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Papers on visually handicapped and mentally retarded children presented are the following: the challenge of the problem; programming; developmental learning; psychotherapeutic learning; operant conditioning; design of institutional facilities; care and management in institutional settings, schools, and state homes; and definitions of medical terms used to diagnose blindness. Educational and psychological management, history of multihandicapped groups at schools for the blind, and deviation in cognition are considered. Also considered are a hospital improvement program and goals of various community and institutional services. (MS)

Proceedings of the Regional Institute on

THE BLIND CHILD WHO FUNCTIONS ON A RETARDED LEVEL

Villa Capri Motor Hotel
Austin, Texas
May 8-10, 1968

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INTRODUCTION

Through community surveys and other demographical studies, attention has been called to the large number of children who, in addition to their blindness, have other impairment. Most of these children are functioning on a retarded level. While a few are receiving educational services through regular programs for children with visual impairment in residential schools and public-school day classes, many are ineligible for such current services. A large number are in institutions or hospitals and training schools for the mentally retarded.

There is growing concern about how the child with visual impairment can best be served in an institution. Many questions arise. Should the child who is blind be in a group with sighted children or should all blind children be brought together in one central building? What kind of a building should this be? Should the facility be specially planned for the child who has severe visual impairment?

Information about the blind child who functions on a retarded level, regardless of the basis of his retardation, is meager; yet service to these children is one of the most pressing problems in education. Early in 1968, the Board of Trustees of the American Foundation for the Blind budgeted a modest amount of money to be used to co-sponsor an institute concerned with services to these children. After considering various parts of the country that might be receptive to such a cooperative project, it was natural that attention should be turned to Texas and the Southwest because at that time discussion centered about the feasibility of modifying the existing services for blind children in the institutions for retarded persons or rather building a new facility designed especially for children who had severe visual impairment.

The response to a letter sent by the American Foundation for the Blind to state and to private agencies serving blind persons in Texas, Arkansas, New Mexico, Oklahoma, and Louisiana, indicated not only an interest in the problem but also earnest desire on the part of agencies to cooperate in this project. Accordingly, a two-and-a-half-day institute was planned for May 8-10, 1968. Announcements in the form of invitations were sent to persons interested in services to blind children in these southwestern states. A planning committee of representatives from the states met for one day to discuss program content, management of the institute, leadership responsibility, and financial support.

The success of this institute was in so small measure due to the work of this committee and especially to those local persons who served as chairmen of committees, including Mr. Roland Ludtke of the Austin state school, chairman of the program committee, and Mr. Vincent Svaldi, chairman of local arrangements. Mr. John Best, Superintendent of the School for the Blind, served as local coordinator. A special note of appreciation should be given to Dr. Natalie Barraga of the Department of Special Education, University of Texas, who gave so freely of her time and effort, though she was not able to serve as chairman of a committee.

A final note might be of interest to the reader. There was some hesitancy on the part of some members of the committee to place much emphasis upon facilities for children with visual impairment. After all, many authorities agree that a good program is dependent upon staff and teaching techniques and that it may be carried out in very limited physical surroundings. However, in this instance there was the earlier desire on the part of the Department of Mental Health and interest in a new facility for the retarded blind child. It was thought appropriate, therefore, that time be allowed in this program for ample discussion of needs of blind children in institutions and for a delineation from an architect's point of view as what might be built. Accordingly, papers on audiovisual materials were presented by local architects and students, which dramatically emphasized the immediate impact of environment upon a child who does not see, particularly when he is surrounded by large numbers of children who are retarded in development.

It seems fitting to note the interest and enthusiasm engendered by this presentation because comparatively little attention has been given to modification of environment through study of space, acoustics, textures; yet persons working with children who have severe visual impairment readily accept the fact that the child must learn through sensory channels other than vision. We believe that the material presented on this facet will undoubtedly point the direction to further studies on the part of the architects, who have much to contribute.

The institute was attended by approximately 300 persons who had an opportunity to share their thinking through discussion periods and through individual conferences with program participants and others. It is for these attendees as well as others who have indicated an interest in services to the blind child who functions on a retarded level that these proceedings have been prepared for national distribution.

We wish to take this opportunity to thank all those who not only participated in the program but who worked behind the scenes in making this institute so successful.

Pauline M. Moor

Coordinator for the American Foundation for the Blind

1. THE CHALLENGE

Chairman: Mr. John Best, Superintendent,
Texas School for the Blind, Austin, Texas

Speaker: Philip Roos, Ph.D.

I think all of us share in a very difficult search; that for identity. Identity in our culture, ladies and gentlemen, is a basic goal. Many of us are constantly attempting to define ourselves to develop a uniqueness, a personality--as it were, a stamp of individuality. This is not true in all cultures as you know, for there are those where the ultimate goal is nirvana, the loss of identity, or the blending in with other human beings. For us who so cherish identity, the threat of its loss produces much anxiety, and I am convinced that the anxiety of death which hangs over all of us is essentially due to the fear of losing our identity.

Our challenge as special educators, as I see it, is to develop within each of our clients his identity. When we speak of working with the blind, mentally retarded person, I think that basically our challenge is to help each of these unfortunate individuals develop an identity. I am sure that you are all aware that in our culture there is a tenuous balance between individuality and conformity. To be sure, we each want to be an individual, but at the same time we must conform with some very rigid and demanding cultural standards. Even those of us who rebel most obviously (and I am thinking here of the cheerful hippie culture) develop a subculture which within itself has very demanding rigid standards.

Those among us whose intelligence is seriously limited violate cherished cultural standards. The mentally retarded, very frequently, do not meet the standards of intelligence, economic productivity, self-sufficiency, independence, and physical attractiveness. If you will reflect just a moment, you will realize that these are basic goals which each of you is desperately fighting to obtain. Consider physical attractiveness awhile. Look at the beautiful people around you and you will soon realize that they have spent a great deal of money to achieve this goal. Now if one fails to comply with these standards, this failure is grounds for rejection by society and for isolation. You are all aware that traditionally this is the way our more seriously handicapped individuals have been handled. The effect of the rejection on these individuals is far-reaching. Their self-concepts are usually seriously warped and many begin to see themselves as losers. Most of us are losers, but most of us can delude ourselves into thinking we are not. Further, the impaired individual learns to anticipate interpersonal rejection. That is, he tends to enter into interpersonal transactions with the anticipation that he is going to be rejected or pitied, or that somehow the transaction will be a painful one; consequently he develops various strategies to avoid getting hurt in dealing with people. Finally, the rejected individual develops a strategy which Cromwell and Bialer have defined as "failure avoidance." I am sure this rings a familiar bell in many of your minds. "Failure avoidance" essentially means that the individual enters any task with the basic orientation of not failing, not with the orientation with which you and I enter each task--mainly we try to succeed. There is a world of difference, because one of the most effective ways to avoid failure, is not to try, which is, of course, a self-defeating strategy.

In recent years--and I believe this is particularly true in the last fifteen years--there has been a change in philosophy about the mentally retarded. We can detect a reversal in the trend toward isolation and rejection. It is almost as if there were an awakening of the social conscience, and certainly there is much more interest in and acceptance of the retarded. Why? In part perhaps because we have become more optimistic about the possibility of habilitating these individuals and/or of preventing the conditions that lead to mental retardation. The trend, as I understand it, if we now look at the field of mental retardation, is toward what we might call normalization--that is, assimilating the retarded within our culture. In our attempt so to assimilate him, we are attempting to develop him into our own image: we are mounting a wide variety of strategies aimed at making the mentally retarded as much like ourselves as possible.

From this general overview of the field, let me now focus more narrowly on trends in institutional programming. The institutions for the retarded, as many of you are painfully aware, are going through a difficult transition. Today there is great emphasis on preventing institutionalization; a few years ago the treatment of choice for the retarded was to place him in an institution as quickly as possible. We are swinging to the opposite end of the continuum and doing everything within our power to prevent institutional placement, certainly for the mildly retarded, and in most cases the moderately retarded as well. As a consequence, the institutional composition is changing. We are having fewer and fewer mildly retarded and moderately retarded and an increasing proportion of severely and profoundly retarded. Paralleling this trend, there is a tendency to develop alternative solutions to institutionalization. These include a wide continuum of services, day-care centers, short-term placements, hostels, sheltered villages, foster care or family care, halfway houses, quarterway houses, three-quarter-way houses, and so on, *ad infinitum*. Each institution develops its own nomenclature to describe basically the same type of animal. The institutions themselves tend more and more to be built on a smaller scale and to be decentralized; they are being placed closer to the home community within the city. You will be glad to learn that in New York state we are building three or four institutions in the heart of Manhattan and in other boroughs--high-rise institutions. They should be highly interesting facilities to operate. The institutions themselves are going through the stages of the amoeba: they are subdividing, or to use the technical term, they are unitizing. They are developing into units so that even big institutions are now developing subinstitutions to serve specialized groups. In this way an attempt is made to decrease the distance between the professional and the resident. In designing physical plants, our concepts of what is a "good institution" are changing dramatically. You will be depressed to learn that some institutions which are not yet open, but which are nearing completion, are considered to be some thirty-five years behind the times. The current concept is that the cheerful institution should be as similar to the home as possible. It should be homelike, so that the victim who dwells therein can develop as closely as possible to the way he would have developed had he remained at home, and, hopefully, so that he will be able to return to the home as quickly as possible. In enlightened New York state official policy for new construction is no more than eight residents in a living unit. And many of these units of eight will have single-room, even double-room occupancy. We are building these facilities not only for the mildly retarded, but for the profoundly retarded as well. They will have couches, chairs, fireplaces, and all the things that the kids can tear up and chew on, and so on. This is the model that is currently gaining popularity. Finally, of course, you know that the institutions are developing a myriad of specialized programs and are attempting to implement new "specialized techniques"--autotelic responsive environments, operant conditioning, classical conditioning, aversive conditioning, Montessori (poor Montessori, resurrected at last), Doman and Delacato. As such programs are mushrooming. One of the consequences is that institutions are beginning to focus on specialized groups. This is, of course, our concern here: the blind-retarded, the deaf-retarded, the emotionally disturbed retarded, the delinquent retarded, the psychotic retarded, the sexually confused retarded, and so on. Specialized groups are beginning to get some attention.

Now as I describe this, I am sure that many here are thinking "By dogs, I wish I were an institutional administrator; this sounds like a challenging and rewarding occupation." Right? Well, I hear someone saying "wrong," and he's an institutional administrator. The unfortunate situation is that a significant number of institutional administrators are developing what our mental health colleagues refer to as schizophrenic psychoses. Those familiar with mental health realize that even today the prognosis for these conditions is not exactly good. Some may be aware of the fact that I left institutional administration not too long ago, possibly motivated in part by an attempt to prevent such a situation from occurring.

Now if you will recall the psychodynamics of the schizophrenias, you will remember that some believe that the etiological condition is the "double-bind" situation. The victim, the schizophrenic-to-be, as it were, is exposed to a situation in which conflicting demands are made of him by important people. Example: Mother says: "Now Johnny I want you to be a good little boy and when Joe across the street kicks you in the gluteus maximum, I want you to turn the other cheek and smile." But the old man says: "Don't listen to that nonsense. You go over there and punch Joe in the nose." A classic "double-bind." Johnny can't do both of these things and retain the love of his parents, so after considering the matter at length, he decides to become schizophrenic, and builds his own world in which he isn't put upon by such demands. This is essentially what many in institutional administration are doing. Why? Because we are subjected to conflicting demands.

Let me briefly share with you what I consider some of the more unpleasant dilemmas faced by the institutional administrator. Briefly, because I do not want any of you to experience the anxieties imposed on the administrator daily and nightly and during meals (which is particularly bad on the digestive system).

Many of us are told that our institutions are overcrowded. In New York, for example, we conservatively estimate that the overcrowding is somewhere between three and four thousand. We are told, of course, to decrease overcrowding. Meanwhile the waiting lists grow longer and, of course, we are told to expedite admissions.

Many of us are informed that our facilities are antiquated, that they do not reflect the new concepts of training, that they should be replaced by more suitable facilities. If memory serves me right, the President's Panel recently reported--I forget the exact percentages--that over half of the retarded live in buildings fifty years old, or older. At the same time, we are told: "Build new facilities. The old ones are losers, and they are located in impossible places; build new ones closer to the home and in the community." So we are asked to do all of this--that is, replace the old ones and build the new ones--with an extremely limited amount of money, preferably without investing any money. This is extremely difficult to do even with the best of intentions.

More and more we are realizing the need for professionals within our facilities. As we unitize, as we develop specialized programs, as we bring in grants and demonstrations, the need for professionals becomes more and more acute. At the same time, however, all sorts of community programs are mushrooming: mental health centers, mental health-mental retardation centers, and so on. They are recruiting like mad. Not to mention the fine university programs. They are recruiting like mad. I noticed the other day that in New York state there are more than fifty of these mental health centers. And the law requires that each be headed up by a psychiatrist. I did not know that there were that many psychiatrists in the state with the time to function as administrators of mental health centers. And this type of situation is repeated all over the country. To make matters worse, by changing the composition of our institutional population we make work there less attractive for professionals. I hate to say it, but most professionals are brought up with the image of habilitating, curing, training for productive employment, and so on, and the profoundly retarded simply do not respond to this degree. They do not meet our high expectations. Most professionals want work with the mildly retarded, or preferably with the normal who is emotionally disturbed. But we place ourselves in an unfavorable bargaining position and we must compete with programs which on the surface, at least, appear considerably more attractive.

The next dilemma deals with the size of the institution. How big should we make the organism? The President's Panel recommended that institutions not have more than 500 patients. Bank-Michaelson from Denmark tells me that he thinks 300 should be the maximum population. Some of us, very liberal types, believe that we could squeeze out a thousand, preferably not more than 750.

Now at the same time we feel a need to group our residents into homogeneous categories. For example, most of us are reluctant to put adolescent males and females in the same bedroom, or profoundly retarded and mildly retarded in the same buildings, and so on. Have you noticed that one of the common criticisms of the institution is poor grouping? In our society there are usually at least two sexes. Assume there are four levels of retardation (and I am making these very large categories), four age groups, and three levels of ambulation. Multiply these and you come out with 96 buildings--96! If you limit the population in these buildings to a maximum of 32--a pretty small building--you have multiplied into an institution with 3,052 beds. This does not include buildings for specialized groups such as the blind, the deaf, the emotionally disturbed, and the delinquent; nor does it include infirmaries and hospital buildings. It will be very difficult to meet both demands--small institutions on the one hand, and homogeneous grouping with adequate programming for each group on the other.

Training is becoming the basic theme in our institutions. At the same time, by changing the composition of the institutions we are making their residents less and less amenable to training. If you begin to look at effectiveness measures, how many residents have you trained and returned to the community? The prediction is that you will succeed less and less and less often. One of our basic goals is to return retardates to the community. But, ladies and gentleman, look at what we are returning them to. The complexities of society are mounting immensely. Just think about filling out the income tax form, or registering the automobile, or changing the telephone number, and so on down the line. We live in a highly complex society which tends to become even more complex. As the phenomena of urbanization and automation become more prominent, one can anticipate increasing complexity in society; consequently, people with limited cognitive capacity will find it more and more difficult to adjust.

We are also caught in this dilemma: Is it better to serve a small number of severely and profoundly retarded people, very probably for their entire life span, or is it better to devote our energies to serving a much greater number of mildly retarded people who could be returned to productive occupation in society? Most of us are selecting the first alternative and thereby neglecting the latter.

Now again facing the problem of building construction, if we follow the New York state model and we build for single or double occupancy in living units housing eight, what will this mean in terms of staffing? You see, as I contemplated these plans with all these little rooms and units, I was feeling delight. Until I began to get a peculiar feeling: from analysis and introspection, and so on, I decided that I was experiencing anxiety. I asked myself: "Why are you feeling anxious? You are sitting here, fairly comfortably, drinking coffee, and so on." And it immediately dawned on me (I must admit it took a great deal of introspection, in which I am particularly skilled) that these rooms reminded me of a bad scene--my superintendency at the Austin State School, where many of the buildings, which had been built in the early part of the century when people didn't know any better, had small rooms. Our big problem was staffing these buildings so that we could supervise the victims in the small rooms because you can't see them unless you run round all day and all night. So now by building our facilities in this way, we lock ourselves into heavy staffing patterns. If we succeed in obtaining adequate staffs, that will be a fine scene; but if we fail, it will be a horrible scene. The amount of staff we obtain is a function of the society's economic structure, not of the professional knowhow or expertise of the time.

Finally, when at last the administrator succeeds (and by success I mean he obtains money), he must decide how to spend it. This, let me assure you, is an extremely difficult problem. There are so many ways in which you can spend money and so many pressures placed upon you about how to spend it. Many times it is extremely tempting to invest in things that are visible, that the world can see and point to and say: "Look there, that cat's doing a great thing--he's putting up a new tree, a new building, the wards look a lot prettier." It is extremely difficult to channel funds into something that is less visible--direct services to the residents. And this, let me assure you, is a real challenge to the administrator.

Well, now that we have disposed of the institutional administrator, we'll consider briefly the implications of some of this for the blind-retarded. Let me indicate first what I am sure is only too obvious, that blindness in an individual with limited intelligence is a particularly severe handicap. The development of intellect--as it were, the ability to cope with the environment--is a direct function of our sensory receptors, and in the human being the distance receptors play a particularly important role, with sight probably more important than any other. In dogs the sense of smell has a great deal of importance, but human beings, most of them, if they follow the ads on TV and so on, don't smell particularly admirably. The rhinencephalon, that part of the brain that deals with olfaction, is atrophied in man, so we are very dependent on our sense of sight. People who have worked extensively with the retarded, such as Seguin and Montessori, have emphasized the importance of sensory input. More recently, Doman, Delacato, and their colleagues have based an entire theory on bombarding the central nervous system with sensory input; in doing this, of course, vision is again extremely important. Now for the nonverbal individual--that is, one who cannot think symbolically with language--this is a doubly serious handicap because audition, which becomes so important for those of us that have language, is much less valuable to him. So in dealing with this type of blind individual we are indeed faced with a challenge. I might also say in passing that in working with the blind-retarded the problem of diagnosis, or classification, is greatly intensified. For many of us it is very difficult to parcel out the effects of sensory impairment from the effects of what we might call central nervous system impairment. No doubt there are many erroneous diagnoses where people diagnosed as retarded are in effect functioning at a very low level because of the lack of sensory input.

What then are some of the problems we might anticipate in programming for the blind-retarded? Let me touch on some of the administrative-type problems. In general, only a small number fall in this category in any locale, and as our institutions shrink, this problem becomes more acute. We then have to answer such questions as "Are we going to try and group them homogeneously according to age, sex, levels?" You have heard Dr. Barnett give you a rundown on the statistics within the Texas system. And you see that they fall in all levels of retardation. Now do we want to put the mild along with the profound? Do we program for them simultaneously? And if not, then we are talking about working with very small groups. Do we want to use the basic principle of isolation or assimilation? That is, do we want to work with the blind-retarded as a group, or do we want to assimilate the blind among the other retarded. Some say that children should be isolated and then assimilated as they grow into adults. At what age and at what level does the assimilation take place? Do we work with these people in a special unit? That is, do we put them in a special building designed particularly for dealing with their problems. Do we place them in a specialized institution? Or does each of our institutions have one or more units for this group? These are all administrative problems which stem from the fact that we are dealing with a relatively small group.

The second critical problem is how will we recruit and retain staff to work with this group? In general, this is a particularly unattractive group. Why? Because the prognosis for significant improvement is viewed by most professionals as relatively poor. Professionals, like all of us, behave in such a way as to need to be reinforced, and much of our reinforcement comes from our idea that we are doing a great job. There also is serious competition from "more promising programs." Those interested in the blind are likely to go into programs for blind people who are not retarded because the prognosis is not as bad. Those interested in mental retardation are likely to work with mentally retarded who are not blind because the prognosis is much better. Therefore we should, I believe, give serious consideration to developing alternative strategies for programming for these people, and by this I mean that we cannot rely entirely upon the professionals. We must develop strategies for involving volunteers, attendants, and other people who are highly motivated but perhaps are not as well trained and sophisticated. The problem of administrative support must enter into this as well. The administrator (and I have gone through some of these problems) needs to set priorities. Almost invariably he has to work with limited resources. The demands made on these resources are almost always much greater than they can possibly meet. He must be concerned with the effectiveness of his program. Therefore, most administrators are led to the conclusion that they will invest resources in programs that will have the greatest pay-off--that is, programs that will be most effective.

I am amazed and pleasantly surprised to find that there are some administrators who do indeed invest resources in programs such as the blind-retarded, where the pay-off, at least the immediate pay-off, is likely to be small. I think of one of our institutions in New York state, the largest institution in this country--the Willowbrook State School--with 5,400 victims residing therein. There is a very nice program for the blind-retarded, but at the same time, there are hundreds of other people in that institution--and I feel safe in saying this--for whom there is little or no program. This is a very difficult decision for an administrator to make.

Finally, let me talk to you about some of the problems we face with regard to the basic goal of our programs for the blind-retarded. What are we really trying to accomplish? What is our basic criterion of success? I believe that most of us attempt to look the other way: we don't really want to get down to the nitty-gritty of this question. Are we trying to make the victims economically productive? Is all this basically an economic gain? Are we trying to justify what we do simply in terms of dollars and cents? Or are we really concerned with the fine-sounding philosophical concepts of human dignity? Are we concerned with the individual's happiness? If this is really what we are looking for, whose happiness are we concerned with? Ours? That is, the staff's? The retarded individual's? The retarded individual's parents? And let me assure you that, unfortunately, they aren't necessarily going to be happy with the same thing.

But these are crucial questions. Because they lead, for example, to making the decision as to whether we are going to program for institutional life or for community life. Ah! There is a ticklish question. Many of us happily gallop forth behind the banner of "onward to community placement," and yet at this stage of the game, is it really a valid goal for many of our residents? Will this make them happier? More productive? Will it benefit society? What goal are we really aiming for? And if we decide that some of these people should be programmed for the community and that others should be programmed for the institution, then we are in the difficult position of having to decide who goes where and at what time. We become entangled with programming differentially, which we are not doing today.

We are building our institutions like miniature homes so that all the victims will happily leave and go into a home. But what about those who never go home? Is this the best way to program? What we are trying to do today is to program the individual so that he will be outward oriented--to program him for community living. But it might be, don't you see, particularly in working with those whom we feel will be institutionalized the rest of their lives, that we need to program the environment. Norm Ellis and Luke Watson, and other behaviorists, have repeatedly called our attention to this. We need to build the institutions; we need to build the environments, so as to facilitate life for the victims. We are not doing this.

Environmental programming may have tremendous implications for the architect and for the programmer. Perhaps the profoundly retarded, blind-retarded, should be programmed in terms of sense and touch. Odor that he will never smell on the outside, let us hope, might make his life a great deal easier, and a great deal happier in the institution.

Let me conclude with a few words of caution. There is some evidence that there may be decreasing support for programs for the mentally retarded. Those who were in Boston at AAMD last week might have heard Gunnar Sybwad raise his voice in alarm because he feels that there is decreasing support at the Federal level and that this is indicative of darker days ahead. Similarly, in a number of states budgets are being cut, appropriations are decreasing. One cannot help but wonder whether this might not be the beginning of disillusionment. Have we raised unrealistic expectations in the populace? Have we promised too much? Is this a repetition of the days of Seguin? You remember that Seguin was very optimistic and spoke of habilitating the retarded and returning them to the community. He was not able to deliver the goods, and so we went into an era of darkness, regression, institutionalization and isolation. Perhaps we are not able to normalize as many retarded people as some believe we are promising. Perhaps it is an unrealistic goal. Perhaps too we cannot justify all our programs on economic grounds. We have talked to legislatures, you know, about more taxpayers, reducing laundry costs by toilet-training programs, and so forth. Is this realistic? And as it becomes evident that these programs cost money and will cost additional money, are we in for a backlash of scepticism and further rejection? In facing what might be a decreasing impetus in this area, I feel that this conference has special meaning.

