

# The Scottish Centre for Children with Motor Impairments



## Explanatory Paper on the View of the Centre Management Team of Conductive Education

### Historical Context

Scotland was introduced to Conductive Education (CE) during the decade 1980 – 1990 as a response to major television programmes, media coverage and parent pressure. Developing public awareness of CE, resulted in a substantial number of children affected by cerebral palsy from all parts of the UK travelling to the Peto Institute in Budapest, which at that time was virtually the sole source of CE world-wide.

A number of organisations involved with children affected by cerebral palsy began to explore this system, sending staff to the Peto Institute in Budapest and beginning to introduce CE into their regimes. Queen Margaret University brought staff of Peto Institute to Scotland to demonstrate this work and conduct seminars with academic and external staff. Queen Margaret also organised two national conferences on CE, and awarded Ester Cotton, a physiotherapist and a pioneer CE in the UK, an honorary doctorate.

The gathering momentum associated with the increasing awareness of CE and growing pressure from parents for CE to be made available, led the then SOED to establish in 1991, 'The Scottish Centre for Children with Motor Impairments' (SCCMI), which was subsequently established at the Craighalbert Centre in Cumbernauld in 1993. This Centre had the requirement to deliver the objectives identified in Appendix I and importantly, although the Centre would provide education with "insights" from the Peto Institute, it was stated that the Centre would not attempt to replicate Hungarian practice.

The SOED also commissioned an independent evaluation of the Centre in its first three years of existence under the Chairmanship of Professor McKay from Strathclyde University. One of the conclusions in this report was that there was "no evidence ..... that a national centre was required", and that a range of geographical and demographic features "militate against a single national centre on the Craighalbert model". The then SOED decided however, not to accept this recommendation, that the Centre should continue and has supported this decision by the contribution of some £15 million over the past 2 decades.

### The Development of Conductive Education

The development of CE in Scotland has been focused on the Craighalbert Centre and has not been adapted by any other organisation involved with children with CP. Capability Scotland engaged with CE decided not to continue with this system in the mid 1990's. The

SCCMI has continued to draw its full-time pupils almost exclusively from the locale surrounding Cumbernauld. It provides a service to children in other parts of Scotland through

## The Scottish Centre for Children with Motor Impairments



its Outreach Department. This Outreach service was boosted in 2005 by the establishment of the Outreach Department and the building of new facilities.

CE has continued to grow world-wide, invariably from a service perspective with new establishments formed on the basis of the experience of other established service providers.

### **The Knowledge Base of Conductive Education**

The fact that this system had been developed in Hungary (at that time the 'Iron Curtain' was still in place), and from a mainly pragmatic service perspective, has resulted in a poverty of information being available on the processes involved in the delivery of CE and on the underpinning concepts of this system. CE was therefore developing in a research free environment without an extensive literature base, without involvement of the universities, the major base for the creation of the body of knowledge and a lack of scholarly analysis.

It would however be unfair to suggest that no academic work has been undertaken in this field, however this has been ad hoc and isolated. CE has been assessed in only a few controlled studies which have focused mainly on progress in motor skills and being compared to traditional physiotherapy. These studies have failed to demonstrate the superiority of conductive education. There has been no scientific examination of the long-term success or cost effectiveness of CE. A review that included less well-designed studies, concluded that the research literature could not provide conclusive evidence, either in support of, or against conductive education, and the limited number of studies and their poor quality made evidence-based decision-making about CE not possible at this time.

### **The Aims of Conductive Education**

CE is focused primarily towards children with a cerebral palsy or other neurological conditions which has resulted in a motor disorder. It is focused on developing the child's ability to 'learn how to learn', is regarded as a model of change and adaptability where expectations of achievement are high.

It is based on the premise that a person who has a motor disorder has not only a medical condition, but also a learning difficulty. It therefore aims to develop a child's mental and physical skills to their fullest potential, enabling those affected by cerebral palsy and other neurological conditions, to lead their life as independently and positively as possible. The optimum outcome for the individual is that they develop into confident individuals, with an active involvement in, and can make a meaningful contribution to society.

