be made.

The child's total classroom performance as well as all the many specific types of responses he makes each day are dependent variables that result from the temporal arrangement of classroom stimulus events, the independent variables. Measurement of the dependent variables (a specified type of response or performance from the child) is the index of the effect of the independent variables (stimulus events) used to facilitate performance.

This discussion of terms presented has been an attempt not only to promote a common base from which to proceed but also to point to the predictable relationships which become established between the child and the events and conditions within the environment that occur in time with it. These interrelationships have been examined and have come to be defined as principles of behavior.

As we examine the variables relevant to instruction, it is necessary to consider the principles of behavior as the source of reliable information which can serve as a guide for the improvement of instruction in special education. The application of behavior principles in the classroom requires incorporating systematic procedures of instruction. The refinements and improvements of instruction implicit in special education can come from increased precision made possible through the utilization of procedures applied systematically with an instructional environment based in behavior principles.

PRINCIPLES OF BEHAVIOR AS OBSERVED IN THE CLASSROOM

Principles of behavior are statements of the lawfulness of behaviors observed under specific conditions. All the principles of behavior to be mentioned will be relevant to reinforcement of behavior—to the consequences which follow a response or pattern of behavior. Behavioral psychology has shown that the consequence for making a response, that
is, the event which temporally follows the behavior of interest, is a critical variable in behavior acquisition.

Through specific arrangements of consequences following a specified response, the rate of occurrence of these responses can be increased, decreased, maintained, or extinguished predictably. By presenting systematically a pleasant experience or event following a specific response or pattern of responses, the probability of the occurrence of the response increases. Such positive reinforcement has the effect of strengthening the probability of the occurrence of the response it follows. If the teacher’s attention, or her smile, or her statement of “good job” is a pleasant event for a child, the teacher can react to the child in one of these ways following a pattern of academic performance and predictably accelerate the child’s rate of performance. The principle of positive reinforcement, then, is a statement of the types of consequence which should follow a specific behavior and a description of the effects on behavior this arrangement will have.

The principle of positive reinforcement can be viewed as a very general principle which incorporates a number of sub-principles, all of which are descriptions either of conditions which bring about precise patterns of behavior or are descriptions of types of consequences which function as positive reinforcers generally. Precise patterns of behavior are brought about through specific arrangements in presenting reinforcement. It is not enough simply to present a pleasant event sometime after a pattern of behavior or a set of responses occur, in order to establish the behavior efficiently. When a pattern of behavior is just becoming established, reinforcement needs to occur frequently so that responding will occur at a high, accurate rate. When a high rate has become established, then reinforcement of these responses is only necessary intermittently. For example, when a child rarely makes any reading responses, almost every response he makes correctly to reading material should be reinforced if we want to increase his probability of reading more material. When he is reading at a high, accurate rate, then reinforcement need occur only intermittently. This, as yet, appears to be the most efficient pattern of reinforcement for establishing and maintaining an efficient, steady rate of accurate performance.

Specific types of events or conditions come to acquire strength as positive reinforcers and can be described in terms of the strength they predictably acquire and how they come to influence behavior. The principles of conditioned reinforcement and generalized reinforcement explain the
environmental arrangements which establish a wide variety of objects, events, conditions, and our own responses as pleasant events which can be used to increase the probability of responding. The human smile, the pat on the back, the gold star on a chart, the words in a book, are not initially events which strengthen behavior, although for most people they gain this strength when paired systematically with consequences already pleasant. Consequently, they come to have enough strength to maintain most of our adult behavior.

Negative reinforcement is a principle of behavior describing conditions which strengthen the probability of the occurrence of a pattern of responses through removal of an aversive stimulus, arrangements which lawfully produce escape and avoidance behaviors. Too many children in the classroom never begin working on an assignment until the teacher becomes very stern. For these children, scolding, nagging, or some other aversive act redirects them back to work. Consequently, the teacher stops her prodding and quite soon many of these children are again observed not to be working. This is a predictable effect of negative reinforcement. Children predictably respond to remove an aversive stimulus and when it is removed the necessity to respond is also removed.

The principle of extinction, which describes environmental conditions that predictably eliminate a pattern of behavior, is the final principle to be mentioned. Arranging events so that a positively reinforcing consequence no longer follows a particular response pattern will lead to the elimination of that behavior. For example, if the teacher will cease to attend to the child when he is shouting out or leaving his seat for no useful purpose or whispering to his neighbor, these behaviors will decrease in number and eventually almost disappear if it is the teacher’s behavior that is maintaining it. At the same time, the most efficient procedure for the elimination of those behaviors inappropriate to the classroom is concurrent positive reinforcement of another pattern of behavior incompatible with responding inappropriately. Consequently, using positive reinforcement for responses made to academic materials is a good counter procedure along with those applied to extinguish a behavior.

Systematic Procedures

Behavior principles offer clear prescriptions for arranging conditions in the environment to change behavior predictably. However, to effect a predictable change in behavior with these prescriptions, it is necessary to use a set of systematic procedures. As we concern ourselves with observable behavior and observable conditions in the environment, it is neces-
sary to use systematically procedures of *direct observation, continuous measurement of the behavior* of concern, and *systematic manipulation of the environmental events* thought to be effective for changing the behavior. These procedures will be described only briefly.

**Direct observation**—Systematic observation of behavior involves stepping through several degrees of refinements in observation procedures which may first begin with describing narratively the behaviors observed and identifying specific behaviors of interest. Then, once the behavior selected as the target for further observation is identified it is defined by its precise topography so that units or cycles of its occurrence can be counted. The occurrences of these units of behavior are then counted over time in order to determine the rate of occurrence.

**Continuous measurement**—Measurement of these responses requires that a response topography be selected which will maintain its comparability during changes in environmental conditions even though response requirements increase in difficulty as academic materials naturally become more complex. This facilitates the sensitivity of measurement necessary for precise evaluation of the effects of changes in contingencies and reinforcers.

**Systematic changes in environmental conditions**—Event changes lead to the establishment of prescribed behavior patterns or sets of responses. Because behavior is lawful, because it develops lawfully from environmentally arranged conditions, the conditions which influence behavior can be determined if condition changes are introduced one at a time and held constant while measurement of performance is taken. A pattern of behavior may not initially register the effect of the temporally arranged conditions. Thus, to obtain a reliable measure of the degree of influence of one particular environmental condition, that condition must remain as introduced over a period of time.

**Contingency Management**

Applying behavior principles in the classroom using a systematic set of procedures is commonly referred to as *contingency management*, defined most precisely in terms of the systematic utilization of reinforcing events in relation to specified behavior. Wide agreement has been reached on the observation that a child learns by the effect he has upon his environment—on both the change he produces in his physical environment and on the temporal arrangement of events in his environment. The systematic application of contingencies of reinforcement to change behavior in a specified direction is relatively recent in its systematic appli-
cation, finding its way into the classroom only within the past three or 
four years (O'Leary & Becker, 1967; Birnbrauer, Wolf, Kidder, & 
Tague, 1965; Nolen, Kunzelmann, & Haring, 1967; Quay, 1966; Har-
ing & Hauck, in press; Zimmerman & Zimmerman, 1962; Lovitt & 
Curtiss, 1968). In terms of the classroom there are three variables re-
levant to the contingencies responsible for changing behavior: 1) the 
occasion upon which behavior occurs, 2) the performance of concern, 
and 3) the consequence of behavior. Armed with this important infor-
mation, the teacher can have a strong and predictable influence upon behavior 
by arranging conditions which facilitate the establishment of appropriate 
classroom behavior. The teacher accomplishes this responsibility first 
by making certain that consequences occur and that they occur under 
conditions which are optimal for producing the changes known as learn-
ing. Once certain events can be seen to reinforce behavior, behavior can 
be changed by the teacher quite predictably.

A pattern of behavior is concurrently influenced not only by the 
reinforcing consequence but also by the adjustment of the schedule 
(Feaster & Skinner, 1957) upon which the reinforcing events are pre-
sented. Attention to scheduling of reinforcement is critical to the acquisi-
tion of a new pattern of behavior as well as to the maintenance of a 
strong and stable behavior pattern over long periods of time. The many 
investigations of reinforcement schedules have demonstrated several 
principles. As mentioned earlier, certain schedules, presenting reinforce-
ment intermittently, have been found to maintain a high and stable rate 
of responding, observable in the classroom as a child hard at work. It 
is this important principle that promotes behavior appearing to be in-
trinsically motivated, while actually it is the specific schedule of rein-
forcement. Many observations of children cause teachers and other adults 
to make statements, such as, "He's just a good boy," "He is certainly 
conscientious about his work," or "He naturally enjoys reading." These 
statements serve to conceal the reinforcement histories of the children 
which have established the materials they respond to as conditioned re-
inforcers and have made it possible to use more powerful reinforcers 
only once in a while. For most children in almost all classrooms accept-
able rates of academic responding have been shaped and are maintained 
by the natural occurrences of reinforcing events from the classroom. 
There are other children, however, who exhibit a different reinforce-
ment history. These are children described as lazy or apathetic or who 
dislike reading or hate school. As with the children whose behavior looks
very acceptable, these behaviors could be explained if a record were retrievable of the effects of the child's behavior upon the environment.

Maximizing Conditions for Learning

There are certain very basic steps the teacher can take in setting up the most efficient, individualized program to apply to a group of children. Here, the teacher must attend to two major variables of learning: 1) to the instructional materials, and 2) to the consequences for responding to the task. Instructional materials to present at the child's level of responding may be anything from sand blocks to basal readers to spelling books to programmed reading materials. They are introduced in order to bring out a specific response from the child, such as, writing a word for spelling, printing a letter in a programmed reading book, writing a number under an arithmetic problem, or feeling a sand block to determine its shape. Instructional materials provide the cues to which the child must respond. They are a major variable in learning.

The second major variable for learning has been observable throughout our discussion of behavior principles in the classroom—that is, the consequences for responding. A program for the acquisition of any series of academic responses must move through a number of successive approximations toward the desired behavior pattern. In order to reach this objective, an extended series of reinforcing events must be handled by the teacher initially, followed later by procedures which bring the child to managing his own contingencies.

Both of these major variables require effective sequencing in their presentation in the classroom. It is extremely important to sequence academic materials to the child which permit him to respond accurately. Materials should be sequenced which guide him to making responses that successively approximate the terminal skills expected of him. At no time under these conditions is he expected to make a response too difficult for him. It is just as important to sequence reinforcement to the child and it becomes more critical for the teacher as she is less prepared to respond. When both of these variables are attended to systematically, we come closer to maximizing accurate and efficient learning.

PRACTICAL EXAMPLES OF THE APPLICATION OF BEHAVIOR PRINCIPLES IN THE REMEDIAL SETTING

Over the next several years many classroom programs in which behavior principles are systematically applied will become evident. At the present time only a few programs have developed to serve as models, models which at best are crude approximations to the refinements which should materialize.
Individualized Reading Program

An individualized reading program (Hauck & Haring, 1968) for twenty-four students in a regular classroom provides an early example of the application of behavior principles to the classroom. Within this program the teacher carried out the responsibilities involved with cuing and reinforcing responses, and with measuring performances and managing contingencies. Several features of this program hold particular interest in these developmental stages of contingency management. First, basal readers were used rather than programmed material. Second, students from the reading program were trained as pupil monitors to measure and record response information from each child. Third, the teacher selected a reinforcing consequence having broad reinforcing strength and one that was easy to dispense. Fourth, a package program was introduced with which the teacher initially could obtain a reliable baseline measurement of performance from which further program evaluation could commence.

Each student was provided a basal reader at his own reading level, with assignments programmed to allow measurement of reading responses in observable, comparable units. The thirty-minute reading session included silent and oral reading of a word list emphasizing discrimination of word parts, silent reading of sets of pages, oral reading of lines of print, and comprehension questions. Reading assignments were framed in equal response units so that the student silently read three pages of text, answered a comprehension question, orally read eight lines of print to the pupil monitor, and then turned to the next set of pages to respond to.