I am confident that you are all facing the challenge of a particularly difficult task. You are zeroing in on one of our real problem areas, and I am deeply encouraged by the richness of resources that I see here in this room. On the basis of this, I feel that programs for the blind-mentally retarded have an excellent prognosis.

2. CHALLENGE IN ACTION

Speaker: Mr. Charles C. Woodcock, Superintendent, Oregon State School for the Blind, Salem, Oregon

Programmers concerned with the education of the blind are facing a new challenge, although some seem to be resisting. The new task is that of providing both educational opportunities for multiply handicapped blind children and services for the child whose only impairment is complete or partial loss of vision.

Many agencies and individuals are talking about programming for the multihandicapped population. Much is being said about what is needed, and there is almost complete verbal agreement at the conceptual level. Unfortunately, too few administrators have had the courage to venture forth in any positive way.

Let me outline briefly, the areas of our verbal agreement.

The education of multiply handicapped blind children--I speak here not only of the blind child who functions at a retarded level--cannot be successful unless attention is focused on the first few years of life. Experience has shown that the kinds of things that happen and the atmosphere in which they happen determine the outcome, or results, that are revealed later. If we ignore the preschool period (ages 2 months to 6 years), we shall allow to be created a generation of lost children "sentenced" to perpetual institutional care. We shall be guilty by our neglect.

Education of these children cannot be successful unless parents, families, teachers, and community agencies work as a team. The team must have direct and free-flowing lines of communication; adequate support must be given the parents because they face the problems of rearing the child--in a changing society where family stress is often beyond what young parents are capable of bearing. Often these children are raised in an explosive, destructive emotional climate, one in which the child's emotional needs cannot be recognized let alone met. Parents must have counseling and support from the educational teams that assume a role in the education of their child. Parent counselors and social workers must be on the team.

Education of these children cannot be successful unless pupil-teacher ratios are improved. All current pupil-teacher ratios are out of reason. Little recognition has been given to changed population. One agency recently discovered that it is on the same level, in 1968, as in the 1931/32 budget year. The curriculum for pupils enrolled in programs for the blind in the 1930s included music, manual skills, and academic subjects. Generally speaking the child's intelligence was not considered.

Pupils enrolled in programs for the blind in the 1950s were largely RLF's; despite their premature beginning, they were programmed for, in terms of subject matter, much as were their sighted counterparts. Their intelligence had a wide range. Some are now completing college with honors, others may transfer to institutions for the retarded or may be there now.

Pupils enrolled in programs for the blind in the 1960s are a new breed. The severity of their handicap is something never before dealt with in school settings. Much more is required of all school personnel.

A nurse in a residential school is no longer a dispenser of medications, an administrator of shots, a bandager of scratches, a keeper of records. She must arrange for and coordinate the services and interpret the findings of the ophthalmologist, neurologist, neurosurgeon, cardiologist, orthopedic physician, psychologist, medical social worker, and psychiatrist. She must breathe meaning into their findings for less medically oriented staff. In simple language, the nurse gathers and interprets medical information needed for the welfare and protection of the child and the assurance and education of the staff.

The teacher is not a dispenser of facts. He cannot begin the school year by going to the book depository and checking out a text for each subject--for each pupil--in each class. Many years ago this became passé. Yet, because teachers are more apt to teach the way they were taught than to teach the way they were taught to teach, much of this kind of teaching still exists. And because many times it takes twenty years for research findings to become generally adopted, some of us may not see the day when the things we are researching in the late 1960s are put into use. We must press for change.

Where our existence is at stake we accept and implement the findings of research with little delay. For example, there is little relationship between a doctor's work today and a few years ago. Changes and discoveries being made this year, this month, or even this day may affect any one of us. In agriculture technological developments are accepted quickly--often with only the time lapse required to generate enough seed to sow a field of the new hybrid.

Few will disagree with the statement that education also is essential for survival, yet most of what we research, develop, and put into practice is centered around questions of content or how to automate traditional teaching materials or methods.

Teachers in some situations where attempts are made to program for children who function at a retarded level face their so-called class at the beginning of a school year without any real notion of what they are going to do. If they approach it in any other manner, it can only be because they have observed each child's typical distress and pleasure responses and have "documented" the stimuli and located the proper reinforcement agents.

Research doesn't seem to be producing very much that the classroom teacher can use with the children in today's programs or the children of whom we speak today. Or perhaps the communication gap that supposedly exists between generations is a mere crack compared with that between researcher and teacher.

The teacher of these children must have support from all sides. Many pupils learn in spite of the teacher, but some of these children will not learn just to spite the teacher. All of their lives have been spent avoiding stimuli, avoiding situations that require any response, shutting out their surroundings, gaining what they want by creating an environment they can manipulate at will.

Insight into these life patterns, gained through observation and interview, may be the most useful part of a "total evaluation." If he has the ability to develop this kind of an environment--that is, one that gives him all of his basic requirements of food, clothing, and shelter so that his physical existence is assured without his having to use language, respond to new foods, change in any way; if he can have his parents dancing like puppets on strings or seeking out the nearest agency accepting children for commitment--he just might have the ability to change if we have the duration to persist.

An approach to consider with these children would be one that would put all auxiliary services at the teacher's disposal. Research would not be done only to determine how to plan for the future, but a great deal of energy would go into short, quick, on-the-spot evaluations of specific behaviors being exhibited on Monday so that the teacher would know what to do on Tuesday.

Research would not be done only to determine new approaches, but energy would go into observing the approach being used the first week of school. It would be determined whether or not the approach should continue the second week or be thrown out, or with which child it should be continued.

Masters degree theses, term papers, and research papers would not limit themselves to such topics as "Teaching Swimming Skills to the Blind" or "Teaching Typing to the Visually Handicapped," and other subjects that have been dealt with many times before. They might either cease to be required because of more pressing needs for manpower in the classroom or be directed to today's needs. In other words, more time with the children and less at the typewriter or in the library. Out of these experiences might come clues that would lead to research that would have immediate implications.

The greatest challenge is that of developing lines of communication among the team so that all are working for the child and no empires are being built by immature adults. Submission to the team approach and the team objectives is possible only when staff have constant help in understanding themselves as individuals--themselves in relationship to others in the team, and themselves in relation to the task at hand.

Teacher training programs might consider gearing more of their energy to further development of teachers already in the field, rather than the recruitment and training of new ones who might be accepting the challenge because of the stipend or to gain a degree or because it is a necessary step into the higher paying ranks of administration. There are those who are in the midst of this changing scene and are being required to alter their course by nearly 180 degrees. They are the struggling ones who need help. It could come from a creative and innovative teacher training department.

We spend more energy getting teachers into programs and children into programs than we do sustaining the teacher and programming for the pupil after employment or enrollment. This whole business of teaching children who function on a retarded level reminds me of the rumored navy technique on how to teach the new recruit to swim--throw him in the deep end. This is sometimes what we do to teachers and kids. We throw them into the same pool: the teachers who don't sink save a few kids who haven't already gone under and a few kids learn to paddle enough to get to the shore. A few find it accidentally and some learn to swim so well they avoid the teacher as she grabs for them, but they never touch the shore.

We're swimming in Oregon.

There are no miracles being performed in Oregon. We have all of these problems. The main thing we have going in our behalf is a willingness to try, and a willingness to chart a new course where we fail. We do not fear failure.

Editor's note: A 20-minute color movie was shown to the group and discussion followed.

Discussion

Q: What kind of support should be given the staff that work with these children?

A: At the Oregon School we have a psychiatrist working one day a week with the staff rather than the children. The psychologist helps the staff understand their relationship to the program and supports them in what they are doing. As Dr. Roos said, we are used to getting our rewards from the growth that any child makes. Many times we can look back a few days or weeks and see growth. However, with these youngsters, we may look back a year or two and not be able to see much or just a little bit. We have constantly to reevaluate the youngsters that we are working with and the amount of time that we are putting into it to determine whether the program is working.

For instance, one of the youngsters you saw in the slides was walking down the street with cabbage between his legs. We had great difficulty with the producer of the movie to get him to leave that shot in there. He thought it would hurt our image and ruin our program because it was bizarre behavior. He wanted to cut shots of the kids rocking back and forth, but we refused to go along with him. We completely rewrote the script so that it would reflect our concepts. I showed this movie in New York and a psychiatrist there said: "Well in spite of the fact that it's got a lot of nineteen thirty educational slop in it is still very good." Knowing the remark he made at some other meetings, I thought that was a very fine compliment.

The boy with the cabbage between his legs *is* in an institution for the retarded now. I know every blind child in that institution through at least one visit, although that is really not knowing the child. I have visited with them to try and program with them. And on my last visit there I came across this boy, and before the Cottage Supervisor had told who I was and how I know the child, I said, "Isn't that boy blind?" and she said "Yes." I said "How does he get along out here?" and she said "Well he takes better care of himself at the table, he dresses himself better, he is cleaner, and he is able to express his needs better than any other of the fifty boys in this cottage." Now there are those who would say since we had him for five years in our program and transferred him to the retarded institution, we gave up, that we failed. But I don't consider that failure with this kind of a child.

Q: What kind of staff do you have and what is their training, and so on.

A: I feel that the people that are most successful with these children had those qualities determined before they enrolled as freshmen in college any place. That is not to discredit anything that happens from that point on, but you have to have a willingness to handle somebody's snotty nose, and you have to do a lot of things that you're not told in college is going to be a part of your responsibility as a teacher for these youngsters. So it takes somebody who is capable of getting their reward by some other means. The staff have to be pretty secure individuals in their own lives before they enter this kind of field. I can't really tell you too much more about it. I really wouldn't know today what to tell the teacher training agencies to concentrate on in their curriculum with these youngsters except to be very very frank about the kinds of things that they are going to be involved in.

As far as recruitment is concerned, without any disrespect to anybody here, we have found the most unsuccessful people are those that have had previous experience in an institution for the retarded. They are not geared toward the idea that change will and can take place with these youngsters, so they work with them in a custodial way. They are not capable of frustrating the children or tolerating their frustrations in order to get them to respond. This has been our experience in our own state, although I know that what works for us may not be the same for you. You may have different types of agency relationships, you may have different, more pressing needs. Our public school program for the blind in Oregon is so well developed that the multiply handicapped child is the challenge that we at the residential school are facing now. These are the children we are going to serve and either we will serve them or we will go out of existence. We are willing to retool, although it is difficult for staff who have worked for ten or fifteen years in a kind of program for other types of children and reshift their thinking into this new program. It is not impossible, but it takes a great deal of in-service, a great deal of support, a great deal of interpretation. We had to bring in psychologists to lead discussion with staff who are not related to the project and go over in detail all the aspects of the project so they would not feel "My God what's happening to our school? Look what they are bringing in now," and this kind of thinking. The support that it takes for the staff is our biggest revelation.

Q: How do you stimulate these children?

A: If you have worked with these children you have seen the family situation or the teacher-pupil situation where the child really is in control. They can talk when they want to talk; they can do things when they want to do them, and when they don't they can completely shut it out.

As far as stimulation is concerned, we feel from our experiences in this kind of program that additional sensory input from all kinds of sources must be brought to bear upon these children. You must create situation after situation where they will be exposed to many stimuli. They must crawl up and down stairways so they can know actually what stairways are like. They must crawl on many different kinds of floor surfaces if they are to know that there is a change under their feet when they move from place to place. They then can make the transition from there to the fact that they are moving in their environment, that they are on their way to the dining room or whatever it is. This is the clue; it just happened under my feet. Brighter youngsters make this with less sensory involvement, and you must create this for these youngsters.

We are creating in a twenty-four-by-forty-five foot room, a sensory stimulation center. When the room is divided horizontally, you cannot walk about in it; you have to crawl. Our idea is to put youngsters in here with very little else on except a pair of shorts so that their arms, their fingers and legs and all parts of the body will be subjected to the stimuli that are in the room. And as you crawl along through this room you experience tactually ceramic tile on the floor. As you come from a thick, heavy carpet onto ceramic tile you would have a sudden temperature change, a sudden texture change which is almost frightening to youngsters. It stops some of them cold until they realize that this isn't really anything but another type of floor surface--ceramic tile, wood flooring, asphalt tile, bare concrete, and so forth. Along every wall there is a different kind of surface so that if you accidentally get over there, your arm rubs against something rough or something smooth.

One room that is about ten feet square will have nothing in it but pillows, and all the pillows will be two feet long and one foot wide and six inches thick and they will fit together like a jigsaw puzzle, although they won't interlock. On the top surface of every pillow will be, let's say, the same surface of a naugahyde chair, but if you stick your hand down under the other pillows you won't know what you are going to find. The teacher can hand the child a piece of rabbit fur; in the pillowroom he'll find rabbit fur. He will have to discriminate tactually among all these different surfaces as he moves about in there among all kinds of other things like fans, and so forth.

You have to be three years ahead in your planning for these youngsters. You can't be working on the ideas you are thinking about today; you have to let go and let your staff work on while you and another group of people get out there and pick up clues from what you see and work toward the future.

Q: What is the educational level of the cottage parents?

A: In Oregon we have civil service with standard classifications set up, with an exam to pass before we can even look at you on the list. This places some restrictions on us. If you came to us from Texas or New York, were highly qualified and highly motivated, interested in this kind of job, better than anybody on our civil service list, we still have to go by the list. This is the restriction.

We have classifications for child care workers, dormitory counselor "one," dormitory counselor "two," dormitory counselor "three." Working with the children in the cottages are the child care workers who generally are scheduled for those times of day when there are other staff on so that they are not handling the full responsibility for the child; if they are on at night when most of the children are asleep. they take care of the night needs. A person in this classification must have graduated from high school and have two or more years of experience with children in a residential setting and ten to twelve hours of work in social sciences. Dormitory counselor "one" must have two years of college or equivalent and the dormitory counselor "two" and "three" are progressively above that.

Q: How can the film be borrowed?
A: Well you don't have to borrow it, you can buy it! We have copies at school that have never been shown to anyone and are available for purchase. We also have copies that we circulate free to anybody who writes us a letter and says they are interested in our film. It's fairly readily available, although our biggest problem is that it takes a week to ten days to get it out and back in this part of the country, so this ties it up for maybe two weeks for one showing. Sometimes there are delays, but we have a couple of copies that we are circulating for loan.

Q: What is the price of the film?
A: I think it is two hundred thirty-five dollars, something like that. It has implications for others than just the population we are talking about, and could be used for experimental education with other populations of children. We didn't agree with the producer on the film about everything. He went to a local public school in Portland and filmed a bunch of children in a playground--running and laughing--and showed closeups of their faces while they were sitting on the fence. Then he wrote a little script that said "Life is wonderful when you are young and when you have sight, etcetera, but supposing you were blind." The screen was black and then comes on "Show us the way." So we have snipped that section from our prints. If you want that section you'll have to buy it directly from the producer because we didn't like it and didn't include it.

3. MEETING THE CHALLENGE

Chairman: Mr. Bill J. Doggett, Superintendent,
Austin State School,

Developmental Learning

Speaker: Natalie Barraga, Ed.D., Associate Professor
of Special Education, University of Texas,
Austin, Texas

After listening to Dr. Roos this morning, I agree with many of the things he had to say. As I maintain one foot in my idealistic world and try to keep the other one on the ground with him, I ponder the very provocative challenge he provided us when he suggested that no matter what we try to do we are going to have to answer some questions and put some priorities. Then after hearing Mr. Woodcock, seeing the beautiful film, I realized that many of us through the years have shaken our heads and said: "Yes, this is what we should be doing. These are some of the kinds of things we are going to have to face in the future." As he said this morning: "If we aren't planning for facing those things in the future, three to five years hence, then we are already ten years behind." So, some of us shake our head, and say: "I know that this is something that we ought to be getting into." I've said it too. Now other people *are* doing it.

In this short time, I know I'm not going to give any answers, but I hope I am going to raise some questions. Perhaps if we can think in this way, we can arrive at some answers that all of us can take back whatever our line of work, whatever our association, whatever our concerns. We have children, first of all, who have marked limitations or no ability in terms of seeing themselves and the world, and further we have children whose levels of functioning are so impaired or so depressed, or so retarded, whatever word you want to use, that they simply don't know where they belong. We have these children everywhere; we do not have them *just* in institutions for the retarded; we do not have them *just* in residential schools for the blind; we do not have them *just* in public school programs with a question mark as to whether they belong there.

All of us share a mutual concern that we are encountering scores of children who are enigmas to their parents, who are paradoxes to their teachers, and who are unknown to themselves. But this is not going to give us a path, or a goal, or a pattern by which we can begin to operate. Perhaps one of our tasks here today is to think with you and provoke you into thinking about some possible frames of reference, some ideas from which you can begin to plan and develop, some theories, so to speak. Not being a very scholarly person to start with and being particularly fond of kids over a long period of time, I do not think I can be very scholarly, so I am just going to talk with you about some things in which I believe. This does not mean that I believe these things exclusively and that I do not believe the things that Dr. Iscoe is going to say--I think he is going to present a different point of view.

To suggest that the lag, or lack of ability to function, can be attributed solely or primarily to the fact that the child is blind would be an erroneous generalization and a denial of true facts. Not all children who are blind are retarded in their functioning; indeed most are not or need *not* be. To seek answers in terms of "cause and effect" relationships would probably be fruitless and possibly irrelevant. Where do we search for answers? Possibly by defining realistic approaches to program planning--structuring situations in a variety of ways--any one of which by itself or in combination with others, will contribute to or enhance a higher level of functioning for these children. The adoption of a particular point of view or frame of reference could be valid so long as the rationale chosen contributes to the modification, change, or expansion of the pattern of development to a higher level of functioning.

To provoke your thinking, let us assume that a program based on developmental learning offers possibilities. This perspective is based upon the idea that a child's functioning is determined largely by the emergence and expansion of capacities in a progressive sequence thought to be achieved through a dynamic interaction between the child and his environment.

Development encompasses many dimensions--physical, social, emotional, and mental--all of which are so intertwined that a lag or deficit in any one may affect progress in the others. Children to whom our concern is directed in this Institute have had limitations imposed on their development in all dimensions.

Erikson suggests that the development of human beings in the social and emotional areas follows specific stages and that the quality of a child's functioning is directly related to the fullest achievement of growth in each period. The first stage is called *trust* and *security*. The infant is loved and nurtured and held close: through this body contact he develops confidence in others in his immediate environment (his present world) and eventually trusts himself. Because of his lack of vision and his inability to see smiles and other gestures which accompany the nurturing, it may be necessary for the blind child to experience a greater abundance of nurturance and security through contact over a longer period of time in order to learn to trust and to feel free to reach out beyond self. What happens to his development if he does not get this--if he is left alone in a crib for long hours, is not held and cuddled when fed, is not talked to or played with because of the mother's emotional trauma or rejection, or his own inability to respond? He may be unable to progress fully to the next stage of *autonomy*, the learning of control, first in handling his own body and the exercise of control over its functions. Later he has difficulty in realizing that there are things he can do for himself without assistance.

On the other hand, suppose development through the first stage has been achieved. Progress in autonomous control requires that the child be given the freedom to handle and manipulate a multitude of objects in his environment so that he understands that objects change their appearance when moved and learns to recognize the sounds they produce when shaken or banged. He learns that things perform for him. With this new-found freedom and control comes the need for others--adults--to help him channel his activities so that they are safe for him and others. During this period, learning to direct and restrain his own behavior comes about; no child develops capabilities if he is left totally free to exercise total control over all of his environment.

As he understands the limitations of his control, he emerges from this stage as a proud and elated child whose curiosity about the world is aroused. He is ready to seek further and enter the stage in which his *initiative* leads him to widen and explore, to imagine and test his skills and become actively involved with his environment through play. This is an especially critical stage for the child who is blind because he must have the opportunities to move and explore freely with guidance, to be lead to new encounters, to investigate everything within his reach and have many other things brought within his reach. With a wide range of concrete experiences the child acquires new information which may later be the basis for more complex types of learning experiences.

Only when development has progressed through the stage of initiative, curiosity, and exploration is the child ready to accept and understand the more formal skills required in academic learning, at which time his development enters the stage of *industrious* pursuits which give him satisfaction as well as meaning. He can busy himself with activities and begin to build his mind--to organize his thoughts and reorganize his ideas, and alter them to realize a pattern of stability in regard to himself and his world.

Given a child whose developmental learning has not achieved full or even partial capacity through these stages, is it possible to develop a program based on this rationale in which children, whose development is retarded, can grow and learn to develop their capacities, even though learning may be slow and tedious? Is it possible for children to find that a real self exists underneath the once unknown? We may never know unless we define our goals and structure programs based on specific points of view and analyze and study our results. Do the children, in fact, progress to higher levels of functioning?

If we were to say, "I believe that I can use a developmental learning approach," then it seems, first of all, that we have to be able to find some way observationally and objectively to define where that child is, at that point in time, in these various facets of development, physically, socially, emotionally, and mentally. What is his baseline? Then look at all of the tiny, tiny steps that we would expect him to climb if he is going to move to a higher level of development. Perhaps this is the key, and I think frequently it is: we expect very young children, young in the sense of learning, to take giant steps when really they can only take little steps which we must be able to define. So what is the first step he should take in this fashion? The next and the next?

As to goals, I do not know if we can set goals. I certainly would not know where to start and I think we have to leave this open. It is not the goal that is important, is it? Not today. The concern is, can he take the next step to a higher level and when he gets to that one, maybe we can stretch the goal a little further. But goals are for the purpose of evaluation and reevaluation and I would much rather set a lower goal and be able to raise it, than to set a goal too high and be disappointed and have to move it back down. This is not very gratifying to any of us.

We thus have to find a point of reference, a baseline for this child in terms of his development in all of these many areas, and then keep very careful records of how he progresses. He is not going to continue just to go up; he is going to slip back a little. What are the ways that we can find to help him to reach up that next step? And remember again what I said in the beginning: we don't leave a previous stage of development.

Another thing that comes into this is the fact that we get concerned sometimes about who we are going to get to work individually with these children. Other speakers have mentioned this. It is a very relevant point because we do not have enough people. Dr. Darrel Mayes and many other people have certainly focused upon this. We are overconcerned with manpower and insufficiently concerned with "doing power" and "mind power." It does not take a professionally trained person to give loving, nurturance, and care to a child who needs it. So maybe we had better look again at what we are specifying in terms of training, in terms of people who serve programs, and look at who are these people. Teacher education programs are beginning to do this. I know that Dr. Meisgeier sitting back there has given great concern to this. Who are you getting? What is the person psychologically? What are his levels of tolerance for frustration, for lack of gratification from some external behavior of a child? Does he have enough internal gratification of his own that he can be free and hold off and wait for this child to respond? So then we need to look very carefully at what we are thinking about doing and realize there may be many ways to do it and that if we wait until everything is perfect and we have all the people we need, we will never do it!

Psychotherapeutic Learning

Speaker: Ira Iscoe, Ph.D., Professor of Psychology and Education, Director of Counseling Center, University of Texas

I come before you, in a way, with false credentials. I know a little bit about mental retardation, certainly not one tenth as much as the people who are here and those who have addressed you and who will address you. I know a little about the blind.

If you take a probable factor and you multiply, I know one eighth about the blind and one eighth about the retarded, so it's one sixty-fourth that I know about this most complex topic of the blind-retarded or the blind child who evidences retardation. I did my best to find reasons why I could not be here, but that did not work. Forsaking my own background in child clinical for the very nebulous unstructured area of community mental health, I am addressing this problem as one of the mental health of children, I am going to level with you: I do not know very much but I am going to ask some "supposes."

