

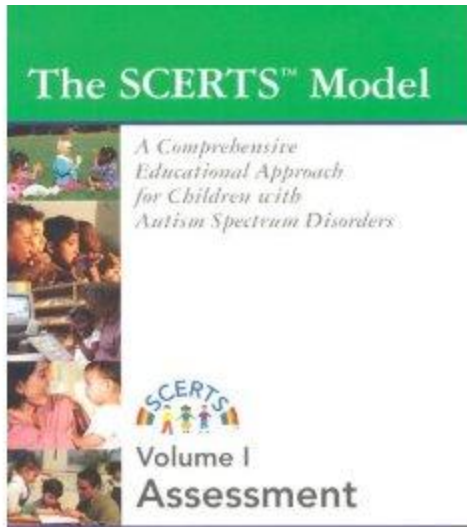
*Using ECHOLALIA to build
communication skills*

Louise Ulliana

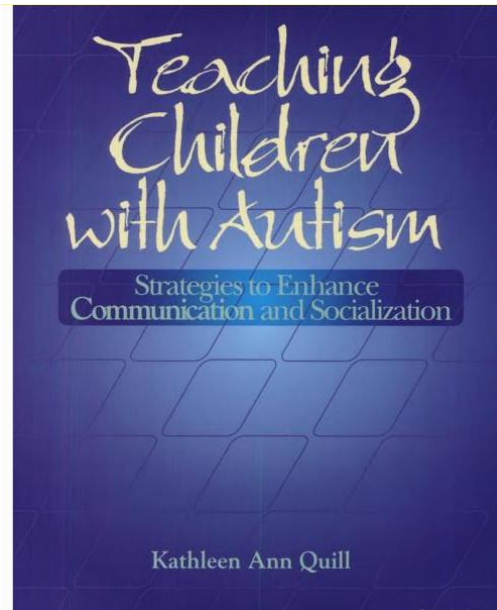
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SERVAM Essentials for Families

ECHOLALIA: Key Influences



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Echolalia, thinking and learning

Echolalia mirrors how children with autism process, store and retrieve information

INFORMATION PROCESSING

Gestalt learning style
Monotropism/polytropism
Central coherence
Executive functioning

SOCIAL COGNITION

Joint attention
Theory of mind

LEARNING STYLE

Visual
Auditory
Kinaesthetic

Review: discuss rationale for not extinguishing echolalia

Types of echolalia

Review: What does this tell you?

Echolalia may be ...

➡ *Immediate*

- *Repetition of words or group of words just spoken*

➡ *Delayed*

- *Repetition of words or group of words after some delay or lapse of time*

➡ *Mitigated*

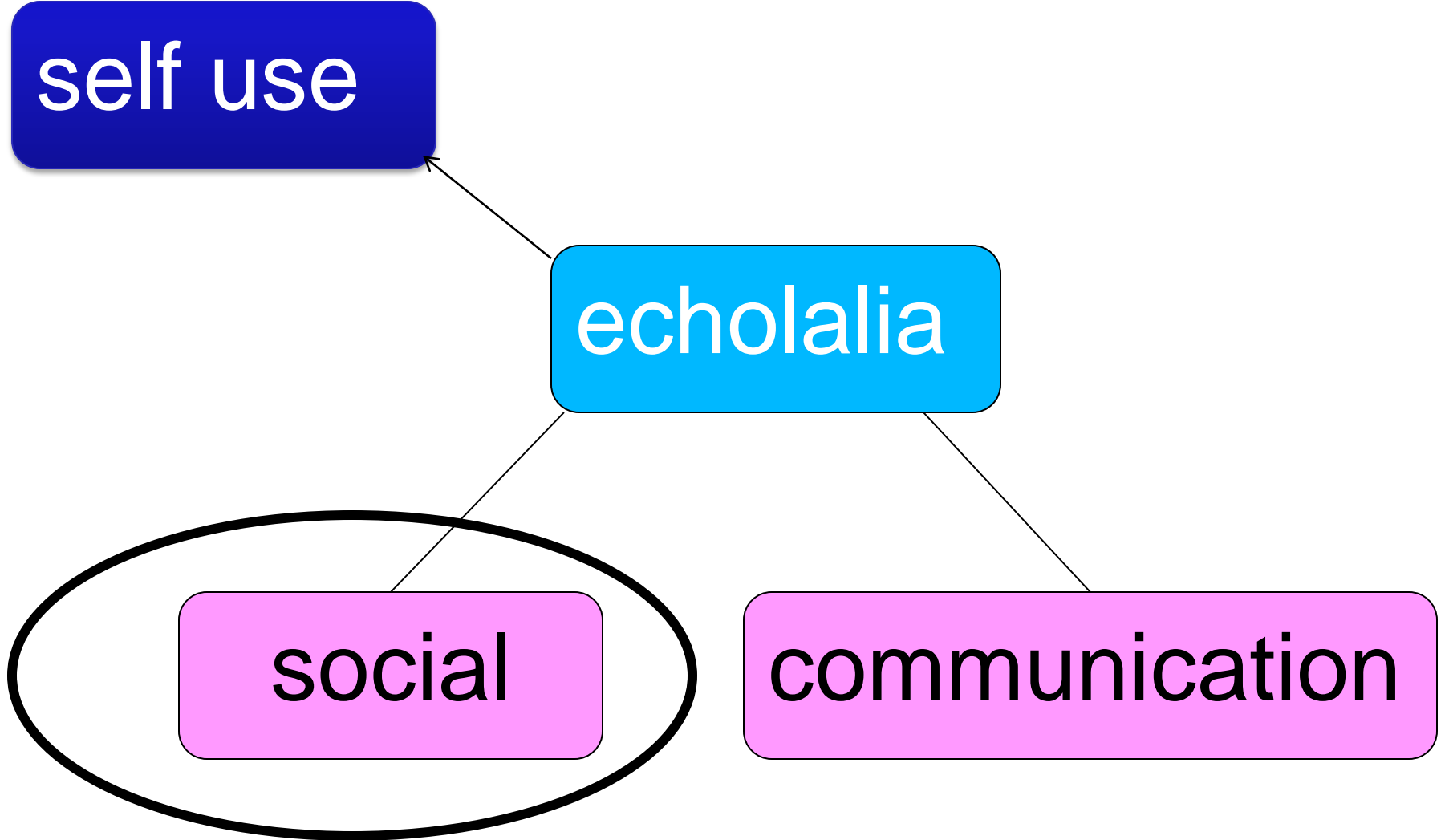
- *delayed or immediate echolalia which is slightly modified*

