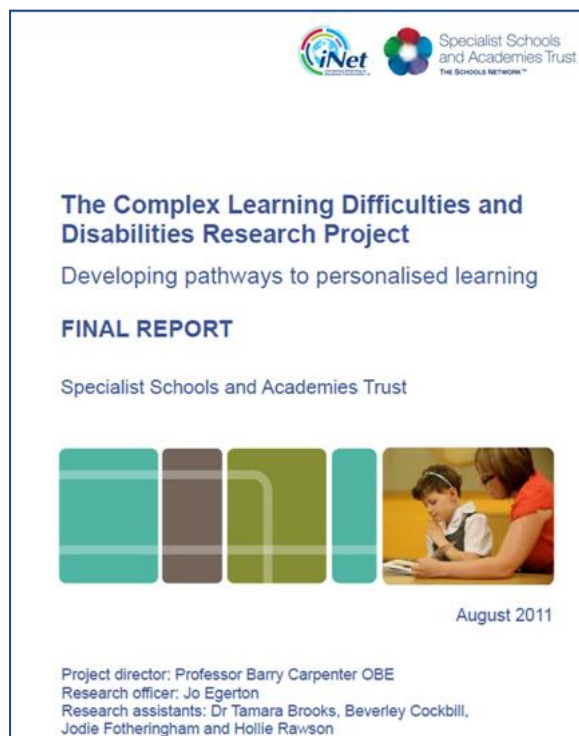


The Complex Learning Difficulties and Disabilities Research Project

Developing pathways to personalised learning

EXECUTIVE SUMMARY



Project director: Professor Barry Carpenter, OBE

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**The COMPLEX LEARNING DIFFICULTIES AND DISABILITIES Research Project:
Developing meaningful pathways to personalised learning**

REPORT OVERVIEW

The Specialist Schools and Academies Trust (SSAT) was commissioned by the Department for Education (DfE) to research ways to improve outcomes for children and young people with the most complex educational needs and disabilities through the development of evidence-based teaching and learning strategies. The research results of the project will be shared with schools and the wider education network.

Children and young people with complex learning difficulties and disabilities (CLDD) include those with co-existing conditions (e.g. autism and attention deficit/hyperactivity disorder (ADHD)) or profound and multiple learning disabilities (PMLD). However, they also include children who have newly begun to populate our schools – among them those who have difficulties arising from premature birth, have survived infancy due to advanced medical interventions, have disabilities arising from parental substance and alcohol abuse, and/or have rare chromosomal disorders. Many may also be affected by compounding factors such as multisensory impairment or mental ill-health, or require invasive procedures, such as supported nutrition, assisted ventilation and rescue medication. While the concept of CLDD is widely recognised, an official definition has yet to be adopted. The project definition of complex learning difficulties and disabilities is being considered by the DfE.

Children and young people with CLDD are a distinctive group of learners requiring educators to make personalised professional responses to their profile of learning need. We have to equip teaching professionals to offer high quality education to these young people to prevent their disenfranchisement from the school system. We need to remodel our pedagogy and generate teaching strategies which will embrace them as learners. The debate around personalised learning, fuelled by the SSAT (www.ssatrust.org.uk), informs this.

The programme of research brought together a multidisciplinary team of researchers and advisors with specialisms across education, health, psychology, therapies and neuroscience. In Phase 1 of the project, the research team worked together with 12 special schools and staff, 60 children/young people, and their families, to develop educational resources to enable practitioners to formulate an effective teaching and learning package for the children and young people with complex needs in their classrooms. The project built on and synthesised existing national and international expertise in the field, as well as drawing upon practitioner experience to develop and trial modified and new approaches for these young people. Between September and December 2010, the resources were trialled in 50

further special schools in the UK and 15 internationally. In the third phase of the project, between January and March 2011, the resources were trialled in 12 mainstream schools – six primary and six secondary – and two early years settings.

The outcome of the project is the CLDD Engagement for Learning Resource Framework to support educators of children and young people with CLDD. The key components are available to download online at <http://complexld.ssatrust.org.uk>. They include:

- CLDD Briefing Packs: a series of information sheets on conditions which commonly co-exist within the profile of CLDD; these give information on effective educational strategies associated with particular disabilities
- The Engagement Profile and Scale: an observation and assessment resource focusing on student engagement for learning
- The Inquiry Framework for Learning: a flexible educational practice framework, promoting multidisciplinary involvement.

The project methodology was approved by the SERC at the University of Northampton, and quality assured by David Braybrook, an experienced practitioner in sensory impairment/speech, language and communication difficulties, and a member of SENDIST and tribunals for other allied professions, who reported to the project's Steering Board.

CLDD RESEARCH PROJECT TEAM AND SUPPORT NETWORK

Specialist Schools and Academies Trust research team

Project Director: Professor Barry Carpenter OBE, Academic Director (SEN)
Research Officer: Jo Egerton
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Advisory Group

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Dr Barry Coughlan, Senior Lecturer, University of Limerick
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Anne Fowlie, Independent Consultant; former Head of Educational Access Service for Children with Physical and Medical Conditions
Carolyn Blackburn, Lead Researcher, Foetal Alcohol Spectrum Disorders in Education (FAS-eD) Research Project, NOFAS (UK)

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Dr Phyllis Jones, Associate Professor, University of South Florida
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David Braybrook, Independent Consultant; former Director of Education, I CAN

Lesley Campbell, Mencap

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Susan Fleisher, Executive Officer, National Organisation on Fetal Alcohol Syndrome UK (NOFAS-UK)

Dr Jane McCarthy, Consultant Psychiatrist, President of the Intellectual Disability Forum, Royal Society of Medicine

Helen Norris, Head of Specialist Support and Disability Services, Bromley

Christine Osborne, Strategy Planning Unit, Children's Society

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Dr Matthew Rayner, Headteacher, Stephen Hawking School, London

Dame Philippa Russell, Chair, Prime Minister's Standing Commission on Carers

Phil Snell, Teaching and Development Agency for Schools (TDA)/DfE

Karen Turner, Department of Health

Kathy Baker, General Teaching Council for England (GTCE)