I am very favorably inclined toward special education, but I am also very critical. To use the Texas phrase, I figure I always have to keep their feet to the fire and just not let the special education people hurrah and hallelujah at a meeting but let them get something done. I am very respectful of the achievements in the area of special education and the handicapped and I want to echo some of the things that Dr. Barraga said in the sense that most of these things have been achieved alone in the face of contrary advice of other professionals. There are a lot of professionals who will help you now especially since there is some money involved. I have often been amazed by how the mentally retarded have emerged as a problem for society and certain disciplines now that there is a little dough involved. Some of us can recall the sad days when nobody would help a parent with a retarded child and school systems did not have special education. It is also quite amazing how the experts emerge from the woodwork.

I have been impressed with the many problems faced by the multiply handicapped child, at least the handicaps that we can assess, like visual deficits, blindness, and retardation. And, of course, I have been impressed also with how quickly in some cases hope is abandoned, and I sometimes ask whatever happened to Helen Keller anyway. Didn't the lesson ever take that her double handicap need not be a signal for abandoning hope?

One of the things that I have suggested sometimes is that schools of special education and any locked-in system be destroyed every ten years so that the "Young Turks" in the field can start afresh and not be constrained by tradition. I will balance this by saying take all learning with a grain of salt--discard most and steal a little bit of it. The final book has not been written; the experts of today hopefully will be displaced in a few years. If they are really good experts and scientists, they would hope to be displaced. Be wary of dynasties because dynasties are fine for those that rule them but hard for the people who want to innovate. I really suppose that the only constraints on any imaginative or new approaches to the blind-retarded are the limits of the imagination of the people who work with them and the setting in which their work occurs. Certainly not the victim; I do not think that the blind-retarded child has any objection to anybody trying innovative approaches or for that matter trying to save the best of the old and taking what is best in the new.

I was given the topic "Psychotherapeutic Learning" and asked myself what that is. In thinking about it I decided that "psychotherapeutic" is being bandied about now in classes for the emotionally disturbed, and realistically I suppose that anything that helps the emotional condition, that reduces the emotional hang-up, is psychotherapeutic. I do not say "therapeutic" because enter the psyche, and the recognition that the child, in contrast to the teacher and the adults around him, has the unhappy or happy propensity for not separating the emotional aspects of his life from the cognitive ones, those charged with the instruction approach the child, the children who are retarded, with an agenda in mind; namely, this child shall learn. My reputation as a teacher depends upon what he or she learns. Now maybe the child is not ready or maybe he is not ready developmentally for the stage that we would like.

My absolute conviction is that kids in the seventh grade, with normal intelligence or above, are not ready for what the junior high is teaching them. They want to learn other things, namely about girls, about how you get a driver's license, about all this dating, jazz, dancing, and the basic interest, of course, accounts for all the frustration of teachers in junior high. They have an agenda that is not very much concurrent with the agenda of the budding adolescent. If they learned a little developmental psychology, the school systems might realize it, but it is not my purpose today to overthrow school systems.

Since the child, and particularly the blind-retarded child, has experienced failure, then the important aspect in psychotherapeutic learning is what successes can I introduce? At this point I can hear the audience saying: "Now here he goes on this success jazz; all that stuff; I have been through this before." But it is important even though you have been through this before. What of the failure of teachers and others who work with the retarded child to look at the child, not his test scores, in order to get a feedback on where we want this child to be? Where do we think we can move him along within two months? At this time let us assess what we have done. This feedback principle is a very important one, and it is psychotherapeutic for those who work with the child to take the minimal goals and to get some support rather than being satisfied with the pat idea that he does not learn because he is retarded.

We admit that there is generally in retardation something called impaired learning. Sometimes the usual methods of learning do not work; however, this does not mean that learning is impossible. I have been amazed at how much retarded children learn, given the proper stimulus, and also amazed at what they learn without stimulus: namely, not to speak up because it is going to be wrong anyway, or not to try because of resulting failure. This is very good learning--inappropriate learning, but it *is* learning. The organism can learn, and let us face it, we have a pretty primitive view of what constitutes learning. We are getting our eyes opened now and I am sure Dr. Hasterok will speak a little bit about how much learning can actually take place at all levels.

I want to point out that advances in one area always bring about advances in another. The advent of learning technology, of various types of programmed instruction, and environmental modification means that perhaps for the first time the teacher, if he wants to, can function as a teaching machine; however, it might be different if we let other programs and other types of environmental input do what they can do best and let the teacher do what he can do best.

One of the real problems I face in dealing with people who work with those who have emotional hang-ups, retardation, blindness, or a combination, is that they are always waiting for somebody else to come and do it. You get the usual bowing out: "Gee, I am not a psychologist" or "I don't know anything about that, and doesn't he need psychotherapy?" My answer is "Yes he does and you are the person to give it." "Well I can't do psychotherapy." My answer is "You are doing it all the time!" "Well what happens if I do something wrong?" My answer is "I have seen better people than you do something wrong too." "Well I am not a psychologist," or "I haven't been trained."

My answer to that is "Thank God, then maybe you won't get caught on methodology." What I am trying to say here is that mental health has become very secular. It is practiced by everybody and we are beginning to turn away from the holy sacrament of psychotherapy, questioning whether in its traditional form it is really that helpful. But more important, is recognizing that it is only through audiences such as this that therapeutic environment plans can be instituted. There really is not a Ph.D. or M.D. requirement to deal with a child's emotions; or for that matter, grown-ups either. Now I am sure a couple of the medics in the audience will cry heresy; some of the Ph.D. psychologists will scream; some of the MSW social workers will be upset because each is deluded that we are the ones to administer the sacrament. The answer is "No," particularly when it comes to children and especially when it comes to retarded children inasmuch as the parents of retarded children are long-suffering and have learned to take any help they can get anywhere.

Now how can you be therapeutic? There are examples of therapeutic environment that have been set up in a variety of fashions with normal children, sighted, where a certain security is provided and where the child at his own level is encouraged to verbalize some of the things that bother him for the moment. These may be strange things to some people but very real to the child or the children--obstacles, worries about certain noises, fears of one's own inadequacy, frustration, inability to communicate with other people, frustration of not being able to see and not being quick on the uptake. These environments can be built in, but it takes some planning and consistency. Although we give a lot of verbal support to the consistency of the environment, I have seen very few schools, except those in upper-class suburban settings, which had any degree of consistency at all. A few, I should add, are consistently rotten in terms of therapeutic environment.

I would say here that with the retarded-blind child you have one thing working for you: you are bound to have some improvement which is always good. It is quite amazing what improvement in the child's general functioning there can come about by this type of therapeutic environment. It might very well involve some drastic curricular changes or some very subtle changes with regard to content. I am not talking of method of teaching but about content, which might involve, at certain levels, children who are handicapped and who cannot see. There might be stories, not about Jimmy and Jane visiting a fine old grandfather in the country every Sunday, but about the real life of the child who cannot see. This is pretty dangerous, because having opened up the situation you have to be prepared to deal with it. Let's face it. We are all human and it would be just absolute folly to say that everybody in this room or any audience of similar nature would all be for giving the type of content and the type of approach that I am advocating. It is much easier to keep it strictly as it is. But if you are going to be real professorial and really mean to set up an environment, you have to think about this.

Also we have to move away from therapeutic learning in a classroom to the general therapeutic environment in a residential center or the environment that is set up in the school. Learning just does not take place in the classroom in terms of content; it is a very, very small part, but unimportant compared to the environment that is built in to support failure. To pick up the child when he is down and also the reward. Then there is a danger here of being too patronizing by saying "After all this child is blind and retarded and I will satisfy some of the dependency needs. It is true that maybe he could learn to deal with himself much easier if I let him be one of the other kids in the classroom, and particularly in the mixed class, when they are not all handicapped in this way." The setting of realistic demands and keeping them takes a lot out of the person, but, nevertheless, it is extremely important.

One of the aspects of therapeutic learning that needs a rehauling is adjustment. Adjustment has been sold like opium to the masses, or maybe now it is tossed to the masses, I guess. For instance, the child that Dr. Barraga mentioned sitting in a room--not moving--is adjusted; he is very happy with his environment. They do not bother anybody. The schizophrenics in the state hospital who sit staring at the wall are extremely well adjusted from somebody's point of view; they do not cause any trouble.

What we really are talking about is *competent coping*, and I would predict that the word "coping" is going to become a lot more popular in the vocabulary than "adjustment." This adjustment jazz is going to have to be reexamined and hopefully kicked out! Is the child at his own level competently coping with the situation? If he isn't, he is uncompetently coping and therefore is building up a series of minuses when he should be building up a series of pluses. This is what I mean basically about psychotherapeutic learning.

I could go on here to say "Well, OK!; here is what you ought to do--ABC." I am not in your field so I can speak out bravely and you of course can shut me out by saying "He doesn't know the first thing about it and he doesn't know the troubles we have already." That is true, and later you will be addressed by people who know the troubles you have and are perhaps right in the middle of the scene. However, I do feel that we are just beginning to tap the potentialities of environments such as I have mentioned--environments that are supportive, that realistically build up the child's ego, heading toward the goal that as much as possible he will be able to function independently within a certain kind of environment. I might add one thing. While the diagnosis of retardation is not uncomplicated, the diagnosis of retardation in a visually handicapped child is extremely complicated. Both diagnoses are complicated and any person working with this type of child has to carry on himself some sort of assessment of the child, not necessarily by instruments, but by saying what has this child had? When was this discovered? How long has he been in another situation? The retardation may very well be pseudo; it may be real. Here again comes the realistic aspect of asking How much of this can I really work on? How much time have we spent on it as a group? What sort of realistic goals can be set? This, of course, takes the old method you know called "team work" and also, more importantly, it takes professional competence, not necessarily the competence of being able to do all of it yourself, but the ability to ask and the willingness to ask: "Give me a new picture on this person or let me share some of my views that I have about such a program."

I would also tell you that maybe you ought to step back, take a look at your own situation, and build your program. If you do, there is great satisfaction, but, of course, it isn't as easy as if you borrowed somebody else's. To build your own, of course, you have to take the responsibility of working. If you take somebody else's program, you then say "I borrowed their program, have studied it carefully, took a visit and saw it, but it doesn't work in my particular setting." We must always be careful about what works or does not work, so I would lean toward getting a group together to decide if psychotherapeutic learning is one aspect of the program. This is the important area that all plan: How is this learning going to be instituted? How is it going to be programmed? They just do not go around asking about who has a psychotherapeutic learning program. There are many for the emotionally disturbed in existence. I do not know how many for blind children. So why not try to build your own and try to explore the exciting possibilities of mobilizing the total environment?

Conditioned Learning

Speaker: Gerald Hasterok, Ph.D., Assistant Professor of Special Education, Coordinator for Program for Learning Disabilities, University of Texas

Operant conditionig is the dinner of coffee I'll serve you because you attend this meeting for about 15 minutes. You will have an M & M candy or a piece of Purina dog food in the form of toffee as a consequence for listening. You see I have a powerful reinforcer available at my command to make you sit and listen. I guess I could put you on the contingency of the more eyelids I see drooping, the longer I talk, so I can shape up this group very quickly, and that brings me to the second half of my topic, namely responses and performances. I guess I fall into the category of one of the struggling Young Turks Dr. Iscoe talked about. He also mentioned destroying systems or throwing away knowledge after ten years of letting it run. I have learned, after getting into the area of the brain injured, mentally retarded child more than ten years ago, that it is now time to throw away most of what I had diligently learned. Why? Because there is coming into the field of education and psychology a method or technique whereby we can control behavior and get out of people the types of responses that we seek.

The general topic is called "Operant Conditioning," or "Behavior Modification," or something like that. It deals with mainly two ideas: arranging the environment as Dr. Iscoe talked about, but more than that. It is just looking at the responses of the individual you are working with. With these two ideas it needs nothing more. It has, in effect, closed the lid on the black box and not bothered to peer in. It suggests to me that we are on the brink of doing something in education that we have always talked about and never achieved--namely, building a science of education. Education, or science rather, has always been based on the premises that one must have data to build a science, data are mainly obtainable by observation, and only that that we can observe is meaningful. These are the basic ideas behind that I wish to talk about in terms of conditioned learning.

I think operant conditioning is particularly applicable to the blind child, although for myself I know relatively little of blind children, but some of the ideas, I think, will fit quite well. This morning, for instance, I am using another principle of operant conditioning, namely that one should always bring data. Unfortunately, I do not have data with me, but Dr. Barraga has supplied me with some and I have observed some. There was a two-and-one-half year old child who was labeled autistic, sitting in a little clinic room with two learning disability specialists sitting on the side. The child was randomly crawling around the room, picking up toys or rolling a car. What is the environment telling this child? It was telling him nothing. It was really telling him that there was no hierarchy of responses set up that he was supposed to emit. There was nothing particularly potentially beneficial or potentially dangerous to pay attention to. He was getting hardly any feedback from his environment. He was much like, as some of the speakers have suggested, the perfectly well-adjusted schizophrenic--the good patient who bothers no one. This child had no information; there were no responses being called out of him, so he was more like a rat aimlessly wandering around in a little cage. This is the stuff that conditioned learning attacks.

Just let me quickly run through some of the more noteworthy studies that have been done. When you can remove a schizophrenic from a ward and have him work pulling the levers on something like a vending machine in order to watch another schizophrenic feeding milk to a kitten with an eyedropper, you get some consistent patterns of performance out of this person we call a patient. He will work because work is required to pull a lever which turns on the light so he can watch the other patient feeding the cat. We don't ask what is going on; don't ask what is he thinking. Someone has gone so far as to label the behavior of this patient as autistic behavior. So if one wants to shape a person into autistic behavior, well then we seem to have a method by which we could put these types of responses into the person's repertoire.

I was in Florida last week, where one of my students has taken over the lab we started together. He no longer sees children in the clinic; rather he talks to the worker over the phone and she reads to him the data she has collected on the child. He plots it while she talks to him and then he prescribes what in the old days we would call remediation or tutorial lessons, or in some cases therapy. One of the problems they were working on was with an educable mentally retarded person who was having difficulty with the multiplication tables of 8; they found that he only had trouble with them beyond 8 times 4. Some of us may have that trouble too. What he suggested on the basis of the data via telephone was to imbed arithmetic problems of 8 times 4 and above in a work sheet in which there were easy multiplication problems, and the teacher then started counting the number of 8 multiplication problems that the child learned per line of problems on the page. Now this is the type of observation I am talking about. It is not observation of what is the child doing or how much arithmetic he has done this week; it is talking about the same type of control that the scientist in the natural sciences has discovered and is able to exercise over phenomena he works with.

Basically, this is what operant conditioning is aiming at: precise control over responses.

I was intrigued by some of the comments made by previous speakers. I can relate to a statement Dr. Bishuu made at Illinois: Let's do away with the concepts of intelligence and mental ability. Let's look at the child in terms of an inconsistent environment; that he was never in a particular environment long enough to work out consistent responses to that environment. The punch line is that Bishuu is talking about something called visual discrimination in this particular case. He says instead of looking at what we call the hyperactive child or brain damaged child with poor perceptual motor skills or poor visual discrimination, look at him in terms of an environment which will not stay fixed.

4. ENVIRONMENTAL DESIGNS

Chairman: Mr. Roland H. Ludtke, Assistant Superintendent,
Austin State School

Speaker: Mr. Thomas W. Shefelman, Associate Professor,
School of Architecture, University of Texas

Mr. Shefelman opened his presentation by stating that there had been requests beginning in the summer of 1967 from Austin state school staff for assistance in programming and development of design criteria for facilities for new programs. As a result of these requests a project was undertaken by some of the fourth-year design students. Designated an "Awareness of Self and Space Room," the project involved the augmentation experientially of an existing "large motor activity room" in one of the trainable school buildings at Austin state school.

Mr. Shefelman's presentation included a taped and photographed record of an interview with Irma, a 14-year-old blind girl at Austin State School for Retarded Children. He indicated that the record was one of the many ways used by the School of Architecture students for gaining insight into the environment of children and staff in institutions for both blind and retarded children. In the interview Irma commented on her environment and revealed her interaction with it: part of the environment is its people, a part of it is place, and some of it is things. She associates inside of the building with noise and outside with peace and quiet. The drinking fountain is a favorite spot and it is a matter of pride that she can always reach it. Her comments about her seeing peers revealed the need for choice--choice to be with them on some occasions, away from them at other times.

In speaking on environmental design Mr. Shefelman continued: "Through considerate, resource, and appropriate design we make the most of our environment and (a) conflicts resolve into reinforcements, (b) frustration into opportunities, (c) choices are increased, (d) our own fruitful interaction with the environment is increased.

"In most creative human conditions the design process is nearly continuous and involve (a) long-range projections, anticipation, and provision; (b) spontaneity and extemporization; (c) design, doing, testing, revision, design, doing, testing in continuous cycles; (d) development of alternatives and choices.

"The roles of the School of Architecture Design during the past school year can be grouped into roughly four categories:

1. Developing dialogue with State School staff, Special Education people, psychologists, and perhaps, most important, even when nonverbal, a dialogue with the children.

2. Using this situation to develop our objectives in realistic, truly human terms.

3. Helping staff and consultants see and state their problems in terms of their physical environment, helping them seek and find opportunities for getting more out of their environment (or facilities), enabling them, incidentally, when the opportunity and funds become available, to have formulated better objectives and ways of communicating them to appropriate state agencies, architects, and so forth. In fact, they may know better when and where to ask for such help.

"The class ranged widely, even if inefficiently, in the field of environment and public facilities for handicapped children, but the experience has (a) broadened and deepened us all; (b) taught us more about human beings in general; (c) taught us more about the design process; (d) taught us more about the learning process itself; (e) and more about the role of one's sensory system play in human development and life by learning what happens when part of it fails or is impaired."

Mr. Shefelman continued: "Out of much sowing last fall a few blossoms have emerged this spring. One of them is presented here this morning." He then introduced four students, Messrs. Cary Carothers, Ronnie Rogers, Ray Goodman, and Paul Jurocka, "who powered this project to completion with their motivation, resourcefulness, physical energy, and skill. They literally moved into the schoolroom and began to design and build. They certainly demonstrated a thing or two to both the state school and to me."

The report of the project continued with three carousels of slides operating simultaneously, using one half of the auditorium side-wall as a wide screen. The first and third carousels showed colored slides of the retarded sighted children in the large playroom. The second carousel carried black-and-white slides of the children who were blind or severely visually impaired. Some of the slides were even blurred to give an impression of poor vision. Superimposed upon the showing of the slides was a tape made of the natural sounds of the playroom, the screaming of the children, the argumentative voices, and sometimes even the silence. There was nothing posed or rehearsed. These were slides of actual activities and situations.

The impact of the pictures upon the viewer was one first of confusion, with children moving around in crowded quarters, and second, of bewilderment, especially for the child who was blind moving among the children who were sighted. The pictures carried a message of how difficult it must be for a blind child to know *where* he is in space in this kind of a crowded environment and how taxing it must be for him to have to sort out and identify the sounds in his immediate environment.

In addition to the audiovisual presentation, models showing effective ways of changing physical space were available for examination. These stressed the importance of variety of shapes and textures.

Mr. Shefelman concluded saying that credit should go to Dr. McCann, Psychologist, Mrs. Margaret Oliver, Principal, and Mrs. Sue Hinajosa at the Austin State School for inspiration and guidance as well as to Mr. Doggett and Mr. Ludtke, Director and Assistant Director of the State School, respectively. He also wished to thank the Container Corporation of America, U.S. Plywood and the Pittsburgh Paint Company for their generous donations of materials.

Speaker: Mr. J. Eugene McKee, Director of Community Facilities Construction, Texas Department of Mental Health and Mental Retardation

You have now heard and seen what a university, its faculty, and students can do in relation to solving problems in the design of environment for handicapped children.

You have also heard how a practicing architect proceeds in obtaining an understanding of the problems of handicapped persons to help him in the design of facilities for those persons.

Now, since I am perhaps more a member of your family than either of the other two because of my five-year association with the Texas Department of Mental Health and Mental Retardation, let me tell you what *you* can do. The project at hand may be an entirely new and large institution or it may be as small as the rearrangement or redevelopment of a single room.

First, select an architect very carefully. It may not be possible to secure the services of an architect for a single room, but you may be surprised. It may also be possible to get some very able help through a nearby school of architecture. If the facility that you plan to rework or to construct is of appropriate size, then you should interview several architectural firms. Ask each of them how they would proceed with the design of the facility you have in mind.

You should also visit other facilities--see what other people are doing to provide facilities for the care of those for whom you are concerned. You should talk to the "doers," the "caretakers," those people who are making the beds and cleaning the floors and attending directly to the patients or persons receiving these services.

After you have done these things, you should determine some of the *specifics* you want to achieve in the facility. You should transform ideals that have been floating around in your mind into actualities. Then you should designate an *editor*, a person with knowledge, experience, and leadership, who can review the work that has been done, the research that has been performed, and the discussions that have been conducted in the development of the program and schematic design for the facility. Have that person make final decisions about each and every aspect of the proposed facility.

Finally, because it is not possible to achieve complete understanding between the operational program writers and the architectural program writers, you should follow through in the work of the architect to make sure that he has understood what you want to achieve. You should, in your mind, walk through each of the designs that he has prepared for your review: open the doors, look down the corridors, and feel around the rooms. For, while the task of designing a major facility may seem insurmountable to you, do like the architect does, take one step at a time. You'll be amazed how simple and effective you can be.

Speaker: Mr. Arthur Fehr, Fehr and Granger Architects,
Austin, Texas

In this discussion of "Environmental Designs," I wish to relate to you some of my experiences with children not classified as normal. I will talk about a juvenile home, a deaf school, the Austin State School, the Brown School for Exceptional Children, and the State Blind School. I am not a specialist--just an architect whose specialty is architecture.

Architecture is really an easy profession to understand. You learn how your client will move or respond, and then you build a shell around him. The environmental design we will talk about is the backdrop in the spaces in which we live in our homes, in our schools, in our business, and the like.

When I was a draftsman-designer in the early thirties in San Antonio, our office received the commission to do a new Juvenile Home. This was a functioning agency. So I set out to learn more about the existing facility. Much to my amazement, I found a rather square three-story structure in the middle of a farm, with heavy metal bars and iron mesh at all openings. To get into the place you passed through one locked area into another locked area, and after opening a third locked door there were the children who were being "corrected." The little boys were happy to have a visitor. Everyone asked the matron to let them show me their home. Four boys about ten or eleven years old grabbed hold of my two hands and became my guides. I could not make any notes. These children were not criminals: they were from broken homes or just some little fellows left on the street, and this led to their arrest for some offense. I felt they were starving just for recognition and affection.

How did we design a better environment? We came up with a hacienda idea: open courts protected for play areas, arcades toward the court side, rejas (ornamental grilles) on exterior windows, open, well-lighted dining area. The result was better behavior and fewer runaways: a happy child being readjusted.

The Fifty-third Legislature passed a bill to improve the physical plant of the State School for the Deaf, which was nearing its one-hundredth birthday. This sounded like an exciting challenge. So Fehr and Granger applied for the commission, along with about seven other firms. Shortly after our interview, we were notified that we had been commissioned. We knew little or nothing about deaf children, so I went to the school and said: "Consider me to be a six-year-old deaf child. Let me register and learn what you do with folks like me." For two weeks, I practically lived with the children, attended classes with them, ate with them, played their games, and, most of all, I remember the rhythm dancing with one hand on top of a grand piano. These were such delightful children, with only a communication difficulty. The housing was similar to that of the juvenile home previously mentioned. Both facilities were rather crude: no locker space for clothing, 25 to 30 children in a bedroom, heavy mesh on the windows, three-story buildings, wooden stairs, mass feeding.

There was a superintendent with ideas and receptive to all sorts of exploratory thoughts. As we kept up our studies and suggested a residential-type community with 16 to 24 children per cottage, the idea jelled. Each cottage self-sufficient, with house mothers, kitchen, dining room, living room, and two children to a bedroom with desk, closet space, and dresser space. The school was designed in a campus-type plan, with clusters of four classrooms placed in a checkerboard fashion with open covered walks. It appears to have been a very successful solution, this new environment, so through the years we watched the change-over.

