New Generation Pedagogy: evolving and personalising teaching for children and young people with Complex Learning Difficulties and Disabilities (CLDD)

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In the second think-piece in this series I raised issues around the child/student population with CLDD. Who are these children? What are their needs? The paper looked at what we knew so far about how these children learn. Neuroscience (Sousa, 2007) has helped our understanding greatly here. We no longer need to 'guess' what is happening inside a child's head. The advent of MRI and fMRI scanning has aided our understanding of what brain activity is taking place in relation to various needs (e.g. language/communication, emotional, cognitive, etc).

The second paper also sought to debate what we mean by children with CLDD. In seeking to open a discussion around pedagogy in this third think piece I would like to use again the quote from Porter and Ashdown (2002):

This is a wide and varied group of learners. They include pupils who do not simply require a differentiated curriculum ... but who, at times, require further adaptation to teaching if they are to make progress.

Progress is a major focus of all Ofsted inspections (Ofsted, 2006), and it is something all teachers would ascribe to for their pupils, but what are the drivers of progress for this pupil population with CLDD? To make progress children need to have been taught in ways that match their learning style, engage them in the learning process, and bring about attainments which demonstrate their progress.

For most children with Special Educational Needs (SEN) we would have achieved this through differentiation – the process of adjusting teaching to meet individual needs. But, as Porter and Ashdown (2002) suggest, children with CLDD require something more.

What can that be? High quality differentiation should be the hallmark of high quality Special Education, and the creative differentiated learning routes emanating from SEN settings over the past two decades (e.g. extended Programmes of Study) have demonstrated this abundantly (Carpenter, Ashdown and Bovair, 2002).

In our journey towards evolving the New Generation Pedagogy (NGP) required by a new generation of children, differentiation points us in the right direction. It is a fundamental platform upon which to build the New Generation Pedagogy; but it is not in itself sufficient. We require something more that will enable us to teach the child with CLDD at their point of learning need. To explore quite what those ingredients may be is the task of the DCSF-funded research project on Complex Learning Difficulties and Disabilities.

However, it is to do with personalising learning, a process which will enable us to mould the learning experience directly around the child with CLDD. To do this we have to know what the learning needs and learning pathways of that child are – at the moment we do not. We are 'pedagogically bereft' (Carpenter, 2010 – in press), a term I have used to describe the desperate need of the teaching profession to be better informed about, for example, the learning needs of children whose learner capacity and effectiveness has been damaged by Foetal Alcohol Spectrum Disorder (FASD).

I am convinced that we are in a good, strong position to evolve this New Generation Pedagogy. To do this we must critically evaluate what it is we know as effective teaching for children with SEN, and analyse where they have had particular difficulties in certain curriculum areas due to the specific learner profile arising from their SEN or disability (Panter, 2002). An example of this would be children with Down's Syndrome who can find Mathematics particularly challenging due to numerical processing difficulties in the brain (Buckley, 2007). Many children with Down's Syndrome have poor short-term auditory memories. Alton (2001) recommends concrete means, such as an icon or pictogram, which gives the child a tangible, tactile strategy by which to carry out some of the processes normally done in the head. This by-passes a proven learning difficulty and enables the child to attain and progress.

Taking this example of how teachers have evolved pedagogy specific to the learning needs of a particular group of children (e.g. those with Down's Syndrome), what can we learn from this? How can we apply this pedagogy as a starting point for the New

Generation learners? Within this child population Mathematics is already widely reported as presenting specific challenges to children born prematurely (Puffett, 2009) and to those with Foetal Alcohol Spectrum Disorder (O'Malley, 2007). What the above example shows us is that we can do it! We can find the ways of creating and developing the learning pathways. In the light of this encouragement we can try some of the lessons learnt from early pedagogy, and apply, modify, adapt, differentiate and personalise.

This is a process I would like to describe as 'pedagogical reconciliation'. In this process we carefully analyse the structure and components of other successful pedagogies in the field of SEN (Lewis and Norwich, 2005), and match them to new generation children with CLDD. This is a process of analysis, deduction, and refinement; reconciling that pedagogy to the unique profile of the learner with a CLDD. As an experienced Special School Headteacher stated in her proposal to the Research Project, 'These children challenge us as teachers. They push our knowledge of curriculum and skills as teachers to their limits, and beyond.... We have to understand how their brains work and how we can help the rewiring of their brains.'

Professor Dieter Wolke, who has led the UK longitudinal EPICure study on premature infants and children for over a decade, is quite clear that in order to do this we need 'specific interventions' (Wolke, 2009). But what are these interventions? If we were talking about children with Autistic Spectrum Disorders we would know, for example, that the pedagogy would be visually based. For new generation children with CLDD we do not know what these are, and exploring this is a major task for the DCSF-funded research project.

The New Generation Pedagogy that evolves needs to be within the framework of practice that currently exists in schools. As such we may like to think of 'Layers of Pedagogy' that are

- ... for all
- ... additional
- ... new, innovative and personalised.

There are four components to New Generation Pedagogy. These involve:

- 1. Re-engineering existing pedagogies
- 2. Pedagogical reconciliation
- 3. Creation of new and innovative teaching strategies
- 4. Personalising learning pathways.

