



CONDUCTIVE EDUCATION PROFESSIONAL  
EDUCATION GROUP



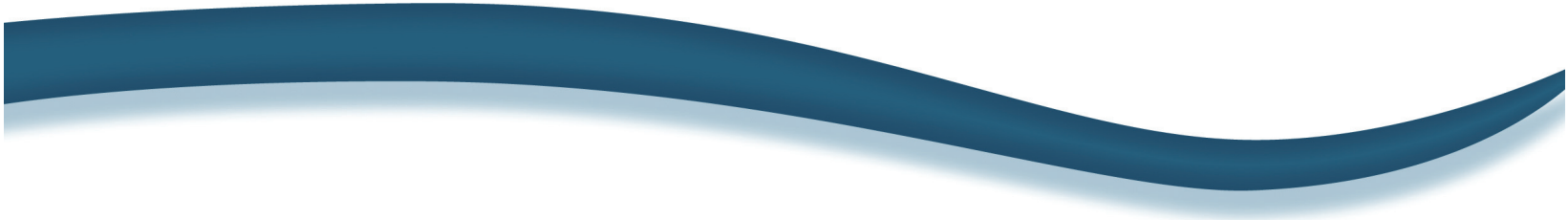
PROFESSIONAL CONDUCTORS  
ASSOCIATION (UK)

# What is conductive education?

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# What is **Conductive Education**?



Conductive education (CE) is a holistic integrated pedagogical/educational system, which enables people with damage to the central nervous system to learn to overcome the challenges they face.

CE is a process of experiences which leads the person to work with their motor disabilities, moving towards increased independence. It is a system which is primarily suitable for people with neurological conditions such as cerebral palsy, Parkinson's disease, multiple sclerosis, stroke, acquired head injury and dyspraxia.

Neurological conditions create a wide range of developmental challenges which can involve areas of gross and fine movement, perception, cognition, social skills, emotional development, speech, language and communication. These in turn can significantly affect motivation, confidence and personality. Ultimately it is the whole personality that is impacted by the condition.

András Pető, the founder of conductive education, viewed people with neurological conditions as a whole; focussing not only on the body but also the personality. He therefore chose methods of facilitation in such a way that they not only made movements/ actions possible, but also developed the whole personality; the wish, desire and ability to be active. CE perceives people with neurological conditions as facing a challenge of learning rather than needing treatment for a medical condition.

After a malfunction or an impairment of the central nervous system, there remains a residual capacity which can be activated to take over functions from the damaged areas. This is known as neuroplasticity. However this residual capacity can not be tapped spontaneously - it must be activated. Pető argued that in order to ensure learning people with neurological conditions should be 'taught' rather than 'treated'. Through a structured teaching environment, led by the conductor, the brain can access residual capacity and learning can be promoted. CE can be seen to utilise the neuroplastic properties of the brain in order to re/learn lost or impaired functionality

Individuals without disabilities often learn quickly how to make use of their environment, how to connect with it, and use it as a tool in human development. They learn to adapt and respond to the environment and its demands. In addition, they learn to influence it thus having an active interaction with the environment.

This situation though, is different for individuals with neurological conditions. Disturbed mobility is accompanied by a challenge in the ability to perceive. The impeded movement can restrict or prevent interactions with people and objects which assist with development. Therefore the ability to adapt formatively to the demands of the environment and to engage in constructive interplay can be affected. This can result in negative experiences and frustrations which in turn affect personality. The dysfunction of the personality in turn restricts physical development and so the circle begins. CE aims to break this circle and transform the lives of people with neurological disabilities by creating people who both desire and are able to learn.

# Origins | Aim | Benefits | Delivery

## THE ORGINS

Conductive education was developed in Hungary by Dr. András Pető in the 1940s. As a physician, he was interested in the rehabilitation of children and adults with physical disabilities, and the connection between mind and body. Dr. Pető recognised that people with lifelong disabilities require a different learning model that integrates education, therapy and (for children) academic learning into a unified, holistic model.

## WHAT IS THE AIM?

Much of the conductive education literature speaks of the goal of orthofunction. In simple terms, this means helping people achieve their potential by nurturing and developing an attitude to learning which is based on simultaneous development of movement, function and personality. The desire to achieve, to be successful and to reach new goals is paramount in this process. The goal of orthofunction is ever-changing, as people extend the limits of achievement beyond that which they thought achievable.

Conductive education enables people to view themselves in a positive way through meaningful activity. It assists them in problem solving, and learning strategies and techniques to approach the various challenges faced. This is when an orthofunctioning personality exists.

