

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

1.1.1 Nature of Curriculum

Without environmental barriers or developmental factors in a country, there is no doubt that every child needs to go to school, either the child is normal or with special needs. In the past, education was an exclusive luxury. Through evolution, education is for all, or supposed to be so. Nevertheless, the impact of modernization has caused great changes in structuring goals and content of education in order to fulfill needs parallel with demands of country development. Ever since then, issues and debates of curriculum have created enthusiasm among educators, specialists, researchers, administrators, policy makers, local educational agencies so on and so forth.

What is curriculum? Morrison (1993) stressed that how we define curriculum makes a difference on how we think about it and how we plan it. Curriculum has been defined from different angles and in various ways. An early definition of curriculum was given by Bloom and Krathwohl(1971), that is, curriculum consists of three domains, the cognitive, affective and psychomotor. Tyler (1950), Simpson (1967) and Vance (1973) had similar views. The Philosophy of National Education Malaysia, objectives of KBSR (Kurikulum Bersepadu Sekolah Rendah), Philosophy of Special Education (Kamariah, 1994) and local researcher (Sebastian, 1986) agreed that these three domains are important and effective elements in shaping and developing a child

in order to become a wholly person in terms of intellectual, spiritual, physical and emotional.

Brennan (1985) also shared a humanity kind of definition. He said that curriculum may be just a course of study to be followed in the process of acquiring education. While in the process, many elements related to learning are included. These elements are such as knowledge through cognitive development and experience in daily life that is related to attitudes and values worth sustainable to develop personality, social relationships and generating motivation for the learning which the school exists to foster in and outside of the school. Flexibility is the key principle to allow the process to come true. Review of curriculum definition from Sands, Adams and Stout (1995) had similar interpretation.

Goldstein (1986), on the other hand, gave a more technical form of definition by saying that curriculum as the content of instruction which is built on the goals of education set forth by educational agencies. The elaboration of goals are the same for all students but the outcome differs for each individual. Goldstein (1986) further suggested some ideas for teachers and administrators on how to enhance the consistency for curriculum foundations for special education.

The Spastic Centre that the researcher investigated has referred the curriculum connotation to Taba, cited by Taylor, Ralphs, Gagne, Robert and Scriven (1967) as having diagnosing educational needs ; formulating objectives ; selection of content ; organization of content ; selection of learning experiences ; organization of learning

experiences and determining the ways and means of evaluating effectiveness of what is taught.

In conclusion, curriculum for either general education or special education still incorporates the three domains, cognitive, affective and psychomotor. At the same time, not leaving out the important structure of content such as goals, objectives, appropriate instructional methods and evaluation of effectiveness while implementing the curriculum to yearn for positive outcome for every child.

In general education, curriculum was used to be described as a secret garden, a garden to which only teachers held the key (Williams & Young, 1985). But the garden is no longer a secret. The curriculum has opened for all to see and to debate. The answer to question of "what shall we teach?" is for individuals or teachers or those concerned with education development to find out.

While the ordinary curriculum is no longer a secret garden, curriculum of special education remains as it used to be and has been neglected for a long time (Sands, Adams & Stout, 1995 ; William & Young, 1985). Among the reasons of neglect are policies which have emphasized individual education (Kavale, 1990 ; Forness, cited in O'Neil, 1988), educators who have overstressed identifying and establishing effective instructional strategies (Gable, Hendrickson & Mercer, 1985). In addition, Clark (1994), Polloway, Patton, Epstein and Smith (1989) have found out that there are at least four different orientations to the special education curriculum :

1. Basic skills models that primarily emphasize the remediation of academic deficits.
2. Social skills and life adjustment models.
3. Learning strategy models.
4. Functional orientations of vocational training and adult outcomes.

Besides, goals or objectives of special education are often more concerned with extending scarce facilities for children with special needs rather than taking care of the content offered by those facilities. Question of “where to place a child” had to take priority over what was actually taught.

Now, the special education service has grown, though in different situations in different countries. Attention is turning to the key question in special education--- what shall we teach? Still, Sands, Adams and Stout (1995) reviewed that in the absence of a curriculum base that provides direction for special education programmes, instructional decision making and practices are often haphazard and widely divergent in terms of instructional content, objectives, monitoring mechanisms, instructional consistency and transformational skills for children with special needs.

Before obtaining a standard and wholly typed curriculum base, teachers should keep on trying new methods and contents for teaching children with special needs while tolerating the differences of each child’s needs. To maximise the benefits of special education and to detect the destructive implication, evaluation of

effectiveness plays an important role as an indicator of judgement for improvement of curriculum.