Students were assigned to pupil monitors who read at least several stories ahead of them and during the course of the program each student served as a pupil monitor. Most of the monitor’s responsibilities involved response measurement, such as measuring and recording rate and accuracy of oral reading and accuracy of comprehension and word discrimination. Thorough training of the monitor was the critical feature of the program.

Following each session students determined their own reading rate and accuracy, then plotted the data on graphs displayed on the wall. Performance rate exhibiting improvement or maintenance of a previously high rate earned the opportunity for extra recess or physical education.

The role of the classroom teacher in this program was to provide information on unknown words to individual students upon request during silent reading, to check on the accuracy of pupil monitors as they
conduct their responsibilities, and to use performance data for making decisions about the effectiveness of contingencies for each child.

Results of performance data for this large group of children clearly exhibited the feasibility and effectiveness of group management 1) for individualizing instruction and rate of progress, 2) for evaluating effectiveness of conditions through direct performance measurement, and 3) for establishing a reading program obviously reinforcing to the children involved. Marked changes in the patterns of reading performance were observable when contingencies required average or better performance. Variable rates of performance were stabilized, low rates of performance were improved, and high rates were maintained. Performance became so efficient that students typically progressed through several basal readers in less than a month. Long-term retention of content was almost 100%.

Maxfield Summer Program

The Summer Program (Haring, Hauck, Starr, 1968) in remedial reading and math at Maxfield Elementary School primarily for regular class children serves as an example of a total school program designed to incorporate the principles of behavior and is a second approximation of the application of necessary systematic procedures. This program, again, should be viewed as an early approximation to the type of school program that should be functioning for each child. Generally, the description can proceed in terms of the application of principles of behavior, utilization of systematic procedures, refinements in modification procedures introduced during the program, and performance data of the children.

The Summer Program for two hundred children in grades kindergarten through eighth was designed to provide programmed sequencing of reading and math materials to facilitate a low rate of error. Positive reinforcement was presented for correct responses in each of three different materials for strengthening and maintaining patterns of responding. The principle of extinction was applied to inappropriate behavior by withholding positive reinforcement for behaviors that should not recur. In other words, talking out, out-of-seat, and other similarly inappropriate behaviors were ignored, short of allowing damage to others or to performance data. Negative reinforcement was avoided. The classrooms were arranged in two basic areas: a work area and an activity area containing many pleasant games, crafts, and art supplies. Children earned the opportunity to engage in these activities following performance
which showed improvement in rate or maintenance of a high accurate rate.

Each teacher applied the systematic set of procedures, described earlier, to the observable behaviors and conditions for learning in the classroom. Correct and incorrect academic responses were counted and recorded and rate was determined and graphed. Children assumed responsibilities of recording as soon as they acquired the skill. Performance was continuously measured as conditions changed in the classroom to evaluate the effects of these changes on the evident changes in child performance. After observing child performance for a week under conditions which specifically cued and reinforced responses, the teacher, using the response data of the child, made decisions about necessary changes in contingencies. That is, she decided which children were well motivated to work accurately and efficiently under present conditions and which children would require revision in kind or amount of reinforcement.

As precise contingencies became established between performance and the opportunity for time to engage in self-chosen activities within the Summer Program, many children exhibited marked changes in performance patterns. Changes in social behaviors were just as evident—behavioral changes which were the first to give great relief to the teacher. Children who left the room at a high rate, walked the ledges of the coatracks in the hall, dropped articles from the window, and shouted loudly in class at the beginning of the program showed remarkable changes in behavior when classroom conditions made it more reinforcing to respond to reading material than to respond to something else. Marked changes in behavior management skills also became very evident in the teachers, a change they were the first to admit.

SUMMARY

Both the Beliewood Reading Program and the Maxfield Summer Program provided significant and interesting implications for extensions and refinements of the procedures used as well as for the educational growth of the child. The programs themselves, the efforts such programming requires—especially in the early stages—and the results obtained in terms of performance and skill development underscore the importance of Three P's of Education. For effective instruction and for respectable growth in the field of education, educators must come to recognize and incorporate into their instructional routine: 1) systematic procedures; 2) professional ethics; and 3) pride of teaching.
Systematic procedures—The importance of systematic procedures, especially as they adhere to the application of behavior principles in the classroom, has already been discussed and examples of their application provided. Further discussion is not necessary except to emphasize that systematic procedures provide the educator with effective instruction, reliable information, and significant skill development.

Professional ethics—Professional ethics, although not yet described, are inherent in the conduct of these procedures and the principles they apply. Professional ethics are facilitated and observable when promoting or incorporating procedures which facilitate learning. To see that children learn is the ultimate responsibility of educators. This responsibility requires effective program planning in the classroom and effective training in the colleges as well as in-service training in the schools. The lawfulness of behavior has been demonstrated a thousandfold. It is, therefore, our ethical responsibility to insure that these results materialize in extensions to the classroom and to professional preparation. If educators do not accept their professional responsibility for maximizing the effects of conditions which can be brought to bear on performance, the door is left open for haphazard learning experiences and deficits in skill development.

It is the further ethical responsibility of educators to make educational decisions based on the performance data of the child. Reliable data must be collected and interpreted objectively. Information sent out for public consideration must especially be based on behavioral data from the child. This emphasis does not in any way lessen the importance of educational decision-making in the classroom with response data from the child. Education as a system is ethical, and if an educator is adhering to procedures which facilitate effective learning, he is professionally ethical.

Pride of teaching—Pride of teaching can be described by each of us in many ways, but primarily it comes through effect, planning, and progress which has already been discussed. When effort is taken for effective instruction and the observable results are child progress in learning, we have before us four representations of pride in teaching: the planning, effort, evaluation, and effectiveness.

BIBLIOGRAPHY


Haring, N. G., & Hauck, M. A. Improved learning conditions in the establishment of reading skills with disabled readers. *Exceptional Children*, in press.


The older and more experienced I become, the more I realize that certain truths are, indeed, self-evident. Although my education included the usual amounts of exposure to philosophy, foreign languages, history, literature, and psychology, many of the lessons one is supposed to learn from a liberal education reached me late. I knew the words but did not always know the meaning of the words. I suppose this is what the development of maturity is all about.

For instance, I had learned the usual pat phrases and large generalizations which represent the distilled wisdom of the ages: that all is not what it seems to be; that what we say and what we do are not necessarily the same. I also learned that beauty is in the eye of the beholder and that truth is in the mind of the believer. I learned, further, that emotions—feelings—influence intellect, whether we acknowledge the relationship between the two or not. Finally, for my purposes here today, I learned that we cannot think of ourselves apart from the words we use to express ourselves. Our language—the terms by which we describe ourselves—is a powerful influence in shaping what we come to think we are as persons.

The generalizations I have just recited were spewed back by me in one form or another on numerous examinations in college and graduate school. But somewhere along the line, the words became working concepts and principles by which I was able to evaluate and get perspective on my own personal place in the world, and the effort to do so continues.

I suppose each of us goes through some process equivalent to what I have just described. First one learns something; then what one learns becomes assimilated into self as the checks and balances of experience take place over a period of time. And so we grow up, hopefully growing wiser—if not brighter—over the years.

One would suppose that what happens to most of us personally would
have its counterpart in our professional lives and in the professional groups and the institutions in which we work. That is, that professionals, professions, and societal institutions would also go through a maturing process based on decreasing self-delusion, and its antithesis—insight. I am afraid I see no evidence, currently, that the professions we represent have reached that state of maturity where self-acceptance and wholesome perspective are part of the professions' contribution to the development of its members. Although as individuals many of us know who we are and have effectively related ourselves to others, as professional workers, we and the groups to which we belong have not.

Today, I want to talk only about those groups which directly influence our professional lives—namely, psychology, education, and special education. And I want to be constructively critical, in the way that a member of the "in-group" can. I want to see if my aforementioned little "truths" when applied to these professional areas might afford some perspective on our failures as well as our successes.

I would venture to guess that our verbalized and felt commitments are, collectively, to the further understanding of human behavior, the alleviation of distress in human affairs, and the improvement of the education of children, including children with special problems. I would also guess that perhaps a majority of our efforts are spent in self-aggrandizement, protecting our roles from the inroads of other specialists, defending our right to exist; in preoccupation with the details, paraphernalia and paper work involved in carrying out our functions. For this reason, concern with priorities and territories becomes important, if only so that we ultimately can concern ourselves with them less and get on with the business of improving education.

Eli Bower (1954) has said, "Professional competency and leadership lie not so much in doing one's job well but in understanding the primary purpose of what one is doing and its place in the scheme of things." Elsewhere, with reference particularly to school psychologists, I have said (Bardon, 1968) that we tend to talk about what we do when the question asked us is about what we are; that is, we talk about our roles rather than our goals. Our very attempt to understand ourselves as professionals has led us to attempt to examine our unique contributions, and we have typically done so by describing the actions and movements we make during our working day. Many of us, I am sure, have worked in a school building where the administrator—the school principal—has reached an exaggerated point in his operational definition of education.
This principal has confused purpose with practice so that his criteria for successful education of the children in his building are based on the neatness of the classrooms, the orderliness of the office files, the promptness of the school buses, the number of special assemblies held, and the attendance count at the P.T.A. meetings. While his concerns for operation are necessary and important and even tangentially related to the education of children, they are supposed to be engaged in for ulterior reasons, and if these reasons are not kept in mind, they are replaced by other reasons not well articulated. Thus, our principal stands up before his P.T.A. group and talks about education for future living, creativity in education, teaching decision-making and the democratic process. But his operations belie his words. The school's philosophy of education, neatly mimeographed on school stationery and passed out to all new teachers, has little relevance to what takes place in the self-contained sixth-grade classes in that particular school building. As we all know, and I stated earlier, all is not what it seems to be. What we do and what we say are not necessarily the same.

As practitioners, those of us who have chosen to work in the schools, are, in my opinion, especially vulnerable to operationalism. To be a “school” psychologist, or to be a “special” educator implies at the very least that one has multiple professional allegiances and commitments. We have some special role to play in a setting which incorporates us into its activities on the assumption that we practice our specialties while at the same time we live by the rules of the institutional setting which employs us. In this setting, it is too easy for us to avoid questions having to do with “why”—the goals of our roles—and to fall back on our special practices as the reasons for our existence.

It is an all too common practice for school psychologists to think of testing as the reason for their being in the schools, when the real reasons may, in part, have something to do with the identification and description of children who have failed to benefit from the schools' educational procedures as practiced. To carry this even further, the identification and description of children who do not benefit from schooling may really be related ultimately to an attempt to improve or change the educational setting so that the setting can incorporate procedures and approaches which obviate the need for testing. For the school psychologist to become preoccupied with testing, as such, to defend his right to give these tests against all others, to become involved almost exclusively in the details of test-giving and test-result-reporting, is to confuse doing with being.
It is all too common for some special educators, especially with regard to the mentally retarded and the neurologically impaired, to think of special classes as the reason for their being in the schools, when the real reasons deal more broadly with the education of children with defects, or problems which make education as generally practiced more difficult for them. In the face of mounting evidence that segregation of children with special problems presents these children with additional special problems and does not always provide either the necessary incentives for learning or the techniques required to assist learning, it is my view that too many special educators have preoccupied themselves and defined themselves as "special class" people. Like the school psychologist who is a tester, the special educator who is a special class person has addressed himself to what he does rather than why he does what he does—why he is in the schools.

There is another related problem which bears examination. I find it increasingly difficult to talk about specialists—educators, school psychologists, social workers, guidance counselors, or what have you—when my frame of reference has to do with goals of the helping specialties, or the purposes of practice.