David Stewart, Headteacher, Oak Field School and Specialist Sports College, Bilborough

Janet Thompson, HMI, Ofsted

Dr Rona Tutt, National Association of Head Teachers (NAHT)

Melissa Hancock, Youth Sport Trust

Sharon Godden, parent representative

Professor Amanda Kirby, Medical Director, Dyscovery Centre, University of Wales

Michele Moore, Training and Development Agency for Schools (TDA)

OVERVIEW OF OUTCOMES

The Complex Learning Difficulties and Disabilities Research Project

The outcomes of the Complex Learning Difficulties and Disabilities Research Project are based upon an 18-month collaborative development and trial of resources to support educators in establishing effective personalised learning pathways for children and young people with CLDD. The SSAT research team, directed by Professor Barry Carpenter OBE, worked together with 91 educational settings, including UK and international special schools, mainstream primary and secondary schools, and early years settings to create the CLDD Engagement for Learning Resource Framework. The research was supported by the Department of Education.

The work was carried out in three phases:

Phase 1: Development of resources in liaison with 12 special schools

Phase 2(a): Trial of the resources with 50 UK special schools

(b): Trial of the resources with 15 international special schools

Phase 3: Trial of the resources with 12 mainstream schools (six primary and six secondary) and two early years settings.

The trend of increasing learner complexity

The increase in numbers of children and young people with complex learning difficulties and disabilities (CLDD) is widely recognised by the Government,¹ independent researchers,² academics,^{3 4} Ofsted⁵ and educators themselves. The numbers of children with severe and complex needs in one local authority more than doubled between 1981 and 2001.⁶ Between 2004 and 2009, the total number of children with severe learning disabilities (SLD) increased by 5.1%, and the total number of those with profound and multiple learning disabilities (PMLD) rose by an average of 29.7%.⁷ Emerson⁸ estimates that the prevalence of PMLD in the older child/young adult age range is increasing by 4–5% annually.

¹ Department for Education (2011) *Support and Aspiration: A new approach to special educational needs and disability – a consultation*. Norwich: The Stationery Office.

² Hartley, R. (2010) *Teacher Expertise for Special Educational Needs: Filling in the gaps* (Research note: July). London: Policy Exchange.

³ Emerson, E. (2009) *Estimating the Future Number of Adults with Profound and Multiple Learning Disabilities in England*. Lancaster: CeDR, Lancaster University.

⁴ Emerson, E. and Hatton, C. (2004) *Estimating the Current Need/Demand for Supports for People with Learning Disabilities in England*. Lancaster: Institute for Health Research, Lancaster University.

⁵ Ofsted (2010) *The Special Educational Needs and Disability Review: A Statement is not enough*. London: Ofsted.

⁶ Emerson (2009) *Ibid*.

⁷ Department for Children, Schools and Families (2009) *Progression Guidance 2009–10*. Annesley: DCSF Publications.

A recent Ofsted report noted this trend in a community special school, stating: 'The proportion of pupils with more complex needs has grown in recent years and a rising number of these pupils are now in the secondary section of the school.'

Headteachers and governors also remark on the changing population in their schools. One governor reported: 'The diverse range of children...is causing us to restructure our school.'

These students are often wholly or partially disengaged from learning, and the Department for Education has stated their awareness that educators, however skilled, find it difficult to deliver the educational entitlement of these learners, and to develop appropriate educational strategies to meet their needs.⁹

Establishing a definition of CLDD

The learning needs of these young people need conceptualising to allow policy makers and professionals in education to address and manage them in a focused, systematic and deductive way. As the PMLD Network states, 'lack of accurate information and consistency in definitions of need make longer term service planning and development difficult'. Policy makers and professionals need an agreed language to be able to talk about and plan for these young people. A 12-month consultation period with educators, charity representatives and academics, resulted in the following definition of CLDD which has been used within the CLDD research project:

Definition of Complex Learning Difficulties and Disabilities

Children and young people with Complex Learning Difficulties and Disabilities (CLDD) have conditions that co-exist. These conditions overlap and interlock creating a complex profile. The co-occurring and compounding nature of complex learning difficulties requires a personalised learning pathway that recognises children and young people's unique and changing learning patterns. Children and young people with CLDD present with a range of issues and combination of layered needs – e.g. mental health, relationships, behavioural, physical, medical, sensory, communication and cognitive. They need informed specific support and strategies which may include transdisciplinary input to engage effectively in the learning process and to participate actively in classroom activities and the wider community. Their attainments may be inconsistent, presenting an atypical or uneven profile. In the school setting, learners may be working at any educational level, including the National Curriculum and P scales. This definition could also be applicable to learners in Early Years and post-school settings.

⁸ Emerson, E. (2009) *Estimating the Future Number of Adults with Profound and Multiple Learning Disabilities in England*. Lancaster: CeDR, Lancaster University.

⁹ Department for Education (2011) *Support and Aspiration: A new approach to special educational needs and disability – a consultation*. Norwich: The Stationery Office.

The Government has articulated the importance of ‘effective, integrated support for children with the most complex needs’.¹⁰ It is important to recognise that complexity is not just associated with high support needs arising from profound medical and physical conditions. For example, consider also the extreme vulnerability and complexity of the young person with fetal alcohol spectrum disorder who, at 18 years old, has the expressive language of a 20-year old, yet the living skills of an 11-year-old, the mathematical understanding of an eight-year-old, the social skills of a seven-year-old and the comprehension and emotional maturity of a six-year-old.

Moving forward to enskill the education workforce

The Government is taking steps to enskill the education workforce to meet the needs of the most complex learners in our schools. Pathfinder SEND Teaching Schools have been commissioned. This DfE supported research project has been established to improve outcomes for children with the most complex educational needs and disabilities through the development of evidence-based teaching and learning strategies. The Training and Development Agency for Schools (TDA) have commissioned online professional development resources which will address professional development needs for educators of children and young people with severe, profound and complex learning difficulties.