## WHO CAN BENEFIT?

Conductive education was developed primarily to teach people with neurological motor disorders. Although the primary problem may be physically based all of these conditions also impact on all areas of human development, including cognition, social skills, emotional development; perceptual abilities, and speech and language. These conditions therefore can not be seen as isolated physical disabilities.

Conditions commonly deemed appropriate for conductive education are cerebral palsy, Parkinson's disease, multiple sclerosis, stroke and head injuries. More recently, children with developmental delay disorders and dyspraxia have benefited from conductive education.

## HOW IS IT DELIVERED?

Conductive education is delivered by a conductor (as explained below) However, there are now examples in the UK where conductors are working together with other professionals, who have been given appropriate training, and may deliver components of the programme. There are centres in the UK that work in conductor only teams and there are also centres where conductors work with other professionals in a multidisciplinary, interdisciplinary or transdisciplinary way.

The approach for children is usually delivered within a full time school setting. As children progress from this type of setting they may access conductive education on a part time basis or through episodic sessions. Some centres also provide intensive programmes for children (often delivered during school holidays) and these may run for one, two or four weeks.

For adults, sessional services are available. These will either consist of weekly sessions of between 1-2 hours or intensive courses which usually run for one to two weeks at a time. The frequency and duration will depend on what is deemed appropriate for the individual. Most conductive education centres work with outside agencies and provide outreach services in schools or other settings. In addition, home visits and additional support for parents, families or carers are often provided.

# The Principles

1. Everyone can learn and neurological conditions are not seen as limiting factors but provide a key to the direction of learning required.

2. Learning is conscious and active

3. An action is only meaningful to a person in the context of their intention. Movement in isolation is of no interest to the person; it gains importance only as a tool to achieve the goals.

4. As action is structured by intentions, movement cannot be viewed separately from other functions. To achieve their intentions the individual needs to integrate all of the skills required (cognitive, emotional, social, sensory, motor, communication) Human function is holistic and people learn to function holistically.

5. It is vital that the individual learns to create their own intentions and solve their own challenges that arise

6. Social interactions are a key factor in CE; the concept of learning together promotes intention in the individual thus impacting directly on development.

7. In order to successfully develop and influence learning individuals need clear and consistent expectations

8. Learning and development is maximised when an individual determines their own goals and is highly motivated to achieve them

9. Opportunity for practice and application in a variety of situations needs to occur in order to reach goals and achieve success

10. It is essential to experience success each step of the way



## WHAT ARE THE FUNDAMENTAL FEATURES?

### 1. The Conductor

This is the name given to people who have qualified in Conductive Education. A conductor is a professional who is a graduate of a certified Conductor training programme. Conductors working in the UK have graduated from either the Pető Institute in Budapest, Hungary, the University of Wolverhampton, in conjunction with the National Institute of Conductive Education or the University of Keele (this course however, is no longer running).

Conductors working in teams are responsible for planning and implementing the integrated educational programmes aimed at stimulating the learning of the individual. This is achieved using effective teaching-learning strategies based on an in-depth knowledge of the individual and the impact of their condition on all areas of development - physical, emotional, social, cognitive and educational.

The conductor is a motivator, and is trained to always build on the abilities of the person rather than focus on the disability caused by the condition; i.e. what individuals can achieve rather than what they cannot. A conductor is trained to have high, but realistic expectations relating to human potential. S/he will then guide the person to not only achieve function but also believe in their own potential, realise their own goals and achieve success. The conductor teaches and guides the whole group, holding attention and enabling the individual to work to their potential whilst constantly observing performance and modifying the programme accordingly.

Conductors are not an amalgamation of current professionals in education, therapy and rehabilitation. They are new, distinct professionals, whose training, experience and methods of working are unique to Conductive Education.

### 2. The Group

An important feature of Conductive Education is the value of the group setting. The group in Conductive Education is created not constructed. The class environment provides a variety of benefits to participants: social interaction, group dynamics, motivation, healthy competition, comparators, support and learning from others in similar situations. Working with others deflects the total focus of attention from the individual, whilst still meeting individual needs. The group also plays a key role in the development of the orthofunctional personality and each member has a role and responsibility.

Conductors are skilled in creating groups in such a way as to ensure all participants benefit from experience and learning opportunities are maximised. As conductors observe achievement and success, they will use the group to reinforce this

### 3. The Programme/Daily Routine

The programme/daily routine is a timetable of activities which reflect an integrated system of learning. It is carefully planned and highly structured with a focus on meeting goals in an interrelated manner. The programme is complex in the way it is designed, but simple for the individual to understand. This allows the learning within the programme to be integrated into every part of an individual's day. It provides the individual with a learning environment rich with relevance, fun, and opportunities to practice and clear pathways to achievement. The daily routine will depend on the age and the specific requirements of the individual. Daily living skills (toileting, washing, dressing eating etc...) will be incorporated and for school aged children, an academic curriculum will be followed. For adult participants it may include working, hobbies or family duties; for teenagers it may include dancing and accessing a social life.

