Preparing your child for pre-school and school... and enabling the school to prepare for your child

See end for photo sources

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Presentation context and focus

The main focus for this presentation is preterm birth.
We will be looking at...

• What is school readiness?

• Possible issues for children born preterm
  – Deferring school
  – Importance of assessment

• Possible delays and difficulties
  – Behaviour
  – Maths
  – Language
  – Executive skills
  – Engagement

• Resources
The duty to make reasonable adjustments is very important. Broadly, a school needs to make adjustments to what it would normally do, so far as reasonable, to meet the requirements of disabled people.

• 6.8 The duty to make reasonable adjustments requires a school to take **positive steps to ensure that disabled pupils can fully participate** in the education provided by the school, and that they can enjoy the other benefits, facilities and services that the school provides for pupils.

• 6.9 **Many reasonable adjustments are inexpensive** and will often involve a change in practice rather than the provision of expensive pieces of equipment or additional staff.

• 6.10 ...**schools need to think in advance** about what disabled pupils might require and what adjustments might need to be made for them.

WHAT IS SCHOOL READINESS?
School readiness – a partnership

The quality of a child’s early experiences is vital for their future learning, and these are shaped by factors including:

• The influence of ‘good parenting’
• The impact of high-quality early education and care

‘The parents who teach, whether they realise they are doing it or not, give their children the greatest...start.’

‘Teaching for small children is not blackboards and desks, it is counting bricks when building a tower, learning nursery rhymes and familiar songs, or gently coaching a child to put their own arms into their coat.’

It’s what parents do every day…

- ‘Communicating and modelling language
- ‘Showing, explaining, demonstrating
- ‘Exploring ideas, encouraging, questioning, recalling
- ‘Providing a narrative for what they are doing
- ‘Facilitating and setting challenges.’

Find out...
about early years setting
assessment practices

‘Children do not make rapid enough progress because far too many settings pass on unreliable assessments. Too often, time is lost through unreliable and inaccurate assessment, time that cannot be regained.’

Find out... how your child’s Early Years involves parents in assessment

An outstanding childminder...

• Asked parents to complete an overview of their child before starting, including:
  – Their child’s routines
  – Likes/dislikes
  – Developmental milestones
  – Stages of development

• Information used for baseline assessments
  – including the child’s developmental, emotional and behavioural starting points in the setting

• This information informs planning from the start.

Ask if assessments can be corrected/adjusted to reflect your child’s developmental age

‘Correcting age for prematurity is recommended by the American Academy of Pediatrics and the Centers for Disease Control and Prevention. The use of chronological age instead of corrected age for infants born prematurely may result in incorrect interpretations regarding the adequacy of a child’s growth or developmental progress and has the potential to negatively affect care...’

Put your child’s preschool/school in the picture

• Provide background information about your child
• Focus on one or two priority concerns
• Flag up any useful information sources
• Agree a way of regular contact (e.g. email, text, etc.)

• Meet regularly about with your child’s teacher/TAs about what’s working and what’s not
• Review what’s most important for your child

SEND Code of Practice 2014
(diagram from Dyslexia Action 2014)
School readiness at age 4 years – a primary headteacher’s expectations

• Be ready to be separated from their parent or carer

• Be able to interact with an adult and/or a peer
  – (e.g. during play to take turns and take some responsibility for actions)

• Respond to some boundary setting.

School readiness at age 4 years – a primary headteacher’s expectations (Ctd)

• Demonstrate listening skills
  – (e.g. show interest and pay attention)

• Have enough language to be able to express their needs

• Be able to communicate something about themselves
  – (e.g. name, age and something about family or relevant factors in their life.)

School readiness at age 4 years – a primary headteacher’s expectations (Ctd)

• Be able to focus on, and show interest in, their work and the world around them
• Make observations, notice things and ask questions
• Be able to hold a book and understand some aspects of narrative

Children with Cerebral Palsy and school readiness – what’s important?

- Around 15 per cent of very pre-term babies have cerebral palsy
- In terms of school readiness, physical disability is often the most prioritised with much focus on walking
- Social interaction and communication are often overlooked

More information needed?


STARTING SCHOOL
School entry – to delay or not to delay

‘There was evidence that year of schooling modifies the impact of prematurity on school outcomes...’