Developing an ‘Engagement for Learning’ approach

Based on a reading of literature around engagement of children and young people with learning difficulties, engagement for learning was instated as the central tenet for developing personalised learning pathways for young people with CLDD. Engagement is the single best predictor of successful learning for children with learning disabilities.¹¹ Without engagement, there is no deep learning,¹² effective teaching, meaningful outcome, real attainment or quality progress.¹³ Children with disabilities have consistently been shown to engage for less time and at lower levels than their non-disabled peers.¹⁴ This has serious implications for learning, resulting in lost learning opportunities for these young people, and whole class distraction or disruption.¹⁵ Research suggests that engaged behaviour is the single best predictor of successful learning for young people with learning disabilities,¹⁶ and

¹⁰ Department for Education (2011) *Support and Aspiration: A new approach to special educational needs and disability – a consultation*. Norwich: The Stationery Office.

¹¹ Iovannone, R., Dunlap, G., Huber, H. and Kincaid, D. (2003) ‘Effective educational practices for students with autism spectrum disorders’, *Focus on Autism and other Developmental Disabilities*, 18, 150–166.

¹² Hargreaves, D.H. (2006) *A New Shape for Schooling?* London: SSAT.

¹³ Carpenter, B. (2010) *A Vision for 21st-Century Special Education (Complex needs series)*. London: SSAT.

¹⁴ Bailey, D.B., McWilliam, R.A., Ware, W.B. and Burchinal, M.A. (1993) ‘Social interactions of toddlers and preschoolers in same-age and mixed-age play groups’, *Journal of Applied Developmental Psychology*, 14 (2), 261–276; McCormick, L., Noonan, M.J. and Heck, R. (1998) ‘Variables affecting engagement in inclusive preschool classrooms’, *Journal of Early Intervention*, 21 (2), 160–176; McWilliam, R.A. and Bailey, D.B. (1995) ‘Effects of classroom social structure and disability on engagement’, *Topics for Early Childhood Special Education*, 15 (2), 123–147;

¹⁵ Hume, K. (2006) ‘Get engaged! Designing instructional activities to help students stay on task’, *Reporter*, 11 (2), 6–9.

¹⁶ Iovannone, R., Dunlap, G., Huber, H. and Kincaid, D. (2003) ‘Effective educational practices for students with

‘sets the occasion for optimal learning to occur.’¹⁷

Establishing the CLDD Engagement for Learning Resource Framework

Three resources to support the engagement of children and young people with CLDD, from whole school strategy to student support, were developed and refined in collaboration with schools over the course of the CLDD research period. Engagement is the core tenet of all these resources:

- ***The Engagement Profile and Scale***

Children and young people with CLDD are often disengaged from learning, and do not respond to teaching approaches which engage most other students. This resource allows educators to have high, yet realistic, expectations of the young person as an engaged learner. It brings focus on how the young person with CLDD *can* learn and achieve – their strengths, their interests, what they say or show about themselves as learners – and encourages educators to value and build on these features to re-engage the young person with learning.

- ***The CLDD Briefing Packs***

These provide educators with the first steps towards personalising learning. The 10 Briefing Packs each address a condition which is found commonly to co-exist with others in children and young people with CLDD. They describe the condition, the learning profiles associated with it, and suggestions for educational strategies at three different priority levels – a four-page briefing sheet as an introduction, a two-page classroom support sheet giving quick advice for immediate support, and a more in-depth six-page information sheet with references and web links for further investigation. This allows educators to make a quick first step towards engaging a student by building on proven successful practice for their condition.

- ***The Inquiry Framework for learning***

The Inquiry Framework for Learning is designed as an online resource for educators in exploring and developing personalised learning pathways for children with CLDD. It supports an approach which focuses on increasing children’s engagement in learning in different areas of need, through a process of discussion and reflection. It enables educators to map the processes they go through in exploring and developing personalised learning pathways for students, and gives them a means of demonstrating

autism spectrum disorders’, *Focus on Autism and Other Developmental Disabilities*, 18, 150–166; Katz, J. and Miranda, P. (2002) ‘Including students with developmental disabilities in general education classrooms: educational benefits’, *International Journal of Special Educational Needs*, 17 (2). [Online at: <http://www.internationaljournalofspecialeducation.com/articles.cfm?y=2002andv=17andn=2>; accessed: 1.7.2011]

¹⁷ McWilliam, R.A., Trivette, C.M. and Dunst, C.J. (1985) ‘Behavior engagement as a measure of the efficacy of early intervention’, *Analysis and Intervention in Developmental Disabilities*, 5 (1–2), 59–71.

and justifying this lengthy but very valuable inquiry process. The 'Inquiry areas' provide inquiry starting points from which educators can begin to build a personalised learning pathway for students in a systematic way. Under a series of twelve headings, questions are posed which may be helpful in themselves or give rise to further questions and debate among class teams.

The SSAT's Complex Needs series of booklets

As an additional resource to support schools, the SSAT published a series of booklets setting the context of CLDD within schools and suggesting a conceptual and professional framework in which senior leadership teams can address their changing student population. This has been used proactively by a number of headteachers and their staff to bring this new 21st century student population with CLDD into focus and to catalyse a whole school response.

Trialling the resources

Schools in Phases 2 and 3 were asked to trial the resources and their feedback enabled further resource modification. Their perceptions of the effectiveness of the tool were elicited from exit interview. A summary of the outcomes presented in the report is below.

Presentation of data

As this research was qualitative and purposive, implications for practice are applicable to this research participant group. However, the identified trends and themes will be of interest to those concerned or working with similar populations of students. Although numbers of participants in most phases would not warrant stated percentage outcomes, these have been added to allow some comparison across phases. The early years data (two settings) is discussed further in the full report.

Effectiveness of the Engagement for Learning approach in developing pathways to personalised learning for students with CLDD

During semi-structured exit interviews with schools involved in the CLDD research project, all (100%) schools in Phases 1 (12 development special schools), Phase 2(b) (15 international special schools) and Phase 3 (12 mainstream schools and two early years settings) perceived that the Engagement for Learning approach was effective in developing pathways to personalised learning for students with CLDD. In Phase 2(a) 48 (96%) of 50 UK special schools stated that the approach was effective.