The daily routine is an evolving dynamic process, not a series of exercises punctured by breaks.

*There is not a single event in the day which does not serve its general education purposes. The various activities form a unified whole from an educational point of view. The daily routine is determined by both general and special educational aims.*

### 4. The Task Series

The task series is a structured part of the daily programme/routine. Each task series is a teaching tool, a series of movements carried out in a variety of positions. It serves to equip individuals with the required skills and techniques to accomplish their goals. The task series is tailored to the needs of each group and each individual within the group.

The task series is not a series of exercises, but functional movements or activities are divided into small achievable steps. For each individual, the task is presented in a way which allows them to succeed at the same time as learning a new skill or reinforcing a previously acquired one. Each task provides an element of movement skill. There are only a certain number of movements that the human body can make and

the task series is built around these: e.g. lifting arms, bending legs, moving feet and toes, moving the head, hands and fingers. While carrying out these an individual learns how to “intend”, to plan and execute a conscious, deliberate action. This in turn, will develop performance control, learning and promote success. People with different disabilities, capabilities and learning styles are taught using the techniques most appropriate to their skills and aims.

## **5. Rhythmical Intention**

For people with neurological disorders, intent alone may not be enough to accomplish the desired action. What is automatic to most people, has to be learned by people with neurological conditions.

Rhythmical intention helps these individuals to overcome this barrier using two techniques. The first element is intention. The conductor verbalises this using a phrase such as “I bend my right leg”. When this is said, it triggers a number of cognitive processes. The individual hears the intention, which leads to the language becoming internalised. This prepares the central nervous system for action and increases the ability to carry out the action. The individual then repeats the phrase aloud (apart from people with Parkinson’s who are learning to decrease the time between intention and action).

This further helps to focus on the desired movement and will begin the process of firing the neurons to complete the action. It also increases memory and learning and teaches an internal strategy which can be used outside of the session. Whilst the individual is ‘internalising’ the action the same neurons are being used as when the action is being carried out. By using this technique, of cognitive preparation, conductors are able to correct the ‘intention’ of the individual in order to enhance a more successful action.

The second element is rhythm. The use of music, counting, cadence and dynamic speech help individuals, particularly those with spasticity or difficulty initiating movements, to successfully intend, initiate and carry out the movement successfully. Rhythm and music are also good tools for motivation, concentration, learning and retention.

## **6. Facilitation**

Each individual is facilitated/helped or assisted to achieve success and reach their goals achieving orthofunction. Within Conductive Education, facilitation is always related to learning. Therefore any facilitation provided aims to enhance learning and not replace it.

There are many forms of facilitation used in Conductive Education, including psychological, educational and physiological. Conductors do manually assist individuals if required; however, the aim again, is always to develop learning. Other forms of facilitation are therefore used first so that independence remains paramount.

Aids and equipment are widely used in Conductive Education. However, the focus is on their use to facilitate learning and skill development rather than dependency or replacement of skills. Conductors will always view equipment in relation to human potential and development and not just as an aid to function.

## **7. Observation**

Observation in Conductive Education is an ongoing process. As the education process is dynamic and constantly changing, so the evaluation of results cannot be limited to single, occasional actions but is rather a continuous process.

Observation consists of three main elements; operative, progressive and comparative. These elements relate specifically to what is being observed, the situation and the context.

Observation within Conductive Education is unique as it relates specifically to learning. As conductors are focussed on the immediate development of the individual, set assessment tools can not be used within a daily setting. Different forms of observation, knowing what to observe and creating an active link between the conductor and the individual are therefore paramount in the overall learning process. Constant structured observation is key in order to assess, evaluate and consider what needs to be changed/adapted to further promote learning.

## **8. The Learning Environment**

The learning environment is critical to the success or failure of skill development. The programme/sessions are structured, supportive, designed to maintain interest, to motivate, to reinforce learning, to praise, to support and to challenge. It is important to also focus on transferring what is learned to the home environment for optimum benefit to the individual. The teaching environment will be structured to ensure that the individual feels success, sees new potential and learns the strategies and techniques in achieving this in a different environment. The conductor will work closely with each individual to facilitate the transfer of this learning from one context to another. It is only at this point that the individual can be seen to be ‘orthofunctional’.

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