

An introduction to Colorful Semantics

DEvised BY
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[with shapes by Susan Ebbels]

Colourful Semantics

1] A system to support spoken and written language learning across the curriculum, which can be used for -

- sentence development
- understanding questions
- understanding written text
- developing vocabulary & learning facts
- developing narrative

2] Aim is to enable teaching staff to use this functionally within the classroom.

Now -Don't Panic!

- ▶ If it's completely new.....relax and take in as much as you can.
- ▶ If you need help at any time - Please ask me!

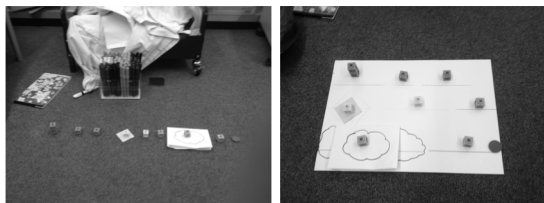
4ICW Colours +/- symbols



Colours PLUS symbols

Colours MINUS key symbols

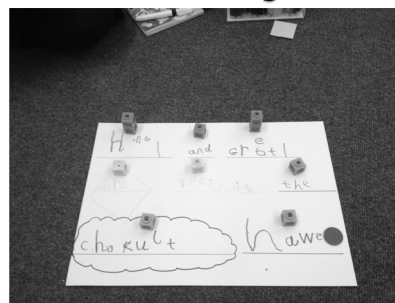
Coding and Literacy : shared writing task



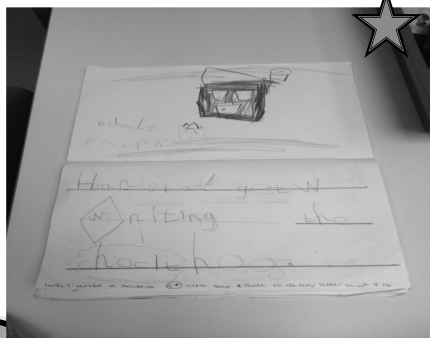
Planning the sentence

Creating the sentence

Coding and Literacy : shared writing task



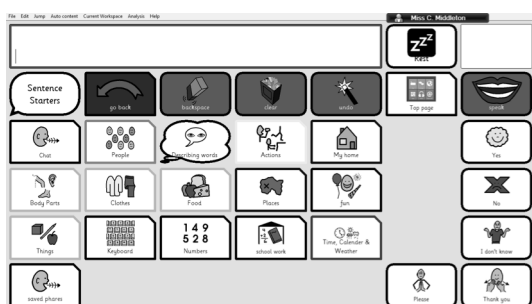
Coding and Literacy : final result !



Why colour coding for AAC ?

- ▶ Much more obvious visual system for AAC users [screen shots of old v new]
- ▶ Immediately gives clues to the sort of meaning the words have and how they can be joined together

SCREEN SHOT- New coding



What is it?

- ▶ A highly effective visual way of coding the information in words and sentences. It helps children understand how the meanings of words are linked in sentences.
- ▶ Question words are used to link to this meaning. Each question word is designated a colour [or sometimes a shape].

e.g. All words that answer a Who question are orange

The boy is jumping. "Who is jumping?" ->

the boy

Where does coding come from?

- ▶ Originally used to help children understand how the meaning of words are linked in sentences. This then helped them make correct sentences when talking.
- ▶ This meaning relationship between words dictates how the ideas are arranged in the sentence.
- ▶ The key to this meaning relationship is the verb/action word.
- ▶ The 'grammar' of the sentence can then change [e.g. verb tense, pronouns] - but the overall meaning of the sentence does not change

We do NOT code everything !

- ▶ Tool not a straightjacket !
- ▶ Be selective
- ▶ You are in control of what is coded
- ▶ Do not have to try and code what child says!
- ▶ Use it to scaffold what you need

We do NOT fully code everyone !

- ▶ Not all children need full coding support for all their sentences
- ▶ If the system is throughout the school, all children will pick up the basics, then you can choose who you use it with in more detail
- ▶ Can just do additional coding for the area that's relevant for that child / lesson eg. Using more cloud words [adjectives]

What happened in Herts?

- ▶ Herts had 2 visual systems running
 1. Colourful Semantics – Alison Bryan 1997
 2. Shape Coding – Susan Ebbels [Moor House School] 2001

BUT both systems from same theoretical base

Integrating the 2 systems

- ▶ Started to integrate many years ago
- ▶ Initially using the non-argument structure shapes [clouds/diamonds] & verb tense arrows with the colour coding system

[N.B. Currently ->
Rolling out training for a fully integrated system to be used across whole of Herts & West Essex]

Incorporating grammar shapes

- ▶ We have incorporated some shapes into Colourful Semantics to enable grammar to be coded when targeting these specifically

The  boy dog  is hiding in the  dark forest

Theory !