It is now evident that CE has substantial congruence with the recently developed 'Curriculum for Excellence', which aims to improve the "attainment and achievement" of children who will "acquire a full range of skills and abilities relevant to growing, living and working in the contemporary world" enabling them to "realise their individual talents".

# The Scottish Centre for Children with Motor Impairments



## Elements of the Conceptual Framework of Conductive Education

It is generally accepted that brain injury can have a detrimental effect on all aspects of a child's development. CE attempts therefore to address the whole development of the individual by providing an overall, holistic approach. The term 'holistic' is now an overused and even clichéd idiom, however the principles which underpin CE are focused on a holistic approach, which regards the total functioning of the individual, personal development and social organisation as inter-dependent, inter-connected, inter-acting, multi-levelled, and cohesive.

The development of a child is dynamic and therefore capable of change. The CE model of change and adaptability is supported by the growing body of knowledge surrounding neuroplasticity, is established through creating an appropriate environment and circumstances for learning and through a partnership between the conductor and the child

A tenet of those engaged in CE is that problems of motor function are regarded as problems of learning. There is therefore, an underlying assumption whatever a child's cognitive development level, all are capable of learning to some degree, that the individual should be an active participant in the learning process and this results in the development of the child's intellect, mental abilities, physical skills, emotions, motivation and awareness.

A child's mind matures as a response to inter-related experiences which include interaction with, and investigation of the environment. CE therefore attempts to create an environment where social and cognitive skills are developed through the child being actively involved with such environments and encountering psychological, social and biological demands.

## Identification of Children Who May Gain Most Benefit From Conductive Education

The view of SCCMI is that to enable children to benefit from CE, normally requires the child to demonstrate:

- potential for a change in their abilities;
- capability of physically participating in the Centre's active daily programme;
- ability to understand language to a level which would have an impact on movement and posture;
- engagement with the immediate environment;
- ability to interact with others.

# The Scottish Centre for Children with Motor Impairments



## **Key Operational Principles Associated With Conductive Education**

The learning needs of each child are assessed in the context of the group, the learning approach builds upon previous learning and leads towards future individual achievement, children are encouraged to be involved in planning their own goals with the aim of increasing motivation.

CE operates on the premise that the child must first learn, practise and subsequently use physical, cognitive, psychological and communication skills in different situations, with a range of people, in order to be able to use them meaningfully in their everyday life. The child's learning is planned to ensure they practice their emerging skills in a range of inter-connected life situations. Some of the main principles associated with CE include:

- The co-professional team
- The role of the conductor
- The use of a group learning environment
- The use of speech and language to facilitate learning.
- The daily programme/task series

### The Co-professional Team and the Role of the Conductor

One of the principles associated with the delivery of CE is the concept of the conductor. At the SCCMI, this concept has been refined and the work of those involved is regarded as 'co-professional'. The aim is to have a 'team of all the talents' working together throughout the whole day with the same group of children. The Centre's aim has always been to have individuals from a range of appropriate professional disciplines and backgrounds working as an integrated team, who can offer a collective and cohesive approach whilst planning and executing the daily programme sharing and employing their specialist knowledge at all times.

The Conductor has a number of roles which include ensuring coherent group engagement of both the children and the conductors. The conductor guides the child towards realistic and achievable goals, acts as a catalyst that assists in the child's learning and ensures maximal concentration and the application of appropriate effort. The emphasis is on the positive aspects of the child's achievement and strong use of praise for both effort and achievement.

### The Group Learning Environment

Group learning is a dynamic and powerful learning environment and a source of motivation and support. It also encourages social skills eg as contact making, self-adaption, collaboration and the adoption of a positive attitude to the community. Each member of the group attempts to learn tasks associated with a range of the same activities. As each child has a different level of ability their learning efforts vary in eg the time required to perform the tasks, the way the tasks are performed, and the level of performance. Although the daily activities take place in a group context, not all group members are subjected to a uniform standard of behaviour. Thus, CE encourages individual solutions to individual problems.

