THE PREPARATION OF THE PHYSICALLY HANDICAPPED CHILD FOR WORK AS PART OF THE OCCUPATIONAL THERAPY PROGRAMME.

Mrs. H.J.V. du Toit

I would like to congratulate the committee of the Rhodesian Society for the Blind and Physically Handicapped on arranging this symposium, and to thank them for inviting me to present a few basic thoughts on the contribution of the Occupational Therapist towards the preparation of the Physically handicapped child for work. My special thanks to the National Council for the care of cripples in South Africa for sponsoring my visit. This is yet another indication of their vital interest in the promotion of Rehabilitation services for the physically handicapped.

I believe it is necessary to share with you a few definitions of the basic concepts contained in this paper, in order to ensure that our interpretation of the statements I make is based on the same reference points.

The first definition must obviously be of Occupational Therapy. The development of this progession during the past 10 years, has been so rapid and intensified that it is necessary to redefine Occupational Therapy even to the most enlightened audiences, such as the one gathered here today. In these few years there has been a crystallisation of professional philosophy, and existing techniques and procedures, have been scientifically evaluated, modified and extended to meet the changing needs of Rehabilitation. To mention but a few dramatic examples there is the change in the nature of pre- and post-prosthetic training, necessitated by the research and development of electronic splints, and there is the introduction of the work-related programme for the patient who will retain disability. This latter programme commences with the incorporation of work-related motivating tasks at the acute stage of treatment, and culminates in work assessment procedures and the formulation of a work prognosis at the final stage of the Occupational Therapy programme. This treatment approach makes it possible for the physically handicapped person to be discharged to a work situation compatible with his residual abilities. The work-related treatment programme emerged as a result of the enlightened Rehabilitation concept which viewed each chronically physically handicapped child or adult as a potential new talent and work force for the community, rather than as a new burden and drag on that community.

New Occupational Therapy media of treatment have been evolved to facilitate the implementation of these treatment concepts, the Pretoria multimotivational therapeutic appartus is such a medium. The P.M.T.A. makes it possible for

...../2

even the most grossly disabled patient to participate in activity. However, although tempted, I must admit that a description of this apparatus is not relevant to the subject of my paper. It is obvious though that both the clinical "look" of the profession and the content of training has radically changed. Evidence of the change in training is that two of the three O.T. training centres, in the R.S.A. have already been converted into 4 year degree courses and that the third is about to follow suit. Let us try to capture the essence of the principles on which the profession was founded and its new application in modern Rehabilitation Services:

Occupational therapy is a medically directed treatment of the physically and mentally disabled. Treatment is administered by a qualified occupational therapist, and is effected by means of the patient's active participation in purposeful activity. The patient is accepted as a totality and treatment programmes are graded to evaluate and promote the patients' recovery in respect of healthy interpersonal relationships, independence, creative and constructive participation and work capacity. Wherever appropriate work evaluation is the terminal point of treatment, as it facilitates the placement of the patient in a work situation which does justice to his residual ability.

It has been most exciting that the three fundamental principles on which Occupational Therapy is based have of recent years also been emphasised as the foundation of enlightened rehabilitation programmes. As a result of this overlap of new Rehabilitation concepts, rationale and the principles on which the occupational therapy profession was founded the essential service contributed by occupational therapists has become acknowledged and sought after, and the growth of the profession has simultaneously been stimulated. This development has banished forever the picture of the occupational therapist as the crafts-lady who helps the patient to while away tedious hours in hospital.

You will recognise the three basic principles of occupational therapy contained in the definition I have just given you, as being the following:

1. That the patient is treated as a totality
2. That the treatment is effected by means of the patient's active participation in selected and graded purposeful activity.
3. That the restoration of the residual work capacity of the patient, or its nearest equivalent, is identified as the fundamental aim of treatment.

...../3

It is clear that when treatment is concerned with the restoration of work capacity, the occupational therapist is dealing with far more than the sum total of the psychological, social and physical factors of the individual, however broadly and accurately these may have been assessed. She is in fact concerned with the patient as the "unitary I am", as a spirit-infused being who expresses his everchanging uniqueness, which he discovers and confirms in himself, by means of his interaction with the people and things in his world.