From the Deaf School, the residence idea got across town, where we built several cottages for pregraduates at Austin State School. Here retarded children were taught home living by being in groups of 24, with three to a bedroom. Each child had a closet for his possessions. Each residence had a living room, dining room, and kitchen where the children helped, just like at home.

Along with this we were commissioned to design a facility for 100 children up to age 14, who would never develop good bathroom habits. Here, again, I registered as a retarded child and told the staff to give me the works. They gave me a full day's tour of the school. That night I was physically sick. I had no idea that such things existed in Austin. Monument-like two-story structures that were designed from the outside inward, with nothing really working. The bedrooms were crowded; the playroom inadequate; stairs were steep; nothing appeared to be in the right place. The Rube Goldberg washtub-spray-water closet combinations to help in the cleanup were ingenious attempts by someone on the staff. "There's just no plumbing fixture for our problem!" We designed one out of stainless steel, and this has become a rather common fixture in many of the Texas schools for the retarded.

In all these schools or homes, I have met some of the finest, most dedicated people, working to make a helpless child's life happier.

One of the most gratifying compliments ever paid our firm was Dr. Jackson's statement after the Texas Education Agency had selected us for the Deaf School work: "You said you wanted to do something for the children--help them live a better life!" Every architect should say this.

Along came the Brown Schools for Exceptional Children. They had started in a humble way as a private enterprise in makeshift quarters. Now they were confronted with a group of parents who said, "Our children will never be able to live at home with us. We want them to be with their own group and live in a country club setting." This did not mean money unlimited.

Fortunately, the Browns came to us and heard of our work with the deaf and the retarded, and decided to add us to their team. Rugged, wooded land northeast of San Marcos became the site. The more-or-less level ground became the administration portion and school, along with an adjoining kitchen and dining hall. The dining hall overlooked the swimming pool. The living quarters were build along an edge of the hill overlooking the valley. Here the children could observe the interstate highway over a mile away, the railroad trains, and a valley changing in color with the sun. There is an openness to the campus plan, with adequate indoor and outdoor play facilities. There is color to give the community a festive appearance. The children seem to enjoy it.

We have watched the Deaf School for a little over ten years, and we know the student there today is a happier child than those who had to attend the old facility. I see Mr. Grace, the superintendent, in this audience, and I think he will say this is a correct and true statement. All our designs had to be completely functional, because budget limitations would never permit any feature not absolutely necessary.

Through color and textures beauty is incorporated to overcome some of the severity.

Recently we designed a 64-student complex for the School for the Blind. It is now under construction. This is for smaller children who will live in groups of 16. Each quadrant has its own living room, and there is one common dining room in the center. The living rooms have their cabinets for games and play toys. The dining room and the four living rooms can be opened into a common room for parties.

Four years ago, our firm was employed by the Texas Education Agency to do some long-range planning. We researched future needs for the Deaf School and the Blind School, and we entered an area of which little is known: training facilities for the multiply handicapped child. The administrators, teachers, and everyone connected with the work in Special Schools were most helpful. This book I hold here is full of dreams that may come true some day. For example, a diagnostic center, educational building and multiply handicapped center with cottages, administration, infirmary, and so forth. There is little in print on this subject; it's a new field where experimental programs are being developed.

An architect must look at what is being done when he studies a problem. Most of all, he must talk to everyone, ask many questions, and be a good listener. You have been good listeners, and I hope my experiences in allied programs may give you ideas how one can achieve better environmental designs.

5. AN OVERVIEW OF CARE AND MANAGEMENT

Chairman: Mr. Randolph Greene, Supervisor of Staff Development, Texas Commission for the Blind, Austin

Speaker: Mr. J. R. Pope, Director, Unit for Blind Multihandicapped, Murdoch Center, Butner, North Carolina

In speaking about care and management of blind retardates, I shall assume that we are discussing visually impaired individuals whose diagnoses indicate institutionalized custodial individuals. In many cases the meaning of custodial care implies that the child is fed, clothed, and housed with someone caring for his total needs. Let us consider, then, that the custodial resident is one whose chances of leaving the institution are greatly limited. When the child comes to the custodial institution, particularly those supported by state governments, they are placed in living situations with large numbers of other totally dependent individuals. The overcrowded conditions and the extreme shortage of cottage parents permit little opportunity for the individual to grow and to develop. This is mainly because there is much deprivation of personal attention. These children have some potential, but there is little opportunity for it to develop. Obviously, this is the fault of no one in particular. Institutional administrators are beginning to recognize the need for additional personnel and facilities to meet the needs of these institutionalized individuals, but state legislative bodies have yet to act in a manner which satisfies these needs. The understaffed cottage parents are unable to help these children to the extent they would like. By necessity, they develop the easiest, most expedient methods of management which are not always in the best interest of the child.

Throughout the United States large numbers of blind people have been placed in state schools and centers for mentally retarded where they have had little or no training opportunities. The individual has very little to occupy his time, except to participate in self-stimulating activities such as rocking, eye gouging, self-destructive behavior, masturbating, and so forth. His days are unstructured for the most part with no meaningful or purposeful activity. His day is one of total free time. We believe that the pathological aspects of leisure are tremendous, unless the individual can participate in meaningful activity. In the custodial units of state schools and centers we see results of this type pathology. The most alarming is dehumanization and/or institutionalization.

Well-rounded recreation programs become extremely important adjuncts to care and management programs. Recreation provides the resident with an opportunity to engage in meaningful activities, for life to be more purposeful. Aspects of dehumanization are decreased. Self-stimulatory activity is replaced with activity which involves the resident with an adult figure and with peer groups. We have observed blind children participating in recreation situations where constant stimulation is provided. While engaged in activity, the child participates; but when the constant stimulation is curtailed, the directed activity of the child ceases. The child, in many instances, reengages in self-stimulatory activity. This, perhaps has something to say about the length of time required for the individual to progress.

The institutionalized blind child requires exposure to many experiences from which he learns to use leisure time. Orientation and mobility are, obviously, concepts that have to be developed. When the child knows where the toy cabinet is, he can find pleasurable objects for himself. If a child is familiar with the playground, he may be able to use its equipment under little supervision. The child becomes independent to this extent. Cottage parents and recreators can make these experiences possible by working with each child at some given time.

Each experience should be one which has learning and/or developmental aspects. Most institutions for the retarded have no specialists to provide training for the blind. There are no orientation and mobility instructors, special education teachers, recreators, rehabilitation therapists, and other personnel of this nature. In many cases, there are only cottage parents. The limitation of these personnel do not necessarily mean that the child cannot receive some learning experiences. Under good leadership where there are only cottage parents, children can have some recreation experiences. If a recreator is available, he and cottage parents should work out a recreation program to meet the needs of these children as best as they can with the resources they have. The program may be meager; but, at least there is an effort to work toward humanization.

As we talk about the care and management of blind retarded children, we use the same ideas as we use in caring and managing sighted retarded individuals, or for that matter any child. One difference is that the blind child has one or more additional handicaps to contend with. The needs of the blind child are the same as other children. The blind child needs to have the opportunity to develop as other children; for the blind retardate to develop, he needs to be loved, to be understood, and to be given the feeling of individuality. These needs are basic to any relationship. The medium of play is very important, but its concept has many connotations. Play is used in making new discoveries, dealing with inner and outer conflicts, and establishing social relationships with others. The sensory development of the visually impaired child is deprived to the extent that play is not utilized as it is in sighted children. The young sighted infant is able to distinguish features within the first few months of life. He can receive an image of mother and other things within his environment, such as the bottle from which he is fed, toys within the crib, and parts of his own body. One observes, then, from the very beginning the importance the infant places on the use of vision in making new discoveries in a "playful" manner. As the child grows, he continues to use vision in exploring and learning about himself and his environment. Learning continues where the results are gratifying and rewarding; this is a continuous process throughout life.

Without vision, there is loss of sensory stimulation which is important to spontaneous investigation and exploration. The remaining sensory devices have to be utilized to the fullest extent to compensate for visual loss. We use a generalized principle that the environment is introduced to the child through the remaining senses, which I am sure is not new to any of you.

Recreation contributes to the learning process. A broad variety of experiences need to be made available to the children through recreation situations such as water play, playground apparatus, hikes, rides, parties, picnics, story telling, assorted toys, skating, trampolining, games of low organization, music, dance, arts, and crafts. At the Unit for Blind Multihandicapped Children, where approximately two thirds of the children function within preschool classifications, these kinds of experiences are made available. Most importantly at this facility, the child is scheduled daily in small group recreation situations where the recreator is engaged in an individualized program with the child. The child learns his way from his living unit to the recreation area; he learns to identify the particular recreator; he develops some understanding of when and where recreation occurs. Thus, the child is developing concepts of person, time, space, place, shapes, and sizes. The purpose of recreation is for the individual to be able to incorporate play in his functional system and to be able to utilize this skill in life experiences.

In conclusion, recreation plays a vital role in the management and welfare of blind retardates. For the institutionalized retardate, it may certainly be the *only* mode of participating in meaningful activity where joy and pleasure are derived. Those about whom we are speaking are not capable of obtaining gratification from life as do the so-called "normal person." We live in a society which provides us with certain rights such as work, worship, political choice, wholesome leisure, and so forth. We are esteemed with feelings of respect, personal dignity, and pride. Often these feelings deprived in handicapped people. The least we can do is provide the institutionalized blind retardate with an opportunity to enjoy life, even if these joys never exceed the fundamental pleasures associated with play.

Slides were presented showing the physical facilities and program at Murdoch Center.

Speaker: Mr. J. M. Woolly, Superintendent, Arkansas School for the Blind, Little Rock, Arkansas

The interest in the blind child who functions on a retarded level throughout the United States indicates that if we have the tune, as well as the words, for this group in our society, both the quantity and quality of service will rapidly improve.

At the Arkansas School for the Blind we have had the experience for many years, as did every other residential school, of having appear on our doorstep the occasional child who was blind and seriously mentally involved as well. As did everyone else, some of these we accepted, others we had no recourse but to refuse because we had no facility, staff, or program for them. Some got a few years' involvement in a program which did not and could not meet their needs. Not only did these few children receive a most inadequate education, but they received very little of the necessary social and personal skill development.

In the early 1950s these numbers began to increase and continued throughout the decade to plague our consciences with their appearances. We began about 1953 to search for a way to provide needed programs for these children; however, it took a full ten years before a physical facility and a staff could be provided. In 1963, we were able in a very meager sort of way to begin a program on the campus of the Arkansas School for the Blind in a facility in which the total needs--that is housing, food service and education needs--could all be handled in the one building.

Needless to say, the recruitment of a staff with preparation in the area of blindness as well as retardation was impossible. Nevertheless, we did accumulate a staff including a director, five teachers, a psychologist, and five houseparents and the necessary food service employees to begin a program. All of the staff had either training or experience with mentally retarded children, but none had any involvement with blind children.

The first year we admitted fourteen children to the program, some of them being transferred from the regular classroom operation. The second year we felt a little more confident of aims, goals, directions, and so forth and admitted three or four more children. During the third year the number was increased to 25, the fourth year to 30, and throughout this academic year we have had 36 children enrolled--29 of them being resident and 7 being day pupils. This is the absolute maximum for the physical facility and the staff which has been enlarged only by the addition of one teacher aide. I neglected to point out earlier that the health service responsibility was assumed by the regular health service staff. The gymnasium and pool were used, and continue to be utilized for physical education activities. Other existing facilities are used as needed in the program operation. As boys and girls who are enrolled in the program have grown older, some have been scheduled into Industrial Arts or Home Economics programs and are handled by members of the regular classroom program staff.

During the first three years of operation there was far more staff turnover than we would have liked. However, only the emotionally strong, well-prepared teacher can survive in this environment, it seems to me. We now have a staff which includes a supervising teacher whose Master's degree preparation is in the area of mental retardation, and who now has three years' experience in directing this program; a male teacher whose preparation includes a Master's degree in education of the blind, and another in mental retardation; another teacher has basic preparation in Physical Education; another whose Bachelor's degree is in music education and whose Master's degree is in mental retardation; another teacher has a Master's in mental retardation and experience in an agency for nonphysically involved mentally retarded children. Our speech therapist has several years' experience as a classroom teacher of mentally retarded children in a resource room, as well as a Master's in speech therapy. Our psychologist now spends no less than 40 percent of his time working in this program. In addition, the staff is complemented by the services of the school social worker and the guidance counselor and mobility specialist.

The houseparent staff of five is directed by a head houseparent who has been with the program since its inception and is deeply involved with the program of personal and social skills building. It should be pointed out here that this program operates ten calendar months in contrast to the operation of the basic classroom program which operates nine calendar months, or a total of 180 days of instruction.

During the month of June many outdoor experiences, including a full week of day camping, are developed.

I would like now, finally, to get to the assigned topic--that of Care and Management Procedures. I would like to attempt this by discussing with you some of the individual children's strengths and weaknesses, and how the staff has moved to build on the strengths and remove some of the weaknesses.

When entering school some totally blind children are almost completely dependent upon their parents. Diane, until this fall, had spent much of her time sitting on her father's lap. She was not toilet trained, and when she went to bed at night she took care of her entire needs as an infant would. With the help of the pediatrician she now takes care of her toilet needs before retiring. He prescribed suppositories which were found to be effective if given right after school, about three or four o'clock in the afternoon. She is allowed to lie down at this time until she is ready to use the bathroom. After this regimen was followed for a number of weeks she was able to take care of her entire needs without further medication. She is also now able to find the bathroom at night as needed without aid. A light sleeping pill was also given Diane to aid her in sleeping the first few weeks because she often got up and played in her room for some time during the late hours. She now sleeps without medication and there has been no recent evidence of playing or disturbing others in the middle of the night.

The other children wanted to play with her as if she were a doll. They led her around and held her as if she were a life-size duplication of the latest gift from Santa. The staff had to be firm with the other children, forbidding them to baby her and lead her everywhere she went. She received special help with orientation problems and was taught the important locations in the building and was made aware of the sounds to which she should pay attention. The staff encouraged her to walk unaided in the building where she lives and attends classes, and to travel alone in the playground. Instead of sitting in a chair on the playground, afraid to move, she now swings with the other children and finds her way around. This is not to say she never gets confused, but generally she finds her way to her classroom which is up one flight of stairs. Diane, who was six years old when she came to school in September, is an exceptional case because most children are toilet trained and are somewhat more self-sufficient than she.

Burt is a day student, but his hyperactivity and general irritability made it a temptation to refuse him. We strongly recommended that the parents take Burt to the Child Guidance Clinic at the University Medical Center where medication was prescribed to help Burt become more amenable to teaching in a structured situation. Slowly he learned to sit still for progressively longer periods of time, and now, in his second year, he is learning braille. He is very proud that he has graduated from the "Readiness" group where he spent the first year and a half and is now in a class with the "big" boys and girls. Burt, at ten, is still no ideal pupil. He becomes very impatient when things do not happen as quickly as he wishes, and any change in his routine is a traumatic experience, not only for him but for the staff. He also slips occasionally and uses unacceptable language among the other children, but this happens less frequently than in the earlier months of school. He visits the Child Guidance Clinic regularly and his medication is modified to meet his changing needs.

Roger, Joy, and Ruby are also regular visitors to the clinic, where one resident doctor attends them and prescribes medication for their hyperactivity. Since securing medication is a financial problem for which we are not yet budgeted, and is totally impossible for most parents, much of our need in this direction is supplied by this doctor who secures samples from pharmaceutical companies and makes them available to us for these children. Both Joy and Roger have had tonsillectomies and adenoidectomies this year after being seen by the audiologist and otologist who recommended the procedures. Until this was accomplished Joy often missed weeks during the winter because of sore throat. It required the help of a Community Service Agency in her home county to persuade the parents to allow this surgery to be accomplished. Financial assistance was also furnished by this Community Agency. Roger's T & A was made possible by the Crippled Children's Division of the State Department of Child Welfare. He is not only severely visually impaired as well as mentally retarded but he also has rather involved cerebral palsy. We are currently seeking a way to secure physical therapy for him as he seems to be regressing somewhat in his mobility skills. Roger is now eight years old.

Mickey did not talk when we visited him in his home last year. He used grunts and little noises to make his needs known but there was no recognizable speech. After we got involved in the situation, secured a hearing evaluation and were successful in securing a hearing aid for him, he was so pleased to hear the sounds around him that with the help provided by the speech therapist since September he now has somewhat independent speech and has added many words to his vocabulary. Certainly his speech needs much improvement, but the progress to date leads us to believe this will come quickly.

When he was first referred, we found Mickey's mother meeting his entire food needs through baby foods because he refused to chew any solid food. As he was enrolled, and as the year progressed, many conferences were held with Mickey's mother. Another mother shared her experiences while teaching her daughter to eat. Soon Mickey began to eat. He did so because his mother acquired enough support to become determined to withstand the crying and yelling that accompanied her refusal to mash any more food. With surprisingly little mayhem Mickey began to chew solid food and another breakthrough was made. It had been determined years earlier there was no apparent physical reason that it would be impossible for Mickey to chew. He simply did not want to do it, so his mother continued to mash all solid foods for him. Mickey is seven years of age and has partial vision. He comes to school, as does Burt, for only a half day. His mother reports that since he has been attending school she can now allow him to play outside with other neighborhood children. Just because Mickey has a visual problem, a hearing difficulty, and is mentally retarded, he is not ignored at school if he hits or agitates another child. He is not different to us and he must respect the rights of others as all of the children do. This makes him more acceptable wherever he goes. No one hits a child, chokes another child, even if the other is a little fellow with multiple handicaps. After grabbing a few of his classmates and several members of the staff and attempting to choke them, Mickey soon learned from a firm staff and a group of children who are warm and acceptable but tolerate no nonsense from their peers, that one simply does not do that sort of thing.

Clay was more like a little frightened animal than a little boy when he entered school. Some of his behavior was bizarre and his nose was running constantly. Whoever had him in charge always needed an abundance of tissues on hand. After a visit to the doctor it was found that Clay had an allergy and medication controlled it. Now he is far more acceptable to others with a nose which is more or less dry. In his second year at school, Clay is beginning to read braille. He has moved from the "Readiness" group which is an evaluation and "learn to sit still for awhile" situation for very young children. He is quite proud of his new status among the older children, and has surprised his teacher with a very serious attitude toward his classroom work. Clay will be nine next month.

Jerry is an older boy, almost sixteen. He has epileptic seizures which are controlled with medication. If teased, he goes into a rage, crying and yelling at the injustice he feels he has received. To meet Jerry's force with anger is courting disaster. Quieting Jerry can be accomplished by using a calm approach, and usually he needs to lie down for a while after an outburst. His teachers are alert to Jerry's needs, and if at any time he appears to be on the verge of a seizure he is allowed to lie down and relax. Of course Jerry has tried to use this arrangement to escape work. When his sincerity is doubted his teacher simply states that his present assignment can be his homework, at which time, if Jerry is malingering, he will suddenly feel better and go on with the work at hand.

Sammy is a little six-year-old girl with cerebral palsy. She came to school a few weeks ago from a private school where she had attended classes for two years. This school constantly reported to her parents that she did not talk at school or participate in any activity. Just prior to coming to us she had pulled her chair up to the table where the other children were, and this was welcomed as a very great achievement. Contrary to her past behavior, Sammy has talked to everyone since the day she first came for a visit. Her mother states that Sammy always talks at home, and if anything, she has had trouble getting her to hush. We agree with mother. Why she talked immediately when she came to us, no one knows, but I suspect it was partially due to the warmness of the other children who spontaneously grabbed her by the hand and led her around the school. No one had told them to do this. Certainly she is not perfect, however, for she has her problems conforming in the classroom. Her father recently reported to the administration that his daughter had been swatted across the seat of her pants, and he was most appreciative of this because it was the first time anyone had paid that much attention to her.

I could go on telling the problems and our approach to them in many other children. Charlie has had a change of environment when out of school. Surgery has been secured for Phyllis. She can now walk erect. Carter has received and has been instructed in the use of a hearing aid, and on and on. However, I think we have detailed enough of these situations.

It is our very firm belief that any progress we may have made in providing basic educational opportunities, growth in personal skills and the development of social competencies has been due to the warm, understanding, friendly attitude which the total staff has exhibited. I am certain that it is nothing new to any of you when I say that the challenge of providing for these children is at times almost beyond human endurance, yet we are convinced after these few years' experience that a great many of these boys and girls can lead independent, happy, contributing lives. If we are to move to meet the needs of the growing numbers of multiply involved children throughout the United States, the best efforts will be required. Administration, faculty, and staff will be tested to the utmost. There can be nothing mechanical about the process.

On that note, let me close as I began, with an only remotely relevant story. It is a story of an Englishman who came to this country to study our intensely technological society. One day he spent the entire time in an IBM facility. From the beginning of the visit to the end, he saw row after row of motorless machines with blinking lights disgorging coded data at the press of large buttons, attended by only one or two human beings. At the end of the day, dizzy with mechanisms, he got on the elevator to go down and say farewell to the management. The elevator was crowded. All occupants were men except for one good-looking young woman at the rear of the elevator cab. The Englishman stood at the front, facing the door. As the elevator descended, all was quiet, then suddenly the silence was pierced with a high scream from the young woman. Without turning, the Englishman was overheard to say, "Thank God there are still some things done by hand."

Speaker: Murdina Desmond, M.D., Associate Professor of Pediatrics, Baylor University Medical School, Houston

Dr. Murdina Desmond, Associate Professor of Pediatrics, Baylor University Medical School, was not able to be present as indicated on the program. However, she generously sent an abstract of her paper which, with her permission, is included in this compilation of proceedings.

1. Considerable knowledge has been gained in recent years concerning the natural history of some of the disorders associated with visual impairment in young infants:

    a. *Congenital rubella syndrome*. This disease is now known to be a chronic viral infection characterized by persistence of virus for variable periods in throat and neurosensory tissues. Both visual losses and hearing losses may be progressive. Encephalitis is often present. Growth is slow during intrauterine life and continues to be slow during infancy. The concept of "fixed lesions" is no longer held. Close medical supervision is mandatory during infancy.

    b. *Cytomegalic inclusion disease* is an intrauterine viral infection involving brain, liver, kidney, and eye (chorioretinitis). Cerebral involvement is usually present, and the infant may excrete virus for periods of years.

    c. *Retrolental fibroplasia*. This type of visual impairment is seen in the small, immature (35 weeks or less gestation) infant as a consequence of oxygen toxicity. Recently, it has been shown that concentrations of oxygen which are associated with spasm of retinal vessels may also produce diminished blood flow within the brain. Neurologic handicaps are more common in these children than in premature children of comparable gestational age without retrolental fibroplasia.

    d. *Galactosemia* is a familial metabolic disorder characterized by an inability to metabolize galactose. Children with this disease may be helped by adherence to a galactose-free diet during infancy.

2. The focus of educational effort has shifted to early infancy. Present-day thought suggests that cognitive development during the first year is of paramount importance to the child's educability and eventual outcome. If communication skills do not develop early, the child is at greater risk for autism and mental retardation.

3. Medical needs and educational needs (a hopeful home climate for learning) occur at a period when parents and families are struggling most intensely with their feelings and concerns. Emotional equilibrium is not easily achieved in such circumstances.

4. New approaches providing comprehensive medical care, family emotional support, financial support, and early development of existing communication skills are urgently needed.

The approach to the infant must be interdisciplinary and well coordinated.

The newer knowledge of these disorders suggests that the medical, emotional, and educational problems are indeed complex and difficult. It also suggests that, if coordination of effort can be achieved, there may be greater hope for the future of the child.