Engagement outcomes for the students involved in the CLDD research project

Engagement outcomes for students involved in the CLDD research project were measured using the Engagement Profile and Scale. They showed students' change in engagement over the period of engagement, which was a school term in each Phase. Case study overviews are provided in the full report.

Students showing an increase in engagement over the CLDD research project intervention period

ENGAGEMENT OUTCOMES FOR STUDENTS FOR INTERVENTION PERIOD (Data from engagement profile and scale)	Outcomes for students with usable data outcomes (n=no. of students with usable data; % of total students per phase with usable data)			
	Phase 1 SEN development students (n=55)	Phase 2 SEN UK trial students (n=87)	Phase 2 SEN international trial students (n=26)	Phase 3 Mainstream trial students (n=16)
Increase in student engagement	45 (82%)	74 (85%)	22 (84.5%)	13 (81%)
Neither increased nor decreased	1 (2%)	8 (9%)	1 (4%)	1 (6%)
Decrease in engagement	9 (16%)	5 (6%)	3 (11.5%)	2 (13%)
Compromised/no data	5 students	13 students	4 students	8 students

The data collected using the Engagement Profile and Scale for individual students across all phases of the research suggested that for the period of intervention the proportions of students showing an increase in engagement as a result of interventions using the CLDD Engagement for Learning resources were broadly similar:

- 81–85% (av. 83%) students showed increased levels of engagement
- 2–9% (av. 5.3%) students showed neither increased nor decreased levels of engagement
- 5–16% (av. 11.6%) students showed decreased levels of engagement.

In most cases, where a decrease in engagement was shown, educators suggested possible reasons for the decrease.

The above information relates to engagement scores alone; however, the scores were supported by descriptive data which included contextualising (e.g. aim, objective, strategies, environment, student mood, etc.), and observational information (e.g. what worked, what did not work and proposed next steps).

It is important to realise that the aim of using the Engagement Profile and Scale with a student is not to show ever increasing engagement. It may be that after introducing a new experience for the student in the context of the activity (e.g. generalising skills to another setting; introducing a social interaction aspect to an activity; introducing new elements to an existing task) that the student's scoring on the Engagement Scale falls. However it is important to continue to expand and extend the student's learning experiences as appropriate. The process of encouraging engagement will begin again in that new situation. The descriptive commentary provided in the Engagement Scale will allow explanation of these important and entirely justifiable variations in a student's engagement.

School perceptions of additional outcomes for students through implementing the CLDD resource framework

In addition to the evidence of student engagement collected using the Engagement Profile and Scale, in Phase 2 and 3 exit interviews, schools were asked to state the most important outcomes for their students involved in the research over the period of intervention. Their comments, summarised in the table below, could be divided into those relating to learning and those relating to emotional wellbeing.

It is important to note that the information below was collected from schools in response to the invitation to 'Describe the most successful outcome for each of the students in the project'. Therefore the fact that some schools did not mention emotional/social wellbeing outcomes does not mean that there were not successful outcomes for their students in those areas. Further discussion of the figures is available in the complete report.

School¹ perceptions of learning outcomes for students over the CLDD research project intervention period

SCHOOL PERCEPTION: School perceptions of learning outcomes for students (Data from exit interviews)	CLDD research project phases (n=numbers of schools) ¹			
	Phase 1 Development schools (n=12)	Phase 2 SEN UK trial schools (n=50)	Phase 2 SEN international trial schools (n=15)	Phase 3 Mainstream trial schools (n=12)
Positive response	Question not included in development school exit interview	40 (80%)	13 (87%)	11 (92%)
Response talked of teaching not learning outcomes		3 (6%)	2 (13%)	1 (8%)
Negative / neutral response		7 (14%)	0	0

¹ NB In the context of exit interview data, 'school' refers to the individual(s) belonging to a school who took part in the exit interview.

School¹ perceptions of emotional and social wellbeing outcomes for students over the CLDD research project intervention period (In response to the question:

SCHOOL PERCEPTION: School perceptions of emotional and social wellbeing outcomes for students (Data from exit interviews)	CLDD research project phases (n=numbers of schools) ¹			
	Phase 1 Development schools (n=12)	Phase 2 SEN UK trial schools (n=50)	Phase 2 SEN international trial schools (n=15)	Phase 3 Mainstream trial schools (n=12)
Positive outcomes	Question not included in development school exit interview	29 (58%)	5 (33%)	12 (100%)
Increased self-esteem		8 (16%)	0	2 (17%)
Improved relationships		14 (28%)	2 (13%)	9 (75%)
Improved wellbeing		9 (18%)	1 (7%)	8 (67%)

¹ NB In the context of exit interview data, 'school' refers to the individual(s) belonging to a school who took part in the exit interview.

Educator perceptions of the effectiveness of resources in supporting the development of learning pathways for students with CLDD

The two early years settings are not included in the table itself as numbers are too small for comparison.

Comparison of schools' perceptions of the usefulness of CLDD Engagement for Learning resources in developing learning pathways for student with CLDD across the three project phases