The next definitions are of the child, and then of the significance of physical handicap. After this it will be relatively simple to deduce what the ideal contribution of the occupational therapist, toward the preparation of the physically handicapped child for work could and should be.

Although the child's destination in life can be defined as adulthood or maturity, the child cannot be defined merely as a miniature or immature version of the adult. The reason for this is obviously bound up with the fact that childhood is a time of both quantitative and qualitative change. In fact it is a time of growth and development, of maturation and learning. By growth I mean quantitative change in size and structure, and by development I mean qualitative change which is defined as follows by Anderson: not "merely a matter of adding inches to stature, or ability to ability instead it is a complex process of integrating many structures and many functions."

Childhood is also a time of maturation and learning. Maturation is interpreted as the unfolding of the genetically endowed potential or phylogenetic functions. Phylogenetic functions are those functions which are common to all the members of the human species for example, the sequential development of locomotor patterns such as sitting, standing and walking, or of neuromuscular function such as the maturation of the intricate and dextrous manipulative ability, which develops out of the primitive grasp and release hand patterns.

Learning and training on the other hand result from the personal effort and exercise exerted by the individual, and they affect mainly ontogenetic function, that is those functions which are specific to the individual and dictated by his special interests talents and skills, for instance in art or in athletics.

...../4

Just as the structure and size of the child's somatic framework is different from that of the adult, so the matrix of the child's physical structure, that is the quality of his personality, his intellect, his reasoning, his interpersonal skill; and most important of all his activity-participation, is essentially different from that of the adult. Whereas the adult stabilises extends and enriches, his capacities, the child becomes something new and different, as he grows, develops, matures and learns. Moreover, apart from the general differences between childhood and adulthood there are the individual differences between child and child, and the differences between the child and himself as he changes in response to the stimuli in his inner and outer world from moment to moment of living.

Each child whether physically handicapped or not is a unique changing totality, born with a particular genetic endowment, at a particular moment in time, into a particular society and family; and who, in addition to this multiplicity of variables has no option but to influence his own destiny by exercising the power of his decision. It is abundantly clear that the fundamental principles which emerge out of this definition of the child and which guide the occupational therapist in the preparation of the physically handicapped child for work are: to acknowledge each child's uniqueness, to understand the principles pertaining to phylogenetic maturation, to analyse objectively his learning capacity, to seek out his particular ontogenetic skills and attributes, and above all to guide each child along that road of activity participation which leads him to gain the ability to exercise his power of decision particularly in regard to work with dignity and responsibility.

What of physical handicap and its significance to the developing individual?

The effects of physical disability are primarily determined by the nature of the disability. The funcional aspect of independence, initially correlates with the degree of the mechanical limitation imposed by the disability. Ultimately however the effects of significant physical disability are profound, because they are total. Physical development precedes and extends, every other facet of development, whether this be social intellectual or spiritual. Consider for a moment the role that physical competence and independence plays in the processes of development, maturation and learning in the child. Each physical skill, the Baby's ability to focus his eyes, to lift his head, to sit up, to stand and to walk, to poke with a fearlessly enquiring forefinger, and to handle and manipulate, acts as an "open sesame" to a storehouse of stimuli, to a new world of opportunities, to new horizons of exploration, and discovery, in fact to an increasingly compelling invitation to the child to live creatively and to learn that there is joy and fulfilment in the execution of exacting tasks.

...../5

Imagine the deprivation which physical handicap brings to the child when it denies the child access not only to physical mechanical independent function, but to all the concomitant limitations of selfdiscovery and living capacity.

There can be no generalisations pertaining to the specific effects of physical handicap, structurally i.entical physical disability becomes essentially different when it is experienced, interpreted and lived by different children. Every individual identifies himself totally with his physical self. In fact because there is no division between the body, mind and spirit of man, each physically handicapped child becomes <u>different</u>, because of his physical handicap. He becomes a different totality, not an inferior or lesser totality but, without doubt a different being, and in my opinion there is no merit in attempting to treat the handicapped child as though he were normal. A physically handicapped child is, first and foremost, a child, a traumatised totality, who in every sense has the right "to be", a child whose ability/ies are more important than his disabilities, but whose handicap brings with it special needs which demand special skills from those who are to play a responsible part in his life.