1.1.2 Importance of Evaluation

Evaluation has long been a useful technical tool to determine if curriculum are meeting stated goals. A written report should be submitted to help educators or school administrators to decide what and how the content of education should be carried out (Richard, 1990). Many types of curriculum have been mushrooming for operation, yet, very little is known about their quality or impact. Erwin and Margaret (1996) support the benefits of applying evaluation by saying that curriculum could only achieve highest potential, if they are well nurtured, managed and evaluated. They argued that, all too often, policy makers or educators involved in planning the content of curriculum, have limited knowledge about how best to implement these curriculum and about which curriculum features are the most essential and beneficial to students. This is especially apparent in the education of cerebral palsy where researchers have found out a large portion of special education teachers who taught students with physical disabilities (cerebral palsy is included) as well as the administrators are still lacking knowledge and skill pertinent of physical and health disabilities although in general, they were well informed and trained in this field (Heller, Fredrick, Dykes, Best & Cohen, 1999).

In advanced countries, studies of evaluation for special education are discussed and implemented more frequently and openly when compared to less developed nations. Abdul Wahab (1998) explained that this might due to the different focus of issues between these countries. In advanced nations, focuses of issues are

concentrated on appropriateness and effectiveness of the services provided whereas in less developed nations, attention is paid on the availability of resources and services. Evaluation is less emphasized, as the advanced countries often serve as a model from which less developed nations could learn from, enjoy the advantages of readily available and time-tested system and avoid having to go through the pitfalls of going into the unknown territory. In other words, adopt and adapt is thus, enough (Abdul Wahab, 1998). Problems arise when curriculum designed in advanced countries are adopted for use in less developed nations (Baine, 1988). Consequently, evaluation is important to find out doubts, problems of the curriculum implementation so that improvement and modification can be made on time. This is similar to a situation where a teacher is getting a feedback after having completed a lesson to find out whether students in the classroom have truly understood the lesson.

Locally, as far as researcher's knowledge, there are merely a few formal studies on curriculum evaluation for special education specifically on intellectual disabilities and community based rehabilitation (Sebastian & Kaur, 1996 ; Wong, 1993 ; Sebastian, 1986). Similar study focus on cerebral palsied children is hardly found. However, the informal evaluation carried out in local educational organizations could be more than ever thought of. Further details will be discussed in Chapter 2 under subheading of special education in local development.

1.1.3 Nature of Cerebral Palsy

Cerebral palsy as stated in the operational definition, cerebral refers to the brain and palsy to disorders of movement (NICHD, 1988). Thus, it is not a single

disease, but a number of disabilities caused by damage to the motor control centres of the brain (Batshaw & Perret, 1988). It is a term generated for a condition of which a person is having motor impairments that stem from a malfunction of the brain (rather than spinal cord or muscles) (Badawi, et al., 1998). It is also categorized under heading of physical disability in most references (Heller, Fredrick, Dykes, Best & Cohen, 1999 ; Ashman & Elkins, 1998 ; Hallahan & Kauffman, 1994 ; Kirk, Gallagher & Anastasiow, 1993).

The brain malfunction can occur before birth, during the birth process or after birth from an accident or injury (for example, a blow to the head or lack of oxygen). The damage conditions affect muscle tone which defects voluntary movement and full control of the muscles and delays gross and fine motor development (Kirk, Gallagher & Anastasiow, 1993). The most common classification and the approximate percentage of individuals with cerebral palsy may be summarized as follows (Hallahan & Kauffman, 1994):

Hemiplegia	One half (right or left side) of the body is involved (35-40 %)
Diplegia	Legs are involved to a greater extent than arms (10-20 %)
Quadriplegia	All four limbs are involved (15-20 %)
Paraplegia	Only the legs are involved (10-20 %)

Classification according to type of brain damage and consequent type of motor disability includes **pyramidal, extrapyramidal, cerebellar and mixed types**. The description forms (Hallahan & Kauffman, 1994) may as follows :

i.) Pyramidal (spastic) : Individuals with this type have suffered defection to the motor cortex or to the pyramidal tract of the brain. This causes problems with voluntary movements and in spasticity-stiffness or tenseness of muscles and inaccurate voluntary movement. About 50 % of cases show spasticity.

ii.) Extrapyramidal (choreoathetoid, rigid and atonic) : Damage is outside the pyramidal tracts and results in abrupt, involuntary movements and difficulty maintaining posture (choreoathetoid), malleable rigidity or “lead pipe stiffness” (rigid) or floppy muscle tone (atonic). About 25 % of cases show symptoms associated primarily with extrapyramidal damage.

iii.) Cerebellar : Damage is at the cerebellum, a part of the brain which acts as a coordination centre for the central nervous system. The damage upsets the balance and muscle coordination.

iv.) Mixed : Damage is to both pyramidal and extra pyramidal regions of the brain and the child shows a mixture of effects (e.g. spasticity in the legs and rigidity in the arms). About 25 % of cases are classified as mixed.

