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Conductive education: thirty years on

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ABSTRACT

In 1989 Mike Oliver's Current Issue about Conductive Education (CE) enabled disability activists and scholars to consider educational 'tools' and cures as potentially oppressive, and he expressed his view that CE was based on a set of assumptions about normality. Challenging the assumption that disabled people wished to be able to walk, Oliver led the way in demonstrating how barriers existed in society, not within the individual. Oliver's social model fosters choice, empowerment and opportunities for maximising one's potential, and we suggest that CE is one vehicle which offers these opportunities to young disabled people, supported here by the voice of a CE 'graduate' who wanted to share her experiences. Building on the importance of Oliver's pioneering re-think of disability, we draw on the field of neuroscience to counter the main points in his critique that there is no evidential support for CE and that it is ideologically untenable.

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Introduction

It is 30 years since Oliver published 'Conductive Education: if it wasn't so sad it would be funny'. In this he objected to Conductive Education (CE) as seeking to 'normalise' people with physical impairments. He stated that there was no evidence in support of the theoretical underpinning of Conductive Education that 'under the right conditions the central nervous system will restructure itself' (Oliver 1989, 197). As an echo of Oliver's own review of the social model after three decades (Oliver 2013), we consider whether what he suggested was true of CE would stand now. We contest that this is important and timely as CE offers the kind of empowering support to promote the educational and social inclusion that Oliver saw as fundamental. At a time when UK services to children with disabilities are being eroded to levels lower than when Oliver was writing, we suggest CE offers a theoretically sound approach to enhancing the holistic development of children and

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families, who currently receive too little support. A more accurate portrayal of CE is important in ensuring that every person who could benefit does so.

Beardshaw (1989), in her rejoinder to Oliver, was passionate in her defence of CE, and even Oliver acknowledged that there was evidence of its benefits. In the intervening years, over 400 centres have been established globally. Research indicates that CE leads to at least as positive outcomes in motor skill development as traditional physiotherapy yet many families in the UK are not offered the service as part of their 'local offer' or may even be counselled against attending by rehabilitation professionals. However, the strength of CE can be attributed to positive experiences of families in both the process and the outcomes (Lebeer 2012). As a 'graduate' of CE expresses 'Conductive education showed me that I'm capable of many things, sometimes it may take me a little longer to reach goals but slowly I have managed to develop into an independent young lady. At the moment I have my own flat, work full time and now have my own car which I can drive around. Without CE I definitely would have not gone as far'. Oliver expressed regret that although CE was offering an alternative vision to children being 'put away in special schools' (Oliver 1989, 198) the CE approach was untenable to him. He gave his reasons as relating to the lack of theoretical support, and an unsound ideology. We examine these points below.

Evidence from neuroscience

Oliver viewed CE as unsubstantiated. However, there is evidence from the field of neuroscience, and particularly in understanding of neuroplasticity (Kleim and Jones 2008), that under the right conditions, the central nervous system *does* restructure itself. We suggest that CE provides many of these 'right conditions' through its unique methodology. The individual components of CE methodology are intimately interconnected to promote conscious and active learning or skill acquisition, rather than mere use, as required to produce significant changes in patterns of neural connectivity (Mawase et al. 2017).

The 'task series' are the structured part of the day (the 'daily routine') and are a repetitive series of functional movements carried out in a variety of positions (e.g. lying, sitting, standing). High levels of repetition of relevant motor actions lead to plastic reorganisational changes in the primary motor cortex, referred to as 'use-dependent plasticity' (Mawase et al. 2017). Furthermore, specific success-related feedback feeds into the positive cycle of conscious learning and augments use-dependent plasticity, created through the repetition of tasks.

In CE movements are not ends in themselves. The 'daily routine' is also carefully planned to practise the structured movements, learnt during 'task

series', through daily living skills e.g. washing, dressing and eating are integrated into every part of a child's day. This lends saliency to the movements being learned, another principle of experience dependent plasticity. Our graduate comments: '*At the time of attending CE I don't think I realised the incredible benefit it would have on my life but now I totally do. When I was attending CE, I saw it as a place to do my exercises with my friends and have some fun. This place however taught me loads of life skills that people take for granted, how to do simple things like put my shoes on*'. Moreover, in the early years parents are very much involved and supported during this process of learning, enabling them to continue to repeat skills learnt and support their child's development in the home environment.