We know that it is not the <u>degree</u> of physical disability which is necessarily the deciding factor in determining the gravity of residual disability nor in determining the value of residual ability, it is the attitudinal factors, such as the quality of the handicapped individual's self directedness, and his commitment to life's purpose. It is the quality of his ideals, his hopes, his aspirations and his determination. These are the attitudinal qualities in the individual, which exaggerate or minimise the significance of his handicap in regard to his life in general, and to his work capacity in particular.

Let us once again extract from this definition of the significance of physical handicap, the principles which form the basis of the occupational therapist's training, and which enable her to execute a work-related programme for the physically handicapped child.

The occupational therapist's training must obviously equip her with the requisite medical and interpersonal knowledge to enable her to assess the physical disability of the child. In the presence of pathology, the accuracy of the analysis of disability, will obviously determine the accuracy of the definition of the residual abilities.

...../6

Residual physical ability only assumes importance once it becomes converted into function, and utilised in activity participation. The central core of the occupational therapy training, must therefore be, the scientific analysis of all the components and facets of activity participations. This enables the occupational therapist to select and grade the activities which will elicit and promote the attitudinal qualities required in work, its qualities of directedness, involvement and determination. The activities are selected so that they will simultaneously help the child to fulfil his potential work capacity. This involves, stimulating the child by means of participation in well-selected activities to progress through the sequential work-related programme. The programme commences with creative ability and independence, and leads to selected skilled and sport activities, then to task fulfilment in graded work preparation tasks, and ultimately, at the end of the child's school programme (at whatever level this may be) to the formulation of an initial work potential assessment, which will obviously take the form of a post-scholastic career and work evaluation.

The work preparation programme must lead the child to reality and not to a sentimental nothingness, nor to accumulate non-functional physical capacities. It must prepare him to fulfil a real role in life, a role compatible with his intellectual, physical and personality abilities, however minor and sheltered this role may have to be in this ruthlessly competitive world of ours.

It requires perceptivity and skill on the part of the occupational therapist to select and grade, the appropriate activities which will stimulate the child's participation, and inspire him to anticipate with excitement the unfolding of his future. Above all it is important to prove to him that his future is more significant than his disability.

Having discussed definitions, aims and principles, what does the occupational therapist's programme actually consist of? What does she use as treatment tools?

The therapeutic media accepted by the S.A. Medical and Dental Council as the specialised skills which define the special contribution of the occupational therapist are as follows:

1. Media graded to restore creative participation.
2. Independence training.
3. Therapeutic apparatus with motivating activities.
4. Adapted sport and recreational techniques.

...../7

5. Specialized techniques and methods adapted to occupational therapy
   i) Group handling
   ii) Child handling
   iii) Techniques and procedures for the assessment and training of perception dysfunction
   iv) Treatment techniques for neuro-physiological impairment
   v) Techniques of relaxation
   vi) Psychodrama
6. Work-related tasks graded to restore work capacity.
7. Work assessment procedures.

I firmly believe that apart from the time allocated for specific occupational therapy of the primary physical disability of the child there should be an additional and quite separate, and regular time allocated for a work preparation programme. This programme should start as early as possible. In act in my opinion the basic activity participation programme which is the crux of the work preparation programme could, and where necessary should start in babyhood; it should lead the child from participation in creative and independence activities, to recreational, social, skilled task and work related activities, and it should end in prognostic work evaluation procedures. Such a programme would give meaning to the child's future, and validate the long and expensive educational treatment programmes offered by special schools.

In the work preparation programme, the selection and grading of appropriate activities will determine the success or failure of the programme. The occupational therapist therefore has been obliged to define the developmental sequence of the child in each facet of his total developmental pattern. These sequences of development relate to the intellectual, physical, social, general activity-participation, and creative ability facets of the child's life. The occupational therapist uses these sequences as norms to grade the treatment of the child in his progression through the work-preparation-programme.

The most ruthless and unchangeable aspect of work-capacity and of living capacity, is the quantitative impersonal, and measurable component of the intellectual endowment, all the other aspects of development, that is the spiritual psychological progression, the quality of activity participation, the quality of social interaction, the quality of physical competence and most important of all the quality of the child's creative response can be manipulated to a greater or lesser degree, and significantly influenced and improved.

...../8

These developmental sequences should not be associated with the chronological age of the child but rather with his own unique tempo of maturation.