self use

echolalia

social

communication



Scenario

Parents and children are in the car at a fast food drive through.

Dad is ordering and looking at person in the order window.

The child is looking at order window too.

Adult: 'Can we get a number nine medium?'

Child: 'numa 9'

Adult: 'medium'

Child: 'ne... e... um'

Adult: 'with um sprite'

Child: 's...pite'

Adult: 'ahh...junior bacon cheese burger'

Child: 'bur...dly cheese bur..ger'

Adult: 'and a chicken nugget kid's meal (intonation drops)'

Child: 'chi...ki, nar ..bee nee...now' (intonation drops)

Dad turns to speak to mum and child shifts gaze from order window to look at mum and dad. Dad talks further with order

Dad: 'with Dr pepper'

Child: 'oarl ... dr pepper'

Dad: 'That will be it'

Child: 'noo dat'l be it.'

Dad: o'k thank you'

Child: 'err dan you'

Child: 'pickles' (as car drives off to pay window)

SOCIAL FOUNDATION SKILLS

- 1. Social orienting**
- 2. Imitation and Joint actions with others**
- 3. Emotion attunement and expression**
- 4. Joint Attention**
- 5. Turn taking**
- 6. Adjusting behaviour to coordinate**

Echolalia for social purposes: immediate echolalia

Social skill	What child is learning: skills and motivation	Evidence that child is using echolalia to engage with others
Social Orienting	<p><i>Skill:</i> show social attention</p> <p><i>Motivation:</i> paying attention <u>to you</u> while talking is enjoyable.</p>	<p>Child combines echolalia with other orienting behaviour e.g. looking, reaching out , moving toward you/others</p>
Imitation & joint action	<p><i>Skill:</i> copy what others say and do</p> <p><i>Motivation:</i> it's FUN to be like others and do what they do.</p>	<p>Child times echolalia to be as close as possible to what you say, copies prosodic patterns etc</p>
Turn taking	<p><i>Skill:</i> keep an interaction going by taking turns. Pay attention while the other person takes a turn then have your turn <u>but</u> stay on topic</p> <p><i>Motivation:</i> taking turns is better than doing things by myself.</p>	<p>Says what you say, waits for you to respond, says the next utterance doesn't repeat first</p>

Echolalia for social purposes: immediate echolalia

Social skill	What child is learning: skills and motivation	Evidence that this is taking place
Joint attention	<i>Skill:</i> notices and pays attention to what other people are looking at <i>Motivation:</i> if you watch what others are doing you can work out what is happening and be involved	Looks in the same direction as others, shifts gaze to other focus when they do etc
Emotional expression, attunement	<i>Skill:</i> is aware of, interprets and responds to other people's emotional displays <i>Motivation:</i> laughing with others is fun, I can make others have more fun when I laugh; I feel better when my mum uses a comforting voice	Copies or reflects other's facial expressions, vocalisations and body language

Using echolalia to build social foundation skills -general principles

- review strategies covered in first training session
- highlight the social purpose :
 - ➡ Turn taking: SLOW DOWN, STRETCH OUT use PAUSES when it is your turn; ALTER the message (add nonverbal communication add more words, delete words) use body language (LEANING IN)
 - ➡ Emotion sharing: Stretch out the emotion sharing moments when your child is engaged with you, add other ways of communicating the same message
 - ➡ Joint actions and imitation : Draw out the sharing moments when your child is engaged with you (so that your child builds memories that *being and doing things with you makes him feel good*)

Using echolalia to build social foundation skills -general principles

- highlight the social purpose :