Whilst not within the scope of this article, evidence from neuroscience points to other core elements of CE having a key role to play in neuroplasticity and the development of motor skills e.g. rhythmical intention (Ghai, Ghai, and Effenberg 2017), group learning and the development of the key interpersonal relationships (Badenboch and Cox 2010).

The development of empowerment

In 1989 Oliver objected to CE as 'ideologically unsound', on the grounds that it focussed on physically changing the person, rather than adapting the environment to accommodate needs. He was critical of the focus on making the person 'normal' and referred to CE as oppressive, particularly with its focus on the ability to walk. He objected, understandably, to the wording of early writings about CE emphasising walking as the ultimate goal for all, which emerged from the social context of Hungary in the 1940s, where many disabled children lived in apartment blocks with no lifts, or needed to be able to walk to access mainstream education (Shields 1989). CE in the 21st century has evolved to accommodate changes in attitudes towards disability; however, the core principles remain: 'Conductive Education enables people to view themselves in a positive way through meaningful activity. It assists them in problem solving by learning strategies and techniques to approach the various challenges faced. This is when an orthofunctioning personality exists' (PCA 2009, 4). The development of 'personality' in this context relates to confidence to attempt movement, through attention and motivation, which are seen as critical modulators of plasticity. Oliver refers to orthofunction as a 'technique' that is applied (Oliver 1989, 198) whereas in fact it is the goal of CE. CE, utilising all components of the methodology, leads a person towards developing the physical, social, emotional and psychological skills to have an 'orthofunctional' personality. Thus, CE supports Oliver's desire to provide the necessary resources to the children and their parents to allow their 'gifts' to develop and thrive in society. '*Conductive*

education also taught me resilience, my degree is in textiles its a very practical subject doing many skills that require two hands from using sewing machines to knitting, these are all tasks which are more challenging when you struggle with dexterity but rather than give up, I think of ways I can adapt the processes so I can compete the tasks. Conductive education developed my knowledge of what I can do when I put my mind to it and now I keep pushing the barriers as far as they will go.' (CE graduate, 2019)

Since Oliver's original writing much has changed regarding policy and attitudes to disability. The social model has impacted on thinking while critical disability studies grapple with complex issues (Vehmas and Watson 2014) of how to conceptualise the link between impairment and society. One of Oliver's fundamental points was that we should be expending our energy on re-shaping environments and tackling exclusion, rather than re-shaping the individual. We do not see CE as being in opposition to this view but believe that everyone has the right to learn to do things for themselves as well as adapting the environment. CE can be seen as being firmly rooted in the capability approach i.e. supporting the valuing and expansion of 'functionings' such as health, mobility, communication, literacy and confidence, through structured support to build on disabled people's capabilities. The word 'normal', that Oliver objects to is absent from CE publications, rather as Sutton (2016) states CE is 'a unified, integrated approach to educating disabled children – and to bringing them up in the widest sense – to maximise the effects of teaching and learning' (2016). 'A lot of people think conductive education is about learning to walk. It isn't. It's about realising potential' (McGuigan cited in Gaunt 2002).

Those who use CE services report improved mobility, greater confidence and independence to be in society, gained through the integrated focus on movement, cognition, language, socialisation and learning how to learn. Despite identified benefits, uptake of services is impacted by either parents not being aware that CE is on offer, or being actively discouraged by professionals, who in our estimation do not have sufficient understanding of CE as currently practised. We argue that at a time of austerity in the UK, with cuts to services leading to reductions in, and lengthy waiting times for, therapy (Hutton and King 2018), CE offers a free, or low cost, additional option for children and families. We seek to challenge negative perceptions and call on colleagues to support families with information, allowing parents and people with disabilities to make informed choices.

Conclusion

CE is based on an educational rather than a medical model and as such seeks to promote learning rather than 'fix' or 'cure'. The focus of CE centres

is empowerment of the individual regardless of the physical challenges they carry forward. The goal is orthofunction: confidence to be in society, positivity about abilities, resilience, and empowerment. Of course, we need inclusive environments, but we suggest that the continuing denigration of CE is counter to the ambition to support people with disabilities to maximise their potential and take charge of their lives. Families of children attending CE centres report higher expectations for their children and gains in their own positivity about the future. Children frequently gain skills and confidence in early years CE centres to additionally attend mainstream nurseries, and then schools, where CE support continues. Given the benefits of CE in physical, cognitive and emotional spheres, evidence of a theoretical basis for the key tenets of the approach, and an overall focus on empowerment of those who attend, CE should be recognised and supported in the same way as other approaches.

Disclosure statement

No potential conflict of interest was reported by the authors.

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