



**Communication and
Cerebral Palsy and other
neurodevelopmental disorders**

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Who am I?

- I come from a land down under
- I have been in the UK for a long, long time
- My background story:
 - children with known or suspected head injuries,
 - to children with complex needs,
 - to managing a therapy team at a Scope school for children with cerebral palsy,
 - to autism.



What about you?

Quick hands up / thumbs up:

- Is your child under the age of 5?
 - Pre-verbal or non-verbal
 - Verbal
- Is your child at primary school?
 - Pre-verbal or non-verbal
 - Verbal
- Is your child at secondary school?
 - Pre-verbal or non-verbal
 - Verbal



You need paper and pen or some technology to write down questions.

Section 1 – Are we covering enough vocab?

- **Study 1, Australia and UK 2015:**

- 5 – 6 year olds
- 61% of children had language impairments
- 44% of children had difficulty in both understanding language and using language expressively
- Impairment occurred across a number of domains including comprehension, vocabulary and grammar
- 70% of participants had difficulty with vocabulary / semantics
- Non-verbal children demonstrated strengths in social skills such as emotion, eye gaze and gesture



- **Outcome for parents, teachers, therapists:**

- Get regular assessments to catch anything starting to happen
- Overall language profiles had strengths and weaknesses, we need to target the deficit
- Teach vocab, both understanding and using it
- Don't underestimate a child's understanding of emotions and social skills because they are non-verbal

Section 2 – Are we covering enough vocab?

- **Study 2, UK 1990, Dorothy Bishop :**
 - 48 children aged between 10 – 18 years old
 - Explored language development in children with cerebral palsy who were not talking, emerging talkers, established talkers
 - Vocabulary was significantly reduced in the children who were not talking and emerging talkers
 - Results were mixed for the talkers
- **Outcome for parents, teachers, therapists:**
 - Get regular assessments to catch anything starting to happen
 - Start as early as possible
 - Build on vocab



Section 1 – Are we covering enough vocab?

- **Study 3, America 2019:**
 - 47 children were charted for their vocabulary growth
 - At age 4, vocabulary showed the fastest, strongest growth
 - After the age of 4, vocabulary growth rates slowed
- **Outcome for parents, teachers, therapists:**
 - Get regular assessments to catch anything starting to happen
 - Continue to work on vocabulary after the age of 4



Section 1 – Are we covering enough vocab?

- **Study 4, America 2010:**
 - 41 children with cerebral palsy, examining precursors to literacy
 - Speech sound awareness (phonological awareness) is a key predictor of reading skills in early school years / reception age
 - Children with motor speech impairments like dysarthria are at increased risk for literacy difficulties
 - Vocabulary is a key predictor to reading comprehension in primary school
 - Fine motor and gross motor skills did not influence reading comprehension



- **Outcome for parents, teachers, therapists:**
 - Get regular assessments to catch anything starting to happen
 - Build on vocab to build literacy
 - Don't think because a child has motor difficulties that they can't learn to read

Section 1 – Are we covering enough vocab?

- **What have we learnt from all the studies:**
 - We need to constantly monitor and build vocabulary
 - 1 area in particular that can be missing in vocabulary:
 - the actions that your child struggles with is the area of vocab that is often missing
 - An example of this is the word “running”. Now think of different words that mean running.
 - But it’s not just “running”, think of all the different words that mean to move slowly
- **Why do we need good levels of vocab:**
 - Vocab = meaning
 - Vocab = thinking, reasoning, problem solving
 - Vocab = reading comprehension, literacy
 - Vocab = story telling, narratives, conversation, explaining, discussion

Section 1 – Are we covering enough vocab?

- **So what do we do:**
 - Assess and find the gaps
 - Fill the gaps
 - Teach vocab using everything we can: play, movement, actions, photos, symbols, YouTube stories, apps on an iPad, smell, touch
 - Create the opportunity to use the vocab

PHEWWWWW: Take a breath



Section 2 – Is it the right vocab at the right time?