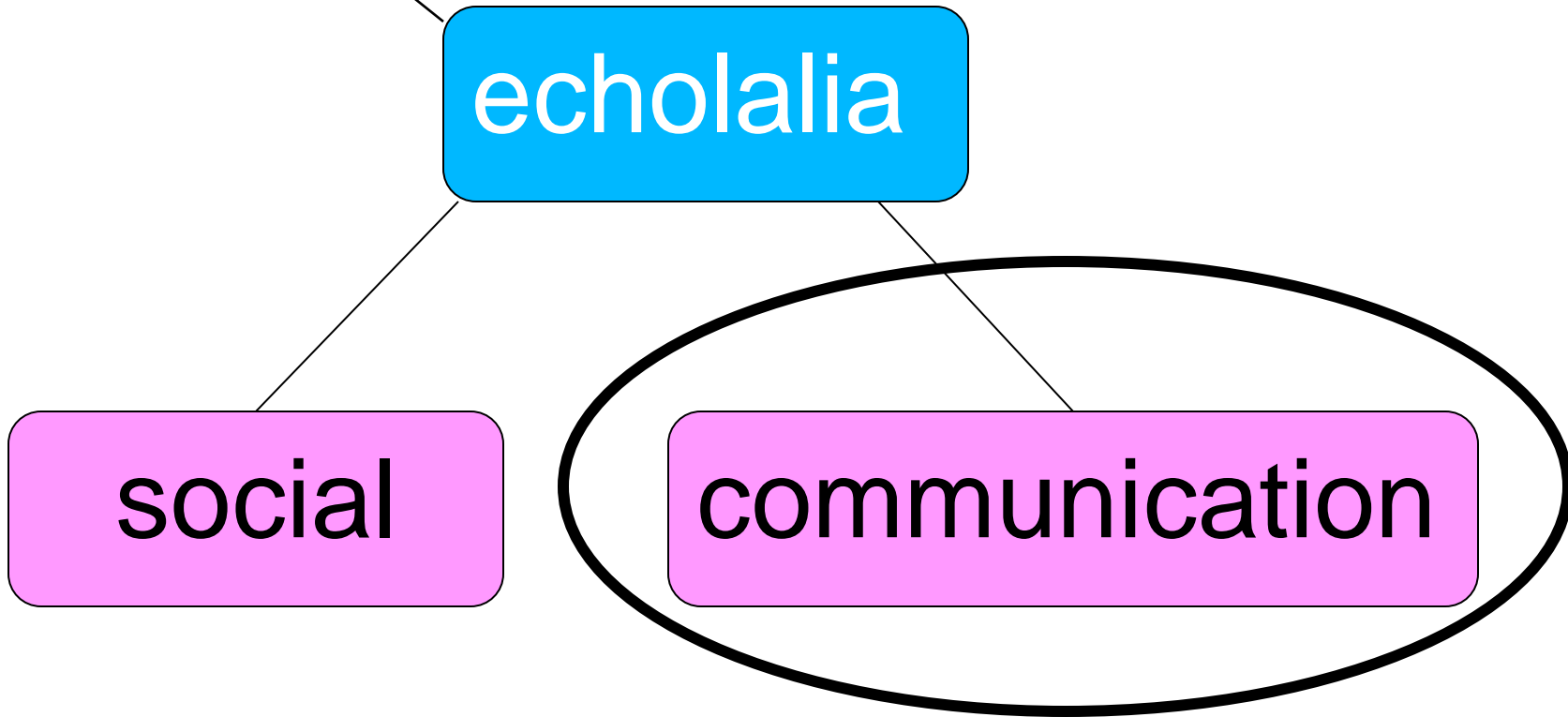
- ▶ Joint attention: point out and label what you are looking at/doing together so that child is aware that you notice or realise it is 'YOU-I AND IT'

self use

echolalia

social

communication



Echolalia as communication

- ***Expressive communication examples***
 - ***requesting***
 - ***commenting***
 - ***protesting***
 - ***expressing states/emotions:***
- ***Comprehension support***
 - ***let me go through that again maybe it'll make sense the second time round.***

Using Echolalia to make requests

"When Toby says, "you want a drink?" it sounds like he is asking me if I would like a drink but really he is asking for his own drink. If I don't respond, he keeps repeating the same thing and sometimes he gets a cup out of the cupboard"

"It took me ages to work out that Sarah was letting me know that she wanted to go outside when she said "No bare feet outside. It's too cold". We live in a pretty cold climate so I'm always saying this when I put on her shoes to go outside. She thought that is what you have to say to get help with your shoes and socks. It just didn't occur to me that she was asking to go outside. As soon as I said " ohh...shoes and socks" and I helped her put them on she smiled and was satisfied.