Children can have one or a combination of these types of cerebral palsy. The form and degree of physical involvement as well as the affected areas of the body vary from child to child. Thus it can be concluded that no two cerebral palsied children are alike. Most of the children with cerebral palsy are associated with additional problems include learning disabilities, intellectual disabilities, seizures, speech impairment, eating problems, sensory impairments and joint and bone deformities such as spinal curvatures and contractures (permanently fixed, tight muscles and joints).

According to Cruickshank (1976) and Batshaw and Perret (1986), the above description shows that cerebral palsy is a developmental disability-a multidisabling condition which is far more complicated than a motor disability alone. In general, there is no universally used method by which physicians or therapists can objectively categorize these children as having mild, moderate or severe degrees of motor dysfunction, such estimates are usually made subjectively. Each child is so unique and different from one another. Categorization just to ensure the appropriate intervention is given to the children.

About forty percent of those with cerebral palsy have normal intelligence, the rest have mild to severe retardation (Batshaw & Perret, 1986). The probability of normal intelligence decreases and the probability of secondary problems increase with the severity of the condition. However, not all cerebral palsied children are severely involved and associated with secondary or associated problems. Kirk, Gallagher and Anastasiow (1993) viewed that cerebral palsied children are an extremely

heterogeneous group who are having unique abilities, weaknesses and needs in particular. Therefore, careful and consistent educational system of the individual child's abilities is particularly important. In related to this circumstances, teaching the child with cerebral palsy demands competence in many aspects of special education and experience in working with a variety of disabling conditions under a multidisciplinary setting -physicians, nurses, psychologists, social workers, physical therapists, occupational therapists, speech therapists, special education teachers, parents and so on (Biggie, 1991 ; Verhaaren & Connor ,1981a, 1981b ; Zadig, 1983).

The prevalence of cerebral palsy is difficult to determine accurately due to reasons of varying conditions among them. Hesitation of parents particularly in rural areas to report and register their children's problems further result in its inaccuracy. The estimation also is confused by the many associated disabilities such as intellectual disability, hearing or visually impairment and emotional or behavioural disorder that accompany cerebral palsy.

The incidence of cerebral palsy is between 1.2 and 2.7 per 1000 live births, with an increase of cerebral palsy noted in the past decade in very low birth weight babies (Davis, 1997 ; Palmer & Hoon, 1995). In Malaysia, the actual number of people with cerebral palsy is not known. The only information that can be gathered from Welfare Department of Malaysia is the number of people with physical disabilities (that will include people with cerebral palsy), together with other types of disabilities are shown as follows :

Figure 1.1 Number of People With Disabilities Registered At Welfare Department of Malaysia Until September, 1998

Types of Disabilities	1981	1986	1991	1996	1998 until Sept.
Visual Impairment	5864	8279	9465	10895	11425
Hearing Impairment	3287	5820	8320	11898	13558
Physical Disability	6381	11643	16021	22324	25331
Intellectual Disability	3881	6491	10914	19070	23044
Total	19413	32233	44720	64187	73358

Source : Jabatan Kebajikan Masyarakat Malaysia (Kementerian Perpaduan Negara dan Pembangunan Masyarakat). (1998). Hari Orang Kurang Upaya Kebangsaan 1998 : Maklumat ringkas.

1.1.4 Brief History of the Spastic Centre

The centre where the researcher has carried out her studies, is one of the Spastic Centres in Malaysia which caters for the needs of spastic children. The centre also caters for the needs of other types of cerebral palsied children, thus, the researcher will use the term-cerebral palsy for any related characteristics and conditions that children have in the centre through out this study.

The awareness and interest in the education of children with disabilities began in the first quarter of the twentieth century in Malaysia. As in many other countries, special education for children and youth with special needs in Malaysia did not begin with the cerebral palsy but with the blind in 1926 (Md. Jamal & Che Yahya, 1997).