	Phase 1: Development schools	Phase 2 (a): UK SEN trial schools	Phase 2 (b): International SEN trial schools	Phase 3: Mainstream schools
Engagement Profile and Scale	n=12 <i>Useful/very useful</i> 8 (67%) <i>Quite useful</i> 4 (33%) <i>No /little use</i>	n=48 <i>Useful/very useful</i> 36 (75%) <i>Quite useful</i> 11 (23%) <i>No /little use</i> 1 (2%)	n=15 <i>Useful/very useful</i> 12 (80%) <i>Quite useful</i> 3 (20%) <i>No /little use</i>	n=12 <i>Useful/very useful</i> 9 (75%) <i>Quite useful</i> 3 (25%) <i>No /little use</i>
CLDD Briefing Packs	n=12 <i>Useful/very useful</i> 8 (67%) <i>Quite useful</i> 4 (33%) <i>No /little use</i>	n=42 <i>Useful/very useful</i> 34 (81%) <i>Quite useful</i> 6 (14%) <i>No /little use</i> 2 (5%)	n=11 <i>Useful/very useful</i> 8 (73%) <i>Quite useful</i> 3 (27%) <i>No /little use</i>	n=12 <i>Useful/very useful</i> 8 (67%) <i>Quite useful</i> 4 (33%) <i>No /little use</i>
Inquiry Framework for Learning	n=10 <i>Useful/very useful</i> 5 (50%) <i>Quite useful</i> 5 (50%) <i>No /little use</i>	n=37 <i>Useful/very useful</i> 15 (41%) <i>Quite useful</i> 13 (35%) <i>No /little use</i> 9 (24%)	n=13 <i>Useful/very useful</i> 10 (77%) <i>Quite useful</i> 3 (23%) <i>No /little use</i>	n=9 <i>Useful/very useful</i> 5 (56%) <i>Quite useful</i> 4 (44%) <i>No /little use</i>
<p>The two early years settings overall rated the usefulness of the resources as follows:</p> <ul style="list-style-type: none"> • Engagement Profile and Scale – rated 4, ‘useful’ • CLDD Briefing Packs – rated 4, ‘useful’ • Inquiry Framework for Learning – setting 1 rated 3, ‘quite useful’; setting 2 rated 2, ‘a little useful’. 				

The results need to be seen in the context of the phase in which they took place. In Phase 1, the Engagement Profile and Scale and the CLDD Briefing Packs were in early draft phases, and underwent refinement before trialling in Phases 2 and 3. The Inquiry Framework for Learning was developed from scratch in Phase 1, resulting in an early draft stage which was trialled in Phases 2 and 3. It has undergone major changes based on suggestions from the Phase 2 and 3 trials. A school who used both the earlier and most recent versions of the Inquiry Framework for Learning in association with the research project has commented:

The recent changes to the Framework on the website has made [it] less daunting to tackle and...very user friendly. I...look forward to using the framework in future profiles and scales.

Educator perceptions of their practice development in using the resources

Educators across all three phases spoke during exit interview about the impact of using the CLDD Engagement for Learning resources. The themes they raised, identified through categorical content analysis, were similar. The exit interview questions did not prompt interviewees for responses in these areas.

The table below allows comparison between the numbers of schools which made comments relating to the identified themes across the phases. These were general comments made in relation to the CLDD Engagement to learning approach. Comments made by educators which were specific to individual resources are not included here.

Numbers of schools commenting on the positive impact of the CLDD Engagement for Learning Resource Framework on areas of professional practice

	Phase 1: Development schools (n=12)	Phase 2 (a): UK SEN trial schools (n=50)	Phase 2 (b): International SEN trial schools (n=15)	Phase 3 (a): Mainstream schools (n=12)	Phase 3 (b): Early years settings (n=2)
Reframing professional practice – Total no. of schools commenting	8 (67%)	42 (84%)	12 (80%)	10 (83%)	2
Awareness of student as learner	6 (50%)	28 (56%)	11 (73%)	5 (42%)	0
Thinking, reflection and analysis around practice	5 (42%)	29 (58%)	9 (60%)	6 (50%)	1
Professional focus	4 (33%)	15 (30%)	6 (40%)	5 (42%)	1
Understanding	0	9 (18%)	5 (33%)	0	0
Areas of practice – Total no. of schools commenting:	10 (83%)	40 (80%)	15 (100%)	6 (50%)	1
Personalising learning	8 (67%)	17 (34%)	7 (46%)	4 (33%)	0
Planning, target-setting and assessment	0	25 (50%)	6 (40%)	3 (25%)	1
Observing	6 (50%)	15 (30%)	8 (53%)	2 (17%)	1

From the figures in the table above, it would seem that a high proportion of schools in all phases felt that their practice benefited from using the CLDD Engagement for Learning framework in some way. It suggests that in addition to using them to address engagement issues for their students, the resources may have a role as a conceptual structure for staff to aid the more effective development of learning pathways for their students.

Future plans of schools involved in the research around implementing the resources

School¹ statements about future use of the CLDD Engagement for Learning Resource Framework

SCHOOL STATEMENTS: Future use of the CLDD Engagement for Learning resources (Data from exit interviews)	CLDD research project phases (n=numbers of schools) ¹			
	Phase 1 SEN development schools (n=12)	Phase 2 SEN UK trial schools (n=50)	Phase 2 SEN international trial schools (n=15)	Phase 3 Mainstream trial schools (n=12)
Continue to use the engagement for learning resources in some way	12 (100%)	46 (92%)	15 (100%)	11 (92%) (+1 'probably')
Continue to use the engagement for learning resources as trialled	7 (58%)	27 (54%)	9 (60%)	11 (92%) (+1 'probably')
Schools intending to roll out the engagement for learning resources across the school	8 (67%)	18 (36%) + 7 (14%) considering	5 (33%)	1 (8%) Secondary school – for <i>all</i> students not just SEN

¹ NB In the context of exit interview data, 'school' refers to the individual(s) belonging to a school who took part in the exit interview.

From the figures above, it would seem that a high percentage of schools involved in the CLDD research project intended to continue to use the CLDD Engagement for Learning tools in some way, although a lower percentages were intending to use the resources as trialled. Unexpectedly, one of the mainstream schools also intended to role the resources out across the whole school. The school had identified a use for the CLDD Engagement for Learning resources beyond their SEN population to encompass all their students.

Implications of the CLDD research in the context of current educational concerns

The Government has identified concerns in the following areas for students with complex learning difficulties and disabilities:¹⁸

- Mental health and emotional wellbeing
- Training the SEN workforce / The role of teaching assistants
- Multidisciplinary working
- Preparing for adulthood
- The family perspective.

Mental health and emotional wellbeing

Of the Phase 1 cohort, the CLDD research project had information relating to positive or compromised mental health/emotional wellbeing of 51 students. Among those students, there were mental health and wellbeing concerns for 28 (55%), and no such concerns for

¹⁸ Department for Education (2011) *Support and Aspiration: A new approach to special educational needs and disability – a consultation*. Norwich: The Stationery Office.

the remaining 23 (45%). For this group of participants, it represents an 150% increase on Emerson and Hatton's¹⁹ finding of mental health issues for 36% of children with identified learning disability. If this finding is common among the wider population of students with CLDD (which would need establishing in further research) this has serious implications for classroom management in both special and mainstream education.