**Review:
Functional
assessment of
expressive skills**

Functional assessment of expressive skills

**Check how echolalia may be
used to convey message types
on FAES profile**

	Social Relating	Negative Messages	Needs and Wants	Giving Information	Affect/ States & Emotions
STRAND 1 MESSAGE TYPES	Seeking attention Proximity to others	Protest Rejection Refusal Escape/Cessation	Food & objects Actions from others		Wariness/ Fear Pain Hunger Pleasure / Joy Interest/Curiosity Frustration/Anger/Rage
STRAND 2 MESSAGE TYPES	Imitation Adjusting behaviour to coordinate Joint attention Turn taking		Self Assertion Activities	Naming Non-Existence/ Possession Mistakes/ Something's wrong Something's different	Sadness Tiredness Self-satisfaction Confusion Boredom
STRAND 3 MESSAGE TYPES	Enhancing other's engagement Social etiquette/rituals Comforting and supporting others	Rejecting information Denial	Permission Confirmation Information	Commenting re immediate context Giving instructions Future events Past events Events outside of life experience	Shame Guilt Pride Embarrassment

Echolalia Dictionary

When ...	I say...	Which means...	Communicatively this is known as...
<i>I'm thirsty and I'm in the kitchen with mum or dad</i>	<i>"you want a drink?"</i>	<i>"Can I have a drink please?"</i>	<i>Requesting food</i>
<i>I see people with really long hair I get very excited and...</i>	<i>" Sheree likes to plait hair"</i>	<i>"Can I touch and play with your hair please?"</i>	<i>Requesting permission</i>
<i>It's Friday at school, I look forward to the highlight of the week and so...</i>	<i>"today is green Friday ... number 4, Jann"</i>	<i>" Are we going to Ryde Aquatic Centre and swimming with Jann?"</i>	<i>Requesting information OR confirmation</i>
<i>When I hear dad's car in the carport just before dinnertime,</i>	<i>"How's my little boy?"</i>	<i>" who.. hoo.. daddy's home!"</i>	<i>Commenting about events in immediate surroundings</i>
<i>I just did something to Charlie our dog</i>	<i>" Charlie's funny"</i>	<i>" I just had some fun with Charlie"</i>	<i>Commenting about immediate past</i>

Using echolalia to build communication - general principles

- Respond to the communicative meaning/social purpose of your child's echolalia (so that your child understands what he says affects others and that you will try to make sense if you don't understand: do not limit this to request/get)
- Extend the amount of time you remain connected through meaningful communication:
 - ➡ When you have your child's attention, SLOW down your message delivery (so that your child remains focused on *you* while he is *immersed in the moment of sense making*)
 - ➡ Stretch out the sharing moments when your child is engaged with you (so that your child builds memories that *being and doing things with you makes him feel good*)

Using echolalia to build communication - general principles

● Extend the amount of time you remain connected through meaningful communication:

● Increase the number contingent back and forth turns in your interactions that are based on your child's engagement (so that your child gets a sense that connecting with others is ongoing and reciprocal and what I'm interested in is a big part of that.)

● Use nonverbal communication when you respond to your child's echolalia (so that your reinforce the notion that words alone are not enough to communicate face to face)

● Use a facilitative style of interaction

● Provide suitable language model

● Use appropriate language complexity

Respond to the communicative purpose as you extend the interaction in length and scope

Scenario: backyard Lewis has filled up bucket with water and has carried it onto the bricks to play with it. Louise and Lily are standing on the verandah 1.5 metres above

Turn	Child	Adult	What mum is doing/communicating
1	"You want green cup?" (said as child is playing with water in a bucket...child does not look up or use gestures)	"want green cup?" (did I get that right tone of voice, place yourself in position for eye gaze)	Acknowledge I heard you but I'm not sure, you need to add more
2	"want green cup" looks up at mum	"oh Lewis wants green cup" emphasize name and point to Lewis or gesture how he will use cup	Add key information verbally and nonverbally ..is that right?
3	"Lewis wants green cup" continues looking at mum	"ok, green cup (smile)... come" (gestures come here) "lets get green cup".	Now I understand but how about you come with me
4	Lewis jumps up walks up stairs	"Yeah let's get green cup"	Finish

Film review : Adult language models

Characteristics of adult language

Pace			
Prosody			
Type of words used	Information words	Relative terms	Filler words grammatical markers/terms
Purpose of messages			
Child's Comprehension			
Communication based around child's engagement			

Use suitable language for your child to copy

- Two general categories
 - ▶ Use simplified language with specific vocabulary when **information** is important
 - ▶ Use whole phrases/sentences when the **general gist** is more important
- Timing and engagement is crucial
- In real life social situations

Adult Language Models

```
graph TD; A[Adult Language Models] --> B[Social gist]; A --> C[information content];
```

**Social
gist**

**information
content**

exclamations

comfort phrases

social gist messages

Social
games

Negative
messages

Social
niceties
greetings
farewells

Comprehension



Use whole phrase to model...

Exclamations

"Oh dear!"

"Oopsy daisy"

"Look out!"

"uh-oh"

Comfort phrases

"There there"

"It's ok"

"Almost finished"

"Don't worry"

"All better"

"We can try again"

"Are you ok?"

"I'm sorry"

Use whole phrases to model...

Negative messages

"go away please"

"do myself thanks"

"leave me alone"

"uh-uh... don't like"

"no thankyou"

"all done... no more"

Use whole phrases to model...