Compared with full-term born peers, children born preterm in their chronological age year were found to be:

• 10% more likely (approx.) to have a low Key Stage 1 test scores
• 12% more likely to have special educational needs support

Delaying school entry – some pros and cons around self-esteem

Pros
If children are developmentally young for their age the child may ...
• Have school readiness and performance issues
• Experience unrealistic expectations
• Always be trying to ‘catch up’
• Have social integration difficulties (e.g. being ‘babied’ by peers)

Cons
If children are chronologically a year older than their peers, they may ...
• Feel self-conscious as they get older
• Experience peer relation difficulties

Attention span
- Sit and listen to stories for a set period of time without being distracted? Concentrate on activities, for example, reading a book or doing a jigsaw puzzle?

Motor development
- Control their movements properly? Use the toilet, and eat unaided? What about co-ordination skills?

Physical stature
- Use the climbing frame in the playground? Sit at a desk and feel comfortable? Reach the sink to wash their hands?

Emotional maturity
- Form relationships with their peers? Socialise independently of adult support?
Delayed entry - what happens when your child reaches secondary school?

The Government stresses that:

• Admission at primary and secondary school must be based on the ‘best interests’ of the child

• The Authority must take into account the child’s primary school year group

‘This should mean that the Authority would have to explain why missing a year of school in order to join their “normal” year group would be in your child’s best interests.’

(Bliss – ‘Delay factsheet’ 2015)
Bliss resources on delayed school entry

• The ‘Delay factsheet’
• Information on the ‘Starting Primary School’

Available at: http://www.bliss.org.uk/starting-primary-school
Other information

• School delay: Bliss Parent Helpline 0808 801 0322


POSSIBLE DEVELOPMENTAL DIFFICULTIES – Not every child will have them
What might affect your child’s behaviours?

• **Brain differences** (Nadeau et al., 2001)
  – ADHD is over 2.5 times more likely to in children born very preterm (Salt and Redshaw, 2006)
  – 8% of children born at less than 26 weeks may have autism

• **Family factors**, such as resources and parenting style

• **Interventions supporting parenting and parent-child interactions**
  – Strategies for typical children may not work
  – May need to gain specialist psychology advice to find strategies that work
Behaviour issues

(Don’t accept people saying: ‘S/he will grow out of it.’)

Behaviour issues need **early identification and intervention**, otherwise problems worsen over time.

They affect:

- Learning outcomes
- Social relationships and/or
- Family functioning
You may need to help your child’s teacher to understand prematurity

‘My son was born at 24 weeks. He is five years old and commenced a mainstream primary school this September... He has been diagnosed with global learning delay and has difficulty with his behaviour and attention...

‘I often dread picking my son up from school to be informed of his antics. I will dutifully go through the motions of discussing his behaviour with him and the teacher, but really I feel very sad for him because it is not his fault. The teachers do not understand that sometimes he just cannot help his behaviour. He is definitely ‘wired differently’ to his peers.’

‘In the average UK classroom, there will be four children who have been born prematurely.’

Professor Barry Carpenter

http://www.teachertoolkit.me/2016/11/16/world-prematurity-day/
Immediate action is important

- Therapeutic – enables the child, family and school to ‘try differently rather than try harder’

- Causes people to manage expectations – high expectations are important, but only if they are attainable

- Helps schools to predict and address related difficulties and avoid secondary psychological harms

- Helps schools to ‘Lose not a minute’ in taking appropriate actions
Externalising and internalising behaviours

Externalising behaviours:
• Maladaptive behaviours directed outwards towards a child’s environment
• Often involve emotion dysregulation problems and impulsivity
• Include disorders such as ADD/ADHD, Oppositional Defiant Disorder and Conduct Disorder

Internalising behaviours:
• Withdrawn, anxious, inhibited, and depressed behaviours
• More centrally affects the child’s internal psychological environment rather than the external world.
Molly-Rose was diagnosed with Asperger syndrome when she was 6...

There were some clues that she might have behavioural problems in her early years...but it wasn’t until she started school that they became very noticeable...

“The cracks started to appear at school: at home it was a very structured environment but this was a new environment with a lot more noise ...”

After teachers alerted [her parents] to Molly-Rose’s behaviour they were able, through the support group Life’s Little Treasures that Shusannah co-founded, to get their daughter to a speech therapist and a behavioural paediatrician who has given her the tools to cope with everyday life.

Now 11, Molly-Rose is a happy, carefree child. “She is full of life and determination. Most people aren’t even aware she has Asperger’s,” her mother says.

Parenting interventions (Australia)

Of five preterm parenting interventions that assessed child behaviour, there was some evidence that:

- the Infant Health and Development Program (IHDP) improved behaviour up to 3 years of age,

- the Victorian Infant Brain Studies (VIBeS) Plus program improved behaviour up to 4 years, with a durable effect on behaviour at 2 years and a small treatment effect at 4 years

- the Mother-Infant Transaction Program (MITP-M) improved behaviour up to 5 years and revealed a small durable treatment effect at 2 years and moderate effect at 5 years.