- **OK OK, you are parents, you have a very busy life. You have a busier life than the average person.**
- **Step 1: Start now**
- **Step 2: Find out where your child's vocab is at, what is their vocab age.**
 - Ask your NHS SALT for a vocab assessment
 - Ask the SENCo for a vocab assessment
 - Go online and check where they are at with developmental norms
- **Step 2: Find a vocab list that matches their vocab age**
 - Go to Flocabulary
 - Go to Twinkl
 - UK government websites, if you look hard enough
- **Step 3: Trial out a vocab list, your child should know SOME of the words, but not many**
 - If they know too many, go to the year above
 - If they don't know any, drop down a year
- **Step 4: Teach the vocab**

First Grade Vocabulary Words

These first grade vocabulary words introduce and reinforce high-utility words. The majority of words in each Flocabulary first grade video are considered "tier-2 vocabulary"—high-utility and aspirational words that are relevant to academic success. Many of these songs are thematically tied to units that are taught at the early elementary grade levels (the four seasons, primary geography terms, animals and their characteristics) to streamline learning. Flocabulary's kindergarten videos each revolve around a specific setting or concept (a visit to the dentist, surfing on the beach). While several of the words are specific to that setting (healthy, rotten, row) others are more "general purpose" words (gentle, relax, glance) that have meaning within the specific story, but have wider application as well.

| | | |
|------------|-----------|---------|
| Ache | Enormous | Rapid |
| adjust | equal | |
| affordable | exclaim | remove |
| alarm | exhausted | repeat |
| alone | expensive | rescue |
| apologize | | restart |
| appetite | Fancy | return |
| applause | fasten | ripe |
| artistic | filthy | rise |
| atmosphere | flat | roar |
| attach | flee | rough |
| | fog | rusty |
| | footprint | |
| | forest | Scold |
| | freezing | scratch |
| Bashful | | seed |
| basket | Gather | selfish |
| hatch | giant | serious |

Section 2 – Is it the right vocab at the right time?

- How do I teach vocab? It's a number of simple, fun steps. The first half is you teaching the word. The second half is the child practicing the word.

YOUR TURN

- Step 1: You say the word. The child hears the word (auditory, visual if they can see your face).
- Step 2: You describe what the word means. The child hears the definition. Make sure you google "kids definition", not Webster dictionary (auditory).
- Step 3: If possible you use an object, a movement, a smell, a taste, a touch sensation to make sure the meaning is embedded (smell, touch, taste, visual, vestibular, proprioception, auditory, tactile).
- Step 4: You show how to spell the word, sounding out the letters (auditory, visual).
- Step 5: You use the word in a sentence. You act out the word (auditory, visual).

Section 2 – Is it the right vocab at the right time?

CHILD'S TURN

- Step 6: You ask the child to say the word or press the AAC to say the word (motor, visual, auditory).
- Step 7: You ask them to act out the word, using whatever movements they can, including facial expressions (motor).
- Step 8: You ask the child to spell the word either verbally, writing or through AAC (motor, visual).
- Step 9: If possible, you ask the child to use it in a phrase or a sentence (motor, auditory).
- Step 10: Repeat, rehearse, laugh, be silly and enjoy it (everything).

Section 2 – Is it the right vocab at the right time?

- Let's do a practice one together.
- The word is bashful, from Year 1 vocab.



YOUR TURN

- Step 1: You say the word. “Bashful”
- Step 2: You describe what the word means. “Bashful means someone is shy or gets embarrassed easily”.
- Step 3: If possible you use an object, a movement, a smell, a taste, a touch sensation to make sure the meaning is embedded. “When someone is bashful, their face goes a bit pink and they move away a little bit.”
- Step 4: you show how the word is spelt, sounding out the letters .
“Bashful”
- Step 5: You use the word in a sentence. You act out the word. “The boy was bashful on his first day at school”.

Section 2 – Is it the right vocab at the right time?

CHILD'S TURN

- Step 6: You ask the child to say the word or press the AAC to say the word. Say “Bashful”.
- Step 7: You ask them to act out the word, using whatever movements they can, including facial expressions. “Show me bashful”.
- Step 8: You ask the child to spell the word either verbally, writing or through AAC. Write “bashful”.
- Step 9: If possible, you ask the child to use it in a phrase or a sentence. “Who is bashful?”.
- Step 10: Repeat, rehearse, laugh, be silly and enjoy it. Ask “Is daddy bashful? Is mummy bashful?”