Announcements

"All finished"

"..... finished!"

"Time for"

"Someone's at the door"

"Look who's here"

"It's time to go"

"Pack away"

Social Games

"Ready or not... here I come"

"1,2,3, ... wee/go"

"Gonna get you"

"Ready steady go

chase me"

"Are you ready?"

"Tickle, tickle, tickle"

Use whole phrases to model...

Social niceties

“Ta”

“Thanks”

“Cheers”

“Your welcome”

“Thanks muchly”

Greetings and farewells

“Hi there!”

“What are you doing?”

“Bye- bye ... time to go!”

“Time for bed ...nighty night”

“See ya!”

“Take care now”

“See you later”

“sayonara”

requests

comments

information content messages

physical
state

questions

comprehension is critical

Echolalic Language Development



immediate
echolalia

delayed
echolalia

mitigated
echolalia

rote
language

generated
language

Carrier phrases
I want please

Information content messages: specific language

- simplify your language to according to your child's comprehension level /generated expressive level... you cannot use your child's echolalia as a guide
- eliminate words that *cause confusion* (my/your, you/me, this/that) or *do not hold information* (the , a) until your child demonstrates solid understanding of a wide number of information words
- use specific vocabulary is based on your own child's life experiences and preferences
- use language for a range of purposes ... don't just ask questions and give directions ...use mostly comments

Information content messages: specific language

- Use child language milestones to identify the types of word meanings to convey . Don't use lots of different combinations. Stick with a concept and show variations
- Example for child at single word or 2 word novel utterances
 - ▶ *possessor +possession* : daddy's shoes/mummy's shoes/Bella's shoes OR daddy's belly, daddy's hair, daddy's car, daddy's shoes.
 - ▶ *attributive+ entity* : Black shoes. Dirty shoes. Light-up shoes.

Specific language eliminates or reduces language terms that create confusion and presents information in a way that uses the learning strengths of autism while addressing the information processing difficulties. In other words, an autism friendly communication style involves adjusting what and how we communicate, to best fit the strengths and inherent challenges of autism

What is specific language?

Specific language uses...

names of people, objects and places rather than relative terms

"Sue" instead of "her"

"cup" instead of "it"

"on table" instead of "here"

"At 12 o'clock" instead of "later on"

When giving instructions don't leave room for misinterpretation

"Put the cup on the table" instead of "Put it here"

specific names rather than general labels

Therefore use comments like

"Crimson class are going to Woolworths" instead of "We are going shopping"

Give specific information

"The pencil is broken" instead of "it's not working"

Even with yes/no questions be specific

Say " Does Henry want lemonade?" instead of " Does Henry want a drink?"

specific names versus general labels

specific names

Woolworths

Simon

Spaghetti bolognese

Big mac

Sprite lemonade

Vegemite and toast

Bolson St Park

Scooby Doo 2

OMO

Mars bar

general labels

- shopping
- boy
- food
- burger
- drink
- breakfast
- park
- video
- laundry powder
- chocolate

What is specific language?

Uses action words (verbs) when the movement is evident

child is engaging in movement

swinging as your child moves back and forth

"kick" as your child's foot comes in contact with the ball

adult models action

say "cut" as adult models cutting action

natural gestures demonstrate action

gestures come as word "come" is said

gestures stop as word "stop" is said

What is specific language?

Meaning of descriptive words is made obvious through demonstration

“*broken*” showing your child that the pencil doesn't leave a mark on page

“*wet*” touching wet patch

“*red*” pointing to colour

“*two*” using fingers, pointing to objects or written numeral to demonstrate number

What is specific language?

Specific language usually refers to the here and now

what the child is attending to

what is happening in surrounding environment

If language refers to non-visible events/people/places then visual supports are used

written words, drawings, photos or objects

Specific language avoids talking about irrelevant matters

Specific and explicit language is mapped onto key points in experiences

your child raises drink to lips say “orange juice”

as your child struggles to open chips say “open”

What is specific language?

Language that carefully uses...

idioms

“be a piece of cake”

“be all ears”

“busting for a drink”

indirect and inferred meanings

“I’ve had enough of your noise” (in other words - stop talking)

“Its chilly in here” (when person has left door open)

abstract terms

love

soon

enough

A test for specific language?

Give it to me

That's not yours give
it to him

This way, in you go.

Pick it up, get both.

You try.

Ready off you go.

Go with her.

Give the Thomas
book to Mary.

The gate is locked.

Patrick, sit on the
lounge.

Turn CD volume to
number 14.