Supporting behavioural difficulties

• Rehearsing self-regulatory language and behaviour
• Teaching ‘thinking before acting’ (e.g. rule-based games; chores; role-play)
• Developing peer social skills (modelling; teaching tact; sociodrama and role-play)
• Ensuring a safe, nurturing environment through environmental and social supports (e.g. assisting work group, peer mentoring, creating friendship opportunities at home)

Building blocks for learning:

Foundation skills

- Sensory processing
- Gross motor co-ordination
- Fine motor control
- Perception
- Language
- Organisation
- Social and emotional aspects

Building blocks for learning: Foundation skills

(Jenkinson, J., Hyde, T. and Ahmad, S., 2008)
Brain plasticity

- The brain has the ability to reorganize neural pathways based on new experiences.
- This means that early interventional services have the potential to reorganize neuronal pathways to improve functional outcomes.

Motor development issues

• Children born very preterm often ‘catch up’ on early foundational motor milestones

• At school age they may struggle with new motor tasks involving balance and coordination.

• Preterm/low birthweight children are six times as likely as full term peers to have Developmental Co-ordination Disorder.

Assessment for motor difficulties is essential
Examples of gross motor development activities

• Crawling
• Rocking (e.g. on an exercise ball) and rolling (e.g. like a log along the carpet)
• Bouncing (e.g. on a ball, space-hopper, trampoline)
• Sliding and swinging
• Exploring ‘feely bags’
• ‘Dancing’ (forward, back and sideways steps)
• Catching, throwing and kicking (e.g. large, easy-catch balls, pom-poms, etc.)
When completing a motor task, children:

- Make a plan based on future task demands
- Monitor the task as it unfolds, and
- Update their plan in response to changes.

In the future: helps with anticipating and selecting behaviour strategies to reach a learning goal.

(Stöckel and Hughes, 2016)
Once these children [born with very low birth weight] have reached appropriate age adjusted motor milestones, clinicians may consider discontinuing services. However, these children are at increased risk of motor coordination disorder later in childhood.

Providing treatment to these children while ambulation, coordination, and balance skills are emerging may optimize health and function at school age.

The implications for improvement in motor performance may have far reaching effects on physical activity, school performance, and self-esteem perhaps into early adulthood.

The cognitive skills of 115 children, aged 8–10 years, who were born very preterm were studied. In comparison with 77 term-born classmates, they struggled more with:

- Maths achievement
- Working memory skills
- Visuospatial skills.

Skills for Maths (PRISM Project)

Important executive function skills for maths include:

- Working memory
- Inhibition
- Visuospatial skills
- Processing speed

Important numeracy skills for maths include:

- Basic counting skills
- Recall of ‘number facts’ + speed of recall
- Maths concept understanding
- Effective strategies

The maths skills of 115 children, aged 8–10 years, who were born VPT were studied. In comparison with 77 term-born classmates, they struggled more with:

- Counting
- Problem-solving strategies

These were both related to children’s working memory and visuospatial difficulties.

Assessment of any difficulties is essential. Here are some examples of what you can do to support your child:

- Posting/matching shapes
- Building with bricks
- Creating pictures from Playdough or 2D shapes
- Inset jigsaws / simple jigsaws
- Large scale painting and drawing
- Threading beads
- Visual memory games
- Identifying shapes or items in a picture
Point out to your child’s teacher – their differences in development

...preterm children, **although just as accurate** as full-term children, **were significantly slower** in non-symbolic magnitude comparisons...

Preterm children need **more time** than their full-term peers...probably linked to **their difficulties with** general processing speed.

(Guarini et al., 2014)
Supporting executive functioning

- Recognition memory
- Memory span
- Visual spatial working memory

Strategies to support memory difficulties

Compared with full term peers, preterm and low birthweight children are likely to have more difficulties with memory

• Break down tasks into small steps that the child can achieve

• One simple instruction or task at a time

• Targeted training (e.g. computerised memory training)

Memory training

Computerized working memory training in a group of preterm born very low birthweight (VLBW) preschoolers

Using the Cogmed RM computerized working memory training program (preschool version) (www.cogmed.com), the VLBW preschoolers improved significantly on:

• Trained and non-trained working memory tasks (75% of children)

For 70-80% of children, transfer effects were observed as improvement on:

• Auditory attention
• Phonological awareness, and
• Visual as well as verbal memory.

