

## NEW WRITING

### *Parent-child interaction as focus for early intervention: experience from early-age Conductive Education*

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depend (reciprocity). Parent-and-child intervention teaches children together with their parents, enhanced by implementation in small groups. Experience at the National Institute of Conductive Education dates back fifteen years and has also involved a range of disabling conditions beyond motor disorders, including intellectual disorders. The approach is compatible with the thinking of major theorists in psychology (Vygotsky, Wallon, Feuerstein, Bronfenbrenner, Dalto). Given lack of demonstrable efficacy for existing approaches to early intervention, a research methodology is proposed for evaluating this psycho-social family-based intervention.

This is a substantial article which can be read in two halves. The first half, ending where '**Early-age Conductive Education**' begins describes the approach to children and families, while the second half offers a historical and theoretical background.

#### Summary

Early-age Conductive Education developed as a means to activate young children whose motor disorders impeded interactions with their material and especially social worlds upon which social and psychological development

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#### Parent and child

Several children are sitting together on a mat with their parents. There's a lot of talking and laughing and singing as the parents and their children play together. The games that they are

playing, the songs that they sing, the toys and other things involved, these are all the familiar stuff of what parents do with their children in everyday family life. They dress them, eat with them, play together, delight in each other's company and do the thousand-and-one things that people with babies and toddlers do to get through the day. The children don't just sit there, being done to but, like little children everywhere, take an active role in deciding what they want to do, and what they *don't* want. The resulting activity is very much a product of individual negotiations, unique to that particular parent-child 'dyad' (a technical term from developmental psychology; it sounds awkward but it's a useful one). Not surprisingly, therefore, even when everyone is aiming to do the same thing, playing 'piggies' and pulling off a sock for example, every parent-child dyad, is learning to do this in a particular personal way, at a personal pace, with personal outcomes and consequences.

All these children are disabled, physically and often mentally too. They are functioning well below our society's usual expectations for their age and, till they started attending this group, their parents were learning from bitter experience that it could be very hard indeed to teach their children to participate and learn actively in the developmentally vital world of family living. Now that parents and children are taking part in a Conductive Education parent-and-child group, mothers (and fathers too) and children are taking control of development and lessening the limiting and distorting effects of impairment upon learning.

Conductive Education for children with motor disorders and other disabilities has been spreading around the world over the last twenty years as mentioned in the blog *Conductive Education world* (Sutton, 2007-8). The spread is largely at the behest of parents who experience the changes that it brings about in their children's development – and the corresponding changes in themselves and the lives of their families. Conductive Education is usually thought of in terms of children of school or kindergarten age, with children working in school- or kindergarten-type groups, but the children working in the parent-and-child group described above are all aged three or under, some being under a year of age. They are not being 'treated'; they are not doing 'exercises';

they are not being 'trained'. They and their parents are learning to learn together, in as active and as joyful situation as can possibly be arranged. They may not be learning in the same way as do their non-disabled brothers and sisters, they and their parents are being *taught*, but taught in a special way that brings together (the Latin for 'brings together' is *conducet*) their disorganised and often frustrating experience of the world into a coherent and rewarding whole.

Conductive parent-and-child work (P&C) is implemented in slightly different ways in different situations. At the National Institute of Conductive Education (NICE) in Birmingham, England, a small group may comprise around four dyads working with one 'conductor' (someone trained to work in this way), a large group may involve six or seven dyads and two conductors. In Hungary, where this approach originated and is much longer established, up to twenty dyads might work together with correspondingly more conductors. Usually it is the mothers who attend, sometimes fathers come as well or instead, sometimes grandparents or other relatives take part, sometimes there are brothers or sisters there. Usually there is only one disabled child in the family, but sometimes there are twins and even triplets. No matter where or how P&C is provided, however, it depends upon the essential unity of the parent-child dyad and the ways in which development within this can be enhanced through the conductive style of teaching known to its practitioners as 'conductive pedagogy'.

The first parent-and-child service in the United Kingdom began at the then Birmingham Institute of Conductive Education in 1992 (Lambert and Baker, 1992) and was incorporated into NICE when it opened in 1995. The English term 'parent-and-child' was adopted to reflect the trend towards shared parenthood in modern societies – though in practice the majority of participating parents have been mothers. The service aims to empower parents of very young children to become the main educators of their own children, through the transformative personal experience of succeeding in doing so.