Through the baseline data collected in Phase 1, and subsequent informal discussions with colleagues in trial phase schools, the CLDD Research Project team have become aware of the under diagnosis of students whose CLDDs include mental health issues and of the difficulties experienced by educators in addressing these through the lack of specialist emotional wellbeing/mental health support in schools for all but the most severely affected young people. Young people's emotional wellbeing/mental health needs have to be addressed before these young people can engage as effective learners.

As described above, 40% (n=64) special schools and 100% (n=12) mainstream schools identified positive emotional wellbeing outcomes for students involved in the implementation of the CLDD Engagement for Learning approach. It would be interesting to further explore the potential of the Engagement for Learning approach in increasing the resilience of learners whose mental health is at risk and in supporting educators to re-engage them in learning.

Training the workforce

Students with CLDD are a unique group of learners with a distinctive profile of learning need. We need to equip teaching professionals to offer high quality education to these children so that they do not become alienated by inappropriate teaching ill-matched to those learning needs.²⁰ In the UK, Salt and Lamb²¹ have highlighted the shortage of teachers effectively trained in SEN, and the paucity of training routes open to those who wish to follow that career pathway.

The CLDD research project involved a range of educators from head teachers to teaching assistants and therapists. From the outset, it became clear that educators did not have the tools in their teaching toolkit to meet the needs of this diverse and rapidly changing group of students. Many were attempting to resolve curriculum and pedagogical issues based on a framework evolved in the late 20th century, and which did not incorporate the new needs profile of those children with CLDD. Their approaches were not cognisant of the contribution of neuroscience which has so rapidly progressed in the early 21st century, and which has given rich insight into the brain functioning, and hence learning patterns, of children with CLDD.

¹⁹ Emerson, E. and Hatton, C. (2007) *The Mental Health of Children and Adolescents with Learning Disabilities in Britain*. London: Foundation for People with Learning Disabilities/ Lancaster University.

²⁰ Fergusson, A. and Carpenter, B. (2010) *Professional Learning and Building a Wider Workforce*. London: SSAT.

²¹ Department for Children, Schools and Families (2010) Salt Review: Independent review of teacher supply for pupils with severe, profound and multiple learning difficulties (SLD and PMLD). Annesley: DCSF Publications; Department for Children, Schools and Families Department (2009) Lamb Inquiry: Special educational needs and parental confidence. Annesley: DCSF Publications.

However, as described above, the CLDD Engagement for Learning approach provided a structure within which educators could move, systematically and deductively, towards implementing effective personalised learning pathways for students with CLDD through student engagement. Schools also identified a range of professional learning outcomes for educators involved in implementing the approach.

While the CLDD Engagement for Learning Resource Framework was seen as having an implication for training – whether carried out by schools for staff who were not originally involved in the project or schools requiring further training – it was also seen as a training resource by some schools. Three schools suggested that it was, in itself, professional development, and two others saw it as having a role in coaching staff. What has become apparent through the project is that the inquiry based approach to learning for students with CLDD resonates with an inquiry-focused professional learning for their educators.

The role of teaching assistants in delivering CLDD Engagement for Learning outcomes

Throughout the CLDD research project, schools articulated the benefit of teaching assistant (TA) involvement in implementing the CLDD Engagement for Learning approach. Most schools commenting thought that TAs could have a future role in working with the CLDD Engagement for Learning Resource Framework to support student engagement, and five schools described their input as key. Schools also identified the following benefits for TAs of their involvement in the CLDD Engagement for Learning approach:

- Increased autonomy
- Ability to take a more proactive role
- Ability to think more analytically
- Improved reporting on student learning outcomes
- A sense of value in their role.

The alignment of class team practice was also noted as a benefit. However, schools also commented on the necessity of a supportive context for TA involvement, including training, allocation of time and a supportive teacher who took responsibility for management and guidance of the intervention.

Transdisciplinary working

As Lacey²² states, 'Collaborative teamwork is a complex concept'. For children and young people with CLDD, there are often high level health, social and educational needs associated with their conditions. For some, this requires multiple interventions from many professionals.²³ These professionals can unwittingly contribute to an intervention scrum with the family and child as the ball at its centre. Transdisciplinary working can take away the elements of depersonalisation, incompatible targets, and impossible scheduling of

²² Lacey, P. (2001) *Support Partnerships: Collaboration in action*. London; David Fulton Publishers.

²³ Boddy, J., Potts, P. and Statham, J. (2006) *Models of Good Practice in Joined-up Assessment: Working for children with 'significant and complex needs'*. London: Thomas Coram Research Unit, University of London. [Online at: <https://www.education.gov.uk/publications/eOrderingDownload/RW79.pdf>; accessed: 27.7.11]

appointments, replacing it with a transdisciplinary team (including the family) prioritising and rationalising their support for the young person in a way that enhances their quality of life and that of their family.

While transdisciplinary working was actively promoted through the CLDD Engagement for Learning training for project schools, it was not specifically investigated within the research remit. However, illustrative examples of excellent transdisciplinary practice arose in association with the CLDD research, and these are described in the full report.

In their recent review,²⁴ Ofsted found 'better accountability from different aspects of provision when providers had a mixed team of professionals from different disciplines.' The project would like to see further research on the impact of transdisciplinary working in schools for students with CLDD.

Preparing for adulthood

Transition is used to describe the period of time between the ages of 14 and 25 that young people make decisions about their future and experience changes in the way they live their lives.²⁵ If a student is to be successful in transition to community life, a comprehensive curriculum must be in place. The most effective curriculum will incorporate three basic pathways or domains: academic; vocational; and community life and residence.

As part of the CLDD research project, the CLDD research team worked with Ellen Tinkham School, Exeter, in the context of their regional person-centred transition support programme. Six students with CLDD who were involved in transition from four schools and their staff took part in semi-structured interviews. These interviews identified five main strands of concern:

- Training
- Personalisation
- Relationships
- Funding and withdrawal of services
- Aspiration.