In order to intelligently discuss purposes, methods, techniques, and ideas as they relate to the understanding and the improvement of the human condition, it is necessary to talk about special education, school psychology, social work, guidance. I do not think I am playing with words. The practitioner is a variable. It is the practitioner's assignment to bring to bear on the problems with which he is presented some body of knowledge and skills, developed from the base of a discipline or sub-discipline which is, relatively speaking, a constant. The practitioner is an instrument by which knowledge is brought to bear on the solution of problems. The specific methods used by the practitioner are only important as they reflect specific knowledge, based on training and education, which has made the practitioner privy to these knowledges and skills. To say, therefore, that a person is a special educator, or a school psychologist is, in effect, to say that this person is a transmitter and interpreter of content and skills. Specialists will vary—and should vary—in the ways in which they act in order to make their knowledge communicable and useful.

If I may be permitted an analogy—the practitioner may be likened to a TV set; the specialty to the TV program. The practitioner is the medium; the specialty is the message. And we are in grave danger of
becoming what Marshall McLuhan believes is happening; that is to say, 
the medium is the message. If this becomes exclusively so for educa-
tionally related specialists—that the practitioner becomes everything—I 
believe we will be in danger of losing track of the message entirely—that 
is, the content, the discipline from which we draw sustenance.

Let me tell you what I think has happened to us, at this point in time. 
That part of education which is not concerned with subject matter per 
se (for example, English grammar, algebra, world history) has its 
primary base in psychology. The processes of teaching and learning, the 
psychology of individual differences, perception, cognition, group interac-
tion, and many many other areas of psychology have become the ground 
for which specific subject matter in education is the figure. In the ele-
mentary years of schooling and in special education where individual 
differences and special problems in learning are of immediate, compelling 
concern, psychology is even more pronounced as the base discipline than 
at the secondary level or in higher education.

As schools began to pay heed to individual differences and began to 
take seriously the tenet that educational methodology and content varied, 
with a host of individual variables, both school psychology and special 
education grew and developed. (So did other educational specialties, but 
they are not our immediate concern at this time.) Both school psychology 
and special education were greatly enhanced by social pressures, pri-
marily from parent groups representing children who were having prob-
lems in development and in education, pressures which were subsequently 
translated in a number of states into legislative action. As will happen 
with legislative action, the specifics of the laws reflected, at the time of 
enactment, the current view of what was best for the children for whom 
the law was enacted. The net effect in many instances has been to fix 
practice by law, or at least to suggest practice through guidelines. So in 
some states, we work in teams, or we don't get state reimbursement. We 
have mandated role differences and assigned specific assignments to 
specific specialists. We have special classes. We have six, or nine, or 
eleven categories of handicappedness. I am sure you can think of many 
more examples. Often, persons employed to help enact these laws have 
accepted and, in fact, were taught by institutions of higher education, 
that practice according to the law was the message. The platitudes about 
the meaning of the services performed abound, but, in my view, it 
appears that laws and custom have carried more weight than evidence 
and knowledge in determining what we do.
Both in school psychology and in special education, despite legislation—and maybe even because of it—acceptance by other related specialists in both psychology and education has been difficult to gain. It is not by chance that so many of us have had to practice in basement offices or in converted storage rooms much too small for adequate classroom activity. With resistance comes counterresistance. With counterresistance comes rigidity. When we feel under attack, we, of course, will try to defend ourselves. When we are told that our instruments are no good or that no one is helped by the "dumb" class, we band together and seek out others who will tell us our instruments are good and that our class for the retarded does help its pupils. We also seek status because it is not given to us easily in the setting in which we have chosen to work—the school. Status is best found in professionalism. And so, we seek to form professional groups and organizations which help us not only to grow and thrive, but, really, to survive. Professionalism—or the quest for it—involves something like self-identity. Self-identity involves distinction from others. And I think that both special education and school psychology in the dynamics of their attempts to find themselves, as I've just described, have lost track of their base discipline, psychology, especially psychology as applied to education.

The dilemma has, in another context, been well stated. C. Winfield Scott in his presidential address to the American Personnel and Guidance Association in 1967 said, "We do not . . . openly and frankly recognize our dependence on psychology. Instead we exhibit the kind of behavior that often characterizes an adolescent's attitudes toward his parents. The main characteristics of this behavior are a determined show of independence with a strong undercurrent, often reaching the surface, of dependence and desire to model."

I would clarify and add further that we sometimes engage in open antagonism to and denial of dependence upon the base discipline of psychology while at the same time we borrow liberally from it, translating it into our specialty jargon. As we all know, denial is a particularly virulent form of defense mechanism because it is so close to loss of reality. Professional and disciplinary denial is no less dangerous than personal denial.

At this point, I can no longer lump school psychology and special education together. There are some unique problems which need separate consideration.
Special education, to my way of thinking, has not really directly faced or been concerned with its dependence on base disciplines—especially psychology—for its content and methodology. Rather its major battles have been fought with the amorphous education the huge enterprise without which special education could not exist. When a specialty must ask itself over and over again, as I think we have, "What is so special about special education?" it is certainly struggling for an identity apart from its parent group and has serious self-doubts.

While special education is very much a part of American education in its affiliation and organization, it is related to psychology—and other behavioral sciences—for its basic content and premises. The Council for Exceptional Children is a part of the National Education Association. Departments of Special Education are typically in schools of education, rarely in departments of educational psychology, and never, in my experience in departments of psychology. It has been my experience and the experience of others with whom I have discussed the matter, that many leaders including Council of Exceptional Children officials, U.S. Office of Education personnel, university special education department heads, and special education administrators are often openly antagonistic to psychology as a science, and even more so to psychologists as special educators. They disavow, or do not recognize, their heritage and the basic nature of their activities, and are suspicious of those who do.

In an attempt to document these remarks I did a little study. I emphasize "little" because the study is based on questionable sampling and is subject to my own reliability as an interpreter of the data involved. Nevertheless, here's what I did. I picked out ten issues of the journal Exceptional Children, the official publication of the Council for Exceptional Children. The issues were chosen in no special manner from the volumes of 1965 through 1968. I did eliminate from consideration special issues, such as one which contained articles almost entirely devoted to legislation and written mostly by U.S. Office of Education staff personnel. I counted, in the ten issues used, 77 articles by 126 authors. Using author titles and affiliations, I came up with these findings. Fifty-two, or 41 per cent of the authors, were listed in the 1967 directory of the American Psychological Association or else had the word "psychologist" in their titles. Forty, or 31 per cent, were listed as special education professors, special education teachers, or special education administrators at a variety of levels. I tried to be very lenient about this category and when in doubt I cast my vote for special education. The remaining 34 authors were a mixture of physicians, speech therapists, social workers,
physiologists, librarians, and laymen. There were three I simply could not classify.

Now, if this little survey means anything at all—and I am certainly not presenting it as proof-positive of anything—then psychologists appear to form the one group which makes the greatest contribution to the literature of the field—in research, demonstration, and theory. Special education people not affiliated with psychology constitute only 31 per cent of the contributors. In all, 69 per cent of the contributors are not special educators or are special educators with strong psychological affiliation. Yet, I continue to maintain that organized special education at national, regional, and local levels appears to act as though my findings are not true. Rather, they see themselves as another curriculum in education or as a separate group who must fight off all comers.

To compound the problem further, affiliation with education presents serious identity problems of its own. Education constantly struggles to establish itself as a discipline in its own right. All one has to do is to become affiliated with a school of education in a university to realize the extent to which education is regarded by outsiders as a practice-area for other disciplines. And, as a psychologist totally committed to education, I must admit to some concerns, shared by others, as to the nature of some of what passes for content and skill-training in education. For instance, much as I have tried, I cannot understand many courses in curriculum and instruction except as applications of behavioral science thinking to the problems of curriculum development and presentation, and it has crossed my mind more than once that such courses might better be taught as psychology courses, or sociology courses. Now, if education is a shaky discipline, and special education asks itself why it is special, any group which sets itself up as a professional group in the name of special education has built-in problems. The major problem, based on my analysis, would probably be an ambivalent stand between professionalism with all that this implies and unionism with all that it implies. The question of whether professionalism or unionism are good or bad is not at issue here. Rather, what is at issue is how certain specialists come to view themselves, how the specialty develops, and what the specialty stands for.

To turn now to school psychology, the divergence between base discipline and specialty practice here is a very serious one. As many of you know, anyone whose primary identity is that of a school psychologist lives professionally in a shadow area between two or more worlds. In
educational circles, he is a psychologist; in psychological circles, he is an educator. If he wants prestige, he calls himself a clinical psychologist or even an educational psychologist, which shows you how desperate one can get! He is mandated by state law in some states. What he studies and what skills he learns are most often determined by state departments of education rather than by graduate departments of psychology in universities or by the profession itself. Guidelines for his professional practice are legislated or are determined locally by nonpsychologists through boards of education and school administrations. Until quite recently, if he wanted to specialize in his area at the doctoral level, he almost always had to take his degree in some other specialty because there were so few doctoral programs in school psychology. The funding agencies of the United States government and private philanthropic organizations have given only token support to the specialty. Most school psychologists are trained to the one- or two-year-post bachelor's level. The American Psychological Association holds that a psychologist should have the doctorate if he is to be a full member of the profession.

It is not at all surprising that currently a small percentage—I would estimate about 25 per cent of school psychologists in the United States—belong to the American Psychological Association. It is completely understandable that a state like California with over a thousand school psychologists has a strong state group but apparently takes little from and gives little to the national scene. It is even understandable that some persons who call themselves school psychologists, legitimately and legally, have had virtually no training in psychology beyond a few psychometric technique courses. When one considers the disaffection with which many psychologists and educators hold school psychologists, it is understandable why a group of school psychologists, primarily nondothoral, are trying to form a national group called the National Association of School Psychologists in order to promote the specialty and to get people to pay attention to them.

All of these events and trends are understandable but they are not progressive or ultimately helpful to the furtherance of the science and practice of psychology or to the improvement of the education of the children of our country.

And, once again, we come, as we did in special education, to the question of professionalism and unionism. While one must work to protect his right to work, his working conditions, infringements of others on his domain, one cannot in all honesty devote himself to these necessary
aspects of professional survival without coordinate consideration of the nature of the practice, otherwise the effect is to freeze practice to some extent. And in a changing world of continuous scientific progress, innovative practice, multi-disciplinary alliances, the union aspects of professional practice can have a stultifying and even dangerous effect on the ability of the specialty to move forward, unless kept in perspective.

I have said that special education must come openly to recognize and welcome its primary base discipline of psychology. And I say now that school psychology must go even further. A school psychologist cannot afford to be anything less than a psychologist. A psychologist, presumably, is one who practices something called psychology. And psychology, presumably, is the science of behavior, or the mind, or mental processes. If the school psychologist is less than a professional person who has been schooled in psychology—and I don't mean only that development within it which deals with psychometric measurement by individual examination—and if he does not follow the generally accepted criteria of a profession, then can he legitimately and with any self-respect use the title "psychologist?" I do not think so, and I hold that this problem is part of the great conflict in the specialty today. Many of us have wanted to practice as psychologists. By virtue of state certification we now do so, although the route by which we came to the title may have been circuitous. We like being psychologists, but we are not really sure we are—we may even be a little afraid to test it out. One way to test it out is to associate with other kinds of psychologists in order to gauge commonalities and to learn. Another way to test it out is to join the American Psychological Association, but for some of us that means becoming an Associate member—a non-voting member—because of the APA requirement of the doctorate for full membership. So we stay closer to home and form local, regional and state groups instead, where people like us can get together. It is more comfortable, but is it sensible, if the goal of furtherance of the practice of psychology in the schools is kept in mind?