Provide ideal language model: adult self talk and commenting (3-4 words)

Turn	Adult	Child	What adult is doing/communicating
1	"where are my keys?" (shakes bag , puts it on stool and looks in)	Stops at front door and looks back to adult	Shows through obvious behaviour and words what she is thinking
2	"mmm...keys" bends over and peers into bag then gives look to child then back to bag	Child comes over and looks into bag	Highlights key word and invites child to look with her
3	"Lewis, looking for keys"	Child looks from face to bag... reaches in the get keys that are slightly visible	Highlights key words again and emphasises the co-looking
4	"yeah... keys, thanks Lewis" (holds out hand with big smile)	Child gives keys then walks to the front door.	Small celebration and acknowledgment of help

An autism friendly communication style

- give plenty of time for your child to respond**
- use positive statements rather than stating what NOT to do**
- give specific choices**
- talk at a normal volume**
- use pausing, pacing, intonation to make your voice interesting**

Adapt your language to your child's comprehension level

Reduce language to your child's comprehension level/ self-generated expressive language

e.g. Use single words or very short phrases if your child is nonverbal or uses single words:

Avoid complex language and long sentences

Don't clutter your messages with unnecessary words. Use high-meaning content words

AVOID TOO MUCH TALKING.

Use consistent vocabulary then introduce alternate terms

Typical Comprehension /Expressive Development

Age	Receptive Skills	Expressive Skills
12 months		Uses 1 or 2 meaningful words
18 months	Understands up to 50 words and recognises many environmental sounds.	Uses 10 to 20 meaningful words 20- 40
2-3 years	Understands between 500 to 900 words	Uses approximately 50 to 250 words 10- 30
3-4 years	Understands between 1,200 to 2,000 words	Uses 800 to 1,500 words 60- 75

Children with autism can...

speaking better than they can
understand

????

How can this happen?

chunk learning

Typical Expressive Language Development



Preverbal

Single
Words
12-18 mths

2 word
combination

3 & 4 word
combinations

Competent
reciprocal
communicators

Operations
of
Reference
Brown
1973

Set of
Semantic
Relations

Telegraphic speech
Joins known
2 word combination
Adds word endings

Single word stage

dada
doggie
nana
up
(s)wing

Names

*People/animals/objects : not just labelling
Someone who does something /gets something etc*

Action words

Action of being picked up, being swung round

here

Location words

no

Negation

Gone
more

Non-existence & Recurrence

Is not present/finished want to happen again

2 word stage: meanings

● agent action

- ▶ car go (car is going down the ramp)
- ▶ baby cry (the baby is crying)
- ▶ doggie bark (the dog is barking)

● action object

- ▶ kick ball (daddy is kicking the ball)
- ▶ eat chips (I'm eating chips)

● action locative

- ▶ baby chair (baby is sitting in the chair)
- ▶ go pool
- ▶ in bath

● agent object

- ▶ daddy ball (daddy kicked the ball)
- ▶ mummy baby (mummy's tickling baby)

2 word stage: meanings

● entity locative

- ▶ Daddy work
- ▶ Mummy bed
- ▶ Charlie up

● demonstrative entity

- ▶ that train
- ▶ this one

● entity attributive

- ▶ tummy sore
- ▶ tv broken

● possessor possession

- ▶ mummy shoe (I've got mummy's shoe)
- ▶ daddy car (that's daddy's car)
- ▶ baby bottle (this is the baby's bottle)

Word endings : 3 word stage

1. -ing Jump+ing
2. plural -s cat+s
3. possessive -'s mummy's
4. Copula be
4. the, a
5. past tense -ed jump+ed
6. third person singular -s jump+s
7. auxiliary be

3 word stage: meanings

1. Chair broken
2. Daddy like this book.
3. What her name?
4. Man ride bus today.
5. Car make noise.
6. Me wanna show Mommy.
7. I good boy.

eat nana

Mummy shoe

Thomas crash

Mummy bed

Teddy there

that car

yucky nana

Mummy shoe

Action + object

Agent + object

Agent + action

Entity + locative

Action + locative

Demonstrative + entity

Entity + Attributive

Possessor + possession

Use specific language

Modelling **requests** (1-2 word level)

Use the name of the object/action with rising intonation not a generalised term such as "want" or "more"

- Child: demonstrates he wants the toy train
- Adult: "train?" "percy train?"
- Child: "train"
- Adult : "ok ... get percy train"

- Child: demonstrates he wants a drink
- Adult: "orange juice?"
- Child: "juice"
- Adult : "ok ... orange juice" you may add additional comments **separately** time your words to coincide with what you are doing at time: "open juice" (if you need to take off the lid) "pour juice" (if you need to pour it into a cup) "yummy!" as the child drinks the juice

- Child : takes your hand and leads it to the swing
- Adult : "swing?" (don't get into position to push yet)
- Child : demonstrates either nonverbally by positioning himself onto the swing or responds verbally
- when child looks to adult as the pushing has not begun adult says " push?" and waits for some type of response
- Adult : continue to say push just as the child feels the swing being propelled. Change your comments to " weee..." when the child is swinging through the air

How communicates

How **adults** should respond

ECHOLALIA

Meaning

How'd that happen?

I've broken something

Ohhh... broken...