The difficulties with transition into adult services and society for young people with SEN is well documented, and it seems that for young people with complex profiles the issues are even more apparent. More detailed research needs to be completed to ascertain the impact that transition has on these complex young people's lives.

²⁴ Ofsted (2010) *The Special Educational Needs and Disability Review: A Statement is not enough*. London: Ofsted.

²⁵ McGrath, A. and Yeowart, C. (2009) *Rights of Passage: Supporting disabled young people through the transition to adulthood*. London: New Philanthropy Capital.

The family perspective

The families of children with CLDD are truly pioneers, charting new pathways in raising their child. They will have created their own care support, therapeutic interventions and educational approaches, based on their deep and rich understanding of their child, long before any school-based professional ever comes into contact with them. The knowledge and expertise of families in supporting children with CLDD should, therefore, be acknowledged and respected.

As part of the initial stages of the CLDD research project, families of the 60 student participants were interviewed to gain a deeper insight of the children's motivators and learning – at school and in the home, to help shape an engagement profile and a pathway to personalised learning. The themes emerging from these interviews with families were around:

- The happiness the child or young person brings to the family
- Pride and elation in seeing them achieve, however small the achievement
- Battles for support and services
- The persistence and determination needed to receive the best opportunities for these children and young people
- Appropriacy of the curriculum
- The importance of personalisation and motivation in learning
- Consistency of routine and staffing
- Sharing successful interventions (e.g. communication) with school
- The importance of communication between home and school.

Throughout the project there were examples of excellent collaboration and communication with families – mostly parents – about the CLDD Engagement for Learning research and incorporation of parent suggestions and ideas into interventions. Families made some important contributions to interventions created during the CLDD research project. The CLDD team would like to see further research into the impact of family involvement in designing/modifying appropriate interventions for their child or young person with CLDD.

CONCLUSION

The overall response of schools to using the Engagement for Learning approach and the CLDD Engagement for Learning Resource Framework has been both positive and constructive in all three phases of the project – SEN development schools (12), SEN trial schools (65), mainstream schools (12) and early years settings (2). The result has been the CLDD Engagement for Learning Resource Framework.

The CLDD Engagement for Learning Resource Framework was designed to support educators of students with CLDD to engage them in learning. As can be seen from the preceding discussion, the responses from schools both in numeric data collected using the Engagement Profile and Scale, and during exit interviews, suggest that the research project has met its aim and objectives through provision of:

- Engagement Profile and Scale – implementation by educators has led to increased engagement in learning for students with CLDD, and to educator reports of associated learning and emotional wellbeing outcomes for students, as well as professional development/practice support for staff
- CLDD briefing packs – schools report that the packs about conditions commonly co-existing in students with CLDD have provided them with valuable information about students' conditions and related learning profiles as a first step towards personalising educational approaches for this student group; some schools intended to use them as training resources
- Inquiry Framework for Learning – schools have reported the usefulness of this resource in supporting personalising learning for students with CLDD, staff development, and the use of the Engagement Profile and Scale by providing inquiry prompts for discussion and investigation by class teams; other schools have identified it as a curriculum development tool
- Continuing training opportunities in use of the resources are provided through:
 - Online information at <http://complexld.ssatrust.org.uk>
 - A CLDD training programme developed through SSAT (further information at: <http://complexld.ssatrust.org.uk>), as stipulated in the tender
 - Inclusion in the TDA's forthcoming online professional development resources which will address professional development needs for educators of students with severe, profound and complex learning difficulties (see Appendix 7 for information sheet).

Educators who have successfully implemented the CLDD Engagement for Learning Resource Framework have formulated creative responses to the needs of their students, and developed high expectations of students' potential for engagement during the period of intervention. The focus on developing a personalised learning pathway for the student has led, even where the student's self-expression is impaired, to a confluence of curriculum delivery with students' learning strengths, needs, aspirations, interests and perspective to deliver a truly relevant and engaging educational programme for learners who were previously disengaged (in whole or in part) from learning. Sometimes working together with families and colleagues from other disciplines to deliver what their student needed, educators have been able to structure and visually represent progressive engagement for learning using engagement indicators and scores, and develop an explanatory commentary which takes account of the introduction of new educational challenges.

The project has also highlighted key educational issues associated with students with CLDD taking part in this project, including:

- Co-existing mental health issues running at 150% of Emerson and Hatton's figure of 36% for children with special educational needs within Phase 1 students with CLDD
- A possible association between implementing the CLDD engagement for learning approach and increasing emotional well-being among some learners
- Corroboration of the need, identified by the Government and the Salt Review, for professional development support for educators of students with CLDD, and the potential value of teaching assistants in supporting the implementation of the CLDD Engagement for Learning approach
- The potential of the CLDD Engagement for Learning resources to act as a student-centred professional coaching structure which supports professional alignment/consistency among class teams, and increasing autonomy, empowerment and analytical practice among the TA workforce
- The application to the mainstream CLDD student population of the continuing, well documented and as yet unmet concerns relating to post-school transition, held in common with many learning disability practitioners and families; this resonates with recent findings by Brooks²⁶ concerning mainstream students with ASD.
- The holistic, enriching and, occasionally, life-changing outcomes experienced by students with CLDD when professionals from multiple disciplines work together in a transdisciplinary way; and the value of this working for the professionals involved
- The potential and as yet unexplored impact of family involvement in designing/modifying interventions for their son/daughter with CLDD.

²⁶ Brooks, J. (2011) *'Mind the Gap!': Supporting high functioning ASC students transition to adulthood*. London: Advisory Service, Garratt Park School.

The CLDD research team urges the DfE to consider the recommendations arising from this research.

The CLDD Engagement for Learning Resource Framework was purposely designed on a foundation of inquiry to meet the dynamic and constantly changing needs of students with CLDD who enter our schools. Resources which advocate specific interventions alone are no longer able to meet the range of needs presented by the current population of students with CLDD, let alone the future one. It is hoped that the CLDD Engagement for Learning Resource Framework will be to educators what the fishing rod is to one who is hungry – it will feed them for life. Systematic and deductive inquiry is the way forward. We need schools and classrooms which, in acknowledging this, are practitioner-led, evidence-based, inquiry-focused and research-informed. Our work must be to transform children with CLDD into active learners, by releasing their motivation, unlocking their curiosity and increasing their participation.