Parents of disabled children often experience feelings of bewilderment, guilt and hopelessness when they realise that their child has a disability for life. They may find plenty to

assure them of what their child *cannot* do but very little if anything that demonstrates practically what their child *might be able to* do as long as they, the parents, have the practical knowledge, the confidence and the hope to adjust their child-rearing activity appropriately. Conductive Education offers opportunity for parents to experience success at teaching their children to take part in activities that they may have been told would never be possible.

**Example 1.** A father had recently been advised that his son James, who has severe athetoid cerebral palsy, would probably never be toilet trained. Despite this, he felt encouraged to introduce James to the potty during their group P&C sessions at NICE. Seated on his potty raised from the floor by a box to enable good posture, and with support of two low stools at the sides to prevent toppling, James then used the potty successfully for the first time. Since then, with advice on pottying routines, James' father has incorporated pottying into his son's daily routine at home and James is now using his potty four or five times each day with only an occasional accident. As long as the adults involved act appropriately James is now eligible to be included 'clean and dry' in a mainstream pre-school setting, an enormous boost to his growing self-esteem – and the achievement is his and his father's.

Sessions last for between one hour and two hours depending upon the ages and needs of the children. Parents are taught to offer their children toys which are then used through play to teach required movements. For example, children may lie on their backs holding a plastic ring in both hands with extended elbows 'driving their cars', while being taught how to keep their legs apart to ensure correct hip position. These movements will be accompanied by a song like *Driving along on a big red bus* and the children will be encouraged to look at what they are doing. The song gives rhythm to the movement. In future when the children hear the song, they will remember the movement that they have learnt before. Along the way the movement of the hands teaches supination of the wrists (turning the hands so that the palm faces up) but the primary goal is psychological and social. Children learn quickly

at this young age and parents are overjoyed at the smallest achievement, which contributes to cementing the parent-child relationship.

Parents often find it particularly hard to say 'No' to a child whose disability already prevents so many things. Saying 'No' plays an important part in helping *all* children to 'grow up' and become autonomous human beings. Not saying it can lead to children's becoming 'spoilt'. If children have motor disorders this may inhibit their parents' from saying 'No' – a step towards 'learned dependence' or even 'learned helplessness'. In the security of the group parents can learn how to say 'No' – and both parents and children can experience the benefits together.

**Example 2.** David attended his initial consultation and refused to ask politely for the train that he wanted to play with. His mother had become resigned to tantrums when he did not get what he wanted and it was only with reluctance that she agreed that he should not have it until he said 'Please'. He still refused, so he was not given the train. We worked with David and his parents, showing them how to teach David to control his own behaviour and how *they* could set boundaries for him. They soon were commenting on how well the suggested strategies were working. After four weeks David asked for the train and said 'Please', smiling cheekily as he said it. Even though he is not yet three years old, it seems that he remembered our first meeting! His parents are delighted at the transformation in their son's manner and readiness. They and David can now to work together to develop his greater independence.

Children attend sessions with their parents weekly or twice-weekly as part of a small group of parent-child dyads. Families who live a long distance away can attend for fixed-term blocks of sessions, staying locally and attending daily. Once attending a group, new joiners hear – and see – success stories from other parents and the children quickly begin to interact and play with their peers; important additional facilitations to learning.

Some parents and children with particularly complex needs may attend individually, but it is hoped that they might eventually join a group, since groups provides a more powerful circumstance for teaching and learning than 'one-to-one' ever can.

Attendance at P&C is only a kick-start to learning and development. The substantive effect is achieved not in the few hours each week spent in groups but in the restructured experience of 24/7 conductive upbringing within daily life at home.

Early-age Conductive Education aims to create active, self-motivated children, confident in their ability to learn – and active parents correspondingly confident that they can teach and bring up their disabled children. In some circumstances this may be achieved while attending P&C and the children then go on to learn amongst their peers, included in local early-years settings. In other instances, continued specialist input may be beneficial as the child grows older, and some children subsequently learn in full- or part-time conductive early-years or school settings (Maguire and Sutton, 2004).

### **Who is it for?**

Most of the children attending P&C have cerebral palsies. There is no reason why early-age Conductive Education should be restricted to children with these conditions (Sutton, 2008). Other children and their families, have been helped at NICE, including those with trisomy 9 mosaic, Rhett's syndrome, pachygyria, general developmental delay and hypotonia, along with children whose cerebral palsy has been compounded by sensory, intellectual and other conditions, including epilepsy and diabetes.