The formal place catered for the needs and education for cerebral palsied children began at the state of Selangor where an association for the care of children was set up. The objective of the Spastic Association is **to develop and restore to the fullest the physical, mental, social and economic usefulness of which the spastic child is capable by intensive and comprehensive rehabilitation services** (Your contribution, -their hope, 1989).

From a garage of the Red Cross Society with a handful of seven children in February, 1960 until the present site (built in mid 1966 plus a new building extension completed in September, 1996) with approximately two hundred children in the association, the centre has been receiving great effort and encouragement in terms of financial and spiritual support from all parts include Royal Patronage of the DYMM Sultan of Selangor Darul Ehsan, VIPs and well known individuals, Welfare Department of Malaysia, firms and the public in general.

The association manages a Spastic Centre which provides free transportation, the early intervention and treatment (physiotherapy, speech therapy and occupational therapy), the academic facilities (Standard 1-4, Form 1, Functional academic) as well as vocational training. The centre has its own Sheltered Workshop to employ those adult children who have completed their vocational training.

The centre encourages the admission of cerebral palsied children as early as possible, including babies. This is not only to prevent secondary disabilities, but to raise awareness among parents for the importance of early intervention for those children with special needs particularly. Children of school going age are registered in the "school section" while the younger children are given outpatient treatment and services. Many teaching and extra-curricular activities are held in the school section such as sports, concert, swimming (hydrotherapy), parties, outings, horse-riding, gardening and needle-work.

The centre is administered by a chairman with eleven advisory committee members, a director, an administrative officer and forty-three other staff members comprising of therapists and aides (10), teachers (13), centre assistants (12), a supervisor of the Sheltered Workshop and drivers (4). An Honorary Medical Panel consisting of paediatricians, neurosurgeon, orthopaedic surgeon and dental officers assists the association on a voluntary basis. In recent years, the centre has an Honorary Legal Advisor to help out on legal issues.

The centre has active women participation. The Women's Auxiliary is a complementary arm of the management committee whose duty is to assist in the activities of the association. They carry out regular fund-raising projects to fulfill the needs and requirements of the children and to improve the amenities of the centre as a whole.

The centre is a member of the National Council for the Spastic Children's Association Malaysia where the secretariat body is located.

1.1.5 Curriculum in the Centre

Late in 1987, the management board of the Spastic Centre had drawn up a standard curriculum for use at the centre with reference to the connotation from Taba, cited by Taylor, Ralph, Gagne, Robert, and Scriven (1967). Other sources of the content curriculum are referred from Gunsburg (1974, 1963), Staff of Rectory Paddock School In Search of a Curriculum (notes:1983) and the curriculum of KBSR.

The structure and content of curriculum is influenced by three major factors. Firstly, children enrolled in the centre, due to the nature of cerebral palsy, are of multiple-disabilities such as physical disability, speech problems, low visual, auditory, tactile or other sensory dysfunction, or a combination of these problems with a normal cognitive development and so on, necessitate a multiple programme that can cover all areas to maximise their potential and minimise the handicapping effects of their disabilities.

Secondly, the existing school organization generally consisted of two main streams that are, ACADEMIC and NON-ACADEMIC into which the children are placed after initial assessment. Continuous assessment makes the transfer from one stream to another a possibility and **the ultimate goal for the academically-able children is integration into regular schools** (Curriculum, 1990). The academic stream has early intervention, nursery, kindergarten, standard one to four and form

one as well as a newly set up---Functional Academic Class. Non-academic students will go to stimulation (young children and below 13 years old), care group (developmental class of children above 13 years old), independent living skill class, pre-vocational or vocational training and finally employed in the Sheltered Workshop or obtaining a job in the society for those trainable young adults. All academic and non-academic streams are structured by two important elements. The “core areas” include motor skills, cognitive skills, self-help skills, social/emotional and communication skills. The “applied curriculum” is where the core skills are generalized to as many other educational purposes as possible.

The major part of curriculum particularly the school section was adapted and modified from certain subjects in the KBSR. The subjects are such as Bahasa Melayu/ Language Development, Maths / Maths Readiness Skills, Reading / Readiness Skills, Handwriting / Handwriting Readiness Skills, Moral, Self-Help / Activities Daily Living, Science, Arts / Crafts, Music, Physical Education and Recreation & Leisure. Students in the school section need to cope with all these subjects and therapy. The curriculum is presented in a form of task analysis and individualizing teaching and learning. The rationale of adapting the KBSR is that some cerebral palsied children are capable of eventual integration into regular schools and should be allowed to maximise their potentials. This is supported by parents as a KBSR based approach does not deny the possibility of integration. Moreover, the objectives of KBSR is congruent with the aim of the centre that every child is respected as an individual who has every opportunity to maximise his or her potential through the practicality of the curriculum in the education provided.