Speaker: Dr. Gloria Cochran, Mental Evaluation Clinic, Texas Children's Hospital, Houston

Dr. Gloria Cochran was in the audience, being en route to Houston from a medical meeting in which she had presented information pertaining to the rubella study, of which Dr. Desmond was formerly the first director. Dr. Cochran graciously offered to share with the group some of the information which was emerging from this study and showed slides indicating prevalence of defects in 100 cases of children born of mothers who have had maternal rubella. From this data it was evident that the major impairment of the postrubella child is apparently a hearing defect. Visual defects are present in about one half as many children. Motor defects are present in about two thirds as many as have hearing impairment. A combination of visual and hearing impairment is present in approximately one third as many children as have a hearing loss or in about one half as many as have visual impairment alone. Dr. Cochran indicated that one of the main purposes of the study was to assess degrees of developmental delay in the children and to assess degrees of sensory impairment.

Dr. Cochran introduced the caseworker who had been seeing the parents of these children, Miss Frances Kelly, who spoke briefly on the series of parents' meetings which had been held under the auspices of the clinic, and about some of the techniques used in social casework treatment. She indicated that many of the traditional modes of treatment had to be modified or adapted in working with these parents. For example, the worker may have to be more aggressive and seek out the child and the family, often going to the home of the parent to observe the child and counsel with the family. Again, Miss Kelly stated that persons who are working on this special project concerned with postrubella babies are encouraged by the results of the multidisciplinary approach in serving these children and particularly encouraged by the results of their efforts when they are able to reach the children at an early age.

The teacher who works with these children in a "school" setting, the children being of preschool age, was also introduced and spoke most enthusiastically of achievements which the children have made in a social group situation.

In summary, though the data present a picture of children with a multiplicity of defects, those persons who are working most closely with children and their families are encouraged by the development of the children and the picture of the future for the child is often more encouraging than medical data might indicate.

6. EDUCATIONAL AND PSYCHOLOGICAL MANAGEMENT

Chairman: Miss Janie Fox, Consultant, Visually Impaired, Division of Special Education, Texas Educational Agency, Austin

Speaker: Mr. William J. Wood, Director, Blind Services, Clover Bottom Hospital and School, Donelson, Tennessee

The problems created by the presence of the multiply-handicapped blind in the institutions for the retarded are not new ones. Statements similar to this have been used by many in recent years to introduce articles on various categories connected with studies and programs concerning this minority group found in most of our institutions. And why not use this type of introduction? In my reading, I have yet to find any record of the specific date that the first case of this nature was reported. This, in itself, would make an interesting study but one of little value to present-day efforts. It seems to be a general consensus that this type of impairment has been present since ancient times, and I have no reason to doubt this. Why has it taken so long for this group to receive the attention that it is presently being shown? One of the obvious answers is numbers. Another is time. There is no need to cite here the increase of the incidence found in this group. It is sufficient only to say that it is on the increase; and, due to the recent advances made in medical knowledge resulting in higher birth survival, the unforeseen results related to modern drugs, and the rash of birth defects caused by known and unknown causes, there is no reason not to expect an even greater incidence of this group to be found in the future. Finally, it must also be assumed that the population is increasing at an accelerated rate, which means that if the percentage of such occurrences remained the same, there would still be an increase in the total number.

It is not completely correct to state that no attention has been given to this group until recently. There has always been the concern of the parents of such persons, and there have always been interested and compassionate persons who have offered assistance to these people. At Clover Bottom, years before any type of organized program was established, there were those interested in this group. One, a teacher of normal blind children, volunteered part of his spare time in reading to the blind residents and attempting to teach individuals when possible. There have always been a few of those in charge of the care of the residents on the wards who showed particular interest in the blind; but because of the tremendous number of residents under their supervision, they were only able to provide for the basic needs of the blind residents. I feel that it would be justifiable to state that, in general, for many years these were a forgotten group in most of our institutions. However, as I stated in the opening lines of this paper, in recent years there has been an increase in interest in the multiply-handicapped blind retarded. Along with this increased interest, there has also been an increase in services and programs for these blind persons. This is most fortunate, but we must realize that this is only the beginning; and, years from now, scholars will probably look back at our efforts and expound on the primitive methods now employed. But, the important thing is that a beginning has been made; and, regardless of how primitive it may be, we are laying the foundation on which to build future programs and, hopefully, posing questions that are so important in nature that they will serve to stimulate future progress.

At present, we find many different approaches to the solutions of the many problems facing us. Some programs are aimed at the training level with emphasis on self-help skills, while others are primarily interested in the educational aspects. Many of those working in the same general areas find themselves in conflict and disagreement with those of different approaches. There is some disagreement in the final goals. Such conflicts are not unhealthy to me because, at the present time, I believe that at this stage we need such variety to explore all aspects and methods. I feel that all these approaches contain certain strong points as well as some that are not so strong. But, I think the time is quickly approaching when we should begin to compare and discuss together; and, from such meetings we should start to develop basic concepts on which to build the body of knowledge still lacking at present. Never would I be in favor of any type of program that did not allow for experimental efforts which would hopefully result in the improvement of methods and procedures. I am sure that along with the many valid methods we have developed, all of us have made errors. By our comparison of ideas and practices with the subsequent development of a basic body of knowledge, we will be able to see why we failed or succeeded. We may be able to prevent those following us in the future from making the same mistakes. One meeting has already taken place at Northern Illinois University in 1967; and, with the meeting in Austin, May, 1968, it is felt that an important beginning has been made to achieve the unity and exchange of ideas now needed.

Clover Bottom's first consideration of meeting the needs of its blind was in 1963. However, it was not until 1964 that the first qualified teacher for the blind retardates was employed. The first program was a classroom group of four of the younger blind children. None of the children were toilet trained; in fact, they possessed few, if any, of the major self-help skills. In addition to this formal program, the teacher made ward visits to the several buildings that had blind residents in addition to the sighted residents. The first case load was approximately 35 residents. This was the status of the program when I assumed its responsibility. One of the first needs prior to expanding the programs was to attempt to identify all residents who were blind. (Blind is used to include all legally blind.) As a result of this survey, the number doubled. Through continued improvement in the methods of evaluation, the number of blind residents now stands at 110. At present, there are 30 referral cases pending final evaluation; and, it is felt that the total number of blind residents now residing in the institution will be very close to the 10 percent mark.

Clover Bottom is in the midst of a program of growth and expansion which is in keeping with all programs falling under the direction of the Department of Mental Health in Tennessee. Like many other state institutions throughout the nation, it is a victim of the "lack" disease; that is, we lack enough space, employees, and funds. In spite of this, progress is still being made. With this in mind, it was decided to approach the needs of the increased case load. Since it was impossible to meet all the needs of the blind retardates with the limited staff, some order of priority had to be established. It was decided to develop the over-all program in three stages. The first stage was designing and putting into practice some type of training program to develop self-help skills. The second phase of the program would be concerned with more formal academic or classroom program. The third phase would be concerned with adult and vocational training. The first stage has been started and has been in operation since January, 1966. We are, at present, entering the second phase of the program. We are not, as yet, ready to consider the third stage. It is quite natural that the training phase of the program was chosen since the mastery of self-help skills is a prerequisite to the second and third phase. It is also true that this phase of the program is a much greater and more difficult undertaking than the second and third phases. The reasons for this are readily seen when you consider certain factors.

Number: This group will be larger than those of the other phases. It will be those who are able to excel in this program who will be considered for educational and vocational training. Since, at present, we have no psychological instruments that can be used as a true indicator of the resident's potential, we are still required to rely on the trial and error method. We have found from our experience that residents whose social quotient, as determined from the Vineland Social Maturity Scale, is less than 10, in some cases, have shown remarkable progress in the training program. By the same experience, we have found that some residents with social quotients above this level did not excel in the program. As yet, enough data have not been acquired to indicate the reasons for such differences. This is one of the many areas in which we need a great deal of work done. It is encouraging to note that, as reported in the literature, some progress is being made in this area.

Foundation: Not only does the training program provide the foundation for future advancement in educational and vocational training but it provides the foundation for a more adequate and enjoyable life for those residents who lack the ability to progress further. In addition to this, it will also mean that those blind residents possessing self-help skills will demand less attention from ward personnel in areas of meeting their everyday needs. This will give the ward personnel more time in which to provide programs of enrichment and recreation. Such residents who possess self-help skills can take part in more activities provided outside the ward.

Adjustment: The training period is an adjustment period in many respects. If the resident is newly admitted, this is the period of time in which he not only adjusts to the new surroundings of the institution, but the initial period in which he is assisted in examining and mending any damage that may have occurred, both mentally and physically, before entering the institution. If the resident has been transferred from another section of the institution, it provides a period of adjustment in which the resident becomes a part of the program and finds that he is expected to make efforts to provide for his own needs rather than having everything done for him.

Evaluation: This is also a period of time in which the resident can be observed so that a better evaluation can be made. He may possess the major number of the self-help skills but needs additional instruction so as to perform them more effectively. The resident may be judged to be mentally ready for a school program but possesses additional problems, such as physical or emotional problems, that can be solved so that his school experience will not be interrupted.

The first stage of the over-all program or the specific training program established at Clover Bottom consisted of a separate ward unit which housed ten blind retardates ranging in chronological age from 8 to 15. The unit was initially established as an experimental program but since has become a permanent part of the institution. It was hoped that the answers to four major questions could be resolved through work done in the unit. They were *(1)* Can a segregated unit best serve the needs of the blind?; *(2)* Can low-level blind children learn self-help skills?; *(3)* What techniques should be employed in training such residents?; and *(4)* What additional instruction should be given to aides to enable them to better serve the needs of blind residents? We feel that we can answer these questions in part due to the work that has been accomplished on the unit.

Segregation: It is our opinion that the training phase of the program can best be accomplished in a segregated or separate situation. The reasons for this conclusion are primarily based on two considerations--the security and environmental control offered by a segregated unit. The first goal in the training of a blind resident is to establish a feeling of security within that resident. He must feel secure in the area in which he is housed and know that he can freely move around in that area with no fear of unexpected obstacles or fear of being bumped by other residents. This cannot be done in a regular ward setting as it is unrealistic to expect sighted residents with low mental levels to understand and compensate for the problems caused by the additional impairment of blindness. Security is closely related to the second reason, of controlling the environment. However, control of the environment must be considered in greater detail than this fact only. Inasmuch as the blind child must rely on the use of sounds for many of the cues needed in the performance of everyday self-help skills, the regular ward is not always conducive to such. The noise factor needs to be controlled. It is not unusual to find that a blind child on a regular ward has become so confused by the noise that he has attempted to shut out all outside stimulation and retreat within himself. It is often necessary to work with a child to make him aware of the sound cues around him and, in some cases, even to respond to verbal commands before instruction will be effective. We have found that the general atmosphere of the ward has a great effect on the types of behavior and response of the residents. We have tried to compensate for outside interference by using music on the ward. We are convinced of the value of music; but, in our present location, we cannot properly control necessary stimuli which would permit us to evaluate this factor. When we move to the new unit, this is one of the projects we hope to give more intensive study. We feel that the results of such a study will be invaluable information and material for sharing at some future conference. So, although we feel that complete control of the environment is necessary, it is evident that, at this time, we have not adequately solved this problem.

As for the second question, ("Can a low-level blind resident learn self-help skills?"), we feel that the experience gained so far certainly indicates that many of the blind residents now thought to be profoundly retarded are capable of learning self-help skills. This is not to imply that all these residents will be able to master all of the skills. As in all learning situations, the amount of accomplishment will vary with the degree of the true mental level or intellectual potential of the individual. As stated earlier, we have found that some of the residents with social quotients less than 10 have been able to do surprisingly well in the learning of self-help skills. Also, there are those who do not do as well but who may have higher social quotients. We cannot, at this time, explain the reasons for these findings but feel that many factors covering a broad range of discipline are involved in such cases. It is in such studies that a team approach is so important. The physician, psychologist, educator, and many other areas will need to work closely together, if solutions are to be found.

The third question ("How to teach the self skills?") has only partially been answered at this time. Many trial and error methods were used in the development of the program. Some methods were discarded completely while others were modified, when indicated. At this point, we can only say that each of the residents with whom we are working is an individual, and the training program must be designed to fit their needs rather than attempting to fit the residents to the program. It will require much work with many more residents before we will be experienced enough to start detecting definite patterns of behavior and responses that will enable us to design custom-made training programs. It may be that after many thousands of these reisdents have been worked with, we will be so skilled in detecting certain characteristics we can program computers so that when a new resident is taken into the unit, his characteristics can be noted, fed into the computer, and out will come the training program best suited to meet his needs. But that's for tomorrow and first we must finish the work before us today.

The fourth question ("What additional training should be given to the aide?") is not as difficult as the first three. At Clover Bottom, as in many of the other state institutions, we have an excellent nursing education course offered to our employees. It includes the teaching of skills needed in meeting the needs of the residents in the areas of daily care; it also includes lectures from the directors of the various departments at the institution. This gives the aide a total picture of the multiple services available for the resident with whom she is involved. With such a background, the additional facts that should be known by the aide to help her better meet the needs of any blind residents under her care can easily be presented in lecture form or as a chapter in the training manual. These can be general and should be presented in such a way that they are understandable; the information should be practical in nature, fitting the situations which aides will encounter. As all our aides must spend a period of time as trainees, I have found that they have already encountered problems created by a blind resident on the ward. These problems are brought to the lecture session in the form of questions for discussion. It will be found that some of these questions will be a new challenge and will result in study, demonstrations, and even solutions to problems that you may or may not have encountered before. Through mutual discussion, the aides, your department, and most of all, the blind residents will profit.

When all of the above four questions have been answered *completely* and all the data have been recorded, we shall have made more than just a start in this field. However, I'm afraid it will be a long time before this will be accomplished.

I'm not sure that we have even discovered all the questions as yet, much less the answers. The important thing, as I stated earlier, is that we have started.

The training segment of the unit's program is a continuing process. It is also a changing process as efforts are made to improve and expand such programs. By necessity, it is continuous because of the periodic introduction of new residents to the unit as well as by the fact that the program is designed for working with residents of different rates of accomplishment. It has been difficult to organize the program into segments or groups. As the program is enlarged and more data are gathered, grouping may be possible in the future. However, regardless of the increase that may occur, the individual approach is felt to be the more effective method. In addition to blindness, there are many other physical and psychological factors to consider which dictate the necessity of individual programming.

During the past two years, the three areas of self-help skills receiving the most emphasis are feeding, hand-washing, and toilet training. Some work has been done in the areas of dressing, bathing, and orientation, and mobility. (Orientation and mobility is used here in its most simple connotation.)

Feeding: Of all the self-help skills, we have found that this is one of the easiest skills to teach. It is felt that one reason for this is the built-in reward of satisfying one of the biological needs, hunger. There is, however, a difference in teaching the child to get the food from the tray to the mouth and doing it in a more acceptable manner. The primary goal is to stimulate the child to feed himself. After this, we move into the area of refinement.

In our program we do not use the finger-feeding step that is utilized in so many feeding programs. The reason for this is that most of the children in the program are above eight years of age and were used to being fed with a spoon. The first step is to teach the mechanical movement necessary in feeding. This is not done in a special class but at meal time by the aides or ward assistants. In most cases we require the instructor to stand behind the resident's chair when teaching. The reason for this is to insure correct movement of the resident's arm which is difficult when working from the side or in front of the resident. The spoon is placed in the resident's hand in its proper position, and the instructor's hand is placed around the resident's hand. It is extremely important that previous evaluation has been made as to whether the resident is left- or right-handed. This knowledge can save hours of teaching time. When the spoon has been properly placed, the instructor goes through the total feeding process with the resident. During this time, the instructor can talk to the resident explaining what foods are being eaten and which offer an opportunity for the development of taste patterns. The feeding process should not be rushed but should assure that enough time is given for the proper chewing of food. Many residents who have been accustomed to being fed have developed poor chewing habits. Many residents will balk at being forced to hold the spoon; but, once the process is started, no spoonful of food should reach the child's mouth without his performing the mechanical process. It will be noted that the instructor is in fact feeding the resident, but, at the same time, the resident is becoming aware of the mechanical movements of eating.

The trainer will note at first that the movements are sluggish and awkward. As time goes by, it will be noted that the movements become more relaxed. The next sign to be alert for is that the resident is not only cooperating with the trainer but is actually beginning to grasp the idea of what is expected of him. Do not try to move the resident too fast or advance to the next step too quickly. This will result in backsets that may only be resolved by starting from the beginning. Another problem in moving too quickly to the next step is that the child, in his eagerness, may develop bad habits that will not be detected until they have become so ingrained in his movement that they are extremely difficult to eliminate and may never be overcome. The instructor should continue the hand control until it is definite that the child is developing the proper movements. The instructor can then move her hands to the resident's forearm from which point she can control the movement if necessary and also give the child the necessary assurance. From the forearm, the next step is to place a hand at the child's elbow. It may be necessary to assist in only part of the movement. Even after the point has been reached where the child needs a minimum of physical assurance, the verbal assurance and instruction should continue.

Don't worry about the child getting food all over himself in the beginning. It is only necessary to watch an infant for a few minutes to see that learning to feed oneself is in the beginning a difficult task. We found that a spastic boy had a difficult time hitting his mouth. This was so serious in the beginning that at times he not only missed his mouth but threw the food over his left shoulder. Through constant encouragement and the hunger drive, the boy managed to develop quite well in feeding himself and seemed to derive great pleasure from this accomplishment.

All children will not move at the same rate of speed, and it will be necessary to introduce many different factors in the feeding program. In some special cases, devices will need to be designed to aid in developing the feeding skills. This is acceptable but, if and when possible, these should be discarded for the conventional eating utensils. However, the idea of taping a spoon to the child's hand is not advisable except in rare instances.

Along with the development of feeding skills, the instructor can work toward developing skills such as table etiquette and discrimination of foods based on variation in tastes and smells. The higher level residents will naturally move faster in these areas, but it is surprising how much will be grasped even by the lower level child. We have noted that even the lowest of the residents have learned such things as to remain quiet while the blessing is being said and not to disturb the napkin or bib.

When the child has mastered the basic self-help skill of eating with the spoon and it is felt that he is ready to advance, the fork can be introduced. The knife is the last and will only be used in selective cases as most foods today do not require its use which is extremely difficult for many multiply-handicapped blind residents.

The procedure outlined above is certainly not original and has not been used with enough multiply-handicapped blind residents so as to be offered as a sure thing. Of the ten children originally making up the unit's population, only one was a so-called self-feeder. After the first year of the program six of the residents could be classified as self-feeders. In addition, the remaining four had made definite progress toward becoming self-feeders. This was felt to be a most satisfactory achievement since only two of the residents were in the 20 and above IQ range while the others were classified as profoundly retarded. Of the fourteen children now in the unit, ten are self-feeders. Of the remaining four, one has been in the infirmary for several months, and we are not sure as to what state he has regressed, although we do know that due to a serious illness he does not show much skill in feeding. Another is a deaf-blind child who has shown promise of making progress. The remaining two have made progress, and it is felt that they will eventually reach the goal of self-feeding. The major factors necessary in this type of feeding program are time, patience, and uniformity of method.

A second area of self-help skills in which the unit has spent considerable time in perfecting a technique of instruction has been hand washing. It should be pointed out that this is, in fact, the first step toward bathing. The second step would be the use of a face cloth which would ultimately lead to the skill of bathing itself. As in feeding, as well as other areas of self-skills, it is not expected that all residents will be able to master the complete bathing program, but any progress toward it will be of benefit to both the residents and those working with them. If the initial stage of hand washing can be mastered by the resident, this will be of extreme value as it will be, in most cases, a morale boost to the resident and will also promote a higher degree of hygienic standards which are so important in an institution.

The program now being used in the unit to teach this skill has been refined into ten steps. They are *(1)* locate and place stopper in basin; *(2)* fill basin with water; *(3)* locate soap; *(4)* apply soap to hands; *(5)* replace soap in proper place; *(6)* apply lather to all areas of hands;

(7) rinse hands thoroughly; *(8)* remove stopper and replace on basin; *(9)* locate towel and dry hands; *(10)* place towel in proper container.

It will be noted that these steps are in their proper sequence and not according to difficulty. In evaluating the progress of these residents, we would check off the steps; and, it was easily seen which were the most difficult. One resident was able to complete most steps except that of filling the basin with water. It was found that the wrist of this resident was so weak that she could not turn the water on. After special exercises were used, the resident was able to perform this step. The idea of this program is to teach the proper sequence. For this reason, it is important to maintain the sequence. If the resident can do steps 1, 2, 3, 6, and 9, it is not wise to work just on the remaining steps out of sequence. You let the resident do those steps he is able to do, and then you assist with the steps until he reaches a step he can do.

Again, it must be pointed out that uniformity in teaching techniques must be used. This includes a common vocabulary. If one instructor refers to a wash basin and another instructor refers to the sink, the resident may not understand the second term and become confused. With many of the residents, it will be necessary to make them conscious of new terms such as soap, stopper, towel, and so forth.

Progress has been made in the area of hand washing. In addition to the skill itself, an attempt has been made to make the residents conscious of the specific times they should wash hands such as before and after meals and after using the toilet. Many of the residents have already grasped this point and carry out this practice without having to be reminded. Others need only slight supervision in this area.

One of the most challenging undertakings of the unit has been the third major area of self-help skills, toilet training. It is my opinion that this is the most difficult area which we face with the multiply-handicapped blind resident. The reasons for this are varied, and there are many unpredictable influencing factors to contend with. These may come under the heading of physical or psychological problems, but the lack of uniformity and follow-through of procedures is the greatest. This will receive more attention later in the paper.

The program used on the unit is designed as follows. Using the premise that cleanliness itself can be a motivator, an effort was made to keep the area in which the resident lives as clean as possible as well as keeping the resident clean at all times. In addition to this, room deodorants and such items as underarm deodorants and bath powder were used. In the area of toilet training, it is mandatory that the program be designed on an individual approach. For the first two weeks of the program, no special efforts were made to train the children. This time was used to obtain accurate records of each child's bathroom habits. After that time, the individual programs were designed. Also during the initial two-week period, through observation, an attempt was made to discover any cues that the resident might give that would denote his needs. Many were found, and these were varied. One child might give a cue by becoming more active such as waving the arms, spinning in a small circle, or making some verbal sound. Others would become withdrawn or cross. Others gave no cues of any type before or after the accident. The original data showed certain patterns, and it was on the basis of the combination of these patterns and cues that a program was designed for each resident. One word of caution: the pattern set by a child is not foolproof as we find patterns change from time to time.

It is a fact but one that usually brings forth smiles and raised eyebrows when you announce to the staff that the first step in training the resident is to toilet train the aides. By this we mean that an aide must become so acquainted with the residents that she is able to detect the cues, and, in some cases, even anticipate the needs of the residents. This is difficult, and some aides seem to be better in this area than others.