I fail to see what is so terrible about becoming an associate member of the one group in this country which represents and can speak for and take responsibility for the promoting and furthering of the science and practice of psychology. The hostility engendered against APA by non-member psychologists I have met who are school psychologists cannot be explained sensibly by the actions and stands of APA toward school psychologists, smug and ignorant as they sometimes are. Rather, I must conclude that the title "psychologist" is worn uneasily by some and that
the anger expressed is an outward manifestation of an internal conflict. As school psychologists and special educators we should understand such dynamics very well indeed.

I think it may be useful to take a few minutes to review what distinguishes a profession from other occupations. Much has been written about this and it is shadowland people like us who need to constantly keep in mind these distinctions as we practice individually and as we form into groups for professional purposes.

The best succinct summary of the literature on professions applicable to applied helping specialties is that of C. Harold McCully. He stated, in an article in 1962, eleven criteria for a profession. I think they are worth paraphrasing:

1. The members perform a unique and definite service.
2. Performance of the service rests primarily upon intellectual techniques.
3. Society has delegated to qualified members of the group authority to provide the specified services.
4. The members possess a common body of knowledge which can be identified and can be communicated through intellectual processes of higher education.
5. Entry into qualified membership requires an extensive period of specialized training.
6. The members as a corporate group assure minimum competence for entry into the occupation by setting and enforcing standards for selection, training, and licensure or certification.
7. The members possess much autonomy in performing the specified services.
8. The members accept personal responsibility for judgments made and acts performed in providing the specified services.
9. Emphasis is on service to society rather than upon economic gain in the behavior of the corporate group as well as in the performance of the specified service by individual members.
10. A functional code of ethics exists.
11. Throughout his career, the member takes positive steps to update his competency by keeping abreast of technical literature, research, and participation in meetings of the corporate group of members.

Is school psychology as such a profession? I do not think so. Can one form a profession at a state or local level? I don’t think so. Can school psychologists become professionals? I do think so. The way is through
affiliation with American psychology which has both professional and scientific aspects. From within, a specialty—professional specialty—of school psychology can emerge, and is beginning to. The crucial professional problems of personal responsibility, autonomy in functioning, ensuring standards of competence, and ethical practice can then get solved across states.

Is special education a profession? I do not think so. Should it strive to become one? I do not think so. Special education is that lovely meeting ground where professionals of all kinds, especially psychologists and including educators, can come together in interdisciplinary practice—to help children who are having difficulty learning or functioning in the school setting. Right now, it is the one arena in education which stands the best chance of improving education because it brings together multidisciplinary, multi-professional views toward the solution of common problems in the school. Organizational closure, over-affiliation with the host—education—and the rejection of the base discipline, can have deleterious effects.

Let me give you an example of the insanity which can occur when we play the game of professionalism, deny our heritage, and become involved in the power struggles of group against group.

In one state I happen to know well, the current interest or vogue in specific learning disabilities was translated into action through state legislation and state department of education guidelines for implementing the legislation by the creation of persons called “learning disabilities specialists.” The situation is so complex, that in an attempt to put it into perspective, I created a little parable, or better, fairy tale, which I recited to a mixed and somewhat hostile audience of learning disabilities specialists, remedial reading teachers, school psychologists and administrators. They seemed on the whole to understand what I was trying to say, and I hope you will too.

"Once upon a time in a land between two great cities, it was decreed that all children shall learn and be happy. It was further decreed that special things shall be done for some of the children for whom learning or happiness did not come easily. The wise men of the land, in their wisdom, used the strongest powers they could devise to see that the decree was carried out. They said, 'It shall be law to find these children and do things for them. There shall be money to get things done. These things shall be done by experts and these experts shall work in teams. So be it.' The wise men then turned to the court magicians, called the
State Department of Education, and said to them, 'Do it.' In turn, the chief magicians turned to one of the helper magicians, called the Office of Special Education, and said, 'Do it.' And the Office of Special Education tried to do it.

"Very soon, it was discovered that there were problems. It was not clear how to do the things which needed to be done to help children who did not learn or were not happy. There were not many experts around who knew what to do. Worst of all, the wise men had forgotten to use the magic of money to provide research and training so that the land could create the experts who would be willing to try to learn about and do what needed to be done.

"The Office of Special Education, being dutiful and loyal to the wise men of the land, called upon all its resources and used the best magic it could create. It said, 'There shall be teams.' And there were teams. If there were no real social workers available for these teams, the Office said, 'There shall be people called school social workers.' And there were. And the same was done for psychologists. But the best magic of all was saved for last. The Office said, 'We will create what does not even exist, and it will solve the problems of our children.' And so the Office said, 'There shall be Learning Disability Specialists' and it turned to the best teachers it could find and said to them, 'You are Learning Disability Specialists.' And they were. And the children's problems were solved and the children and their teams lived happily ever after, and the land between the two great cities prospered."

This is a fairy tale with a happy ending. The fairy tale took place, the ending has not. Although undoubtedly the specifics of the tale do not fit California precisely, I hope this little tale conveys my message anyway. You cannot take a need; borrow a term or idea currently in fashion but still under critical scrutiny, where research is only beginning to get underway; tell people they can do something about meeting the need if they perform certain operations; organize them into a group which calls itself professional; and then expect anything useful to happen. What will happen is that some well-meaning people will help some children because they are kind and helpful people. The new specialist, or the old specialist with a new fad, will claim functions which formerly belonged to other specialists or overlap others, who then fight back. Time and energy go into claims of territories and privileges, and fewer children get helped while more and more specialists spend more and more time staking out their claims. The important questions—such as what do the
behavioral sciences have to offer to the solution of the problem under consideration? Are our methods working? Is this the best way to function? What do we need to know to improve our services?—these questions do not even get asked, and the new specialist created out of whole cloth or the old specialist with a new fad does not even know where to turn to find out. The state of affairs in which one has strong organizational identity but weak scientific or conceptual identity is one which has no place to go but toward self-preservation for its own sake.

These concerns are not unique to education. But it is characteristic of the educational enterprise to operate on the basis of a crisis orientation—out of immediate needs—and sometimes to pretend to do something useful in order to placate those who pressure it. It is also characteristic of the educational enterprise to operate autonomously without due regard for the contributions others might make to it. It is a further characteristic of education, I am sorry to say, to downgrade itself—not by its words but by its deeds. For education to call a person a social worker or a psychologist, without regard for what it means professionally to be either, is to downgrade both education and the profession involved.

These then are some of the problems we have in priorities and territories when psychology and education meet, often in the area of special education, in order to ostensibly solve major societal problems. It is a little odd, I imagine, to the uninvolved academician, whatever his discipline, to contemplate us here tonight spending our time talking about these ephemeral issues, which to the uninvolved must border on utter nonsense.

But, as I said earlier, we seem unable both personally and professionally to mature without going through some difficult process by which we learn to get some perspective on ourselves and our place in the world. I do believe that the issues I have talked about tonight are those which must be resolved in order for us to contribute both personally and professionally to the betterment of that portion of the world for which we have assumed some responsibility. I am convinced that school psychology must become part of American psychology. I am also certain that special education is the best arena in which many disciplines can ultimately make their major contributions to all of education. I have tried to point out a few of the too-often unspoken problems we face in the hope that saying them may make a contribution to the decrease of self-delusion and an increase in our professional self-acceptance.
BIBLIOGRAPHY

Import and Export Trade in Special Education

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In the midst of wars and riots, atom bombs and famine, instability and bloody struggles within the nations emerging from colonialism, cold wars and blazing wars, it is almost amazing to find evidences of great strides around the world in individual freedom, in health, in democracy, and education. In the race between destructive and constructive forces, between despair and hope, one of the encouraging signs is the evidence on every continent that the recent fantastic growth of special education in America is part of a world-wide movement. Wherever there is enough semblance of peace to allow organized life and elementary education to proceed, one finds some efforts to educate the handicapped, whether they are tiny sparks of brave beginnings glowing in a sea of darkness, or highly sophisticated and comprehensive systems.

One sees starvation on the sidewalks of Calcutta, but also an experimental public day school for the educable and a private day school for the trainable-retarded in Delhi. One sees the high incidence of cretinism and eye disease in high Himalayan villages, and an American Peace Corps girl giving oral language to a group of deaf tots, training four Nepali teachers to continue her work. One sees the highly developed programs Japan and Israel have built so rapidly and efficiently, the cradle-to-the-grave coordinated services of the northern countries of Europe, and the research and practice of defectology in Russia. One feels very humble that with our greater resources the United States of America is still far from providing all our handicapped children with the education we know could increase their chances for lives of fulfillment and usefulness.

At home, special educators, facing the realities of our local programs, admit to our colleagues that our practice lags behind theory, and that research validation of the theory we attempt to implement is often lacking. In the face of the great unmet needs of the handicapped children about us, however, we feel justified in ardent sales pitches to the public and the parents, to our local school boards and state and national legisla-
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...tured on the value of our particular form of special education, and the sed for skyrocketing budgets. Not unnaturally we have sometimes fallen into the habit of overstating our case. We pontificate on our personal or organizational biases about special education procedures as though they were some word from on high, rather than hypotheses we are still testing. We pronounce on the desirability of integrating the handicapped into the regular school program without specifying the boundaries and limitations; or, about the sacredness of the oral, the manual, or an eclectic method of teaching the deaf. We wax eloquent on the need for ever higher standards of training for all who work with the handicapped, or the great values of aides and para-professionals. Whatever our particular theories or points of view, our emotional investment in them has been heightened by our struggles with our own colleagues and with funding agencies.

It is not surprising, therefore, that when we get abroad, where polite hosts appear to hang on our every word, we show little hesitancy in promoting those pet theories. Americans of all professions are today bounding about the world, dispensing advice, frequently by request, sometimes gratuitously, on official projects. All too seldom do we wonder whether our proposals fit a culture we only vaguely perceive, or whether there is something we might ourselves learn from a way of life so different from our own.

Special educators have not been laggards in this respect—particularly, in the underdeveloped countries where our comprehension of cultural and educational realities is least, we are sometimes most free with advice.

To set the stage for tonight’s comments, I want first to talk about our imports—to recall to your memories the many aspects of special education which historically America has imported, and currently that we are or might be importing; second, to note a few of the probably helpful exports we are making and a few that seem to me to be ill-advised, or at least undocumented; third, to visualize the rapidly expanding channels of communication through which ideas and techniques, personnel, and finance are being interchanged with exponential rates of increasing volume; and finally, to consider the difficulties in extrapolations from our own experience to come up with a few recommendations, hopefully to make this expanding trade more profitable for all concerned.

We have no time nor need tonight to go into a history of special education. A few names will recall to you our debt to Europe. Consider the education of the retarded. Jean Itard, of the era of the French Revo-
lution, was inspired by the philosophy of the period to confidence that education could be effective with the “wild boy of Aveyron.” He believed that education and environment are determining factors in mental development. This point of view lost much favor in America of the early twentieth century but might almost be the theme and the religion of our mounting programs for the culturally deprived, and is perhaps back of the perfervid attacks on all intelligence testing.

Itard’s pupil, Edward Seguin, came to the United States and here published his book on the treatment of idiocy by physiological methods, another trend that went out of fashion only to return in some of today’s newest instructional methods and research. Montessori was an Italian physician of whom we hear much today. Alfred Binet developed his intelligence test as a by-product of his work with the retarded. Braille was developed for the blind in Europe. Fernald brought European methods of teaching the deaf to Boston. Our concepts of work with the emotionally disturbed and with “wayward youth” owe much to Freud and his disciples, down through Eichhorn, Redl, and Bettelheim, even Carl Rogers. Marianne Frostig started her work in Vienna, though California now claims her. Our programs for crippled children owe much to the Hans Knudsen system, or the so-called Danish System, going back to 1872. Though here we have conspicuously failed to reach the levels of complete and coordinated educational, medical, and vocational services for the disabled that characterize today’s Scandinavian and British programs.