In keeping with Conductive Education's basic position that if appropriately taught all children can learn, whatever their disability, there is no 'assessment' as such. Instead there is an 'initial consultation' that starts off a process of continuous dynamic assessment of what and how a child learns best in response to Conductive Education. The determining issue in offering a place is not 'within-child' factors but whether the P&C has the practical facility to take on a given child at that moment.

Children attend for initial consultation with their parents after completing application forms and supplying medical reports. At this consultation we discuss with parents the effects of their child's condition and what their goals are. We describe the programmes that the groups follow and invite them to observe sessions in order to be fully informed about Conductive Education before committing to attendance. Most importantly of all, the parents are shown how their children can be taught – sometimes very easily – to do things that they, the parents, had not thought possible. To the outsider, these might seem very little things, like sitting cross-legged on the floor, but they can be the most powerful possible inauguration into a new way of bringing up their children.



**Children and parents learning to learn together**

### Early-age Conductive Education

More than fifty years ago, in Hungary, the pioneers of Conductive Education had found themselves unable to 'commandeer' very young children (Bobath, 1986) so, in order to promote active movements, they turned these into playful activity. A further step was to organise the work into a mother-and-child group of five to seven children plus their parents. There followed more and more playful exercises, intercommunication between mother and child, and mimicry of facial expressions and speech sounds. These activities drew eclectically from existing techniques and included practical tasks for self-sufficiency and daily living (Hári, 2001). This more 'human' approach (Hári, 1998) constitutes the basis for conductive 'parent-and-child' work (Sutton, 2003).

The English term 'Conductive Education' encompasses two related processes:

*conductive pedagogy*, specific processes used to teach according to this particular educational philosophy; and  
*conductive upbringing*, the long-term and general task of bringing up children according to its precepts.

The essential precondition of every learning process is to create a situation where the desired activity can and will be realised. In P&C parents learn *never* to be satisfied with a minimum. They are taught to proceed not through abstract neuro-psychological principles, suppression of wrong postures, or series of physical exercises. Instead, the child's life routine is appropriately planned by modelling various moments of the day in a way to make young children *understand* how they can meet everyday requirements (Hári, 1975). The only way to teach them this is indirectly, through their parents' mediation.

Problems of learning and development are approached through pedagogy and upbringing, with pedagogy/learning and upbringing/development seen as two faces of the same coin. Young children are not solely entities in themselves but exist in dependent and active symbiotic relationship with their families. The pedagogic task for Conductive Education at an early age is to create experience of active learning for parents and children *together*, in which parents discover – or

rediscover – how to bring up their sometimes baffling child.

This very European approach lies outside the mainstream of present ways of understanding and providing for children with disabilities and their families in the United Kingdom and other English-speaking countries but is compatible with contemporary paediatric thinking on family-centred service (King, 2004). It also reflects the positions of major thinkers in child development around the world. These include: L. S. Vygotsky on social-psychological development (Vygotsky, 1993); Henri Wallon on the mutual dependence of movement and emotion in development (Aubrey, 1987); Reuven Feuerstein on mediated learning (1988); Urie Bronfenbrenner on ecological psychology (1980); Françoise Dolto's psycho-analytic insights into the responsibilities of parenthood (1984); and recognition of the centrality of reciprocity in developmental psychology reaching back a long time.

This approach should not therefore be classed amongst the 'therapies' (unless one wishes to consider it *psychotherapy*). It can be argued that there is good *a priori* reason for successful intervention into human movement disorders to be psychological and social in its basis (that is through pedagogy) rather than biological (through therapy) (Berger, 1987). Some empirical support for this position has been offered by a finding of greater efficacy of mental over physical stimulation in advancing the development of young children with diplegic cerebral palsy (Palmer, et al, 1988).

### 'Reciprocity' in motor disorder

Movement is intimately involved in children's psychological development. Motor disorders (movement disabilities) may impair, distort or even prevent children's ability to interact with their world in ways that are predictable, reliable or contingent. They affect children's ability to change position in space or their perspective, to direct or avert their gaze, to reach, point, manipulate, fetch, initiate or maintain eye contact, to smile, develop appropriate facial expressions or look and sound appealing to adults, with the ease and effectiveness possible without the motor disorder. Correspondingly, their parents may lack the familiar cues (vocal, facial, postural, practical) integral to normal interaction.

Responses may even be actively misleading: for example, cuddled infants with motor disorders may remain floppy or arch their backs in a startle response in reaction to close eye contact. Spontaneous actions may lead to disappointment, frustration and failure for adult and child alike – and perhaps negative learning contrary to the original intention.