When the program starts, the first goal is to prevent accidents. When this has been accomplished, efforts must then be made to train the resident to respond to his needs with only verbal assistance being given, and finally to respond with no assistance from the aides. In order for the resident to respond to verbal commands, it is necessary, in many cases, for new words to be added to his vocabulary. Again, it is important that uniformity be stressed in the terms used in training. When the resident is first taken to the toilet, it is important that an aide be with him all the time he is there. The toilet should present a segment of the resident's environment that is a positive experience, not a negative one. The aide should talk to the resident and explain what he is expected to do. The resident should never be required to stay too long a period of time in the toilet as this itself may create a negative attitude. It should never appear to be a punishment. The aide must be alert; and, as soon as the child performs the act desired, verbal praise should be given. This is usually sincere as the aide prefers this to the job of cleaning a soiled child. If you noticed, I said verbal praise and not a reward of candy or some other edible. I cannot accept the use of this type reward in the toilet; and, if the child is given such rewards after leaving the toilet, he often is confused as to what he was being rewarded for. I believe that no tangible reward can take preference over honest acceptance and tender love and care, TLC. There are many variables to consider in toilet training, and they have a definite influence on the success that will be achieved in training the resident. Such factors as the mobility skills of the resident, whether or not the resident possesses travel vision, physical impairments, as well as medical and psychological factors will be determiners as to the success of the program. Various degrees of success have been obtained in our program. When the program started, we had only one resident who was completely toilet trained. This includes the ability and capability to go from any point in the unit to the toilet, take care of all her needs in the toilet, and return to any desired point in the unit. At the present time, we have three residents who are completely toilet trained. One resident does not have accidents but cannot be considered as being trained since she still waits for the verbal commands sometimes. It is felt that this child should have already reached complete independency; but, through the lack of follow-through and inconsistency of ward personnel, she has not reached the final goal. It appears that she will reach the goal in the next few weeks. Another resident has few problems during the day but must still be taken to the toilet during the night. Another resident never wets on himself but has soil accidents. This resident is now under study by the building physician as his problem is thought to be due to a physical disorder rather than mental or psychological. Progress can be seen through the records kept--this done by means of a weekly "soil chart" which is marked daily. Each resident on the unit has a sheet which covers a twenty-four hour period. The record reflects the following data: *(1)* if the resident has a "wet" accident, it is recorded by a red 1; if a soil accident, by a red 2; *(2)* if the child goes alone to the bathroom and "wets" in the pot, it is recorded by a blue 1; if he "soils" in the pot, by a blue 2; and *(3)* if the aide takes the child to the bathroom, and he "wets" in the pot, it is recorded by a blue 1 circled; if the child "soils" in the pot, by a blue 2 circled. As a result of such records, we can see how many accidents the resident has each week, what hours they occurred, when the aide took the resident to the toilet and at what hour, and when the resident went by himself and at what hour. This information can then be plotted on a graph individually and as a group. Through weekly analysis of the data, changes can be made in the program when needed.

Needless to say, during the first few weeks of the program, the number of accidents was very high, about 65 percent. After the program had been in action for a few months, we were pleased and slightly surprised to find that the ratio of accidents had dropped to 25 percent, the percentage of independent actions had reached approximately 32 percent, and the aides were able to anticipate the residents' needs approximately 43 percent. At present, the approximate percentage of accidents is 11 percent, the independent rate is 50 percent, and the aide-assistance rate is 39 percent. It has been noted, through experience, that the figures do not rise or fall at a gradual rate from week to week but often make sudden changes. This is due to factors such as a new resident being enrolled in the unit or the illness of a particular child causing a sudden change. Therefore, it is necessary to study the rate of increase or decrease over a long period of time to get a true picture of the effectiveness of the program.

Some of the dangers to watch for have already been mentioned such as the lack of uniformity in vocabulary and consistency in technique. Another is to guard against regimentation in the program. As stated earlier, the programs must be developed individually, and it is too easy for ward personnel to forget that all children do not have the same time schedules. It is wrong to say that you are training the child by taking him to the toilet every hour or two hours. This is an effort to merely prevent accidents which is only a part of the total program. In fact, this type of approach is detrimental in that it develops the residents into a type of machine, timed to perform at the biddings of the caretaker, rather than developing the children to respond to natural situations in a natural and acceptable manner.

As has been pointed out earlier in this paper, some work has been done in the areas of dressing and bathing on the unit. Much of the work was the result of the fact that it is directly related to other skills already described. However, at this time, it is felt that not enough organized work has been planned or carried out to warrant special description here. When the unit is located in its new surroundings and better control can be exercised over the entire environment, these skills must receive more attention.

The topic of orientation and mobility was briefly mentioned, but, it goes without saying that this skill has not been neglected. We must be careful when using these terms as they denote the act of teaching cane travel to many. This is not meant by mobility here. Rather, it is the idea of stimulating the residents so that they feel secure in moving freely in the unit. Orientation is a prerequisite to mobility in that a person must have some awareness of the environment before he will respond to any type of mobility instruction. The residents are made aware of their surroundings by leading them to the different areas, telling them what is found in each area, and letting them touch the objects in the area. It is also wise to make direct trips to certain areas from a given point which the resident will be required to travel later. As will be noted, this type of approach is in line with the general orientation skills that have been outlined in several works on orientation and mobility. As with normal blind children, they apply to multiply-handicapped retardates with few modifications. The point I wish to emphasize here is to attempt to make the resident aware of the area and feel secure in that area. It is necessary to instruct ward personnel in the proper way of leading the residents, but to only lead those residents who really require such assistance. The actual act of getting the resident to move on his own is most important. This can be done through individual work as well as in group activities such as marching and group play. There will be some residents who are mentally capable of responding to higher levels of mobility training. This is when we must be extremely careful in what we do. At Clover Bottom, we are fortunate that our campus is adjacent to that of the Tennessee School for the Blind; and, the peripatologist there has been gracious enough to advise us when we find a resident so capable. Primarily, our work in mobility outside the unit is in the proper guidance of our blind residents. This is important in that it enables our residents on the unit to take part in programs of other departments located in various sections of the institution's grounds. Our children take part in occupational therapy, swimming, and other programs of recreation.

The preceding has been a brief statement of the history, development, and procedures used in the program for the beginning group of multiply-handicapped blind residents who make up the Unit for the Blind at Clover Bottom Hospital and School. This does not begin to include all of the problems and satisfactions that have arisen from the many incidents that have occurred in the past two years. Many of the solutions to the problems have been solved through a team effort of all those connected with the unit. Some of the solutions were supplied by the residents themselves. Sometimes, it is felt that they teach us far more than we are able to teach them. Progress can never be measured in leaps and bounds but must be derived from minute advances over a long period of time. After two years, we can sum up the past two years work by saying that there have been definite improvements in the residents who make up the unit. During that period we have encountered and solved many problems, but we are realistic enough to know that we have not scratched the surface. It will take many years of such work that is now being done at Clover Bottom and many other institutions throughout the United States and many discussions and comparison of information before we will ever reach the level of competency so badly needed in this field. There are areas of this work that have not even been considered as yet but which must be developed before we can adequately meet the needs of this segment of our population. The beginning has been made. Let us continue, but let us work more closely together than we have so far. All must work together. This includes the fields of medicine, psychology, education, social work, and all other disciplines needed to meet the wide and varied tasks facing us.

Speaker: Mr. Robert J. Winn, Jr., Project Director,
Project for Multihandicapped Children at the
Texas School for the Blind:
A Learning-Problem Approach

In June, 1966, a pilot program for multihandicapped blind children was established at the Texas School for the Blind with funds obtained under Title I of the National Elementary and Secondary Education Act. During the three summer months the staff was trained in those areas of exceptionality where they were most efficient. A curriculum was planned and educational methods and media were studied for applicability in the program. Equipment and materials were purchased. Classroom space was remodeled, and candidates for the program were selected. The basic educational philosophy and procedures governing the structure of the program were also developed at that time.

During the first two and a half school months various educational methods and media were attempted. Through teacher evaluation procedures the methods and media were selected which best met the individual needs of the children.

Extensive testing was done in November to establish a baseline for evaluation of the philosophy and procedures of the program, as well as the methods and media selected through teacher evaluation procedures. In May a posttest battery is planned so that the strengths and weaknesses of the program can be assessed. These findings will be reported soon thereafter.

Purpose of Paper

The purpose of this paper is to describe the educational philosophy and procedures followed, as well as the educational curriculum and media which are being used, to deal with the learning problems of the multihandicapped blind children in this program. It should be understood that this project has just been initiated and therefore ample time has not elapsed to evaluate conclusively the educational procedures and curricula described here.

Subjects

Most of the fifteen subjects in the program have learning disabilities due to emotional problems, neurological dysfunctioning, educational deprivation, and cultural deprivation. No child in the program tests out functionally below IQ 60. All but two of the children have attended the Texas School for the Blind one year or more with educational advancement on the average one fourth of the normal rate, as indicated by achievement tests and teacher estimates of grade placement. For a description of each subject in terms of the traditional medical, psychological, and educational labels, a chart is presented on the following page.

Child	Age on 9-1-66	Visual Acuity	Emotional Problems	Emotionally Disturbed	Hyperactive Behavior	Neurological Dysfunctioning	Educational Deprivation	Cultural Deprivation	Intelligence	Educational Achievement (grade level)	Years Prior Schooling	Other Medical Problems
1	12-4	R. LP L. 0	yes		yes			yes	EMR	2-2.5	2	
2	8-8	R.3/200 L.3/200	yes						EMR	preschool	2	
3	12-8	R.CF@1' L.2/200	yes					yes	EMR	3-3.5	6	
4	8-6	R. LP? L.2/200	yes						bright normal	1.5-2	3	
5	7-9	R.10/200 L. 5/200	yes					yes	borderline MR	preschool	1	high frequency hearing loss/30 db
6	11-2	R.10/200 L.15/200	yes					yes	EMR	2-2.5	5	
7	9-8	R. LP L. LP		yes	yes		yes	yes	bright normal	1-1.5	1.5	poss.malnutrition
8	10-7	R. LP L. LP	yes		yes	yes			EMR	1.5-2	4	seizures
9	12-11	R. LP L. LP	yes				yes		dull normal	1.5-2	2	abnormally poor tactual perception
10	11-3	R.20/200 L. 0					yes	yes	borderline	preschool	0	
11	7-1	R. LP L. 5/200		yes	yes				?	preschool	2	
12	12-1	R. LP L. 2/200	yes					yes	EMR	preschool	5	
13	8	R. LP L. LP	yes		yes	yes		yes	bright normal	1-1.5	2	seizures
14	11-0	R. LP L. LP					yes	yes	bright normal	preschool	0	
15	13	R. 9/200 L.12/200	yes		yes		yes		dull normal	2-2.5	4	obesity

Terms used in the chart are defined below:

Visual acuity refers to medical findings reported by an ophthamologist.

Emotional problem refers to characteristics such as aggressiveness, slight withdrawal symptoms, lack of socialization, and the like, which have been identified as such by a school counselor or psychologist.

Emotional disturbance refers here to more serious emotional problems, such as childhood schizophrenia or autism, which have been identified by a psychologist and/or psychiatrist.

Hyperactive behavior refers to that type of behavior characterized by the need for constant physical movement, inattentiveness, and lack of concentration, which has been identified by a psychologist or psychiatrist.

Neurological dysfunctioning is a label used only in those cases where there have been positive neurological findings by a qualified physician.

Educational deprivation refers to the history of a child who has had no educational opportunities at appropriate ages or who has been placed in an educational setting described as unsuitable by a social worker or educational administrator.

Environmental deprivation refers to the history of a child who has been extremely deprived, especially at an early age, of experiences which most normal children have (said deprivation certified by a child social worker and confirmed by a psychologist).

Intelligence refers to the intelligence quotient level obtained on the verbal scale of the Wechsler Intelligence Scale for Children or the Interim Hayes-Binet.

Educational achievement refers to the grade level placement as measured by the Stanford Achievement Tests, when possible; otherwise, it is based upon the teacher's description of the child's educational ability.

Description of Educational Philosophy and Procedures

It is the purpose of the project to provide optimal educational opportunities designed to lead to self-sufficiency for those children with impaired vision who have additional handicaps resulting in learning problems that cannot be dealt with properly in the regular classroom at the school. Provision of an optimal educational opportunity includes giving the child as much individual attention as possible, developing a curriculum to meet his unique needs, and providing the latest educational media and equipment to implement the learning situation. A one-to-five teacher-pupil ratio is maintained to ensure necessary individual attention.

Since the eventual educational goal is that the student will be able to take care of his own social and economic needs while living as independent a life as possible, children who are profoundly mentally retarded, emotionally disturbed, or neurologically involved to the extent that this goal could never be met are excluded from the program. Referrals are made elsewhere for such children.

In many cases, however, psychological, medical, and sociological data are inadequate to make prima facie judgments; therefore, the program serves a diagnostic function as well. If at the end of one or two years in the program it is clear that the child's rate of educational progress supports the negative psychological, medical, or sociological data indicating inevitable custodial care, then the child can be referred to the appropriate institution with much more assurance that the best referral is being made.

Although at the present time all of the educational needs of the fifteen children are met by the project, it is not the philosophy of the program that a child necessarily be educated entirely by the special program or entirely by the regular program. As certain learning disabilities are overcome, a partial or total integration of the child into the regular classroom program may occur. In addition, a child in the regular program may have a learning disability in only one area that can be dealt with by the special program.

Although a thorough testing procedure may indicate in advance that a child may have a learning disability that cannot be cared for in the regular school program, it is a present tendency of this project to take only children who have entered the regular program and over a period of at least one year have shown their inability to profit in the regular classroom (their inability to learn also being supported by psychological, medical or sociological data). A child with a medically or psychologically diagnosed second disability does not necessarily have a learning problem.

Of those children who were eligible for the program, the youngest children with the better prognoses were preferred to older children or those with poor prognoses. This policy was developed for several reasons. Under the Title I grant "prevention" had priority over "rehabilitation." The older children who were accepted into the pilot project have had more difficulty in profiting from the program because of the negative attitudes they formed after years of failure in the regular school program. It was considered more desirable to begin the program at a preschool, primary, and elementary level and to expand the program gradually upward as the children advance educationally. This way there is greater assurance of a more sound, comprehensive developmental program.

A key aspect of the program is its learning-problems approach, which is implemented through evaluative and procedural staffings. Although a psychological, medical, or sociological diagnosis such as educable mental retardation, minimal brain damage, cultural deprivation, and the like, is necessary for the child's entry into the program, such pigeon-holing methods are not used for educational classifications (since they are not necessarily valid). There are no classes for "educable mentally retarded blind" or "neurologically dysfunctioning blind." Children are grouped on the basis of common learning disabilities and their current educational developmental levels. This approach is used for several reasons. With the diagnostic tools presently available it is difficult to get a clearly defined and accurate diagnosis. Many of the medical or psychological diagnostic labels are meaningless to a classroom teacher. To tell a teacher that a child is legally blind and minimally brain damaged does not solve her problem of developing a curriculum to meet the individual needs of that child.

The criteria used in this learning-problems approach are

1. What is *this* child's best mode of sensory input for learning?
2. What sort of educational environment is necessary for maximum learning for *this* child?
3. What sort of educational methods and media facilitate maximum learning for *this* child?

During daily staffings each child in the program is evaluated in terms of these three criteria in each area of the curriculum. Teacher evaluations, a great number of which are written on specially developed forms, together with the director's observations, are primarily used in the staffing evaluation. Test data is used *secondarily* to *assist* in the evaluations. Recommendations are made and after a period of trial reevaluation is scheduled, at which time the recommended methods may be altered or maintained. During the first week of the program's operation the curriculum and groupings changed daily. After the first two months, however, major changes in the curriculum, educational methods and media were relatively infrequent.

In terms of the criterion regarding best mode of sensory input, *it was found without exception that the auditory mode was far superior to the tactual or visual mode.* Listening comprehension in many cases measured two grade levels above reading comprehension. Therefore, it has been necessary to spend considerable time recording materials, especially in the areas of science and social studies, so that the children can progress in these areas in terms of their ability to understand and learn the content instead of in terms of reading ability. This should not imply, however, that written language arts have been abandoned. In the teachers' opinions, student motivation and interest increased in academic areas where reading disability was averted.

Since most of the children in the program have an emotional problem, much time has been spent in staffings dealing with the second criterion: what sort of educational environment is necessary for maximum learning for this child? Specific boundaries of acceptable behavior for optimal learning for the child, as well as for his classmates, have been set individually and differ considerably from child to child. The major methods used in dealing with the children's emotional problems are

1. Free, relaxed teaching styles;
2. Programmed learning, where the student need not interact with a teacher;
3. Crisis therapy, in which the child receives therapy immediately when an emotional crisis occurs;
4. Partitioning a child from adjacent children by means of dividers;
5. Use of an isolation therapy room.

The criterion concerning educational methods and media was dealt with extensively during the first two and a half months of the program. Basic decisions were made concerning educational methods; for example, in teaching reading is the phonics approach better than the whole-word approach? It became evident early in the program that much of our educational media must be developed, such as programmed materials on magnetic tape and sensory training materials.

In addition to the learning-problems approach, another important principle of the program is the use of a developmental learning orientation. Staffings also play a key role here. It is through the educational staffings that the position of a child in a specific curricular area is pinpointed along the developmental continuum. Educational staffings help discover developmental gaps in learning or skills and an attempt is made to go back and provide the child with educational experiences to fill in the gap. One of the major problems encountered in carrying out this approach is a general lack of agreement among the experts concerning normal developmental learning patterns.

There are several maxims followed in the developmental approach. Learning tasks are broken down into small segments to facilitate learning and to show more precisely the progress of children who learn slowly. Throughout the curriculum an effort has been made to work from the concrete to the abstract. Field trips are probably the most valuable way of providing concrete experiences for these children; a field trip a week is usually planned. An attempt is made to work from the classroom to real life situations. Carry-over from the classroom is not left to chance since self-sufficiency for multihandicapped children is crucial.

Description of Educational Curriculum and Media

The program curriculum includes written language arts; oral language development and speech arts; arithmetic; social science; natural science; arts and crafts, and manual dexterity training; sensory training; physical education; music; and daily living activity skills.

Although each student participates in almost every area of the curriculum the degree of concentration of a particular child in each area depends upon his learning problems. For example, those children who have inadequate oral language development may receive extensive training in this area while spending proportionately less time in written language arts, which are necessarily dependent upon good oral language development.

Where possible, the curriculum is set up in one-hour periods with a heavy academic subject scheduled next to a less demanding subject. For example, a teacher may spend the first 40 minutes of an hour teaching arithmetic and then 20 minutes teaching daily living activity skills. The teacher is given the freedom, however, either to shorten or to lengthen the time that she spends on a heavy academic subject area in accordance with the students' attention span that day. Thus, on a bad day a teacher might spend only 25 minutes on arithmetic and 35 minutes on daily living activity skills. All of the heavily loaded academic subject areas are scheduled during the morning.

In written language arts the students are grouped according to whether they read braille or large print and then subgrouped according to their reading proficiency level and reading problems. It was difficult to find high interest, low vocabulary materials. As most of the older children indicated, they were sick of "Dick, run" materials. Since the Lippincott Basic Reading Series has been used, this difficulty has been overcome. In addition to being available in braille and large print, the Lippincott Series has integrated phonics into its reading program. The phonics method of teaching reading has proven to be most successful with the children. For preschool level children much time is spent in readiness for reading braille or large print.

After attempting several methods of teaching mathematical concepts the Stern Structural Arithmetic Series was adopted. Tangible apparatus is the key aspect of the Stern method, and only minor adaptations had to be made with the apparatus for use with blind children. After the math concepts have been developed an effort is made to assist the children in applying the concepts to real situations. Students who cannot work math by pencil-and-paper methods use the abacus.

Almost all textual material in social science is presented to the students orally or through recordings. Field trips have been found to be essential. The general concept of expansion from self to family to community to state, and so forth, is employed in this area.

In natural science almost all textual information is presented orally or on tape to the children. Field trips and experiments have been important in this area also.

Speech arts and oral language development serve two functions in this program: psychodrama provides a therapeutic tool to deal with the emotional problems of the children, and oral language arts provides an essential base for written language arts. All of the children have had an insatiable desire to record their plays, psychodrama sessions and story telling sessions so that they could hear themselves later.

Because many of the children will inevitably earn their livings using their hands, arts and crafts and manual dexterity constitute an important area in the program curriculum. Initially, this area was beset with problems because most of the children were extremely deficient in using their hands skillfully and in being creative. It was difficult to motivate them. The teachers often found it necessary to have the children copy simple models that a teacher had made before they would venture in using the crafts materials creatively. Fingerpainting, clay modeling, ceramics, paper mache modeling, collage, weaving, and plaster of paris modeling are just a few of the activities included in the crafts program.

Sensory training is a separate area in the curriculum because of its necessity in dealing with the children's learning problems. Montessori equipment is used in this area, but many of the materials have been specially developed. The Thermoform machine has been used to produce much of the tactual material. The teachers have developed taped materials for use in auditory training. Children who have light perception or better have been encouraged to make maximum use of their vision, and much of the methodology developed by Dr. Natalie Barraga is employed in this area.

The children participate in a physical education program similar to that provided for children in the regular school program. One addition, however, has been made: recreational games have been developed to assist the children in their socialization process.

The project's music program is also similar to that provided children in the regular school program. It includes activities such as singing, folk dancing, rhythm band, and music appreciation.

The daily living skills area of the curriculum concerns itself primarily with assisting the child to eventually be self-sufficient. The areas of concentration are self-care skills, social etiquette, premobility skills, and work attitudes and habits. It has been necessary to teach the younger children such activities as dressing and tying shoes. With the older children etiquette and social grace have been stressed.

Premobility skills are worked on by the teachers, with the school mobility director acting as consultant. The curriculum guide on precane mobility skills published by the Michigan School for the Blind has been found useful.

RATIO BETWEEN RATE OF EDUCATIONAL DEVELOPMENT DURING PROJECT TO RATE OF EDUCATIONAL DEVELOPMENT PRIOR TO PROJECT

Subtests	*Rate of Grade Level Achievement Prior to Project per Year of School Attendance*	*Rate of Grade Level Achievement in Project per Year of School Attendance*	*Ratio Between Rate of Educational Development During Project to Rate of Educational Development Prior to Project*
Word meaning	.62	1.77	Rate increased 2.85 times during project
Paragraph meaning	.04	.32	Rate increased 8.00 times during project
Science and soc. studies	.43	2.00	Rate increased 4.66 times during project
Spelling	.25	.28	Rate increased 1.12 times during project
Word study	.54	1.48	Rate increased 2.74 times during project
Language	.09	.63	Rate increased 7.00 times during project
Arithmetic computation	.24	.45	Rate increased 1.88 times during project
Arithmetic concepts	.48	.78	Rate increased 1.63 times during project
Mean	.34	.97	Rate increased 2.85 times during project

One of the traditionally neglected areas, according to rehabilitation counselors, is that of work attitudes and habits. For this reason an attempt has been made to design a developmental program in this area. Presently the children are assigned work duties which are supervised by the teachers. A token reward system is used in which those students who do poor jobs get fewer tokens. At the end of the month children may exchange their tokens for edibles at a token reward party. The second phase of the Work Attitudes and Habits Development Program will begin near the end of the year. In that phase the student will purchase materials and make handicraft items for sale. Still a third phase is planned for next year in which a workshop situation will be simulated for one hour a day for the older students.

Because of the limited time for presentation, this paper has necessarily been limited to a brief description of the educational philosophy and principles of the program, as well as some of the educational curricula and media employed. At a future date a comprehensive description will be published along with a more objective evaluation. It is hoped that the philosophy and principles of the Project for Multihandicapped Children at the Texas School for the Blind will be of use in developing other programs for multihandicapped children.

Speaker: Dr. Paul Dokecki, Psychological
Consultant, Houston-Harris County
Lighthouse for the Blind, Houston

As a clinical psychologist spending most of my time in the "ivory tower," my association with the Children's Division of the Houston Lighthouse for the Blind has been a significant professional experience. I say this since I can think of few settings where more immediate and stringent demands are made for the practical application of abstract theories and ideas.

In speaking to the issue of educational and psychological management of the blind child who functions at a retarded level, I believe I can do no better than describe the exciting program of the Houston Lighthouse. If this sounds like boasting, it is; but it may be viewed as only slightly biased since my primary affiliation is still with a university. Along with the program description several general management concepts are also developed.

To begin, let me give you the philosophy of the Children's Division in four parts: *(1)* to help the visually limited make the most of their lives; *(2)* to build children for an adult work rather than build a world for children; *(3)* flexibility in operation (that is, use anything that works); *(4)* assessment-in-action is basic and essential to proper management of children.