Suggestions for future research

In summary, the CLDD research team would also like to see further opportunities for research which builds on the outcomes and findings of the current research into the CLDD Engagement for Learning Resource Framework in the following areas:

- A more wide-ranging and formal evaluation of the CLDD Engagement for Learning resources in their final form, subject to in-depth training of practitioner-researchers in the CLDD Engagement for Learning approach by the CLDD research team (ethos and practice), an extended baselining period prior to intervention, which the scope and timeframe for the research project did not allow, and continuing coaching of practitioners in implementing the approach
- Systematic monitoring of emotional wellbeing outcomes for students with CLDD as a result of implementing the CLDD Engagement for Learning approach
- A formal evaluation of the resources among early years settings, subject to the caveats above
- Use of the CLDD Engagement for Learning Resource Framework as a structure for coaching within the class team
- Explore the potential of the Inquiry Framework for Learning as a catalyst for curriculum development
- Transdisciplinary working in the context of implementing the CLDD Engagement for Learning resources, including family involvement in designing/modifying interventions for their son/daughter.

In the area of CLDD, to gain evidence about student performance it is necessary to go about a process of inquiry. From the corrupted/incomplete data in this study, it was obvious that some teachers were not confident in handling emerging evidence, interpreting that

evidence in terms of student learning or of forming judgements about alternative pathways within a framework. There is a need for future professional development programmes to embody inquiry based processes through which educators can acquire the relevant skills to manage and implement evidenced based approaches to their maximum effect as a dynamic element of learning development for children with CLDD. The response of 25% of Phase 2 UK SEN schools to the Inquiry Framework for Learning is also further indication of an existing training need if inquiry is to be an embedded dynamic in classrooms. As one of the international schools headteachers stated about the Framework:

I used inquiry as a method of engaging the staff... The staff are very skilled and experienced. However, initially, they wanted answers, but by the end they were more comfortable with it being an inquiry. It enabled them to explore more.

CLDD RESEARCH PROJECT RECOMMENDATIONS

1. Evidence from this research has defined the population of children with Complex Learning Difficulties and Disabilities. We recommend that Local Authorities adopt the national definition of Complex Learning Difficulties and Disabilities in developing provision and reporting trends to National Government.
2. Schools involved in this research project have demonstrated great commitment, insight and endeavour. The wider community of schools will now need to be informed. Systematic, critical reflection in schools will enable this. We recommend that the Specialist Schools and Academies Trust's Complex Needs booklets are used to aid and stimulate debate and discussion.
3. Children with Complex Learning Difficulties and Disabilities are presenting profiles of learning need not previously experienced by schools. We recommend that headteachers and SENCOs access the free CLDD Briefing Packs, available through the Specialist Schools and Academies Trust, and disseminate them widely across all of their staff team.
4. Educators involved in this project have embraced new pedagogy designed around the tenet of engagement. We recommend schools consider the introduction of the Specialist Schools and Academies Trust's Engagement Profile and Scale to aid and enrich student engagement in learning.
5. Complex Learning Difficulties and Disabilities will continue to be a growing phenomenon in all schools. A culture of inquiry will help to meet the learning challenges displayed by these pupils. We recommend that schools use the Specialist Schools and Academies Trust's Inquiry Framework for Learning.
6. This project's evidence base and outcomes was greatly enriched through collaboration internationally with other schools, universities and experts. We recommend that the International Network for Educational Transformation (iNet), in conjunction with Department for Education, considers frameworks for enabling this initiative to be sustained.
7. Mental health is the most pervasive and co-occurring need to compound and complicate children's special educational needs and disabilities. In recognition of this, the project has developed supporting information for schools. We recommend that schools consider creating a 'Wellbeing Team' to promote emotional wellbeing in all children and young people and build emotional resilience in those with Complex Learning Difficulties and Disabilities.
8. In line with the recommendations of the Salt Review and the Lamb Inquiry for better training for teachers of children with SEND, the findings of this project also support this, and illustrate the urgent need in relation to a new generation of children. We

recommend that the new modules of training in special educational needs and disabilities, and specifically Complex Learning Difficulties and Disabilities, commissioned by the Training and Development Agency for Schools are systematically introduced across schools.

9. The diversity of need profiled in Complex Learning Difficulties and Disabilities should be reflected in the diversity of the workforce in schools which support children and young people with Complex Learning Difficulties and Disabilities. We recommend a re-designation of Teaching Assistant posts and others to build an appropriate wider workforce.
10. The contribution of Teaching Assistants at all levels is crucial in supporting children and young people with Complex Learning Difficulties and Disabilities. We recommend that detailed consideration be given to the training needs of Teaching Assistants working in the area of Complex Learning Difficulties and Disabilities.
11. Collaborative approaches are key to unlocking the innate abilities of children and young people with Complex Learning Difficulties and Disabilities. We recommend that transdisciplinary practice is encouraged wherever possible through joint initiation between the Department for Education and the Department of Health.
12. Young people with Complex Learning Difficulties and Disabilities are experiencing considerable challenges in the process of preparing for adulthood. We recommend that specific research be undertaken to identify more accurately their needs in the transition process.
13. Families of children with Complex Learning Difficulties and Disabilities are charting new care practices, therapeutic interventions and education pathways. We recommend that, in a spirit of equal partnership, professionals learn from these families, and apply their knowledge and insight to personalise programmes.
14. England has, through this Department for Education commissioned research project, defined and outlined the group of learners with Complex Learning Difficulties and Disabilities. This bedrock of research, professional practice and student focused information needs to be nurtured, disseminated and built upon. We recommend that the Government considers the most effective ways of doing this.

Information and materials related to the project are available online from the Specialist Schools and Academies Trust's Complex Learning Difficulties and Disabilities Project website: <http://complexld.ssatrust.org.uk>.

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