The physical (psychological/spiritual) sequence leads the child from an unmotivated or biological existence to the self discovery, and self acceptance, which are necessary prerequisites for self presentation and for the motivated competitive and contributive Spiritual capacities demanded on the highest levels of work competence. The six stages of recovery used as norms to treat and evaluate progress on the psychical level are: biological tone, self differentiation, self presentation, self participation, contribution and competitive contribution.

On the social interaction level, the occupational therapist must take the child through the following phases: The early phase in which he is egoistically concerned only with himself, to those where he is capable of the incidental acknowledgement of the existence of others as he plays along-side them, to the ability to play with other children in selected groups, to the phase where he can cope with the social demands made of him by unselected groups. Ultimately he reaches the stage of being capable of mastering in his unique way, the essential characteristics of group behaviour. These characteristics are group loyalty, submission to the will of others, acceptable and compromise social patterns, the ability to accept the authority figure as a fellow human being; and ultimately the all inclusive ability to form mature and meaningful, intimate relationships.

The general activity participation sequence develops according to the following pattern.

Immediately after birth, and approximately in the first 8 months the baby reacts mainly reflexly, and as he has a high perceptual threshold, he registers mainly high intensity stimuli. The child's activity participation consists of negative-reflex-movements of withdrawal and fright, and positive-reflex-movements of flexion, and moving towards. Within this period an element of spontaneous movement in response to inner-motivation becomes apparent, provided the child is handled correctly. Correct handling includes the ability to stimulate the child over a wide perceptual area whilst transmitting the qualities of acceptance and affection and whilst acknowledging the child's basic needs for security and self-expression. The most important handling situation in this very early stage is the

...../9

feeding situation. The vital importance of the correct quality and method of handling the baby with feeding problems, e.g. swallowing problems, and nasal tube feeding, etc. has become increasingly highlighted, and has featured very largely in the occupational therapy programmes, in children's hospitals in Australia with excellent results.

The normal reflexes are directed functionally and abnormal reflexes are inhibited.

The next phase of activity participation is directed at independence, and parallel with this, the child commences the sequential pattern of creative responses, which I will elaborate on a little later. Emerging out of the biological independence, the child defines himself as being different and apart from the objects in his world, and with this insight the nature of his independence becomes more qualitative. Not only does he bring things to his mouth, but he starts exercising his independent will as he manipulates a variety of things with initiative.

This heralds the stage of play-activity-participation, which again re-inforces social-participation. As the child progresses through the three stages of play, he simultaneously progresses through the mainpphases of social participation already mentioned. The three play phases are imaginative play, play with toys which represent the world modified to comply with the child's ability, and his way of interpreting his world, and finally play with natural elements. The latter includes imitative play, which prepares the child for his adult role and for task fulfilment in skilled activity participation.

Play-activity-participation imperceptibly merges into skilled-activity-participation. This is the most critical phase in the development of the child's ability and personality, and one that places the heaviest demands on the discretion and ability of the occupational therapist. Tasks must be selected and graded to stimulate the child's interests, to awaken his self-expectation and to instill in him the joy of task fulfilment. Only when task fulfilment has been experienced, and absorbed as a pattern of responding toward tasks, can one logically introduce specific work preparation stressing work desire, work habits and work patterns. In the advanced stages of work preparation and work evaluation the occupational therapist uses tasks and job samples selected not only from the six specific sociological work areas, that is the operative, clerical, domestic, creative, professional and persuasive work areas, but selected also in accordance with

...../10

the qualitative competence dimension, within each specific work area chosen. These dimensions range from the level of unskilled work, through the levels of skilled work, technical-administrative work, managerial responsibilities and finally to the highest level of executive competence. These vertical dimensional levels are obviously chosen to correlate with the intellectual, psychical, social and physical competence of the child.

The occupational therapist extracts the child's creative response in relation to activity as the main focus of her attention. In emphasizing the development of the creative relationship of the child to activity she knows that she can introduce and manipulate all the other developmental sequences as they all form an integral part of the total work-preparation-treatment-programme of the physically handicapped child. The primary aim of treatment in this special-work-preparation-programme, is the stimulation in the child of a creative response or attitude towards participation in activity. It is imperative to realise that work-ability cannot be superimposed at the end point of treatment if all these facets have not been sequentially built up in the treatment programme. We all have experience of the over-treated unmotivated child. This is often an irreversable problem.