Part (2) deserves some special mention. The noted psychologist B. F. Skinner has distinguished between two types of environments used in caring for and attempting to help people in need. A *therapeutic environment* is one in which environmental contingencies are arranged in such a way that the people residing in the environment are changed in the direction of eventually living in the everyday world. A *prosthetic environment*, on the other hand, is constructed to maximize the behavior potential of the residents in that environment with the realization that the residents will probably never leave that environment or function in the everyday world. In terms of this distinction, the Lighthouse has decided to be a therapeutic environment. It should be pointed out, however, that other institutions or agencies may make the other choice or decide on some combination of the two depending on the nature of the populations they serve. Realization of this distinction may help in making program decisions.

The Children's Division program has three general aspects: *(1)* education; *(2)* comprehensive service; and *(3)* research and training. All of these are certainly desirable elements in any management program.

The *educational program* is geared for children who are able to live at home. It has the following facets: *(1)* parent counseling and guidance (including involvement of the parents in the overall management and education of the child); *(2)* work with the child and his parents from birth, if possible, in order to optimize the child's further educational experiences; *(3)* preschool classes which include both multiply handicapped and "normal" visually impaired children; *(4)* school-age classes for the visually limited, multiply handicapped child; *(5)* a summer program which may involve some of the children seen throughout the school year and/or provide activities for the visually limited children who attend public schools throughout the year. (Recently, the Children's Division has embarked on a program involving the child with learning disabilities related to visual dysfunction.)

Throughout the time a child spends in the educational program information is continually gathered relative to his functional abilities. This information guides educational plans and influences decisions regarding further placement of the child. The information thus gathered is of inestimable value since it grows out of attempts to change the child and has immediate implications for subsequent change procedures. This illustrates the concept of *assessment-in-action* which may be defined as the gathering of diagnostic information through the process of trying to change behavior.

The aspect of the Children's Division program involving *comprehensive service* also stresses ongoing assessment Within a multidisciplinary framework the following services are provided: *(1)* the gamut of medical specialities; *(2)* neurological and psychiatric diagnoses and treatment; *(3)* psychological evaluation and treatment; *(4)* case work service. Full-time staff and a cadre of consultants drawn from the active Houston professional community carry out these activities. "One shot" evaluations yielding the typical "report-of-limited-utility" are not tolerated. Assessment and pursuant service are truly ongoing and dynamic.

The final aspect of the program is one which is often overlooked by agencies and institutions. *Research and training* provide input to the system and prevent boredom, stagnation, and getting out of date. There is a fairly constant influx of professionals-in-training from the disciplines of education, medicine and psychology who keep the staff on its toes and bring fresh ideas and viewpoints.

Research is seen as an invaluable part of the over-all Lighthouse picture. Research activities are carried on at many levels but an overriding concept which unites all the efforts is assessment-in-action. Let me briefly describe three ongoing research projects.

At the basic research level we are pursuing the factors involved in tactual learning and hope to apply results to facilitating the teaching of braille reading. In addition, individual difference variables involved in braille performance are being sought. Improved readiness and remedial techniques for braille are the goals of the project.

The second project involves the use of operant conditioning techniques in modifying the behavior of children at the Lighthouse. We have to date worked on aberrant motor behavior (Hull and Dokecki, 1968), language development, and social skills. It is our belief that operant techniques are also suitable to the modification of blindisms. Operant procedures exemplify very directly the concept of assessment-in-action. As Hull and Dokecki pointed out, there are important things to be learned about children which can only be determined by attempting to change their behavior. The operant tradition stresses the careful observation and recording of change procedures and the responses of the child which yield data with immediate relevance to further decisions regarding the child.

The last project I would like to describe is termed the Environmental Design (ED) Project. Together with James Kean, Director of the Children's Division, Earle Britton, School of Architecture, University of Houston, and Richard Rozelle, Department of Psychology, University of Houston, I have been exploring the possible marriage of architecture and psychology pursuant to the design of facilities for the multiply-handicapped, visually limited child. The ED project employs neither the "expert" nor the "off the top of the head" models. Rather, we are attempting to arrive at design principles through the techniques of behavioral science. Further, we are interested in developing a facility which not only houses a program but which *participates* in a program. We believe that the physical environment, properly arranged, can facilitate the development of children. Last, we believe an environment can and should be "programmed" or arranged to meet the developing needs of the children. We have therefore proposed a completely modifiable environment which will respond to the assessed needs of the residents over time. Emerging construction techniques make this assessment-in-action environment possible and desirable.

In summary, I have tried to show that a program steeped in the concept of assessment-in-action and one which is far reaching in the kinds of services provided, can serve as a model for educational and psychological management of the blind child who functions on a retarded level.

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Speaker: Mr. Maurice Tretakoff, Director, Hope School for Blind Multiple Handicapped Children, Springfield

The blind child with additional impairments has been described as blind multiple-handicapped, blind multihandicapped or blind multiply-handicapped. Moreover, the literature shows that most authors have placed special emphasis on the importance of one secondary impairment. Some seem to stress deviant affective behavior (8, 12, 14, 15, 16). Others lean toward motor impairments (6, 19, 23). A few are concerned with language development and speech correction (9, 11, 21). However, the majority of published papers emphasize cognitive impairment (1, 2, 3, 4, 5, 7, 10, 13, 17, 18, 20, 22, 24, 25, 28).

In reality educators have discovered that these children do not seem to fall into neat categories. Once a child is discovered to possess two impairments, additional ones are usually diagnosed. One might even question of any one of the labels mentioned has any educational validity in describing these children. It appears that educators have been creating labels without considering the complexity of the variables involved in the educational process.

When the special educator confronts a child with multiple impairments in which the deviations from the norm vary in quantity and quality, he is faced with an extremely complex problem. Moreover, there is a paucity of empirical data that the special educator can rely upon in developing methodology in educating the blind multiple-handicapped. One usually reverts to trial and error. However, one might become more optimistic for the future. It seems to lead in the direction of diagnostic teaching with evaluations done in the cognitive, affective, sensory, motor, language, and social areas. The diagnosis would be made with the aid of a team that would include physicians of various specialties, psychologists, social workers, language development specialists, and special educators (27).

Some of the variables in the cognitive area that would need to be diagnosed would include divergent and convergent thinking, memory, problem solving, creativity, and evaluation. In the affective area, an educator would be interested in how a child receives attention from others, how he responds to attention, what his value system is that might affect trust of people, motivation, independence and achievement. There would be concern about the extent of sensory impairment of the visual, auditory, kinesthetic, gustatory and olfactory channels that would affect a child's ability to perceive, hear, feel, taste and smell. In the motor area, there would be interest in the child's coordination, strength, speed and flexibility that might affect his ability to travel or learn braille. It would be important to know what stage of language development that a child has reached and how this affects communication. It is also necessary to know the social milieu in which the child was raised and now resides that would affect his socialization process. Before any of these variables can be accurately evaluated there is a need for more sophisticated diagnostic tools. Even when they are developed, it does not seem feasible that one person will be able to master all of the knowledge that will be necessary to comprehend the interaction of the variables. The diagnostic team seems to be the most logical approach to the solution of the problem. However, while this author may perceive the diagnostic team approach as an ideal long term goal, there is the pragmatic problem of having hundreds of severely handicapped children needing immediate programming.

Principles of Learning

In this presentation, it is the author's purpose to emphasize only one of the variables discussed. That variable is deviation in cognition. In general, there are three principles of learning that are applicable to the training and education of children with slow mental development. The first one is that all initial training must relate to the concrete. Abstractions are introduced after the child has developed concepts that will allow him to comprehend relationships.

The second principle states that a child must be positively rewarded for successful achievement. It is understood that a child will be given tasks within the achievement level of his current abilities.

This third principle relates to the necessity for consistency in the environment and in the methodology presented to the child.

With these three principles as a base it is now possible to progress to the areas of knowledge to be achieved. Some of these areas have already been superficially discussed in earlier papers (25, 26).

Body-Image Concepts

Body-image should be the first area of knowledge taught to these children. This leads to an identification of the self. One begins with the major parts of the body followed with instruction of the more detailed areas. One might use the following list as a guide:

- HEAD
  - Nose
    - nostril

  - Eye
    - eye brow
    - eye lash
    - tears

  - Mouth
    - lips
    - tongue
    - teeth
    - gums
    - throat(inner)
    - saliva

  - Ear
    - lobe

  - Chin
  - Cheek
  - Forehead
  - Temple
  - Hair
  - Beard
  - Mustache
  - Scalp
  - Face

- NECK
  - Throat(outer)

- TORSO
  - Shoulder
  - Chest
  - Ribs
  - Abdomen(stomach)
  - Waist
  - Hip
  - Back
    - spine
  - Side
  - Genitals
  - Buttocks

- ARMS
  - Upper arms
    - bicept
  - Forearm
  - Elbow
  - Wrist
  - Hand
    - palm
    - knuckles
    - thumb
    - fingers
    - nails
    - cuticle

- LEG
  - Thigh
  - Knee
  - Calf
  - Shin
  - Ankle
  - Foot
    - instep
    - heel
    - toes
    - nails

- SKIN

- BONES

The method of instruction the teacher would employ would be to take the child's hand and guide it to the part of the body to be learned and repeat the name of that part. The teacher may test the child's knowledge by verbally asking him to point to a part of the body. The child's mental level will have a direct relationship to the time required to master body image.

Sensory Discrimination

For a blind child to comprehend and, thus, rationally relate to his environment, he must be able to identify all sensory stimuli that he receives. It is basic to his ability to achieve and develop as he matures. In teaching sensory discrimination the following list might be followed:

hot
warm
cold
cool
wet
damp
dry
sticky
hard
stiff
soft
spongy

circle
round
curve
oval
triangle
square
rectangle
straight
arch
cube
cone
cylinder

thick
thin
narrow
wide
rough
smooth
sweet
sour
bitter
loud
shrill
soft (sound)
whisper

The methods of instruction would include tactual presentation of various wood, plastic, or metal solids in the shapes mentioned to the children with the teacher verbally naming the objects. Blocks of wood or metal and cotton balls might be used for teaching hard and soft. Heated water and ice cubes might be used for instructing the concepts of hot, warm, cool, and cold. Various sizes of wooden blocks might be used to teach thick, thin, narrow and wide.

Directional Discrimination

Another area of knowledge in concept development would include instruction in directional discrimination. This aids in developing spatial relationships and is an introduction to mobility training. One might use the following list as a guide:

right
left
up
down
front
back
under
over
above
below
top

bottom
in
out
high
low
near
far
corner
diagonal
around
column
row

start
begin
end
finish
north
south
east
west
in a room:
floor
ceiling
window
door
wall

Perhaps the best method for instructing directional discrimination would be using the individual child's body in relationship to his environment. Right and left is best taught by teaching the right hand and the left hand. One could teach up and down by asking a child to stand up and sit down. Top, bottom, under and over could be taught by using a book or a peg board. There are some excellent activity records that can be purchased for instruction of these concepts.

Measurement Discrimination

A third area in concept development would be introduction to measurement. This concept deals with the subject of quantity. Again the emphasis should be on the concrete before abstractions are introduced. One could use the following list for measurement discrimination:

- inch
- foot
- yard
- mile
- pint
- quart
- gallon
- cupful
- glassful
- teaspoonful
- tablespoonful
- ounce
- pound
- dozen
- half
- one quarter
- three quarters
- one third
- two thirds
- middle
- half way
- each
- pair
- all
- none
- full
- empty
- whole
- part
- many
- few
- more
- most
- less
- some
- big
- little
- tall
- short
- medium
- long
- heavy
- light
- number concepts of one to one hundred

Obviously, there are many materials available for instructional purposes in this area. A braille yardstick for use in measuring the top of a desk, a book, chair, or even a room would be in order. Measuring cups are useful for liquid measurement and should be used for instruction of the abstract relationship between full and empty. A creative teacher could develop additional materials as needed.

Time Discrimination

Another, although more advanced area for concept development is the introduction of time. This is a more abstract phase of the area of knowledge concerned with measurement. One might use the following list as a guide for instructional purposes:

second
minute
hour
day
week
month
year
decade
score
century

yesterday
tomorrow
night
morning
afternoon
evening
noon
midnight
age
next
beginning

start
end
finish
before
after
early
late
fast
slow
on time

The trained elementary school teacher should have no problem in methodology in teaching this area of knowledge.

Language Development in the Self-help Skill Area

While it is vital for the congenitally totally blind child to learn the vocabulary of materials in his immediate environment, rarely does the special educator systematically tackle this problem. Too many blind children learn about their environment through incidental experiences and, often, the result is development of erroneous concepts. The following lists may be followed in developing meaningful vocabulary for these children:

Clothing

underwear
shirt
trousers
belt
sweater
jacket
hat
necktie
shoes
socks

coat
scarf
gloves
rubbers
overshoes
boots
zippers
buttons
raincoat
robe

swim suit
ear muffs
pajamas

For Girls Add:

dress
slacks
blouse

Eating Utensils

glass
cup
bowl

saucer
plate (various size)
fork

spoon (teaspoon)(tablespoon)
knife
napkin

Foods

The name of all meats, fowls, vegetables, desserts, and liquids should be identified through the tactile, olfactory and gustatory channels in the classroom and at the dining table during mealtime.

Grooming

soap
shampoo
wash cloth
towel (hand and bath)
brush
comb
nail file
nail clipper
scissors
talcum powder
deodorant
cologne (boys and girls)
razor (blade and electric)
shaving cream and soap
tooth brush (hand and electric)
tooth paste
bath tub
shower
haircut

Household Furnishings

chair (wood, plastic, metal, upholstered)
table (all types)
desk
sofa
dresser
bed (single, double, queen, king)
lamp
carpet
rug
drapes
curtains
window shades
venetian blinds
mattress
pillow
pillow cover
sheets
blanket (electric)
spread
mirror
book case
television
radio
record player
records
telephone
pictures (wall decorations)
indoor plants (all types)
washing machine
dryer
sewing machine

The methodology to be followed is similar to that which has been mentioned--sensory input with verbal reinforcement.

Socialization Development Process

In socializing a child, it is important to guide him in cultural rules while supporting him when he commits an error. Social rights and responsibilities of individuals and ordinary courtesies should be stressed. In addition there should be emphasis on the roles people play in our society. The following list of concepts can be developed through role playing in the classroom.

Role Discrimination

mother
father
brother
sister
uncle
aunt
grandmother
grandfather
cousin
nephew
niece
friend
boy
girl
man
woman
child
adult
baby

A Selected List of Occupations

teacher
housemother
principal
policeman
fireman
mailman
grocer
repairman
electrician
plumber
carpenter
mason
cook
clerk
milkman
laundryman
physician
dentist
nurse

Social Courtesies

Verbal Phrases

please
may I
excuse me
beg your pardon
thank you

Summary

The purpose of this paper has been to question the educational validity of the terminology used with blind children with multiple impairments as well as discuss the basic areas of knowledge that a congenitally totally blind child must learn if he is to obtain meaningful concepts related to himself as a person and to his immediate environment. The methodology discussed is similar to that used with sighted mentally retarded children. If the child is able to master these concepts, he may be able to progress to the more traditional areas of academic instruction.

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7. COMMUNITY AND INSTITUTIONAL SERVICES

Chairman: Miss Pauline M. Moor, Program Specialist in Education, American Foundation for the Blind

Speaker: Mrs. Jeanne Huffman, R.N., Director, Hospital Improvement Project, Sonoma State Hospital, Eldridge, California

The blind mentally retarded child requires more stimulation for development and in reality receives much less. He fits into neither classes for the blind nor training programs for the retarded; it is also immediately apparent that usually the institutionalized blind retarded child is not programmed to meet his specific needs. The blind child who has had little or no help in mobility and orientation, when grouped with active ambulatory children, often withdraws to a corner and may find the only stimulation over which he has any control is self-abuse.

The needs of these children are essentially the same as those of any child, the critical difference is that the blind retarded child needs time to mature, develop mobility and orientation skills, positive self-concepts, communication and social skills.

The innovation of the Hospital Improvement Program at Sonoma State Hospital in September, 1965, sponsored in part by a Public Health Service Project Grant, is an active program within the institution which will hopefully act as a stimulus to the community to set up programs for the blind mentally retarded children. The grant allowed us to select a fraction of our segment of blind youngsters who were under sixteen years and provided enriched staffing. It has opened the door in providing daily living experiences and curriculum to meet the specific needs of each individual child. Presently we have fifteen psychiatric technicians over a twenty-four hour period, assigned to our twenty profoundly retarded children; the ages range from five to seventeen years. The enriched staffing has allowed a more intensive training program.

The goals of the HIP are

1. Treat each child as an individual, recognize and accept him with his limitations.
2. Assist the individual to realize his maximum potential in self-help activities, mobility and orientation skills, communication, self-awareness and self-acceptance.

3. Teach the child about life instead of shielding him while he is within our protective walls so he can learn to conform to the demands of society.
4. Assist in habilitating the individual to enable his return to the community or to a more independent life within the hospital.

These goals are accomplished by the following approaches to patient care.

1. Creation of a family living unit through equipment, furnishing, decor, and programming.
2. Development of social relationships in recreational and occupational activities.
3. Provision for appropriate educational training and daily living experiences on and off the hospital grounds.
4. Provide training throughout the day in a therapeutic milieu with close coordination of nursing staff, teachers and other disciplines.

Formerly many of our children presented a variety of emotional, behavioral and physical problems relating to their retardation. There was no typical picture. The children were divided into two general categories; the withdrawn would isolate themselves from any stimuli and spent hours twirling, rocking or sitting in a knee-chest position. The hyperactive group displayed frequent temper tantrums, abusive to children, property and themselves. The twenty children were nonverbal, had short attention spans and were totally dependent in all activities except the four youngsters who could spoon-feed themselves.

All the youngsters regressed upon transfer to the HIP for a period of two to three months. The degree of regression varied, but disappeared in all cases. After the youngsters adjusted to the new environment, happy moods set in and they began to move about freely inspecting various sections of the unit. The children who were previously shy in venturing out felt freer in leaving familiar places.

The ward program program provides a true homelike environment and programming over a twenty-four hour period with realistic expectations set for each child. There is no set curriculum as it is a continuation of developmental activities to help the individuals to achieve goals set at each level of training. The treatment program is centered around a "parent" figure for each family of four to five children. The parent figure is in charge of the training and recreational activities, each considered a learning experience.

The training areas emphasized on the ward are: Self-care (dressing, feeding, toilet training), mobility and orientation, development of communication, socialization with others, interaction in recreation and acceptable social behavior. The program stimulates the children to channel their energy constructively and assists them to acquire many skills through varied experiences. They gain a meaningful knowledge of and relationship to the world, thus allowing them to achieve self-respect, self-confidence, pride in appearance, productive work skills and a greater degree of acceptable functioning in society.

The staff set a good example in all activities by wearing dress appropriate to the activity, patience, oral instruction, tactile demonstration, repetition, adequate supervision, praise and reward. The children are achieving the established goals according to their individual capabilities through the staff's acceptance, reassurance, consistency and coordination of the staff on all shifts.

Participation in recreational activities has been emphasized and favorably accepted by many of the youngsters. The outdoor play equipment has improved their coordination and enables them to learn how to play. It has stimulated our passive children to engage in active participation on the swings, slides, jungle gym and trampolines. The children have been in part cautious in accepting new experiences, be it an outing to the community or other activities. It is necessary to offer the individuals a varied recreational schedule, allowing them time to understand and acquaint them with the world.

In conclusion I would like to comment on some of the accomplishments during the two and one half years with enriched staffing and intensive care. We find considerable improvement in all the children. They have partially realized the ward objectives, the self-destructive behavior and abusiveness to others has ceased, all have some concept of mobility and orientation, fourteen dress independently, eighteen feed themselves, eleven are toilet trained and six habit trained, seven are able to do simple work chores and three attend sheltered workshop on the hospital grounds and are nearly as productive as their sighted peers. Nine children have adequate speech, two, who are new admissions, converse with everyone and have been a great asset in stimulating the other children.

Eleven children attend school on the hospital grounds while the less capable youngsters have a prenursery school type program on the ward. Since enrollment they are responding more and their attention spans have increased.

Four children have been transferred off the unit, two as they were deaf and blind--our program is not applicable to a child with both handicaps--one was transferred as he had reached his maximum potential and another was placed in the community.

In evaluating the total program, we discussed the problems that have arisen, what extent the goals are being achieved and what changes are necessary for future progress. The key approach to the project is that it is ward centered with nursing staff in direct contact with the children. In the multidisciplinary group meetings for evaluation and action, nursing staff plans the agenda, presents the problems and achievements, looking to the professional members of the team for guidance and support. Evaluation is made on each child quarterly and written reports are kept on the over-all functioning of the entire program from which the nursing staff develops yearly goals.

The development of a Handbook for Nursing Personnel Working With Mentally Retarded Blind Children was accomplished through the efforts of the nursing staff. These handbooks contain goals and methodology, roles of disciplines, criteria for selection and programs for the children and progress evaluation scales of the ward and school. These handbooks are available to any interested persons by writing to Hospital Improvement Program, Sonoma State Hospital, Eldridge, California, Attention: Mrs. Jeanne Huffman, HIP Coordinator.

The HIP has shown conclusively that the blind retarded can be meaningfully trained in daily living skills and self-help through a program that is structured to meet the specific needs of the multihandicapped child involved.

Slides of the children in various activities were shown. They indicated development in movement, activity skills, such as feeding, dressing, and the like. Many of the immobile and inactive children are now moving, making noise and relating to other people showing steps in improvement.

Speaker: Mrs. Julia Young, Supervisor, Services for Blind Children, Texas Commission for the Blind

The Texas State Commission for the Blind offers medical eye services to visually impaired children, for the purpose of correcting an eye problem, reducing it, or eliminating a cosmetic problem resulting from a visual condition. The ability to pay for these services is based on the financial condition of the family. Once the service is offered, once the child has maximum medical care, and there is still a residual impairment sufficient to prevent him from functioning in an otherwise "normal" fashion, we enter the picture with our counseling services.

There are ten field workers who go into the homes where there is a severely visually impaired child, offering counsel and guidance to the parents, provide information and instruction in the home. We also assist the parents in developing or adapting the local resources which can more adequately meet the special needs of the child.

The very young child whoever he is, but especially the child who is blind or who has a severe visual impairment, needs to know that he is loved so that he can feel secure in order to move ahead and develop maximally according to and within his own capacity and ability. To feel security, to have love, is something that we can share with parents. The child needs to know that he is loved. And we need to let them know that we cannot just look at a blind child and visually let him know of your love. There has to be another technique to use, it has to be more tactual and verbal.

There is a tremendous need to help parents understand and accept the loss of sight. It is only with this understanding and acceptance by the family that the child too will be able to accept his loss of sight, and will not consider this as a tremendous handicap or barrier to his learning, development, growth.

One of the greatest things that we can offer a parent is to help them become aware of the obvious so simple that it is overlooked. There are so many things in our environment that our seeing population, see so frequently, they no longer see it, they are no longer aware of the existence or importance of it. Counseling and guidance can be a vital turning point in helping the parent understand how this child needs to get his information, what there is in the environment that any individual needs to know and how the techniques for the blind child in getting this information can be varied.

We had referrals of children at age four weeks, seven weeks, two months and inquiries from parents of very young children seeking information and guidance. Although we talk about offering services to children at this early age, working with parents, the contacts in the home are periodic; we do not have day-to-day structured conferences for a child and parent to come into. Therefore, it is vital that we focus most of all of our attention on the parents so that they themselves can work with the child on a day-to-day basis in helping him to develop and mature within his own capacity and abilities. Hopefully, by our contacts with the family and the child at a very young age, we will be able to prevent some of the retardation that we are finding in the child who is older. This retardation is a cultural or environmental one that can be corrected if the right service or training is available at an early age. This is where prevention will come in. We hope not to be finding youngsters school age and older as time goes by who have this kind of retardation because the child will have been given optimum opportunity.