Besides, stimulation classroom and developmental class use the Portage or stimulation curriculum. The goal is to stimulate all the children and young adults' senses in order to promote growth and development. Early intervention, nursery and kindergarten refer to pre-school curriculum / Portage and recently teachers in pre-school section have done some refinement on the curriculum. The aim is to provide a holistic education from intellectual, emotions, social and physical aspects as well as to develop basic learning skills to acquire new information and knowledge.

Pre-vocational section uses the curriculum based on the Australia Pre-Vocational Programme (Fauziah, 1986). The goal of this section is to stimulate the personality growth of the disabled and to prepare them for community participation as well as for the work in the Sheltered Workshop or the open labour market. Each section has their own goals to be achieved and together, working toward the association's objective (Further detail of the curriculum, please refer to Curriculum, 1990).

Finally, the third major factor is influenced by the stated aim of "normalization" for these children. With this, the framework of the curriculum is divided into "core" and "applied" areas of a child's development and the skills needed to generalize to as many other educational purposes as possible.

The curriculum hopes to embrace the characteristics of dynamic, flexibility and be able to evolve through times to meet the complex needs of cerebral palsied children in the society and new development in special education. Therefore, staff

members in setting up and implementing this curriculum are urged to constantly evaluate its practicability and efficacy as well as be able to contribute, at some point in the future, to its revision and refinement.

Until now, the curriculum has been implemented for more than ten years, review or evaluation is yet to be done. The curriculum is in need to be evaluated not only because it has been implemented for a long time, but it is time to find out whether there is anything to be improved in terms of students' learning, parents' satisfaction, teachers' instructional methods, weaknesses, strengths and other problems that could be found out from the curriculum. Based on the significance of the study, teachers in the classroom as dominant resource implementation of the curriculum are chosen to share views and thoughts concerned with the practical part of the content.

In conclusion, curriculum adoption from the KBSR has fulfilled one of the components in the provision for an educational system and services deliveries for pupils or students with special needs in Education Act 1961 (Kamariah, 1994) where :

"The curriculum should be part and parcel of the National Curriculum but modification is permitted when deemed necessary and practicable." (p.17).

The objective of which capable cerebral palsied children are possible to integrate into regular school is parallel with the development of special education because inclusive education is being paid much attention to in recent years. According to Kamariah (1994), inclusive education has been successfully implemented for students who are

visually impaired. But to what extent and how far the implementation has been effective, is not mention in her study.

The service delivery system in the centre is referred to system from the advanced nations. The combination of western services and local curricular is a mixed type that is waiting to be evaluated in order to find out whether this comprehensive method is effective or non-effective.

Without adopting western curriculum fully could be seen as a reaction to avoid or minimise the problems, usually aroused from the adoption of western curriculum (Baine, 1988). Alternatively, the centre may become the initial organization to prove that adoption and modification from the local curriculum of regular education and a combination of facilities could be a better choice to provide educational oppotunities to cerebral palsied children in particular and children with disabilities in general.

1.2 Purpose of the Study

Based on the description earlier, this research report is aimed to highlight issue concerned with the teachers' perception of the curriculum implemented in a local Spastic Centre. Locally, although there has been a few studies done on similar topic with children of different types of disabilities from various perspectives, for cerebral palsied children, the number of research or proper document in this area can be counted.

It is hoped that teachers' views could become a valuable reference for the centre's administrators to ponder over. Hence, they could be more sensitive towards the multi-disabilities conditions of children with cerebral palsy, so that more service, facilities and trained educators are gathered to achieve the objective of the association. Parents, too, could advocate more openly towards their children's needs while having a supporting group as their "hidden voice".

1.3 Significance of the Study

The researcher choose to investigate and evaluate the curriculum from teachers' perception as teachers' perception and practices are important elements in teaching and learning as it is greatly influential in both curriculum in classroom and reform initiatives for curriculum implementation and evaluation (Conley, 1991). Besides parents, teachers are the second important persons who have responsibility to special children's learning progress. They are like "second parents" to the children, love them, take care of the children's emotions, social learning behaviour, mastery skills, literacy and many other things. Teachers make their own decision on what and how to teach the children. Thus, through the teachers' decisions and actions, they play an important role in deciding whether the policy needs to be implemented, transformed, modified or ignored (Cuban, 1988). In addition, the researcher can solicit valuable information from teachers who have had the responsibility for the implementation yet never been asked about their views and thoughts of the implementation's process and outcome.