7 working memory tasks – 3 tasks per day; 10 to 15 minutes, 5 days a week for 5 weeks. The exercises became more difficult as the child’s skills improved.

Benefits of working memory training in children at school age

• Improved visual as well as verbal memory and learning for very low birthweight preschoolers

• Increased reading comprehension

• Positive effects on phonics awareness – possible future reading benefits in preterm born children.

• Possible reduction in hyperactivity and improvement in attention.

Preterm children and language

Language delay is a common problem in preschool preterm children and may affect school success.

Extremely preterm and very preterm children show a delay in early language skills, as reflected in vocabulary size and word use as well as [sentence structure].

Preterm children and language programmes

• Preterm children have an atypical language development
• Delays are linked to cognition and verbal working memory
• A detailed linguistic assessment is needed to show any impairments
• Effective intervention programmes should focus on specific linguistic abilities.

Request a detailed linguistic assessment

‘A “wait and see” strategy is dangerous and inappropriate for children born preterm: a detailed evaluation and early intervention at preschool age may decrease…literacy delays when children reach school age.’

Engaging children in learning

‘Engagement is the connection between the student and their learning outcome. Students [with CLDD] cannot create that connection for themselves; it is educators, families and colleagues who must construct it with and for them.’

Engagement...

The **single best predictor** of successful learning for children with learning disabilities *(lovannone et al., 2003)*
7 Indicators of Engagement

Curiosity
Responsiveness
Initiation
Discovery
Investigation
Persistence
Anticipation...

Engagement Profile & Scale:
http://complexld.ssatrust.org.uk/project-resources/engagement-profile-scale.html
‘Teachers and other school professionals have a vital role in recognising, supporting, and helping students born very preterm achieve their academic and social potential, both at school and subsequently in adulthood.’

(Hornby and Woodward, 2009)

However, they themselves need strategic support from their school in order to fulfill this role.
Schools taking action

• Identification of children born premature on school entry
• Continuing regular assessment
• Proactive early identification of emerging motor, communication, cognitive, emotional and social difficulties; some may not appear until pre-teenage years
• Published guidance on teaching children born premature at all phases of the education system
• A focus on identifying effective teaching and learning strategies
• Professional development for educators
• A transdisciplinary approach – including families and a range of professionals – to establish educational, social and developmental priorities
‘Without action...

...we are asking teachers to teach with one hand tied behind their back. There are children struggling who could learn in a different style.’

Andy Cole, CEO, Bliss
- the special care baby charity
What’s reasonable? – a parent’s perspective

Reasonable expectations of schools:
– That people take action on key issues
– That people care about the outcomes for your child
– That people try
– That people keep to what’s been agreed
– That they listen to and respect you as a parent
– That they keep in touch with you about your child’s difficulties and take account of your concerns.

It’s important as a parent:
• To flag up your concerns as early as possible
• To understand that no-one is perfect and everyone makes mistakes
• To take teacher workloads into consideration
• To give people time to act – but not too much time
RESOURCES

For families and information to give to schools
Toy libraries

- Some early years settings have ‘lending libraries’ for parents
- Parents, Early Years and Learning (PEAL) may have information on toy libraries and treasure baskets (www.peal.org.uk)
- Local authorities may provide links to toy libraries (e.g. Cornwall: https://www.cornwall.gov.uk/leisure-and-culture/libraries/childrens-library/toy-libraries/)
Not specific to preterm babies and children but some useful advice on developmental activities (adjust your child’s developmental age)

http://raisingchildren.net.au/
Expensive and currently few copies available to buy but will be available from your local library through the national ‘Inter-Library Loan’ system (for a small fee) if they don’t already have the book.
One family’s struggle

This harrowing account describes one family’s massive struggle to get the right services for their child, who has very complex needs.
Born too soon

Barry Carpenter and Jo Egerton discuss the challenge of prematurity for 21st-century educators

The changing pattern of special educational needs and disabilities (SEND) across all types of school is now well documented. The learning profiles of children are often complex, with permutations of disability and additional need that are new to many school contexts. From these profiles of learner need arise new teaching strategies that need clear leadership and management.

This new generation of children requires new styles of leadership in all phases and designations of school. The leadership is often based on a process of inquiry – exploring, investigating and discovering innovative pathways to effective learning, attainment and progress. These are pathways that may have not been trodden before, and require leadership that recognises, guides and supports the inquiry process but does not try to impose answers, when the task, in reality, is about seeking solutions.