In order to elicit a creative activity response in the child the occupational therapist concerns herself with the method of presenting the activity rather than the nature of the activity selected, and with the attitude, and the response elicited from the child rather than with the product of the child's efforts.

The sequential development of the child's creative response towards activity participation is as follows:

First, he finds satisfaction in destruction, that is destruction for the sheer pleasure of destroying. Out of this enjoyment of destruction the child gradually discovers that construction can flow out of destruction, and in the process he crystallises the difference between destructive response and constructive response.

This leads the child to a rather vulnerable willingness to handle activity material, willingness which will be re-inforced provided the material is presented in an absolutely undemanding way, and provided that neither planning nor handling skill is required from the child. This is the phase of incidental creative response and it is evolved by eliminating any vestige of anxiety competition or judgement in the activity participation, and by ensuring that the child repeatedly experiences pleasure and success in

...../11

these situations. The glow of pleasure and success will confirm the child's belief in himself and indelibly impress on him the knowledge that he can succeed, provided he makes the effort.

This is the surest way of evoking in the child an attitude of joyful anticipation associated with personal participation in activity and ultimately in work. The phase of the incidential creative response may last for a long time, but gradually it brings to the child the confidence to experiment with and find out about handling concrete material. The child's handling of concrete material is initially dictated by his personal desire to explore, and will not at this stage necessarily conform to the accepted norms and standards of handling the media. The properties inherent in the material may however, coincidentally guide the child to handle the material in the correct way. This is the stage of personal experimental response to concrete material. Provided the child's experimental handling and explaratory efforts are accepted he will be ready to imitate the therapist's handling of a variety of activity materials. The imitative stage provides the occupational therapist with the opportunity of graduating the complexity of the object-construction-tasks which the child is invited to imitate. The graduation of the complexity of the tasks is achieved by constant evaluation of the rate of the child's increasing handling ability. The key principles in this imitative concrete phase are still to eliminate anxiety and to ensure that the demands made of the child are compatible with his ability. It is as harmful to ask the child to imitate a task which is too easy for him as it is to expect him to attempt a task which is too difficult. It is as harmful to give the child effusive praise for an inferior effort as it is not to give justified acknowledgement for optimal effort.

Out of the satisfaction, which the child experiences in imitating the construction of objects he spontaneously experiences the conscious desire to add something of his own, something original, to the object imitated. This is the initiation of the phase of creative response in the handling of concrete material. When the child has thoroughly exploited his creative ability on this level the therapist knows that it is time to introduce a work-related programme in which a productive response is elicited in respect of handling concrete material. This stage is product-centred, and the child is required to plan, to comply with norms pertaining to personal presentation, social presentation, and work competence; the latter includes elements of productive speed, and accurary.

.....12

In the highest phase of the creative activity response, the child abandons the norms set by industry, and replaces them by his own much higher abstract ideals dictated by his self-expectations and personal aspirations. He demands much more from himself than any employer or work situation would demand from him.

In this phase all the abstract characteristics of creativity such as sensitivity, flexibility, originality and adaptability are attained.

Obviously not every child will be brought to the highest stage of development, in any of the areas which form a part of the work preparation programme, but it is significant that each of these areas is so planned to culminate in work competence and work evaluation. The important thing is that the occupational therapist should with knowledge, insight and sensitivity assist each physically handicapped child to attain his highest work potential, and that she should be able to formulate an accurate post-scholastic work evaluation which will validate all the years of treatment and schooling, and direct the child to a realistic, and where possible independent and creative future in a satisfying work situation compatible with his abilities.

The work preparation programme should be so realistic for each physically handicapped child that his wishes can be converted into hopes, his hopes into aspirations, and his aspirations into reality.

In summary the occupational therapist attempts to evaluate each one of the following questions concerning the physically handicapped child:- his intellectual capacity interests determine his road and type of work.

1. The physical or spiritual development determines his ability to participate, contribute or compete.

2. His level of social development dictates whether or not he is capable of functioning acceptibly in a work group.

3. His level of creative-activity-participation, determines the all important attitudes which are related to original activity participation and task fulfilment.

4. His physical competence permit him mechanically to cope with the work. The child's ability must be nurtured and graduated at all levels.