Through the research findings, awareness and knowledge about the education and service for cerebral palsied children in particular can be widened to a degree where interaction and relationships among teachers, parents, administrators could be enhanced. Knowing that handling a special child is not easy, to handle a child with cerebral palsy is even tougher. Through this research, people involved in this field are further aware of the importance of providing multi service to this group of children.

Secondly, the information based on teachers' perception could create the awareness of the importance of teachers' training in special education. This is to urge the local educational agencies from both governmental and non-governmental organizations to take real action over the issue of special educator's training seriously and not just remain as orally suggestion and complaint (Kamariah, 1994).

As formal research regarding curriculum of cerebral palsied children in local is hardly found, this research report may serve as a catalyst for further empirical investigations towards the expansion of knowledge in the field of education for cerebral palsied children in Malaysia.

Purposes of evaluation are not inclined to find fault with the service providers. Conversely, evaluation may serve to justify the existence or expansion of a programme, to improve its functions or to demonstrate the impact of a service on participants and the wider community (Hauser-Cram, 1990). The purpose of this research, is to find out from teachers' perception, the effectiveness of the curriculum implemented in the centre.

1.4 Research Questions

Research questions of this research report are as follows :

- i) Based on teachers' perception, to what extent has the curriculum achieved its stated objective that is congruent with the association's objective?
- ii) Based on teachers' perception, what are the weaknesses and strengths of the curriculum?
- iii) What do teachers perceive of the curriculum implemented in the centre
 - in helping children learning skills
 - in enhancing parents coping skills
 - teamwork coordination
 - use of task analysis and Individualized Education Plan (IEP) in teaching and learning process
 - monitoring mechanisms
 - facilities in the centre
 - issues of transition
 - teachers' training
- iv) In teachers' views, what are the suggestions or solutions to maximise the development of the curriculum?

1.5 Operational Definitions

This research uses the following terms with their operational definitions.

i.) Perception

A way of seeing, understanding or interpreting something ; awareness

ii.) Cerebral palsy

Cerebral refers to the brain and palsy to disorders of movement. It is not a single disease but a number of disabilities caused by damage to the motor control centres of the brain.

iii.) Pyramidal

Pertaining to pyramid (a structure in the brain)

iv.) Task analysis

According to Baine (1988), in the field of mental handicap, it is described as not only the tasks to be taught, but an analysis of the most appropriate teaching methods for different types of tasks, together with the form in which records should be kept.

v.) Individualized Educational Plan (IEP)

PL 94-142 requires an IEP to be drawn up by the educational team for each exceptional child ; the IEP must include a statement of present educational performance, instructional goals, educational services to be provided, and criteria and procedures for determining that the instructional objectives are being met.

vi.) Normalization

The creation of as normal as possible a learning and social environment for the exceptional person.

vii.) Curriculum

The structured content and sequence of the knowledge and skills to be taught in an area or more of instruction. It is used to include all planned experience of students.

vii.) Evaluation

The process of determining the progress of students and the efficacy of the total curriculum or intervention programme in an objective and systematic way in order to achieve its stated objective.

viii.) Spastic

Sudden, involuntary contraction of muscles that makes accurate, voluntary movement difficult ; a type of cerebral palsy.

ix.) Choreoathetoid

A type of cerebral palsy characterized by abrupt involuntary movements and difficulty in maintaining posture.

x.) Atonic

A type of cerebral palsy characterized by lack of muscle tone or “floppiness”.

xi.) Hemiplegia

A condition in which one half (right or left side) of the body is paralysed.

xii.) Diplegia

A condition in which the legs are paralysed to a greater extent than the arms.

xiii.) Quadriplegia

A condition in which all four limbs are paralysed.

xiv.) Paraplegia

A condition in which both legs are paralysed.

1.6 Limitation of the Study

Findings of the research cannot be generalized to actual population of children with cerebral palsy as views and opinions of samples in the centre are not representative and involve individual differences and biases. The research would only focus on teachers' perception and not the perception of other staff members such as therapists (physical / occupational / speech) or parents who are considered important persons in helping and determining the progress of the children in the centre and at home. It is an attempt to provide a formal documentation on general perception of teachers towards the effectiveness of curriculum implementation in this Spastic Centre.