The usual cognitive and emotional mechanisms in the adult-child dyad, the mutual emotional reinforcements that drive developmentally vital interactions, do not then work as parent or child might expect, but result instead in only limited or even actively negative gains. The normal interactive cycle may be poorly established, diverted or even grind to a halt, creating a vicious circle of negative, 'dysfunctional' learning.

Parents may experience an analogous cycle of mislearning. The effect of the two acting in tandem, is what Vygotsky (1993) called a 'dislocation of development', or in modern terms 'dysontogenesis'. In Conductive Education it is called 'dysfunction' and the goal is to restart or retune the process of adult-child developmental communications and relationships, correcting the dysfunctional cycle through appropriate compensatory measures, particularly through measures of a *social* nature. It is directed towards the impairment's psychological and social consequences upon the adult-child dyad within which both parent and child develop active orientation to learning. The mutually reinforcing effect of the two create a 'virtuous cycle' of spontaneous learning that in Conductive Education is called 'orthofunction'.

Orthofunctional children develop from being passive recipients of the aims of others to internally driven and autonomous individuals, beginning to create a concept of themselves that is not one of dependence. This intervention is aimed not at the primary, biological condition (at the physical impairment) but towards countering and correcting secondary and tertiary effects at social and psychological levels.

### **Working in a group**

Parents' primary goal in this is to learn to *activate* their children. They learn what to do to ensure that their children co-operate with them,

react when called, become more and more interested, turn towards impulses, become active and show pleasure when approached, learn to play and keep playing, and build up endurance.

This is always achieved through play. Abstract movement is not used, always movements embedded within activities that have a purpose or goal, pottying, hand-washing, eating, etc. Within the group the children should become noisy, animated, lively and alert. This is the framework in which necessary practical skills are taught, with parents learning how *they* can do this. The condition for success is *parents'* educational activity.

Teaching and learning within a group benefit child and parent alike. Parents can compare their own children to others within the group – not just with non-disabled children as they might elsewhere – and thus learn to judge their child's progress and to be more conscious and optimistic about their own goals. They develop positive, rewarding relationships with their disabled children in the company of others experiencing a similar process, and can serve as models for each other.

Parents learn 'simple techniques that allow their children to participate meaningfully, rather than having things done for them' (Rózsahegyi, 2006). Vivaly, this should lead to parents and their children creating the same positive atmosphere at home as experienced in the group, not through abstract 'exercises' but fitting in with the complex activities of daily living, until habitual.

### **The future**

The United Kingdom is not the only country to be developing conductive services. In Israel an explicitly family-oriented model for children of *all* ages (not solely very young children) has been developed to give explicit account to the parent-child relationship in child development and to families' central role in rehabilitation (Schenker, 2006). In Norway an expanding conductive service is integrating into the Health Ministry's rehabilitation system (Norsk Forum for Konduktiv Pedagogikk, n.d.). In the United Kingdom the National Institute of Conductive Education is provided and financed by the Foundation for Conductive Education, a voluntary organization. Its P&C is currently

supported financially by donations from Zurich Cares, a charitable activity of Zurich Insurance. Parents and children attend free of charge, with referral open to any agency with parents' consent, and of course to parents themselves. There are other P&C services across the United Kingdom, mostly in the voluntary sector. Specifically trained personnel ('conductors') are scarce and, though since 1997 NICE has run degree-level conductor-training, most conductors working in the United Kingdom come from Hungary. Extending access to P&C is a problem. One proposal has been distance learning for parents, piloted some years ago between Hungary and Germany but not developed further (Ákos and Ákos, 1991). A further barrier to wider take-up has been less-than-enthusiastic reception by existing therapy services.

Existing intervention for children with motor disorders under three years of age is usually made through physio-, occupational and/or speech therapy. Evidence for the efficacy of early intervention in improving developmental outcomes has, however, been inconclusive. This may run deeper than methodological problems and it has been suggested in the United States that 'the therapeutic model may have to be remodelled or perhaps abandoned and replaced with a family-social model for early-intervention planning' (Lipkin and Schertz, 1996). Conductive P&C requires relevant, rigorous research, into processes as well as outcomes. So far conductive pedagogy in general has been ill-served by research (Ludvig, et al, 2000), and research into P&C wholly ignored. An appropriate research modality does exist, suited to identifying change in parent-child interaction at this age range through time-sampled video analysis of child-caregiver interaction (Crittenden, 2006). Until such research is undertaken, however, the future of conductive P&C may be as an interesting but small-scale 'craft' rather than something with important implications for the much needed development of child habilitation as a whole.

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