Perhaps we are not ready to accept the cradle-to-the-grave programs of care that the socialist countries provide for the handicapped. But, somehow, from them or from our own good sense of efficiency and economy, we must learn to avoid the overlaps and the huge gaps that result from our present hodgepodge of unrelated public and private services, all too often competing for prestige and funds.

A program we hear a good bit about but have not emulated in a substantial way is the new profession of Educateur, now well-established not only in France where it originated but in many European countries. Educateurs are trained as workers with the emotionally disturbed and as child-care workers for other children’s institutions and day centers. Specially designed training programs require about three years post-secondary school. In France, alone, more than 100 institutions are graduating thousands of Educateurs every year, all of them to be effectively employed in positions of dignity and respect. We are told that
their recommendations concerning the children under their care are given high weight in diagnostic, treatment, and placement decisions. Contrast this group with the low status, low paid, frequently low caliber child-care aides in too many of our institutions and day centers. Scattered efforts at in-service training for them are all too minimal on a national scale. American literature on child care emphasizes the vital importance of the person who is closest to the child most of his waking hours, but political and financial realities have caught up with theory in all too few instances in America.

William Cruickshank dramatized the comparison between European and American special education, at the CEC convention in April 1968, when he said that in special education America is an underdeveloped nation; that the institutions for children in Denmark are far superior to anything we have in the United States; that Copenhagen has the best services for the mentally retarded in the world; that Sweden has the best total national program; that the work with delinquents in Brussels, and for the emotionally disturbed at St. Denise Mental Hospital outside of Paris have much to teach us. From other continents, too, we have much to learn. We would be hard put to emulate the speed and efficiency of Japan's national implementation of special education. Consider that Japan's school system has been rebuilt from ashes in a little more than twenty years. In the same period, compulsory special education legislation has been passed—something only a few American states have achieved and which we do not even consider on the national scene. Japan's program, though not fully implemented in every province, is making giant strides and not merely in the big cities. Her residential programs for the cerebral palsied are particularly innovative. From Israel we might learn much about determination in the face of tremendous odds. Its schools bear their share of the task of developing an integrated nation out of refugees of unbelievably varied backgrounds. Its educational system in recent years has been particularly taxed by the influx of Jews from Yemen and North Africa, mostly illiterate and totally different in culture from even the most downtrodden of European immigrants. Its Youth Aliyah Camps, schools, and villages for homeless child refugees have had to cope with every variety of emotional, social, health, and cultural problem, and have done so with a success Americans could well study. Programs for the retarded, the disturbed, the blind, the deaf, and the crippled have been integral parts of the
developing school system from its beginnings.

Americans have deliberately set out to learn from special educators abroad, especially from Europe, through several channels. The Kennedy Foundation has brought European advisors to the United States to assist in the development of its programs for the retarded. It has been much interested in the Montessori Method. It brought Dr. Maria Ilg from Zurich to advise on vocational training, and gave her a Kennedy Award this April.

The American Association on Mental Deficiency, in its project on documentation in mental retardation, uses an International Committee and issues international bibliographies serially. The "Rehabilitation Review" published by the National Society for Crippled Children and Adults indexes special education articles and books from many languages. There are similar efforts, chiefly medically oriented, concerned with specific handicaps. ISRD has published many special education reports including the Taylor's Comprehensive Summary of the Education of the Crippled in Europe.

Near the conclusion of the work of the President's Panel on Mental Retardation, several task forces made trips to European countries and reported back, not only to the Panel but at many meetings and in various Journals, so that Russian Defectology, Scandinavian Workshops, and British "Cradle-to-the-Grave" services became better known in the United States. Since these junkets took place after the preliminary manuscripts of each task force had been submitted to the general editors, I am not sure how much their findings influenced the final report. But their individual reports published in pamphlet form have added to the scarce literature on international special education available to the American student.

The Council for Exceptional Children, with Canadian and U.S. membership, has an active International Relations Committee which has sponsored symposia at recent annual conventions, and has stimulated some articles in the CEC Journal, though the Journal's international coverage has been far from comprehensive. The committee has conferred with members of the United States Commission for UNESCO, hoping to promote more attention to special education in that body, with relatively little success. It has cooperated closely with and has had joint members with the Special Education Committee of ISRD. CEC has attempted some European travel tours with special education study objectives, but except for the first one they have not been particularly
well-planned or successful from the professional visitor's point of view. University study tours, offering graduate credit for visits to European Special Education facilities, have been more successful.

Through these and other means some Americans deliberately have sought to improve their services to handicapped children by learning from their European confreres. In some university training and research programs the effects may be seen, but in general the impact on the American educational and political scene, where so many Special Education decisions are made, has been slight.

Exports

Having mentioned these few samples of the Special Education imports we have made, and some we might find it advantageous to make, let us turn equally briefly to some of our exports.

One of our major exports recently, hopefully for the good though it has its dangers, is the parent group movement. Groups of determined parents, organized with a major emphasis on political and community pressure for better education of the handicapped, are springing up in the most unlikely places around the world. Documentation of this movement, as having major stimulus from the U.S., is uncertain. Parent groups have existed in Europe and elsewhere for many years, but the driving, pressure-group type of organization which has grown so phenomenally in the United States since World War II, which we see developing world-wide, seems to have American characteristics. This is partly confirmed by the date of organization of many of the member national organizations now coordinated through such federations as The League of Societies for the Mentally Handicapped, and similar organizations in the field of the deaf, the emotionally disturbed, and other handicaps. In Iran and in Israel, India and Japan, I have had contacts with energetic parents who were setting up some services for children, but putting major effort into pressuring the government for the establishment or improvement of programs, in what seemed to be typically American strategy.

Another phenomenon on the Special Education scene, across Asia and South America at least, that strikes the visitor as quite American in character is the leadership of organizations for the handicapped by women of social prestige, who combine intelligence and charm, and seek self-fulfillment in using their social position to promote services for the handicapped. Princess Prem of Thailand is a middle-aged, widely-travelled, suave but energetic example of this breed. Some years ago she
organized and headed a Thailand Society for the Blind. When it was well established, she organized and is still honorary president of the Thailand Society for the Rehabilitation of the Disabled—a national affiliate of the ISRD—and has greatly spurred the building of a modern residential unit for crippled children outside of Bangkok. Now that that is in operation, she is devoting currently more of her energies to a new Thailand Society for the Mentally Retarded. Since each king has had many wives the royal family is widespread. Princess Prem has rounded up support for many of her projects not only from the royal family and its many branches but from all of Bangkok society.

In Nepal the Queen is not only patroness but active and energetic as a supporter of the only Special Education program—a small project for deaf tots started by a Peace Corps girl and a Nepali Otologist. She, too, has organized a group of the social elite—the former Rana aristocracy—to raise funds and contribute personal services in somewhat American fashion.

In Delhi I did not move in quite such high society, but the wife of a Delhi banker invited me to dinner at her lovely home where a group of businessmen were planning a benefit performance of *My Fair Lady* to raise funds for the education of the blind.

In Teheran, Mrs. Shahnavazee has almost single-handedly created a school for the mentally retarded. A woman of social position and wealth, relatively young, she has studied and visited Special Education programs in the United States, England, and Scandinavia. She has held exhibits of the work of her school at meetings in Scandinavia, and was interested in possible publicity in the United States. Her school for the mentally retarded enrolls chiefly children from desperately poor families, since she says with much feeling that a retarded child born into a wealthy family is immediately shipped to a European institution and never mentioned again at home. In addition to financial gifts from her family, she has financed this program by opening an expensive private school for normal children from upper class families and is putting the profits into her school for the retarded.

In Lima, Peru, a mother, who had sent her deaf son to be educated at Syracuse and who, herself, had visited there and elsewhere in the United States, was instrumental in bringing Cruickshank to Peru to help her develop a school program for the deaf. She is a real organizer and promoter in the pattern of the American women who have thrown themselves wholeheartedly into work for the handicapped.
How much of the inspiration of these women came from America it is impossible to say. Royal patronage is a British institution. But, there was something about the drive of these women, their skill in organization and in building support for their projects, in spite of the social limitations of their cultures, that struck me repeatedly as having some American roots.

Integration of the Blind

An export—more specifically and technically from Special Education—is the philosophy of integration of the blind into regular education. Among the private organizations most active around the world in spreading Special Education is the American Foundation for Overseas Blind—one of the few organizations that has financed full-time workers in many countries and continents. They preach fervently the advantages of "integrated" rather than "segregated" education of the blind, and have effective programs in operation in the Philippines and elsewhere.

Personally, I could not help being somewhat disturbed by this insistence on integration of the blind into the regular classroom. I wondered if the AFOB representatives had ever been in a village school, or, for that matter, in the average city schoolroom in those countries with the dark, earth-floored rooms, a few ragged books shared by 20 to 50 children, almost no pencils and paper, a few slates on which the teacher sets words to be copied. How is this harried, ill-prepared and ill-paid teacher to find time to give special attention to the blind child? Who is going to bring him the Braille materials and the special instruction the child needs? Who is going to understand (against the traditions and experience of the community) that this child does have some future potential for education? Truly, the existing residential institutions for the blind all too frequently are dismal and dirty, offering little education and no preparation for self-supporting citizenship, and are operated by established bureaucracies, ill-trained and easily threatened by any suggestion of change. Granted all this, is it not at least possible that at this stage of educational progress, in much of South America and Asia, more could be accomplished for the blind by an equivalent amount of effort in upgrading those institutions rather than in promoting integrated day school programs? Even in Delhi, where one of the best residential institutions for the blind was indeed a dreary and hopeless spectacle, a bright progressive institution for the deaf proved that a residential institution can have possibilities. And in Bandung, Indonesia, there is a Blind and Deaf School, with both residential and day pupils, of truly outstanding quality.
I am disturbed, too, by the fact that the propaganda literature on integrated programs for the blind in India stresses the economy of this program. Those of us who have administered American city programs know that the costs of good services to the handicapped on the various desegregation programs are no less costly than the segregated. In fact, they are more so, if we really provide the amount of itinerant teacher-time, in-service training of regular teachers and administrators, the equipment and materials that the child and his regular teacher need. If integration of the blind in India is to be less expensive than their sad institutions, I wonder what kind of program of service to the regular class is anticipated.

**Deaf**

The oral method of teaching the deaf has many adherents around the world. In Delhi is a large, well-maintained institution whose older section uses a manual approach, but which has recently opened a new wing in which the oral method is the sole approach. A most charming school is a private institution for the deaf in Tokyo, well-staffed, equipped, and housed. The mothers all give a day or more a week as teacher assistants, to learn how to carry on the basic preparation for oral language at home. Schools and institutions for the deaf are not as numerous as for the blind, but being newer are sometimes of a superior level.

**Diagnostic Testing**

Each program for the handicapped that has aspirations toward being considered scientific and modern is concerned with diagnosis and evaluation. Staff members returned from study in U.S. or Europe are frequently busy translating intelligence tests, personality tests, achievement tests, vocational aptitude tests into their native languages and cultures. To what extent these do more than give the illusion of a scientific basis to active service programs of Special Education, I am not sure. It does sometimes seem that trained personnel are spending more time on such publishable activities in preference to improvement of actual services to children, though certainly one would not want to belittle needed research and diagnosis.

**Rehabilitation**

One cannot consider our exports in Special Education without considering Rehabilitation. Actually Rehab is far ahead of Special Education. Much of the export of Special Education has in a sense been bootlegged through rehabilitation projects. This is true of the work both of Government and private agencies, United States and international.
In the U.S. Government, the Department of Health Education and Welfare for 1967 reported 23 research and demonstration grants in mental retardation to foreign countries. All were in rehabilitation or in genetics and preventive medicine. None came from the Office of Education which has no funds for such grants for work outside the U.S. The Vocational Rehabilitation Administration, now the Rehabilitation Services Administration, has long had counterpart funds available for rehabilitation projects in those countries where the U.S. had accumulated funds which could not be used outside the country of origin. These rehab projects sometimes pointed up the necessity for Special Education, and in a few cases have filtered down into actual school programs for the handicapped at the adolescent vocational education level.

