Speech, language and communication in students with Down syndrome

Limerick
autumn 2018

Down Syndrome Ireland

? % of people with Down syndrome have speech, language and communication disorders over and above what would be expected given their general intellectual ability.

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Strengths and weaknesses

Strengths:

- Emotional sensitivity
- Confidence and self esteem
- Responsive to positive attention
- Ability to keep learning
- Increasing opportunities

Weaknesses:

- Speech and Language Disorder
- Auditory discrimination
- Auditory processing
- Working memory
- Hearing
- Vision
- Learned helplessness
- Low expectations of others

Idea

Message

Answer

Message heard and understood

Response formed

Attention
Interest in communicating
Common language
Shared context

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Understand literal and implied meanings
Comprehension

Decode the sentence structure
Grammar

Have an Idea (or form a response)
Concept

Compare to words and concepts in long term memory
Vocabulary, semantics

Think of words
Vocabulary, semantics

Hold sounds in short term memory while you identify words
Memory, phonology

Link words together
Syntax, grammar

Receptive language

Expressive Language

Choose sounds and put them in order
Phonology

Listen to sounds and tone of voice
Hearing, auditory processing

Coordinate mouth shape, breath, voice and resonance
Speech

Interpret non-verbal communication and subtext
Social skills, vision, hearing

Attention
Interest in communicating
Common language
Shared context

Transition smoothly from one sound to the next
Fluency

Be aware of communication opportunity
Interpersonal skills
Hearing, vision

Look and listen for feedback
Appropriacy

Listen and adjust the sound as it's coming out
Self monitoring

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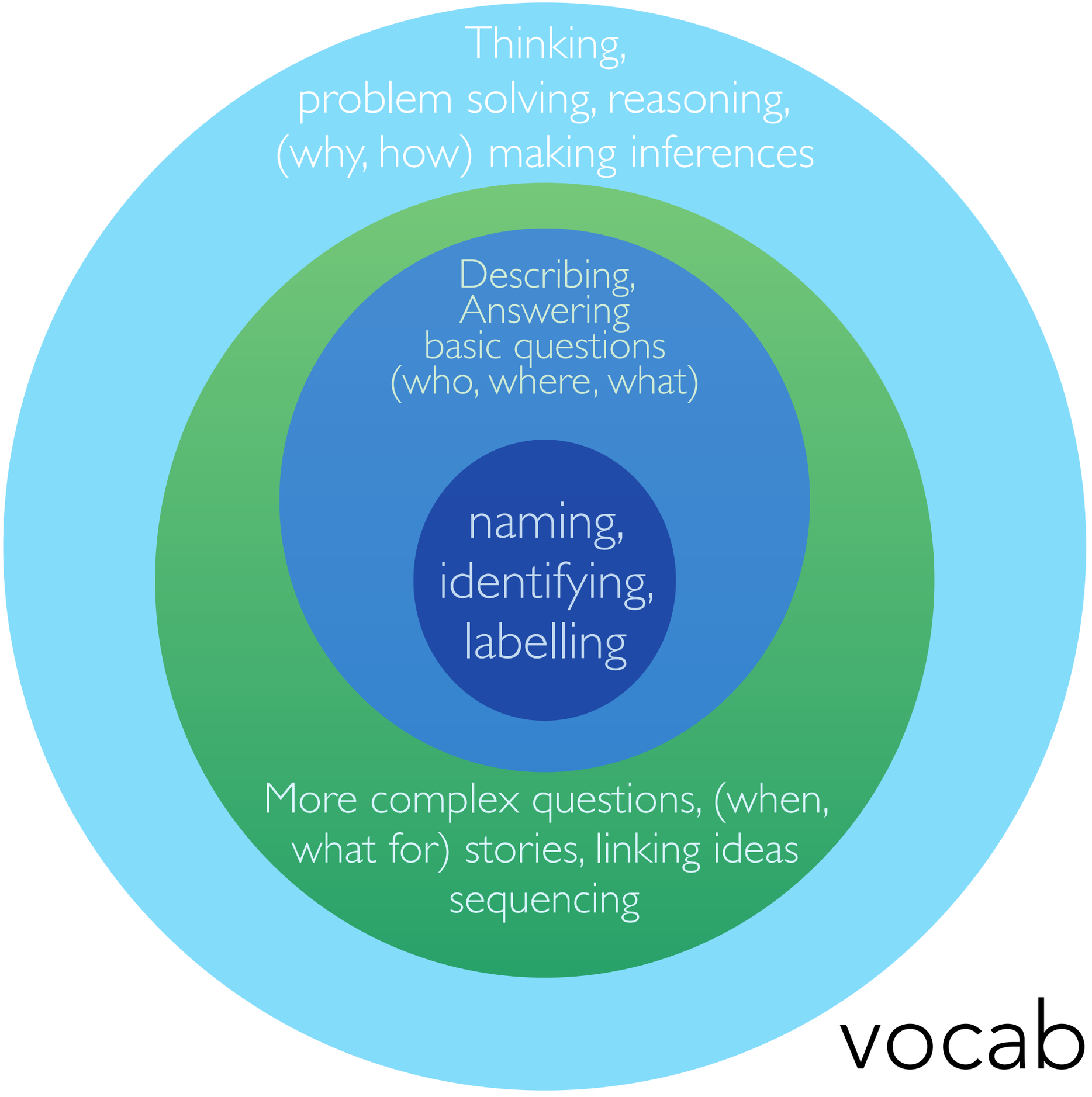
Differentiation for language disorders: Key questions