The overall goal of this pedagogical process is 'Engagement'. Our quest is to engage the learner with CLDD in their environment. Our challenge is to how we achieve engagement? How do we recognise when a child is engaged? How do we measure engagement? How do we chart the outcomes of engagement? Again these are all questions to be assimilated and worked on during the CLDD Research Project.

We should not underestimate the magnitude of this research challenge. It is, in itself, a complex process that will demand a significant shift in thinking for teachers. We will be moving more to inquiry-based styles of teaching rather than the curriculum driven styles of the last two decades.

A common unifying feature of children with CLDD is their vulnerability. By creating more conducive pedagogy we hope to shift the balance for the child with CLDD from vulnerability to resilience; to reduce that 'pain of disconnection' (Bovair, 2009) which so many of these children display in the classroom situation. To do this we will need to increase learner effectiveness by releasing motivation, unlocking curiosity and increasing participation.

In the journey that lies ahead the teacher must remain committed to the core mission of 'Engagement' in learning for the child with CLDD. With this as a focus the practitioner is armed to transcend the complexities of a child's SEN. The permutations of SEN presented by some children can send a teacher off at a pedagogical tangent or embroil them in a level of detail not helpful to the learning process.

Many teachers in the field will have worked with children with co-existing, overlapping conditions, say, a dual diagnosis of ASD and ADHD. Which do you teach to? They are not mutually exclusive. They do not interconnect perfectly in terms of a learner profile that we can easily plan our teaching responses to.

The obsessive, single minded focus of the child with ASD can be a stark contrast to the distractible, inattentive, disorganised behaviour of the child with ADHD. So, when both conditions co-habit within one child, which strategies from the ASD teaching repertoire (Hanbury, 2005) are compatible with the advice on understanding and supporting children with ADHD (Hughes and Cooper, 2007)? These are truly complex learning difficulties, and the process of pedagogical reconciliation described earlier comes into play as we reengineer the known successful approaches from both fields around the child with a diagnosis of both ASD and ADHD.

To teach children with CLDD effectively the teacher must penetrate the mask of disengagement generated by many of these children. As ever the capability of the effective Special Educator is to see beyond the disturbed and disturbing behaviour, beyond the tubes and medical equipment, beyond the physical apparatus to the child as a learner. The skilled, insightful teacher devises personalised learning pathways which engage the child meaningfully in the dynamic process of learning.

So what does personalised learning look like for a child with complex learning difficulties and disabilities? This process has to be informed by the rationale David Hargreaves gave to the Personalisation agenda, with words that I think ring remarkably true for children with CLDD:

Personalising learning demands that schools transform their responses to the learner from the largely standardised to the profoundly personalised.... If students are to engage in deeper learning, they will need new forms of enriched support.

Hargreaves (2006)

I am convinced that key to this are relationship processes – warmth, sensitivity and responsiveness. For too long now politically driven curriculum and policy has caused teachers of children with SEN to behave in ways alien to the fundamental aspects of their humanity that bought them into this field. Those qualities are the ones most likely to touch the child – the human being to human being qualities –.From there the child becomes engaged and their personalised learning journey begins. Along that journey, as the teacher seeks to enhance the levels of engagement, the processes I described earlier in this paper – of pedagogical re-engineering, reconciliation and innovation – are employed.

For the New Generation Pedagogy to be meaningful for both the child as a learner and the teacher as a practitioner there are four contexts in which it must seek to operate. These are:

- 1. **School organisation** if the pedagogy changes, what are the implications for the school environment, resources, organisational systems?
- 2. Family perspective acknowledging the 'parent as first educator', what are their insights into how their child learns? And how does New Generation Pedagogy operate in the home and in the family context?
- 3. **Interdisciplinary interface** what is the contribution of other professional groups in schools to the design and delivery of New Generation Pedagogy? Will we need to evolve new models of practice which are more transdisciplinary in nature?
- 4. **System synchronisation** the tsunami of children with CLDD hitting our schools is demanding significant pedagogical shifts. What is the impact on the education system? How will it support and unify schools in their endeavours to develop and deliver New Generation Pedagogy?

The recently published Lamb Inquiry is calling for reforms to the SEN systems, and highlighting the need to encourage parents in their aspirations for the child with SEN (Lamb, 2009). I would argue that the recommendations of the Lamb Inquiry interface well with the need to review pedagogy in schools, through dialogue with parents and families, which leads to school improvement and system reform. The first decade of this 21st century has consolidated the trends that have been emerging for the last 20 years, namely that we have a new generation of children with SEN, those with Complex Learning Difficulties and Disabilities. To educate them meaningfully, effectively and purposefully we must evolve New Generation Pedagogy.

The Specialist Schools and Academies Trust invites you to contribute to the online debate around New Generation Pedagogy:

- What, in your experience, are some of the teaching challenges posed by children with CLDD?
- What ideas have you 'borrowed' from other areas of SEN to help you compile a personalised programme of learning for a child with CLDD?

 If you have any case study examples, the CLDD Research Project would be glad to receive them. Please email Jo Egerton, Research Officer,

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This online debate is open until 5 February 2010. We would welcome your views and contributions.

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