Among the private agencies, the International Society for the Rehabilitation of the Disabled started as an outgrowth of the U.S. and the Canadian National Societies for Crippled Children and Adults. ISRD holds huge international conferences every three years, the last one in Germany, and the next in Ireland in 1969. Lately they have been accompanied by week-long institutes on Special Education as well as by numerous sessions and papers on Special Education on the main convention program. Between the triennial conferences, ISRD holds regional conferences, such as the Pan Pacific to be held in Hong Kong in October 1968, in which Special Education is heavily represented.

ISRD services are carried out through its member national organizations. Outstanding are the fine modern schools for crippled children sponsored by the Hellenic Society for Crippled Children in Athens and the Thailand Foundation in Bangkok.

Goodwill Industries, started in Boston in 1902, now has rehabilitation programs in Mexico, Trinidad, Venezuela, Columbia, Uruguay, South Africa, Australia and Canada as well as 127 in the U.S.

Through various specialized agencies of the United Nations, Rehabilitation also has received far more attention than Special Education. ILO, the International Labor Organization, reported that in the decade ending in 1965 it had provided technical assistance in vocational rehabilitation to 28 countries. Both UNICEF and ILO have been increasing their services in vocational education of handicapped adolescents. WHO, the World Health Organization, has also been active in rehabilitation fields. Much of this concern for rehabilitation stems from the needs of war veterans, but services have spread to the innately handicapped and have strengthened Special Education programs in many areas.
Standards of Training

Around the world Americans have raised the battle cry of higher standards of training for all professional workers, a worthy, not to say absolutely essential, goal; but even as worthy a cause as this can sometimes lead to excesses.

In Asia, the unrealism of some American efforts to upgrade the education of teachers and school personnel is little short of appalling. In Special Education, we preach that our teachers must accept each child where he is and start progress from there, but we seem sometimes to forget that similar reasoning might apply to the improvement of teacher training programs. The US AID Mission at one Asian university was in a state of frustration because the local university officials were not enthusiastic about the M.A. level training for elementary teachers on which the Americans had been working for three years. The Americans suspected, and probably rightly, that it would not survive the close of the project. But in a country with one of the lowest literacy rates it would seem more important to find ways to give some training to whomever in the village could read and write, than to worry about master’s degrees.

Nepal is a country that 15 years ago, when the revolution deposed the Ranas and opened the borders, had a bare handful of schools and today has several thousand schools in quarters built by the villagers themselves, taught largely by ex-Gurkha soldiers who learned to read, write and figure, and to know there was a bigger world beyond, through their service in the British or Indian armies, not in school. The Teacher’s College at Kathmandu under a Nepali principal who had had training at the University of Oregon, was doing a good job in bringing many of the village teachers to the capital for two-week training institutes, and was even setting up some regional centers for such institutes so that the teacher would not have to walk for more than 7 days to reach the center. Few if any of these men have been to secondary school, let alone a college, but they are getting a program going. Yet an American, who himself is doing a fine job in another aspect of the U.S. AID Education Mission, who has never been outside the city of Kathmandu, assured me in all earnestness that by 1970 every elementary teacher in Nepal would be required to hold a baccalaureate degree.

After that it was rather refreshing to find New Zealanders not at all distressed that the basic elementary teacher as well as the Special Education teacher had a three-year and not a baccalaureate program of training. New Zealanders are healthily relaxed people anyway. In a country
whose economy is down and slipping further, whose educational budgets have been cut and are being cut further. They are plowing ahead, innovating, working realistically, developing new Special Education projects within their budget limitations.

Local professionals returned from study in the United States or Europe are often at least as insensitive or unresponsive to the actual needs of their countrymen as the visiting American. The prestige of Education throughout Asia means that the recipient too often feels that any practical work is beneath him. His contact with some of the best Special Ed programs of America leads him to want to establish a showplace that will reflect professional status on himself, whether or not it rates a top priority among the needs of his country. Most of these American educated professionals speak of the necessity of adapting programs to the culture of their country, but the pilot programs they set up all too often seem attempts at literal copies of an American model.

Channels of Communication

As we have discussed different imports and exports, many of the channels through which this exchange of ideas and services takes place have been mentioned. Perhaps it will be helpful, however, to summarize some of these ways in which information and philosophies of Special Education are interchanged.

One of the potent ways in which American ideas and ways of doing things reach other countries is through the foreign students who come to our universities to study, and to our schools to visit Special Education. From Asian countries many students go, very profitably, to England or elsewhere in Europe but America is still the glittering magnet for many. The urge to get to the U.S. or to send one's sons for study there is deep-seated and widespread. Perhaps because the language-deprived American will chiefly meet those who already speak English, it sometimes seems that every professional one meets requests help in finding some fellowship or exchange position or foundation grant that will enable him or his son to make the trip.

One of the most impressive of these returned students that I have met was a young child-psychiatrist in Taiwan. Dr. Chen Chin Hsu had recently returned from a residency at the Judge Baker Clinic in Boston. He came home convinced that one child psychiatrist in the island of Taiwan could accomplish little in traditional child guidance clinic procedures (although he operates a very good one apparently in his spare time). He decided to work through the public schools. In the few years
he has been back, he has instigated the opening of public school classes for the trainable and the educable retarded. He has trained several successive groups of elementary teachers now serving as elementary counselors, and working with emotionally disturbed children.

In India, Sharma, trained at Syracuse, was teaching an in-service course for a group of teachers of the blind—many of them blinded veterans, most of them teaching in residential institutions.

In Bangkok, Miss Chid Chand Hansasuta, Director of the Thailand Society for the Rehabilitation of the Disabled, was trained in social work at Columbia, and is much interested in Special Education which she visited at various U.S. centers. I met her again at the Tokyo Pan Pacific Conference on Rehabilitation and my last letter from her indicated she was returning from a tour of rehabilitation facilities in Poland and the U.S.S.R.

In New Zealand the last three Directors of Special Education have all studied in the U.S. as well as in England. They had, it seemed to me, made realistic appraisals of the Special Education they saw in America, to select that which was most applicable in their now industrialized country with its faltering economy. They are utilizing, with some pride in their newly acquired sophistication, such techniques as the ITTPA tests for diagnosis of learning problems and the TOWER system of vocational evaluation. They have introduced classes for the trainable; in fact if there are ten eligible children, the local education agency is required to take over the program often started by a local parent group. In 1967 there was much interest in ways of educating the emotionally disturbed, and a desire to expand from the existing quite innovative residential programs to day classes.

In Delhi, Dr. Bhatia, a physician trained in New York, is president of the Society for the Welfare of the Mentally Retarded which operates a private school for the trainable. Teaching there I found a young woman who had studied with Cruickshank at Syracuse. She is a Moslem citizen of India, married to a German she met in New York, with a child born in the U.S. Her major goal is a visa to return to the U.S. as a permanent immigrant. Unfortunately this illustrates what happens perhaps to too many of the professional people trained in Special Education (as in other specialties) in the U.S. who avoid returning to their home countries.

In Greece the only public school for the mentally retarded was directed in 1964 by a Greek trained at Illinois State University. In
Thailand the principal of a school for 600 deaf children, trained in the
U.S., was the only trained member of the staff. She was attempting to
train the elementary teachers and others who were assigned to her.

The Lend-Lease Professor

American professors have followed their students back to all contin-
ents, to increase the export of American know-how in Special Education.
The Fulbright-Hays Act has stimulated two-way exchanges, both in
bringing foreign scholars to the U.S. and providing travel and mainten-
ance grants to U.S. professors for research and lectureships abroad. Not
too many of these have gone into any form of Education or Psychology,
but there have been a few in Special Education. Cruickshank went to
Peru, Godfrey Stevens to New Zealand, Herb Goldstein to Norway,
Herman Goldberg to East Africa—to mention a few whose impact has
been considerable. Cruickshank seems to have been one of America’s most
effective exporters of Special Education. I happened to follow him in
two South American countries and one European installation where the
local professional and community people interested in handicapped
children (deaf, mentally retarded, crippled—as it happened in the differ-
ent localities) were enthusiastically continuing on the paths he had
pointed out, with feelings of warmest regard for his close personal
involvement with their children, their teachers, and the parents.

Teacher Exchanges

Teacher exchanges in Special Education appear to be even less com-
mon than professional exchanges. In 1965 Romaine Mackie reported
that of some 216 teaching opportunities in 13 countries open to American
teachers on an exchange basis there were usually each year three to five
in special education—all in the United Kingdom or in Australia.

The Overseas Dependents Schools, operated by the U.S. Military,
employ some Special Education teachers, particularly of the retarded,
but how much impact they make outside the American enclaves in which
they work is uncertain.

The Peace Corps, as far as I know, has not set up specific Special
Education projects, but it has gotten involved. In Nepal, a young woman
sent out as a village teacher, had background in speech and hearing. She
became interested in deaf children in the Kathmandu, and managed to
get a small program for deaf tots started.

In the barriadas of Lima, Peace Corps young people have succeeded in
developing efficient mother’s groups through which there seems to have
been real improvement in the nutritional, health, and psychological care
these most deprived of mothers have been able to give their infants. There is reported to be evidence that the children of these mothers are brighter and more responsive to elementary education as a result.

United Nations and its Specialized Agencies

The work of ILO, WHO, UNICEF, was mentioned when we talked about rehabilitation. UNESCO, the United Nations arm for Education has moved more slowly toward any avowed concern for the handicapped. A resolution recognizing the need and the vacuum in Special Education services was adopted in 1964. It was a nice, high-sounding resolution. It invited member states to take appropriate measures; it requested the Director General to give increased attention to Special Education, and to give due consideration to the Education of the Handicapped in UNESCO-sponsored projects for teacher training. It stated that Education of the Handicapped should be an integral part of all educational planning. However, the resolution was not accompanied by any budget and no personnel time was allotted to implementation—so little happened. Committees and individual Special Educators talked to UNESCO officials and urged more specific effort. The reply was usually that the Secretariat did what the member organizations, the National Commissions for UNESCO from the member states, requested—and that few formal demands for services in Special Education had been received. The National Commissions of the Scandinavian countries, in particular, did begin to apply pressures. Rather specifically American Special Educators were chagrined to find it evident that the U.S. Commission for UNESCO was definitely not interested and unwilling to make any recommendations concerning Special Education.

In November of 1966, the Special Education Committee of ISRD, chaired by Skov Jorgensen, Superintendent of Special Education for Denmark, presented a brief to the 14th Session of UNESCO, and the Scandinavian National Commissions continued their pressure. As a result, a single position on the UNESCO staff for a Consultant on Special Education was tentatively promised. In the Fall of 1967 this position was budgeted and advertised. An appointment had not been made as of February 1968.

The activities of the many nongovernmental organizations have appeared throughout this paper. They exist in all areas of the handicapped; they represent medical, educational, social, or parent group orientation. Some are primarily concerned with research, some with service. Some are weak and some are strong. But all increase the opportunities for dialogue, for interchange of ideas.
Conclusion

The following conclusions are presented as hypotheses based on my observations of Special Education in many areas of the world.

1. Special Educators in the United States still have much to learn from the programs of Europe. Can we find ways within our complex governmental and private efforts to develop the comprehensive long range programs of service to the handicapped which integrate medical, social, educational, and vocational services into a continuum of care? What can we learn from the Educateur Program that may help as we develop para-professionals in the fields of instruction, diagnosis, and counseling? How can we bridge our gaps between Vocational Education and Special Education—between Sheltered Workshops and real Employment—between Residential Institutions and Day Programs? We are working at all these bridges but in some places in Europe such gaps are scarcely problems any more.