- What is the single most important thing to learn from this lesson?
- Can this be simplified and taught visually?
- Can this be personalised or made more relevant?
- Are there underlying concepts or vocabulary that need to be pre-taught?


Thinking,
problem solving, reasoning,
(why, how) making inferences
Describing,
Answering
basic questions
(who, where, what)
naming,
identifying,
labelling
More complex questions, (when,
what for) stories, linking ideas
sequencing

vocabulary

Levels of complexity: sentences

Simple

Compound

Complex

Compound-complex

Positive

Negative

Active

Passive

Present

Past

Future

Declarative

Interrogative

Imperative

Exclamatory

John is walking

John is walking the dog

John is walking the dog in the forest

The dog likes walking in the forest

John is happily walking the energetic dog in the autumnal forest

Simple

Positive

Active

Present

Declarative

John is walking.	Simple
John is walking and the dog is running.	Compound
While John is walking, the dog is happy.	Complex
If John is walking and the sun is shining, then the dog is happy.	Compound complex

John is walking the dog	Active
John isn’t walking the dog	Negative
The dog is being walked by John.	Passive
The dog which is being walked by John is black.	Complex passive
The dog which is being walked by John isn’t black.	Complex negative passive

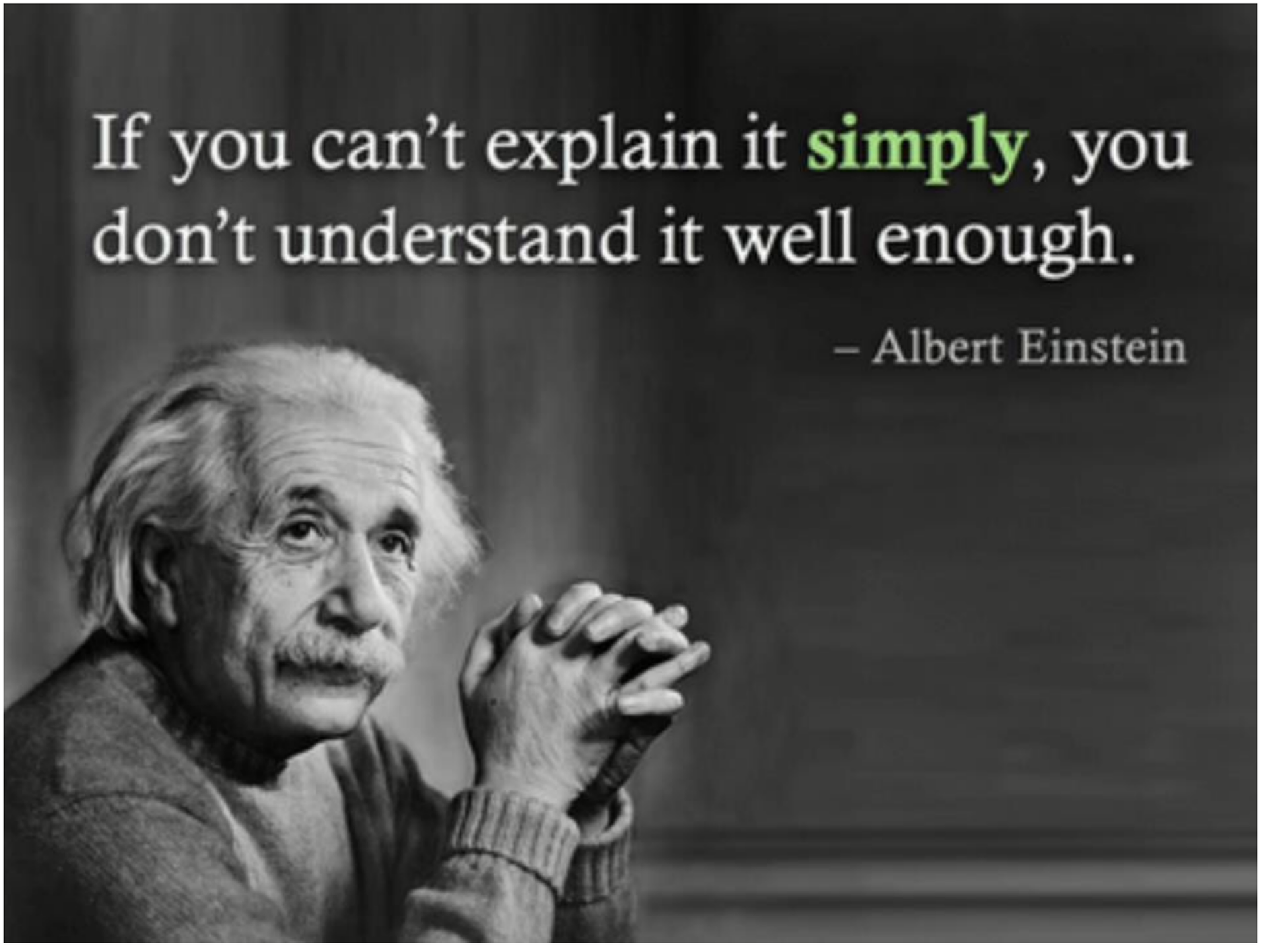
The single biggest problem
in communication
is the illusion
that it has taken place.

George Bernard Shaw

How can you help?

Become aware of your own communication style.

- Do you:
    - Do one thing at a time
    - Make eye contact
    - Talk at a reasonable pace
    - Use straightforward sentence structures
    - Wait between sentences
    - Support with visual or written materials
    - Allow processing time
    - Differentiate for language disorder



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How can you help develop language skills?

- Use written language to prompt spoken language. This increases speech clarity and sentence structure (possibly by reducing planning and memory load)

- Practice using a functional core vocabulary with carrier phrases if intelligibility is still an issue.

- Target vocabulary development specifically, looking at depth of understanding as well as breadth.

- Address vocabulary ahead of topics in school.

- Target specific language and sentence structures which are relevant for school (and exams) such as question forms, tenses, etc.

- Don't underestimate!

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What if there are additional difficulties?

- Developing language skills and using them to make choices is vitally important. (Use visuals)

- Help the student to recognise, understand and label their emotions.

- Help the student find acceptable ways of signalling the need for help or for a break, to avoid meltdowns.

- Make accommodations for sensory issues.

- Create a need and opportunity to communicate.

- Never treat a student like a younger child, or they will behave like one.

- Social rules are learned by immersion. Lots of opportunities to practice are needed.

Holistic speech and language goals

Communication

To achieve not just functional, but optimal speech, language and communication skills.

Inclusion

To be able to use those skills with as many different people and in as many different situations as they wish.

Self-Advocacy

To be able to use those skills to make choices about their home, school, work and social life.