Another area of service that we offer beyond the very young child is that of vocation rehabilitation nature. Many of you are familiar with vocational rehabilitation, which includes counseling, guidance, training, physical restoration, job placement and follow-up. Granted the blind retarded is a difficult multihandicap group with which to work, however, we do have some success in these areas and some of the individuals have been successfully employed in placement workshops.

Here is a new project; an interagency agreement between the Commission for the Blind and the Mental Health and Mental Retardation Agency which provide the legal framework within which we are developing a program of vocational rehabilitation services to visually impaired persons residing in our institutions for the mentally retarded. In this project now are three counselors whom we affectionately refer to as our "mentally retarded counselors" who have offices in Austin. The Institutions to be involved are the thirteen State residential institutions under the supervision of MHMR in Texas, which include emotionally disturbed as well as mentally retarded. The counselors will be working with the individuals residing in these institutions, for the purpose of providing those vocational rehabilitation services which will enable the individual to reach at least a minimal level of vocational activity. It is felt that in the beginning that the majority of the individuals will be placed into an extended evaluation period of eighteen months maximum and it is during extended evaluation period that the counselor will be able to determine the vocational rehabilitation potential and/or vocational objectives for these individuals. What we are endeavoring to do here is to open a door to these individuals--a door which has not been open to them previously. Beyond the service which we will be offering the individual, the personnel of the Commission for the Blind will also be made available in the beginning to help guide the institutional staff and volunteers who will be working with these particular persons, the visually impaired retarded individuals.

As a result of help it is hoped that these persons will be able to fit into and take advantage of some of the ongoing programs in the institution today.

At the present time we have information based on studies conducted by MHMR that tell us more than 600 visually impaired persons in these institutions serving the mentally retarded. Another figure that you might be interested in are the one hundred visually impaired children who are functioning at a retarded level. On the children's workers roles about three fourths of these youngsters have other disabilities in addition to the visual limitations and the retardation; about half of this total number are of preschool age. Of the children who are school age, about one-half are enrolled in a school program.

To sum up, at the present time we offer counseling services for the parents of a child who has a severe visual limitation, including the youngster who is also retarded; vocational rehabilitation services to adults and in institutional settings, the age may drop as low as ten or twelve years of age. The next step with regard to service to this group is for our agency to develop services that will help to meet more adequate needs of the young child who is visually impaired and retarded.

Speaker: Mr. Daniel B. Overbeck, Training
Specialist, Inservice Training
Department, Austin State School

We live in an age when the word "future" doesn't have the same connotation it used to have. We aren't content to wait for fifty or sixty years for things that we envision today. Usually, we don't have to. For those of us who like to feel that we are living in an enlightened, scientific age where we can predict the atmospheric conditions of a planet billions of miles away by looking at the light it emits, and where we are now planning to influence what a person will be like before that person is born through manipulation of the parental genes, it is disconcerting to realize that we cannot easily and accurately judge whether or not certain children--for instance, the blind, have the potential for normal development, and what the best course to encourage such development might be. Looking at certain of these blind children, it is difficult to tell whether the child does not have the capacity for learning, or whether the retardation which is visible is attributable to his sensory deficit or to some emotional disturbance which does not let him utilize the capacity that he possesses.

It is on the basis of observable behavior, or the lack of it, that we judge a person to be deviant from the cultural norms and describe him as mentally retarded and further label him "educable" or "trainable." Sadly, the same behavior which is used as a basis for describing a child's intellectual inabilities is not then taken as an indicator of what the child has been able to learn. We seem to place more emphasis on what the child has NOT learned, rather than what he HAS been able to learn.

I would expect that most of us agree that all behavior is purposeful. As illogical, as bizarre, as unacceptable as it may seem to us, each act holds some meaning for the child. Let me give you some examples. One boy prefers to sit next to the wire cover of an old steam radiator on one of the buildings at the State School and with his fingers, work the taut wire screen back and forth until he has broken off a small portion of the screen wire to put into his mouth. If the attendants move this boy from this area, he will gradually work his way back to the same spot in order to resume his twisting and chewing. On the basis of this and other unusual behaviors, the boy has been said to be subtrainable. Few people have suggested that since he is able to find his way across a crowded playroom to a radiator, that he is capable of learning other skills. The fact that he will spend one to two hours working a small piece of wire back and forth until it breaks off does not, in all honesty, let me say that I believe this boy is untrainable--as reads his "label."

Or, the boy who will throw himself to the floor and begin kicking one foot furiously against the other. Some people have called this a fit. Some professionals who heard this behavior described to them were content to redescribe this behavior as "temper tantrums"--an obvious bid for attention. I saw this behavior one day, and when I went over to the boy, and talked to him and touched his foot, I found that the foot he was kicking was knotted into one huge cramp. Massaging it, the cramps disappeared, as did the temper tantrum. The attendants were encouraged to massage the foot as soon as the boy would throw himself down--in less than four weeks the boy was beginning to massage his own foot with directions by the attendant.

I could list case after case, and in each case, if the search could be carried far enough, a reason for the behavior, or the lack of a more appropriate behavior, could be found.

It is this problem that we are faced with when caring for the institutionalized blind child. In working with the mentally retarded, an estimate of potential has to be based upon what the child has been able to learn--or has not been able to learn--by a certain chronological point in time. It is a deceptive index at best. When the mental retardation is compounded with a sensory deficit, the task of forecasting is exceedingly more difficult.

Austin State School is in the initial stages of implementing a program hopefully designed to *(1)* provide some valid comment regarding the reliability of using objective behavior as a criterion for forecasting potential in the blind child who functions on a retarded level; *(2)* suggest the desirability of certain techniques of training the mentally retarded blind child with; and *(3)* provide an experiential basis for expanding programs for the blind in other dormitories and other institutions.

Long-range goals of the project include, in order of preference, helping the blind mentally retarded child return to their own community, be it to their home, or a community facility serving the blind; providing sufficient training to help a child enter a prevocational program on our campus which might lead to a sheltered workshop experience; assisting the resident to return to a more independent life within the institution. Another goal, this one more institution-oriented, is to provide a training station for attendants, volunteers, and Foster Grandparents in which the institutional personnel can learn those skills needed to insure that the institutionalization of the blind child with mental retardation is a constructive--rather than a destructive--experience. The immediate goals for each child as they enter the program include getting the children used to living in the program environment; teaching them to be proficient in self-help skills (dressing/undressing, feeding, potty training, orientation, mobility, socialization, and so forth) and helping them learn through personal, social, and recreational experiences.

Violet Hall, a one-story structure completed in 1917, is being remodeled to provide an adequate dormitory setting for twenty residents. Two playgrounds are being established--one a conventional playground, the other a special recreational and mobility training area. Little structural modification to the existing building is planned with the exception of enlarging and modernizing the bathroom facilities. No special funds have been established to initiate or sustain this program, although to be very candid, we are hoping that by showing what can be done with limited resources, the State legislature will be encouraged to consider the vast number of benefits that we could offer with a little more access to funds. We feel that we must be able to demonstrate an adequate program with the existing facilities before we can justify asking for newer structures.

With the ratio of one attendant to four children, supplemented by volunteers and Foster Grandparents, we feel that it will be possible to provide each child in the project with an individualized program of development that encourages and allows him to grow at his most rapid rate.

The attendants, volunteers, and Foster Grandparents will provide one segment of the interdependent program. Other segments include a special education teacher certified in working with the blind who will be conducting on-dormitory classes, on a rotating basis, for small groups of children. The classes will reemphasize the self-help, socialization, mobility and orientation skills being encouraged by the attendants. Adjuncts to the teaching staff will be volunteers and student teachers in training at the University of Texas.

The primary training approach will be through play or play-oriented activities, utilizing the full range of behavior shaping techniques. All segments of the staff--attendants, teachers, and recreation workers will be actively engaged in activities designed to provide the children (and the staff) with an encouraging, relaxed atmosphere where the blind child can learn that the world is a friendly, interesting place. Learning experiences will range from games, songs, structured and unstructured play activities to field trips on and off campus, recreational activities such as swimming, trampoline, running, and jumping.

Evaluations are made of each child before and at regular intervals (four to six months) during the program. Evaluative instruments include the Hayes-Binet, Maxfield-Bucholz, Parson's Adaptive Behavior Scale, and the TMR.

Because our population includes many blind and partially sighted who do meet the criteria for participation in the project, attendants from various buildings are attending the training workshops. The blind children who are not eligible for the Violet program can then, as much as possible, be grouped together on buildings for more effective programming.

Although the Violet Program will receive concentrated attention and considerable effort to make it a productive project, we feel that we cannot neglect our responsibilities to the other blind children at the School. We are presently exploring the possibilities of other programs for the blind in cooperation with the Commission for the Blind. It is hoped that we will be able to offer a wide range of services--preliminary discussions with representatives from the Commission indicate that among the programs available are *(1)* immediate availability of programming for the educable retardate, ages 10 to 45 years, *(2)* possibility of extending training and programs to the more severely retarded, including surgery where indicated, ophthamological examinations, mobility training, and home-bound teachers.

This interagency, interdisciplinary approach to the blind at Austin State School will hopefully enable the School to offer a full-spectrum curriculum of training and education to all of the blind residents, regardless of present functioning level.

Speaker: Charles E. Bounds, Ph.D., Director of
Psychological Services, Austin-Travis County
Mental Health-Mental Retardation Center;
Chief Psychologist, Austin Child
Guidance Center

Not all cities have mental health-mentally retarded centers, but it might be important, too, for you to understand how to collaborate with them, what it can offer, and how you can work together.

These MHMR centers are built new and you will find a variety of services available. In Austin we have a fairly comprehensive center which has a lot of services. I would like to point out that whatever services an agency or a community might have, many would be instituted if the need arises. So what I'd like to speak briefly on is what a center might do and not particularly what it does do in any one city.

The Austin-Travis County Mental Health-Mental Retardation Center does not have at this time services for blind or blind functioning in the mentally retarded level, but there might be some services if the need is identified and the demand arises. There should be no desire or demand for local MHMR centers to try to take over or duplicate in any way the services provided by institutions. I would like to think that what we would do is a follow-up of the individual or child returning to the community; and it is at this point, then that an institution can look at an MHMR center and ask "All right, we have taken this child, we've worked and done what we could and now are we going to pitch him back into the community and see if he survives?" If there is an MHMR center in your community, you don't have to just say "We hope he survives" something positive can be done about this. And I can say this about Austin-Travis County for services to certain kinds of children or adults, then we will institute the services. I as the Director of Psychology Services, if enough need is identified, can simply ask for funds and hire certain people or ask for consultation funds and get it to provide these services. So the fact that services do not already exist is not the important thing. Ask for them if there is a center in your community. So again, I would like to think that these community agencies begin where the institution leaves off when an individual is returned to the community.

Let us look at some of the things that can be done. However, if assessment of certain types of children or adults was required, funds could be obtained to hire someone to do the assessment on a consultation basis. However, I am assuming that probably this person is being returned to the community from the institution; if not, the individual may be already functioning at home and in the community and this individual could be picked up. Obviously we would need all the diagnostic facilities that are usually provided.

Now let's go on and look at some of the things that might happen if a number of children were identified in Austin who had gone through the process of an institution and had shown growth, had been showing a development in IQ, then what could we do if he was brought back home?

1. We could establish a school class for these children and educate them at various levels through the normal education process. This would probably be done in the context of an exciting program. We are operating in Austin a day school which is a type of hospital, although we don't want a hospital concept. We simply have a day school for emotionally disturbed children who cannot function in the public schools. This day school is operated on the basis of operant conditioning, behavior modification. These children have normal intelligence but are emotionally disturbed. I can see in the context of this same school, instituting a class in which the only difference is you have blind children who had previously functioned, and may still be, at a mentally retarded level. We incorporate him--the only difference being the need for braille if the child was at this level. We would give the rewards and so forth and move him right into our program and elevate him as far as he could go until some other program was appropriate for him or as far as possible.

2. The MHMR center will have consultation services available for the child and for the family. This includes casework services.

3. Homemakers can be placed in the home if there is a family in which there is some disruption, a large family, a divorced mother, and the like. Home management consultation can be furnished by an MHMR center and paid for by them. An MHMR center could actually furnish the funds and, either on a consultative basis or by hiring personnel, go into the home to teach the parent the behavior modification and operative conditioning principles and supervise the parents in the homes. An MHMR center could provide group after school care for a child. While the parent was at work to pick the child up.

There are sampling of the kinds of services which can be almost for the asking but probably will not appear until a need is identified. As I said at the beginning we don't have these services here in Austin, but they could all exist in a very short time if a need were identified. In Austin-Travis County living at home are people who either have no need for institutionalization or have been there and have now been returned. We could establish all of these services including collaborating with what had already been done in the institution.

Without taking any more time I would invite you, if there is an MHMR center in your community or in a community to which you are returning the child, to contact them and inquire about these services. This will be the best thing you can do for the child and he can continue his growth and development in a community environment.

Speaker: Victor Hinojosa, M.D., Director of Volunteer Research and Training Project, Austin State School

Blindness and mental retardation are additively restrictive in opportunity for normal experiences. In order that we can appreciate the problems with which we are concerned, some basic statistics are indicated at this time. In Texas special schools for the mentally retarded there are 675 visually handicapped residents who are functioning at a retarded level. These represent 6 percent of the total resident population which is 10,870. The Austin State school has 43 totally blind and 235 visually handicapped residents, ranging in ages between 3 and 53 and of varying degrees of retardation. Not one of our seven institutions for the mentally retarded in Texas had adequately designed dormitories to house the multiply handicapped child, although the new institutions are seriously considering the possibility of having separate dormitories for the blind.

The Denton State School does have an existing program for the visually handicapped. We all know that an adequate physical facility is one of the utmost importance in the care of the blind, and more so with our mentally retarded blind children. If they are housed with the sighted children as they are now, these residents are constantly under tension, stress, and fear of being injured by their hyperactive sighted peers. We are directing all our energies and available facilities into improving this situation here at the Austin State School. I sincerely hope that other similar programs will take heed and follow in our footsteps since it is the purpose of all who are working with the multiply-handicapped to insure their welfare and attempt to bring them all up to the highest degree of functioning.

This awakening of ours is a step forward in an attempt to get organized and to find ways and means of helping a segment of our blind retarded children. At present there are eleven severely retarded blind boys between the ages of 7 and 18 in one dormitory. For an hour and a half a day six of them are gathered in a classroom in the same building in which they are housed. They are being motivated to participate in as much play therapy as possible. This classroom is assigned for the retarded possessing a mental age under 4 years. The classroom is as attractive and stimulating as possible in order that the children who attend this class look forward to coming into this room; it helps stabilize the child.

Due to experiences of disappointment, failure, frustration, and neglect, the child may not be functioning at his accurate intellectual level. The goal of the teacher here is to establish a positive emotional relationship with the child. Music plays an important role in this class; it might appear to many people as a glorified babysitting job, which may be true to a certain degree, but at least for this short daily period, these children are together and an attempt is being made to socialize them, to teach them how to interact with each other, and to participate actively in some simple games. During the remaining hours of the day, these and the other low-functioning blind children of the dormitories are separated from the sighted peers in a play room conditioned for them. Then we have those low-trainable and high-trainable blind residents who are housed together and who, for the most part, are constantly in the building, unfortunately. Five of the high-trainables attend a structured classroom type of activity for half a day, and one of the foster grandparents who is blind is in charge of this classroom activity. She mentioned the fact that her day was complete by being a foster grandparent and working with blind children.

Here, again, in this classroom, an attempt was made to train these children in self-help skills, communication, and stimulation of senses. A classroom is introduced to the child by permitting him to explore with guidance everything that is within his reach. Names are attached to objects with which he comes in contact. He is encouraged to repeat the names of the objects and he is permitted to look at each object thoroughly. There are some children who do not profit from this experience, due perhaps to the low-trainability and must remain in the dormitories. Here we make use of a faithful volunteer who in this present day of ours is looking for a challenging assignment.

Here, I want to spend a little time discussing our volunteers. Two and a half years ago the State School was awarded a grant to use as trainers of retarded children. This is a Title V Federal Grant under the National Institute of Mental Health. Goals in this project are twofold: to utilize volunteers in intensive programs such as training and habilitation of the uninstitutionalized mentally retarded; to demonstrate effective methods of recruiting, selecting, training and supervising some professionals as an extension of the regular professional staff. No longer are volunteers used only as case aides, recreation aides, friendly visitors and party givers, but rather they are used as extensions of the professional staff. Volunteers provide additional manpower and without additional financial burden to the institutional budget. We are now tapping existing and highly qualified lay personnel who have approached the challenging positions and gladly give of themselves.

We are using the volunteer in the role of a friend and instructor and he is demonstrating his dedication to the training of the blind mentally retarded. Looking ahead to the day we will have a visually handicapped child in dormitories where everyone is like himself, we are training volunteers for the present and for that future so that they may work side by side with the staff and for the welfare of the resident.

Volunteers have a variety of assignments when they work with the visually handicapped. They initiate the work of establishing rapport with the child which may take two, three, four or more sessions. After the gain of trust with the child, the steps toward development are initiated. A volunteer must go to his assignment with positive attitudes which necessitate the ability to emphasize and interrelate with the children. Such attitudes include:

1. a warm and compelling interest in working with all children
2. a sympathetic understanding of their behavior and needs
3. faith and belief in their potential capability and future usefulness
4. the patience to work toward and wait for growth and development

5. the mental and emotional stamina to accept with sympathetic understanding the child's disturbing behavior without becoming personally disturbed.

These attitudes cannot be assumed; they must be felt. With positive attitudes a volunteer can accept pressing annoyances and work toward the child's improvement and growth. In spite of all his handicaps, problems and differences the mentally retarded blind child is more like a sighted child than he is different. Like all children everywhere, multiply handicapped children need love and security. This is stressed to the volunteer so that it will always be first in his mind when he is working with his assignment. A volunteer tends to stimulate the child's sensory concepts such as tactile experiences, auditory and kinesthetic senses. Some of this stimuli is done through taking the child out on field trips either within the campus area or into the community itself. The time that is devoted to the campus excursions helps the children become better acquainted with their environment and learn through experiences many concepts relating to various subject matters.

We have a petting zoo at the State School where children are taken to see the animals. It is funtime for the children and incidental teaching. These same children are taken also into the community so they will be further stimulated with first-hand experiences; for example: going to a supermarket to see the variety of foods that one finds there. They touch and smell the fruit and vegetables, and they are encouraged to help choose the object which the volunteer wishes to buy.

They learn through explanation and description of things. They are also taught to use a cane to get around the campus.

At all times communication is stimulated. This is in relation to proper speech and correct number concept. This oral work, at times, consists of simple games that are based on learning concepts, sometimes improvised by the children themselves or the volunteer.

What is the immediate future for the blind mentally retarded children at the Austin State School? It is hoped that a dormitory would be conditioned hopefully within the next month or month and a half to be used by twenty male and female blind mentally retarded who are functioning at a high trainable and educable level. Their chronological ages would range from between four and twelve. Here, a 24-hour ongoing program of treatment, education and socialization will be implemented. This will entail a comprehensive and constant evaluation so that the program of treatment and training may be solidly established. The team concept will be extended to include all persons who will deal with the individual so that a consistent method of dealing with the child will be used by all who work with him. At present, the inservice training department is holding classes for all attendant personnel assigned to this project, this training being done with the assistance of personnel from the Texas School for the Blind. A certified teacher of the blind will be hired in the fall and assigned to those dormitories. She will provide educational training and extend herself into many needed areas, not only in teaching. There will be a readiness program preparing the child for total living experience. The use of the texture box to distinguish degrees of roughness and degrees of smoothness will be used as well as touch and tell series. Numerous other means of supplying the children with learning experiences will also be used in this situation. And those who show potential will be prepared for reading braille. The recreation department will be assisted also by personnel from the School for the Blind, organizing an elaborate program for the children. Trained volunteers will be increasingly used and these will continue to extend themselves into working with small groups of blind children or with individual residents. We will continue to offer lay people challenging jobs in the field of volunteerism so that the existent gap in the manpower can be reduced substantially.

Speaker: Durward G. Carnes, Ph.D., Assistant Professor of Special Education, Director of Vocational Rehabilitation, University of Texas

This paper called attention first to the change in name of "Vocational Rehabilitation Administration" to "Rehabilitation Services Administration," the new title reflecting change in attitude toward rehabilitation services. As the author stated, "We're looking at the person's total life adjustment and seeing the vocational aspect not as an exclusive focus but as part of a person's life adjustment." As part of the new focus there is a much broader interpretation of rehabilitation. Children who were multiply handicapped would not have been acceptable or eligible for service as defined in the past, but at present at national levels there is a clear directive to extend rehabilitation services to groups which have not been considered acceptable because of practical problems, posed by the extent or multiplicity of their disabilities.

In the past there was the concept that a blind retarded child as he matured would not be capable of anything except custodial or institutional care. Society has moved a great deal in recent years, but still it is felt that we are not going to be able to rehabilitate every disabled person by the year 1975.

It was pointed out that we only produce frustrations in ourselves and for the people whom we are trying to help if we do not have some rational realism about who can and who cannot be aided. The fact remains that in general rehabilitation and rehabilitation of specialty groups that everyone is not equally suitable, or has potential, for utilization of rehabilitation services as defined even in the broadest sense.

Professional knowledge in many areas is so far beyond its implementation and application that what we need now is not more research in some areas to turn up more knowledge, but to direct our resources into an application of those already known knowledges and skills and techniques.

We need relationships between those who are teaching and those who will be aiding in the rehabilitation process. We need well-trained teachers and well-trained rehabilitation counselors and clients properly selected and well screened.

Programs often look well on paper but they break down for lack of professionally trained, competent people. On the other hand, they do not fall short because of the competency level of personnel. Administrative and organizational support are also needed.

It was suggested that the rehabilitation counselor should be working with the client "years before the client is ready for more intensive service." The counselor should be coordinating his work with the child's teacher before the child reaches the age of sixteen or seventeen as then can be too late for some children. Mention was made of the importance and usefulness of halfway houses and the importance of allowing more time for the rehabilitation of more difficult groups of children.

In summary, this paper stressed the need for a close working relationship between the teacher and rehabilitation counselors. Counselors were urged to be "less in the office" and out more in life in defining the needs and providing services for retarded blind persons. The blind retarded person poses a national problem which is being attacked now, perhaps in a limited way, but hopefully with more federal funds we will be able to meet our national commitment more positively. Such institutes as this one concerned with blind children who are retarded in development may be looked upon as a part of the new frontier for the blind retardate.

SUMMARY

Mr. John Best, Superintendent,
Texas School for the Blind

I want to express to all participants my sincere feelings of excitement regarding this institute. Special thanks to the Committee Chairmen, Mr. Svaldi and Mr. Ludtke, committee members, and the sponsoring agencies. You have had the opportunity to see and hear from outstanding authorities and have also had opportunities to react and interact extensively. I certainly want to thank everyone who has made a presentation at these meetings, but I also want to compliment the spectators on their tremendous enthusiasm and active participation. I believe the institute has been successful in inspiring all of us to attempt to do more and greater things for the mentally retarded blind children of our country. I feel that most of you have demonstrated clearly that you are the type of people who will go home and do something to improve the services for these children in your own areas. I plead with you to dream big, be unafraid, and take steps to influence those who can provide the wherewithal to fund and implement the programs so sorely needed.

As you can tell by your programs, my assignment is to summarize the proceedings of the past three days. However, I fully realize that such a task is impossible. We have received so much so rapidly that it will take time to realize the full impact of what we have seen and heard.

Let me just say that we know now more than ever before how to attack the problem and how enormous the problem is. What we must do is stop procrastinating and act. Contrary to what we have sometimes been led to believe, I feel that the climate for change is here in this room today and moves across our nation. The special needs of exceptional children are more in view than they have ever been. The financial power to provide proper and adequate programs is available if we take steps to use it. Let us act now and continue to press forward as if the very lives of these children depend on it, as indeed they do.