Educational needs of premature children

In the last decade a rapidly emerging group of children entering our school system has been those born premature. Indeed, it has been reported that there are likely to be four children born premature in every primary classroom; in special schools and settings this will be higher. A much-observed trend documented in Ofsted reports on special schools, is the significant trend towards the survival of children pre-27 weeks’ gestation, over 50% of whom survive with some form of SEND, has dramatically contributed to the figure of 60,000 children annually born premature.

These children are wired differently. If they learn differently, in what way do we teach differently, and, if we teach differently, what are the leadership and management issues arising that may be new in our portfolio of practice?

Classroom support

Recently, a conference was held in London, under the auspices of the National Forum for Neuroscience in Special Education, to review and debate the educational needs of children born premature.

In the UK, pre-term birth is defined as fewer than 37 weeks’ gestation, very pre-term as 28–32 weeks and extremely pre-term as fewer than 28 weeks’ gestation. Press reports often record children born premature at 20, 25, 24 weeks or earlier, and the EPICure study in 2006 (www.epicure.ac.uk) found that around 53% of these extremely premature infants survived. But what happens when they enter the school system? Children born extremely pre-term often present different profiles of learning need. Even premature children who do not show apparent difficulties may have persistent and mildly poorer grammatical skills and verbal working memory. Although as infants and toddlers they appear to catch up with their peers, children born three months prematurely are three to four times more likely to struggle in school than their full-term peers, and these difficulties persist into...
Downloading the Engagement Profile

http://complexld.ssatrust.org.uk/project-resources/engagement-profile-scale.html

Scroll down to find downloads

- Download Engagement profile
- Download 'How to use' guide

Mainstream schools wording
- Engagement profile and scale document (Word 97-2003)
- Engagement profile template (Word 2007)
- Engagement profile template (alternative Word 97-2003 version)
- Engagement scale template (Word 97-2003)
- Observation schedule (Word 97-2003)

Special schools / early years wording
- Engagement profile and scale document (Word 97-2003)
- Engagement profile template (Word 2007)
Complex Needs (CLDD) Briefing Packs for schools

http://complexld.ssatrust.org.uk/project-resources/cldd-briefing-packs.html

### Premature Birth

One contributing factor to the rise in childhood disability, particularly in the developed world, is the increasing survival rates of preterm infants, especially those born very and extremely preterm. Prematurity of birth is defined in terms of either gestational age (GA) or birth weight (BW). Table 1 below outlines the varying degrees of prematurity.

<table>
<thead>
<tr>
<th>Degree of prematurity</th>
<th>Gestational age</th>
<th>Birth weight</th>
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<tbody>
<tr>
<td>Full-term</td>
<td>Over 37 weeks</td>
<td></td>
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<tr>
<td>Preterm</td>
<td>Less than 37 weeks</td>
<td>Less than 2,500g</td>
</tr>
<tr>
<td>Very preterm</td>
<td>Less than 32 weeks</td>
<td>Less than 2,500g</td>
</tr>
<tr>
<td>Extremely preterm</td>
<td>Less than 28 weeks</td>
<td>Less than 1,500g</td>
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<tr>
<td>Normal birth weight (NBW)</td>
<td></td>
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<tr>
<td>Low birth weight (LBW)</td>
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<tr>
<td>Very low birth weight (VLBW)</td>
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<tr>
<td>Extremely low birth weight (ELBW)</td>
<td>Less than 1,000g</td>
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</table>

The rise in survival rates of preterm infants, particularly for those termed 'extremely immature', means that preterm births now account for 5–7% of live births and very and extremely preterm births account for 1–2%.

### What is premature birth?

The number of children with disabilities is contributing to the rise in childhood disability, particularly the number of preterm infants. As Hornby and Woods (2000) have noted, recent decades have witnessed dramatic rises in the number of preterm births, particularly those born very and extremely premature, especially those born very and extremely immature. These definitions of prematurity are now being used as indicators of prematurity in all aspects of prematurity.

### Implications for teaching and learning

Although most infants who are premature are born at 36–37 weeks without any significant long term challenges, preterm infants are at significantly higher risk than the general population of having neurodevelopmental problems. These are characterised by cognitive, neuromotor and behavioural difficulties, which will impact on their ability to do well at school.

Very preterm infants have been found to be at greater risk of being towards the lower end of the normal ability range and significantly lower than their full-term peers. This puts them at greater risk of educational underachievement as a result of specific or general learning difficulties.
‘There is no-one as clever as all of us together!’

Sir Ray Avery – multi-millionaire, entrepreneur, philanthropist
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Photo sources:

- http://www.mirror.co.uk/lifestyle/family/born-soon-seven-mums-share-4647518