Section 2 – Is it the right vocab at the right time?

Helpful home tips:

- Once you find the right word list, pick 2 words per week.
- Write them down, print out a picture for the word and write what it is underneath.
- Stick it to the dining table or fridge or bathroom mirror.
- Whenever someone in the family uses one of the key words, they get a point, a high five, a sticker, a chocolate button.
- Be silly, have fun. You are not going to do any harm, to anyone doing this.



Section 2 – Is it the right vocab at the right time?

- But Annie, they already know the word "shy", why do they need to know the word "bashful" too?
 - Vocab = meaning
 - Vocab = thinking, reasoning, problem solving
 - Vocab = reading comprehension, literacy
 - Vocab = story telling, narratives, conversation, explaining, discussion

PHEWWWWW: Take a breath



Section 3 – Social language

- Nitty, gritty, good stuff.....
- Is it more vocab?yes!



Section 3 – Social language

- Aren't they cute?
- This strange person is going to put you in your standing frame / walker.
- Passivity, calmness, acceptance....

Section 3 – Social language

....except when they are with other children....and then it's a jungle out there!



Section 3 – Social language

- What vocab do children with CP need to learn?
- Under 5 and primary school
 - Cheeky monkey
 - You've gotta be kidding
 - Really?????
 - You're not the boss of me!
 - Give me a break!
 - Whatever!
 - You're not my friend.

Section 3 – Social language

- What are teenagers talking about?
 - Lit
 - GOAT
 - Extra
 - Snatched
 - Gucci
 - Woke
 - Flexed



Section 3 – Social language

- Right from the start, what do we need to teach them....
 1. It's OK to make negative comments, to their family, to their friends, to the people working with them.
 2. How?
 - I don't like it.
 - It's not OK.
 - It doesn't feel right.
 - I don't think so.
 - Let me think about it.
 - I want to talk about it later.



Section 3 – Social language

- Why do we want them to say these things?
 - It gives your child a voice.
 - It gives them power in a situation.
 - It buys them time to think and then respond.
 - It automatically shows that they are an equal in the situation.



Section 3 – Social language

- Negotiation.....
 - If you wear your splint, you can have.....
 - If you do your physio, you can have.....
- Negotiation involves empathy and compromise and children who learn to negotiate acquire and learn the importance of these abilities. Parents who teach their children to negotiate with them, as well as with other adults and children, enhance their confidence, self-esteem, empathy and social relationship skills.
- When we use, we are offering them a solution to their current problem.
- But does your child ever start the negotiation?



Section 3 – Social language

- The single most important phrase you can teach your child.....

“IF YOU DO THAT, I WILL”

Section 3 – Social language

- Diplomats negotiate.
- Kids playing games negotiate.
- Married couples and friends negotiate.
- All successful, respectful relationships involve a continuing series of negotiations.
- It's not defeating another; it's not adversarial.

Section 3 – Social language

- Negotiations teach and emphasise fairness and understanding, walking in the other person's shoes, negotiations result in as favourable outcomes as possible for all parties involved.
- Children are given power, independence, and respect when they are allowed to and encouraged to negotiate, even as young children.
- There are endless opportunities to teach children negotiation. Parents who embrace negotiation and compromise as a family value raise children who know that their opinions, feelings and needs will be listened to and respected.
- Negotiation protects children and empowers them.

Section 4 – AAC

- The golden rule of AAC:

Ask your child what they want programmed



- Example: nicknames, local community sayings, compliments, sibling insults, swearing

THE END!!!!

- Questions and answers, comments and discussion



A man with a beard, wearing a red long-sleeved shirt, is leaning over a child who is lying on their back on a mat. The man is smiling and looking down at the child. The child is wearing a grey hoodie with the word "Best" and a colorful logo on it, and red pants with white stars. The background shows a gymnasium with colorful equipment.

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