**Bit hot,
don't touch**

Laminator

Ummm....laminator

Tea, coffee, crap

Let's play tea party

play ...cup of tea

How communicates

How adults should respond

ECHOLALIA

Meaning

Too much,
don't worry

You're putting on creae

Cream... rub rub rub

**Charlie
Funny**

I've done
doing something
i shouldn't do to
the dog

How

communicates

How **staff** should respond

ECHOLALIA

Meaning

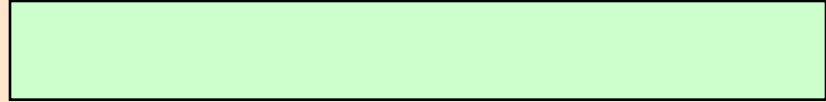
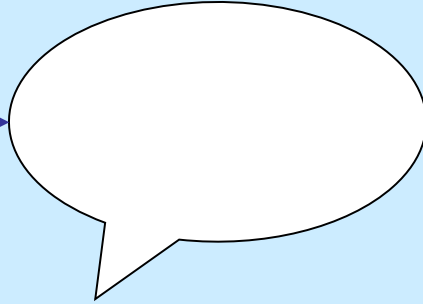
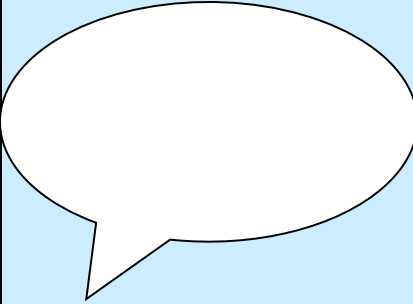
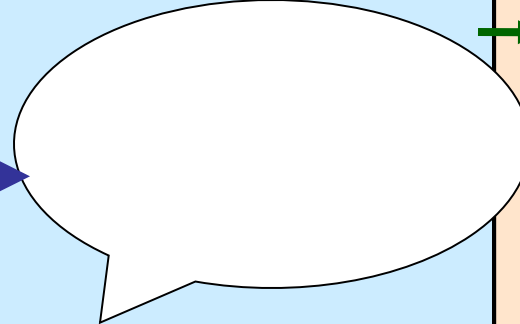
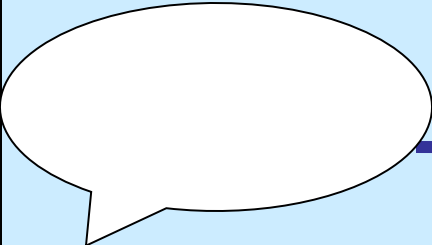
Mum's gone
for coffee



*Where's mum
and when is she
coming back?*



Show Michael visual schedule
when mum will return:

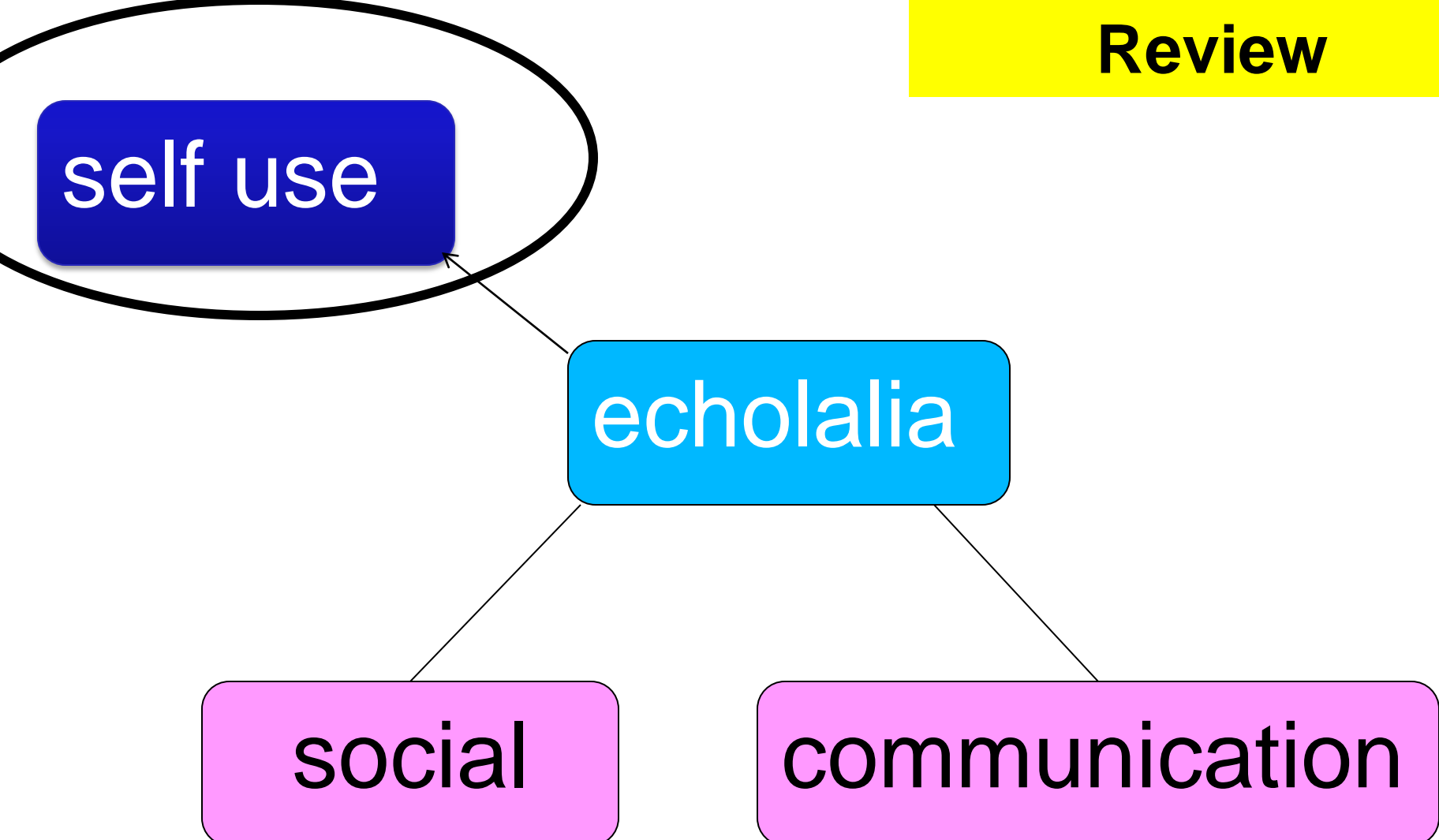


self use

echolalia

social

communication



Echolalia used as a personal tool

possible SELF USE PURPOSES

Self talk to regulate behaviour : Child develops an internal script. This occurs when a child has paired specific instructions with steps/actions in a task.

Self talk to regulate emotional responses: Echolalia may also be used by children to make themselves feel better. Sometimes when a child is feeling a little challenged by a situation they may repeat language that they like or comments they have heard that comforted them in the past.

Self talk to recall and label : Echolalia may be used by child to recall or remember things that interest him. He may see a sticker or DVD cover, recall some lines from the film and repeat them.

Responding to Self-Use echolalia

- **Identify and acknowledge purpose**
 - **Regulate behaviour:** indicates child is a strong auditory learner -use specific language paired with actions to teach independence.
 - **Regulate emotions:** acknowledge and provide phrases your child can use in the future to label understand and deal with his/her emotions.

Echolalia may increase ...

- *During unstructured, unpredictable, or transitional periods*
- When tasks or situations are unfamiliar, difficult or challenging
- *During activities or situations that cause anxiety, fear, distress or excitement*
- When the language used by the speaker is too complex
- When the present context triggers a specific memory and the associated language is recalled.

Echolalia Dictionary

Date: _____

When ...	I say...	Which means...	Communicatively this is known as...

Behaviour Dictionary

Date: _____

When ...	I...	Which means...	Communicatively this is known as...

ADDITIONAL SLIDES

Children with autism can...

speak better than they can
understand

????

How can this happen?

chunk learning

Compartmentalised chunk learning

- **“Echo-box” type memory**
- ***Information that occurs close in time is “taken-in” as a whole (as a chunk). Information chunks contain both relevant and irrelevant info***
- **Chunks are stored as unanalysed chunks and retrieved intact (like a video segment on rewind)**
- ***The component parts are not understood nor can they be rearranged***

Compartmentalised chunk and language acquisition

- Echolalia mirrors how children with autism process, store and retrieve information.
- *" A gestalt mode must be viewed in contrast to analytic mode in which experiences or events are analysed and segmented into meaningful components based upon prior experience. In an analytic mode irrelevancies or redundancies are given little attention while new or significant information is abstracted"*
♀ Prizant (1983)

Comparison between gestalt and analytic modes of language acquisition

- Basic units usually multiword phrases & clauses
- Early language characterised by echoed utterances functioning as single unit
- Language remains inflexible and complexity improves through recombination of prefabricated patterns
- Language remains specific to situation
- Basic units are words
- Early language characterised by movement from single words, to two words followed by morpheme markers
- Language is productive and generated based on rule system
- Language is generalised to relevant objects and events after short period of specific use.

Behaviour Dictionary

When ...	I ...	Which means...	Communicatively this is known as...
<i>I want to go outside</i>	<i>Take my mother by the hand and lead her to the door</i>	<i>"Can I go outside?"</i>	<i>Requesting activity</i>
<i>I don't want to eat my toast</i>	<i>Push away the plate</i>	<i>"I don't want to eat it"</i>	<i>Rejection</i>
<i>When my brother has the thomase the tank toy</i>	<i>I scream and try to bite him</i>	<i>Give it to me</i>	<i>Protest</i>
<i>When mum picks me up from day care</i>	<i>Stand at the gate and jump up and down flapping my hands</i>	<i>" who.. hoo.. Mummy's here!"</i>	<i>Expressing joy Commenting about events in immediate surroundings</i>

Comparison between language acquired through echolalia and typical language acquisition

- Basic units usually multiword phrases & sentences
- echoed utterances functioning as single unit
- **Language remains inflexible and complexity improves through recombination of known patterns**
- Language remains specific to situation
- Basic units are words
- Expands set pattern: single words, 2-words, 3- words and word endings
- Language is productive and generated based on rule system
- Language is generalised to relevant objects and events after short period of specific use.