2. We also have much to learn from the so-called Underdeveloped Countries, both from those that have succeeded in establishing modern programs, in face of great difficulties, and those who are just beginning but are plunging ahead with hope and confidence in face of truly almost insuperable obstacles of poverty, ignorance, and opposing traditions and customs.

3. When we train foreign students, or help visitors who seek ways to improve the Education of the Handicapped in their homelands let us help them concentrate on the basic needs of children—encourage them with the evidence of what can be accomplished by relatively simple means. Let us play down the sophisticated research techniques, the elaborate team approaches requiring large numbers of highly trained professionals.

4. When we venture abroad, let us control our impulse to praise mightily that which looks good to us because it looks “American.” Let us keep raising the questions of greatest service to the greatest number of the handicapped children, rather than the most elaborate and elegant services to the few.

5. When we advise and help on the establishment or upgrading of Special Education programs abroad, let us first find out what the readiness is, not merely in respect to the immediate program we want to start but in the general educational setting—the auxiliary services, the community attitudes. And, remember our own dictums about starting where the child is, and seeking sound, not dramatic, gains, no matter how small.
6) Can we develop a channel of U.S. export somewhere between the paths of the Peace Corps and those of the U.S. AID Mission? Can we expect the AID personnel to learn languages, as the Peace Corps kids do? Can they come out of their comfortable American-equipped abodes and see what life is like outside the capital cities? Can we give the Peace Corps youngsters a little more protein in their diet, a little more health protection, without cutting their relationships with their villagers? And, can we give their findings the prestige, and their recommendations the chance of implementation—the entrance to the government power structure that the prestigious AID Missions have?

Special Education has been an exciting field of endeavor during these recent decades of huge advances across America. Our problems are great. The solutions of many of them still elude us. But, through it all there has been and is the sense of progress, the feeling of a strong and rising tide of support from the community.

Around the world it is still more exciting to find that that tide has sent its ripples into almost every backwater—that great surges of progress are bringing hope and a brighter horizon to millions of handicapped children. As I start, next week, on a four-month trip across Europe and Asia, let me thank you for letting me reminisce with you about past adventures in Special Education and share with you my dreams, however remote, for the day when every handicapped child—not only in the United States where we are still far, far from that goal—will have opportunity to develop his optimal capacity, and lead a life of dignity and self-respect. I see a Cretin child at the hearth of a Sherpa home, warmly accepted by his family and their guests, and know that the new hospital Sir Ermund Hilary opened last year will have a major interest in trying to find ways to reduce the incidence of Cretinism in those tribes at the foot of Mount Everest. I see a row of tiny Japanese sandals at the edge of the tatami mats of a classroom for the deaf, all neatly marked with the owner's name so that those deaf babies can begin to associate language and symbols—and remember that Japan has compulsory legislation designed to bring education to every handicapped child as rapidly as possible—and they are a people who move rapidly. I see fine workshops for the disabled in Australia, uniquely operated camps for the emotionally disturbed in New Zealand, and Princess Prem bustling off to her next Director's meeting to plan something more for handicapped children. We are all part of that wave of the future. The image of America, so tarnished by some of our exports of power and violence, is brightened for all who come to know our exports in Health, in Education, and not least, Special Education.
Biographical Sketches of Distinguished Lecturers—1968

Dr. Jack I. Bardon is Professor of Education, and Coordinator of the School Psychology Training Program, Graduate School of Education, Rutgers University, New Brunswick, New Jersey. He graduated from Western Reserve University, and received his M.A. and Ph.D. at the University of Pennsylvania. Prior to coming to Rutgers he served as School Psychologist and Coordinator of Special Services in the Princeton, New Jersey, Public Schools for eight years. He is a member of the Council of Representatives of the American Psychological Association where he also serves as Chairman of the APA Committee on the Practice of Psychology in the Schools, and as a member of the APA Task Force on Children and Youth. He is the Editor-elect of The Journal of School Psychology.

* * *

Dr. Maurice F. Freehill is Professor of Educational Psychology, University of Washington, and a Certified Psychologist in the State of Washington. He received his M.A. and his Doctorate at Stanford University. In 1961-62 he was East-West Professor, Chairman, Department of Educational Psychology, University of Hawaii; prior to that he was Professor of Psychology, Director, Psychological Services and Research, Western Washington State College. He is author of Gifted Children: Their Psychology and Education. He is a member of the American Psychological Association, Canadian Psychological Association, American Personnel and Guidance Association, National Education Association.

* * *

Dr. Edward L. French is the President and Director of The Devereux Foundation, Devon, Pennsylvania. He graduated from Ursinus College, and received his M.A. and his Ph.D. at the University of Pennsylvania. Prior to coming to the Devereux Foundation he was
Chief Psychologist at the Vineland Training School, Vineland, New Jersey. He is the President-elect of the Division of School Psychology, American Psychological Association and on the Council of Representatives of the APA. He is a Fellow of the American Association on Mental Deficiency as well as of the Society for Research in Child Development.

* * *

Dr. Norris G. Haring is Professor of Education; Director of the Experimental Education Unit, College of Education, University of Washington; and Lecturer in the Department of Pediatrics, School of Medicine, University of Washington. He graduated from Nebraska State College, received his M.A. from the University of Nebraska, and his Ed.D. from Syracuse University. He was Educational Director of the Children’s Rehabilitation Unit, University of Kansas Medical Center, Kansas City, Kansas and held a Chair in Child Development at the University of Kansas Medical Center. He is on the Advisory Committee on Special Education for the State of Washington; on the Advisory Committee, U.S. Office of Education, Program for the Preparation of Professional Personnel in the Education of Handicapped Children. He is a member of the American Association on Mental Deficiency; the Council for Exceptional Children; the Joint Commission on Mental Health of Children, Washington, D.C.; the National Society for the Study of Education; and Phi Delta Kappa. He is Chairman of Task Force II, Educational Services Committee (Minimal Brain Dysfunction—National Project on Learning Disabilities in Children) sponsored by National Institute of Neurological Diseases and Blindness, Easter Seal Research Foundation, U.S. Office of Education, and U.S. Public Health Service. He is Associate Editor. “Exceptional Children.”

* * *

Dr. Romaine P. Mackie is Consultant, Education of Handicapped and Education of Environmentally Deprived. For ten years she was Chief, Exceptional Children and Youth, Washington, D.C. She held a number of positions in the Office of Education, including Chief of Education of the Handicapped in Low-Income Areas, a part of the Elementary and Secondary Education Act of Title I. Author of books, government publications, and many published articles and reports. Dr. Mackie is internationally known in her field. She represented the Federal Government in many national and international conferences and on Special Education missions. She received her Ph.D. degree from Colum-
bria University in 1943; and in 1965 Ohio Wesleyan University conferred an Honorary Doctorate Degree upon her. She began her work in Special Education in the Columbus, Ohio, public school system where she was principal for the School for Crippled Children. She was also connected with both Teachers College of Columbia University and Hunter College of New York City in the preparation of teachers of the handicapped. Prior to coming to the Office of Education as a Specialist in 1947 she served as consultant for education of the handicapped in the California State Department of Education.

Dr. Beth MacLeach is Associate Professor of Education at the University of Southern California; Coordinator, Programs in Mental Retardation, Department of Special Education and in the Department of Counselor Education. He graduated from Occidental College; received his M.A. and Ed.D. at Harvard Graduate School of Education. Prior to coming to USC he was founder, and Executive Director of the Young Adult Institute and Workshop, Inc., in New York City. His work at this unique institute evolved out of his past experience as teacher, reading consultant, coordinator of special programs for preparing retardates for return to community living. He was Director of a Summer School “Practicum for Teacher Training and Demonstration” at Teachers College, Columbia University, New York. He is a member of Phi Delta Kappa; is President of the California Association of Professors in Special Education; and is a member of the Mayor’s Committee for Employment of the Handicapped in Los Angeles as well as a member of the Coordinating Counsel for the Mentally Retarded, Santa Monica and West Bay area. He is a Fellow of the American Association on Mental Deficiency; Chairman of the Education Committee, and member of the Executive Board of the AAMD Region II, Southern California; a member of the Council for Exceptional Children; American Association of University Professors; and the National Rehabilitation Association. He was Project Director for “An Exploration of the Advisability of Developing a Research and Demonstration Project Concerned with Elevating the Readiness for Vocational Rehabilitation of Multiply-Disabled Young Adults” under Research Grant (No. RD-2085-G66), Department of Health, Education and Welfare, Washington, D.C.
Dr. Frances A. Mullen is the former Assistant Superintendent in charge of Special Education, Chicago Public Schools, Chicago, Illinois. She has her M.A. and Ph.D. from the University of Chicago. She was a teacher; a school psychologist for the Bureau of Child Study; a principal; a director of the Bureau of Mentally Handicapped Children; lecturer at Northwestern University, and at the Illinois Inst. Tech. She is past president of the Division of School Psychologists of the American Psychological Association; a Diplomate of the American Board of Examiners in Professional Psychology; a Fellow of the American Association on Deficiency; a member of the American Orthopsychiatric Association; the American Psychological Association; the Council for Exceptional Children; the American Association of School Administrators; and the Interprofessional Research Commission of Pupil Personnel Services.
MEDICAL CLASSIFICATION OF DISABILITIES FOR EDUCATIONAL PURPOSES—A CRITIQUE
Francis E. Lord, Professor of Special Education, California State College at Los Angeles

THE ROLE OF LANGUAGE IN THE DEVELOPMENT OF THE PRESCHOOL DEAF CHILD
Boris V. Morkovin, Professor Emeritus, USC

A PROFESSOR IN A HURRY: THE NEED FOR STANDARDS
Maynard Reynolds, President, Council for Exceptional Children, and Chairman, Department of Special Education. University of Minnesota

YESTERDAY WAS TUESDAY: ISSUES IN LANGUAGE INSTRUCTION FOR THE SEVERELY MENTALLY RETARDED
May V. Seagoe, Associate Dean, School of Education, UCLA

LANGUAGE RESEARCH IN RELATIONSHIP TO THE MENTALLY RETARDED AND CULTURALLY DEPRIVED
Melvyn Semmel, Associate Professor of Education, University of Michigan

HEADSTART ON HEADSTART: A THIRTY YEAR EVALUATION
Harold M. Skeels, Retired, Community Service Branch, NIMH, U.S. Public Health Service
Sixth Annual Distinguished Lecture Series®—1967

IRCOPPS AND ITS RELATION TO THE FIELD OF SPECIAL EDUCATION
Donald G. Ferguson, Ph.D., Associate Director, Interprofessional Research Commission on the Pupil Personnel Services, University of Maryland

INTEGRATION—THE CHALLENGE OF OUR TIME
Berthold Lowenfeld, Ph.D., Research Professor, Frederic Burk Foundation for Education, San Francisco State College

GOAL SETTING IN TEACHING THE RETARDED
William W. Lynch, Ph.D., Professor of Education and Chairman, Educational Psychology, Indiana University

PRESCRIPTIVE TEACHING: AN INTEGRATING CONCEPT
Laurence J. Peter, Ed.D., Associate Professor of Education, University of Southern California

A PERSONAL ODYSSEY IN SPEECH THERAPY
Lee Edward Travis, Ph.D., Professor and Dean, Graduate School of Psychology, Fuller Theological Seminary

STRENGTHENING THE SELF-CONCEPT
Beatrice Wright, Ph.D., Professor of Psychology, University of Kansas.