# The Scottish Centre for Children with Motor Impairments



## The Use of Speech and Language to Facilitate Learning

One of the ways in which speech and language is used is to provide instruction, guidance and explanation where appropriate. In CE, speech and language is considered to be a powerful tool used to assist the children's learning to overcome their motor problems. Verbalising the intention to move prepares the child for action. The individual may also construct an internal picture of what he/she is about to do and verbalise in some form, the intention. This assists the child to focus on what the intention is and acts as a stimulus to the physical actions required. Speech does not only have communicative and preparatory functions but can also have a role in regulating and moderating the speed and rhythm of movements. This process has the term 'rhythmic intention' in the idiom of CE.

## The 'Task Series'

CE utilises a series of tasks which are performed in different positions in order to enable the child to learn a range of motor and functional skills. These 'task series' are the components of different functional activities and are designed to enable the child to learn to and perform the components of the tasks that are usually learned spontaneously through by able-bodied children as they progress through developmental stages. Children are given achievable tasks but which also test their current ability limits. The completion of the task is set out with the child's current ability level but within their potential learning ability level.

The tasks require the child to engage basic motor patterns, move from one functional position to another eg, sitting to stand, and are designed to enable the child to learn to acquire everyday skills and to access an age appropriate curriculum. They can include games, learning activities, self-care, spontaneous expression, and complex activities and outcomes. These tasks are also performed in different body positions (eg lying, sitting, standing).

The task series components are integrated into daily programmes that provide the individual with opportunities to practice means to attain goals. The tasks are designed to gradually increase in their levels of difficulty and complexity and are targeted ultimately to enable the child to successfully complete the functional activity.

## Continuity and Consistency

Continuity, repetition and opportunities to use the same skill in different situations facilitate skills development. Sufficient time must therefore be built into the child's programme to learn and then practice a range of activities eg, walking, toileting, feeding self-care and in developing fine motor tasks. The organised daily programme of CE uses all parts of the child's day as a learning situation and establishes the consistency required for skill development.

Parents have an important role in ensuring continuity (particularly in the early years) by continuing the child's learning at home and other environments, allowing parental engagement by placing a positive value on their child's contribution, therefore developing both the parents and the child's confidence and sense of achievement.

# The Scottish Centre for Children with Motor Impairments



## Appendix I

### **MEMORANDUM OF ASSOCIATION OF THE SCOTTISH CENTRE FOR CHILDREN WITH MOTOR IMPAIRMENTS**

The Company's name is "The **Scottish Centre for Children with Motor Impairments**"

The Company's objects are detailed below. It should be noted that "no addition or alteration in the provisions of this Memorandum or in the Articles of Association of the Company shall be made without the prior approval of the Secretary of State for Scotland"

- (1) The development and advancement in Scotland of education for children suffering from disorder of movement or co-ordination, including any reduction in communication skills, caused by cerebral palsy or other condition (referred to in this memorandum as "children with motor impairments"), and in particular the development and advancement of what is known as "Conductive Education" as it has been developed in the Peto institute in Hungary.
- (2) To establish in Scotland a centre for the education of children with motor impairments based on the principles of Conductive Education and on other progressive educational methods, and to provide and assist in providing residential accommodation for children attending the centre and for parents and families of such children.
- (3) To provide in Scotland training facilities for professional and other staff working with children with motor impairments.
- (4) To enter into or contribute towards research and development of provision for children with motor impairments.
- (5) To establish contact with and liaise with other providers of treatment and education for children with motor impairments, and with the parents or guardians of such children, and provide support, advice and assistance as necessary.
- (6) To establish contact with and liaise with institutions of further and higher education and provide such institutions with assistance with courses relating to the education of children with motor impairments.
- (7) To accept employees of local authorities, health boards and charitable bodies on secondment for training and other purposes relating to the education of children with motor impairments.
- (8) To provide and promote educational and other facilities for the study and practice of methods of education for children with motor impairments.
- (9) To reproduce, publish and distribute in any language and in any part of the world works in any medium on methods of education for children with motor impairments.
- (10) To award prizes for essays, monographs, books, films or video tapes on or bearing on education for children with motor impairments.
- (11) To make grants for education and training in relation to the objectives of the Centre.
- (12) To provide general information and advice on and relating to education for children with motor impairments.
- (13) To promote the formation, organisation and establishment of groups for purposes in connection with the objects of the Company or otherwise to advance the objects of the Company.