*Note: The Fifth, Sixth, and Seventh Annual Distinguished Lecture Series monographs are available. Order your printed copy from the USC Bookstore, Los Angeles, California 90007. $3.00 per copy.
University of Southern California
Graduate Study in the Education of Exceptional Children

Programs in Special Education

A. Teacher training:
This program consists of both in-service and pre-service training. These are primarily at the graduate level although an undergraduate sequence is available to young people interested in special education. At present the USC teacher preparation programs are accredited in the areas of mental retardation, speech correction and lip reading, deaf and hard-of-hearing, and physically handicapping conditions. Credentials to teach educationally handicapped, emotionally disturbed, and/or neurologically handicapped do not exist in California at present, but a complete sequence of courses does exist in teacher preparation.

B. Graduate degree programs:
The School of Education and the Department of Special Education offer four basic degrees: Master of Science in Education, Advanced Master of Science, Doctor of Education, and Doctor of Philosophy.

Master of Science in Education:
This is the basic degree in the School of Education and is closely connected with teaching credential programs. For persons interested in teaching positions and who do not desire a higher degree, it is possible to complete the M.S. without a thesis after completion of the required sequence of courses. Fellowship students are expected to complete one or more special education teaching credentials as part of their master's program.

Advanced Master of Science:
This is a sixth-year degree and includes the writing of an advanced study somewhat beyond the level of a master's thesis. Students, including those on Fellowship, working on this degree will normally complete all the requirements for admission into the doctoral program. Credential programs requiring long preparation, e.g. administration, may be accomplished in conjunction with this degree.
Doctor of Education and Doctor of Philosophy:
Doctoral programs, including Fellowship programs, in special education require a content emphasis on two types of handicapping conditions and on one major professional approach to problems in the field, e.g. educational psychology, curriculum, administration, guidance, school psychology, etc.

Graduate research training:
The Department offers Fellowships to provide training in research techniques dealing with the problems of educating the handicapped. Limited to students committed to the doctorate, this is a three-year program. Allowances are paid on a twelve-month basis to provide time for extensive field work.

C. Special programs:
Students may obtain training in the Prescriptive Teaching model developed by Dr. Laurence J. Peter. The Department operates the Evelyn Frieden Center on campus where students may obtain clinical experience in behavior modification with emotionally disturbed children. Students may also obtain an understanding of the affective processes involved in the education of exceptional children within the framework of instruction offered by Dr. Leo Buscaglia. Professional preparation for work with the mentally retarded is provided by Dr. Bert MacLeech. Administration and supervision of special schools and facilities is offered in conjunction with the Department of Educational Administration.

D. Instructional Materials Center for Special Education:
The United States Office of Education established one of its regional materials centers at USC. As an adjunct to the Department of Special Education it offers students a wealth of materials resources, library, and bibliographic print-outs from its computer retrieval system.
Special Education Fellowship Awards

United States Office of Education Fellowship funds are available for students interested in advanced professional training or Master's and Doctoral degrees in the areas of mental retardation, emotional disturbance, learning disabilities, deaf and hard-of-hearing, and speech impairment.

These Fellowships pay $2200 for students at the Master's level of graduate study, and $3200 for the post-Master's level. An additional $600 a year is allowed for each dependent.

USOE Research Fellowships provide stipends for a three-year sequence of $2400, $2600, and $2800 per twelve-month period. An additional allowance of $500 is made for each dependent.

Tuition and fees are free to all Fellowship holders. Awards are made only for full-time study for the academic year (and summer session for research fellows).

Applicants for these Fellowships must be qualified for admission to graduate study in the School of Education.

Selection is based on:
1. Adequate scores on G.R.E.
2. Grade-point average
3. Experience in education of exceptional children or other indication of commitment in the field
4. Good general references
5. Special recommendations for advanced study
6. Personal interview (where possible)

Inquiries about Fellowships in mental retardation, emotional disturbance, learning disabilities, and research in special education should be directed to:

Joe G. Coss, Ed.D., Chairman
Department of Special Education
University of Southern California
Waite Phillips Hall of Education 601
Los Angeles, California 90007
Inquiries about Fellowships in the area of deaf and hard-of-hearing should be sent to:

EDGAR L. LOWELL, PH.D.
Administrator, John Tracy Clinic
806 West Adams Boulevard
Los Angeles, California 90007

Inquiries about Fellowships in speech should be sent to:

VICTOR P. GAIWOOD, PH.D., DIRECTOR
Speech and Hearing Center
University of Southern California
University Park
Los Angeles, California 90007

Applications must be received by February 1 to be considered for the next academic year.

Department of Special Education Faculty

A. JEAN AYRES, Ph.D., Visiting Associate Professor of Education, Research

ELENA BORDER, M.D., Adjunct Associate Professor of Education and Associate Clinical Professor of Pediatrics

RICHARD BRADY, M.Ed., Lecturer in Education, Emotional Disturbances

LEO F. BUSCAGLIA, Ph.D., Associate Professor of Education, Educational Handicaps

JOE G. COSS, Ed.D., Associate Professor of Education, Research director, Administration of Special Education

JAMES DORSON, Ph.D., Research Associate in Education, Research, Physical Handicaps

DAVID H. DUETSCH, Ph.D., Lecturer in Education, Mental Retardation

MARIANNE FROSTIG, Ph.D., Clinical Professor of Education, Educational Handicaps

WILLIAM HIRSCH, Ph.D., Clinical Assistant Professor of Education, Principal, Lowman School, Mental Retardation, Physical Handicaps

RICHARD KOCH, M.D., Associate Professor of Pediatrics and Adjunct Professor of Education, Children's Hospital, Research, Physical Handicaps, Mental Retardation

CHARLES KOONTZ, M.S., Lecturer in Education, Principal Rancho Los Amigos Hospital School, Physical Handicaps
BRULAH LIGHT, M.A., Lecturer in Education, Chairman, TMR
   Department, Washington Boulevard School
EDGAR LOWELL, Ph.D., Professor of Education and Administrator of
   the John Tracy Clinic, Deaf and Hard-of-hearing
JAMES F. MAGARY, Ph.D., Associate Professor of Education, Physical
   Handicaps
ROBERT B. McINTYRE, Ph.D., Associate Professor of Education and
   Director of the Instructional Materials Center for Special Education,
   Research
BERT MACLEECH, Ed.D., Associate Professor of Education, Mental
   Retardation, Vocational Rehabilitation
C. EDWARD MEYERS, Ph.D., Professor of Education, Psychology, Special
   Education, Guidance
LAURENCE J. PETER, Ed.D., Professor of Education and Director of
   the Evelyn Frieden Center, Emotional Disturbances
JACK B. SHARE, M.A., Lecturer in Education, Learning Disabilities
CHESTER A. TAFT, M.S., Lecturer in Education Administration of
   Special Education
CAROLYN WETMORE, Ph.D., Lecturer in Education Vocational
   Rehabilitation, Research, Physical Handicaps
ERNST P. WILLENBERG, Ed.D., Lecturer in Education, Administrator
   Special Education Los Angeles City Schools, Administration of
   Special Education
EDDIE H. WILLIAMS, Assistant Professor of Education, Mental
   Retardation.
University of Southern California
School of Education Graduate Study
in Rehabilitation Counseling

DEGREES
Master of Science in Education
Advanced Master of Education
Doctor of Education
Doctor of Philosophy

Programs leading to:
California School Counseling Credential
Master of Science in Education
Advanced Master of Education
Doctor of Education
Doctor of Philosophy

Preparation for Employment as:
Rehabilitation Counselors
College teachers in Rehabilitation Counseling
and Counselor Education
School Counseling
Research and Administration in Rehabilitation
Consultants in Rehabilitation

THE PROFESSION
Rehabilitation Counseling is a rapidly expanding service profession concerned with assisting handicapped individuals in their search for vocational and social adjustment.

THE COUNSELOR
The counselor counsels with physically, mentally and socially handicapped individuals to help them return to productive employment. He assesses their needs and problems to help them make choices about their futures. In the process he coordinates the services of various community agencies in planning and overseeing a training and restoration program designed to meet this goal.

OPPORTUNITIES
There is a rapidly increasing need for rehabilitation counselors in both state and private agencies. Counselors are serving in state departments of rehabilitation, chronic disease hospitals, correctional facilities, community rehabilitation centers and sheltered workshops. Starting salaries range from $6,000 to $9,000 per year.
THE PROGRAM
The program includes: Two years of full-time study with specialization in Rehabilitation Counseling leading to the degrees of Master of Science in Education or Advanced Master of Education; a program for persons currently employed in the field of rehabilitation who wish to complete the requirements for the Master's degree on a part-time basis; and an Ed.D. or Ph.D. in Rehabilitation Counselor Education with opportunities for specialization in such areas as counseling, counselor education, rehabilitation programs administration or rehabilitation research.

THE CURRICULUM
The curriculum consists in part of courses such as the Introduction to Rehabilitation; Vocational Development Theories and Occupational Information and Processes; Measurement Theories and Procedures; Dynamics of Behavior; Medical and Sociopsychological Aspects of Disability; and Counseling as a Profession.

Emphasis will be placed on observation of community agencies involved in rehabilitation and on supervised counseling and internship in these settings.

FACULTY, DEPARTMENT OF COUNSELOR EDUCATION
Calman Bock, M.S., Lecturer, Professional Aspects of Rehabilitation
Rosemary Callahan, M.Ed., Clinical Instructor
Earl F. Carnes, Ph.D., Professor, Counselor Education
Donald R. Hoover, Ed.D., Visiting Associate Professor, Counselor Education
Bert MacLeech, Ed.D., Associate Professor, Special Education
Fred A. Moore, M.S., Instructor, Assistant Coordinator, Rehabilitation Counseling Program
William Ofman, Ph.D., Associate Professor, Counselor Education
Diana Rheinstrom, M.S., Lecturer, Medical Aspects of Rehabilitation
Donald R. Schrader, Ph.D., Associate Professor, Coordinator, Rehabilitation Counseling Program
E. W. Stude, Jr., M.S., Instructor, Fieldwork Coordinator, Rehabilitation Counseling Program
David Wine, Ph.D., Lecturer, Practicum Instruction
TRAINING AWARDS
Under a grant from the Rehabilitation Services Administration, U.S. Department of Health, Education and Welfare, a number of Traineeships are available to qualified, full-time students. These stipends are for $1,800, plus tuition and fees, for the first academic year, and $2,000, plus tuition and fees, for the second year. Information on third- and fourth-year awards is available through the Department of Counselor Education.

ADMISSION
Applicants must meet requirements for admission to the Graduate School of the University of Southern California.

For Further Information and Application Blanks write to:
Coordinator, Rehabilitation Counseling Program
University of Southern California
503 Waite Phillips Hall of Education
University Park
Los Angeles, California 90007
UNIVERSITY OF SOUTHERN CALIFORNIA
Summer Session 1969

Eighth Annual Series
of
Distinguished Lectures
in
Special Education and Rehabilitation

3:30 p.m. Tuesdays—June 24-July 29
Founders Hall—Auditorium No. 133
(The professional public is invited gratis)

June 24—Children and Youth: Coping with Tomorrow
Henry Leland, Ph.D., Coordinator, Professional Training, Education and Demonstration, Parsons State Hospital, Parsons, Kansas.

July 1—Value Confrontation and Rehabilitation of the Culturally Different
Milton E. Wilson, Jr., Ph.D., Professor in Rehabilitation Counseling, Kent State University, Kent Ohio.

July 8—Recent International Developments: Implications for US
Gunnar Dybwad, Ph.D., Professor of Human Development, Florence Heller Graduate School, Brandeis University, Waltham, Massachusetts.

July 15—Politics of Counseling
Joseph Stubbins, Ph.D., Professor in Rehabilitation Counseling, California State College at Los Angeles.

July 22—Legislative Developments and Perspectives
Chester A. Taft, Lecturer in Education, University of Southern California; Past President, American Association on Mental Deficiency, Region II.

July 29—Recent Research in Rehabilitation
Gerald Fisher, Ed.D., Director, Hot Springs Rehabilitation Center, Hot Springs, Arkansas.