- ▶ Bootstrapping
Chiat (2000)
- ▶ Functional [verb] argument structure
Garrett 1980, Black & Chiat (2003)
- ▶ Non-argument structure
Pinker (1989), Black & Chiat (2003)

Bootstrapping – *CHIAT [2000]*

Syntactic Bootstrapping

- ▶ using argument (grammar) structure to work out a verb's focus

Semantic Bootstrapping

- ▶ using knowledge of verb meaning in an event to predict the structures it will or will not take

Phonological Bootstrapping

- ▶ using intonation/stress patterns to locate verbs/nouns

Argument structure

- ▶ All verbs have an argument structure
- ▶ Arguments are '*participants in the event*'
[*'who'* does '*what*' to '*whom*']
- ▶ Expressed as thematic roles
- ▶ Obligatory [essential] or optional
- ▶ Non arguments

Thematic roles

- ▶ ACTOR- Instigator of action.
- ▶ THEME - Entity asserted to have a particular state, location or change of state or location.
- ▶ LOCATION - corresponds to what or where a theme is.
- ▶ SOURCE - corresponds to what it is moving or changing from.
- ▶ GOAL - corresponds to what it is moving or changing to.

Garrett Model - updated 1990

- ▶ Created from normal 'slips of the tongue'
i.e. on line processing errors
 - ▶ Described 5 levels of representation
1. Message level
 2. Functional level
 3. Positional level
 4. Phonetic level
 5. Motor level

Functional Level of Representation

- ▶ *Main Level addressed by Colourful Semantics*
- ▶ *Planning of semantic-syntactic relationships*
+ *semantic content* via 3 processes

Processes [& potential problems]

- ▶ Lexical selection
- ▶ Creation of verb argument structure
- ▶ Assignment of the lexical items

"Who-does-what-to whom"

E.G. "*Ben put the apple in the bowl*"

- ▶ **Lexical items**
verb = *put* nouns = *apple, bowl*
- ▶ **Argument structure for 'put'**
Verb: actor_[WHO], theme [WHAT], goal _[WHERE]
- ▶ **Assignment**
verb: actor, theme, goal
 WHO WHAT WHERE
[put]: [Ben] [apple] [bowl]

Errors

Lexical selection error

"I cut dinner my fork"

Argument Structure error

"Mum put table"

Assignment error

"Mouse chase cat"

The problem with verbs ! [Chiat 200]

- Rarely occur in isolation
- Less stressed than nouns in word stream
- Poor auditory processing affects **identification & storage of verb phonology**
- Events focusing on verb are brief/transient
- Poor event perception or joint attention affects **identification & storage of verb semantics**

Positional level

- Planning frame created
- **Word order** and **grammatical form** is planned & selected
- **Phonology** for lexical items and grammatical forms found and inserted

"Ben put the apple in the bowl"
"The apple was put there by Ben"
"He is going to put it in the bowl"

We also need to select the semantics for 'Non-argument' structures

- Non argument structures are those not directly related to the verb/verb semantics
- Still adds to semantic content of the sentence e.g. adjectives/complements , adverbs of time & manner

"The boy is tall"
"Last week I went on holiday"

Colourful Semantics

- Addresses problems in understanding and creating verb argument structure + assignment
- Supports / develops use of 'syntactic bootstrapping' to get to meaning
- Supports poor 'phonological bootstrapping'
- Includes some 'non-argument' structure support
- Shape coding can add some 'morphology' support [e.g. verb tenses, plurals]

The intervention

AIMS

- To teach recognition of underlying 'thematic roles' via use of question words
- To use this knowledge to understand or create argument structure of verbs
- To assign the right lexical item to each thematic role
- To extend skills to some non arguments
- To use skills as strategy for cuing and self help [spoken & written language]

QUESTION WORDS ARE THE KEY TO CODING

HOW DO WE CODE?

By linking each argument/non argument with

- > A **colour/shape**
- > A spoken & signed **question** word

For simple sentences

- > Associating a target sentence structure with the resulting colour/shape sequence.

Colour coding

- ▶ Is it new?
- ▶ Language through reading
- ▶ Coding grammatical structure v semantic syntactic relationships

Gordon is drawing a picture in his book

v

Gordon is drawing a picture in his book

Basic colour/shape coding :- 'Verb + arguments'

Question Word	Colour Coding	Shape Coding	Thematic Role
(What) Doing ?	yellow		action/verb
Who ?	orange		actor/theme
What ?	green		theme
Where ?	blue		Location goal/source
To-Who(m) ?	pink		recipient/ goal

'Non- argument' question words

- ▶ **'What look like'** – gives descriptive information [e.g. conceptual language of size & colour]
- ▶ **'What feel like'** – gives descriptive information using conceptual language related to texture, solidity etc
- ▶ **'How feel'** – gives information about emotions
- ▶ **'When'** – gives information about time
- ▶ **'How'** – gives information about the manner of an action
- ▶ **'Why'** – gives causal information
- ▶ **'Whose'** – gives information on possessives

PLUS

Shape coding also codes grammar words like 'auxillary verbs'

Additional [non argument coding]

Other information	Question	Colour/shape
Adjective / concept <small>i.e. description related to noun</small>	What like?	
Adverb [time]	When?	Brown
Adverb [manner]	How?	Black
Cause & effect	Why?	Purple arrow
Sentence joining	[Joining up words]	Purple rectangle
Auxiliary Verbs	[Little doing words]	Yellow +
Possessives	Whose?	

BASIC ORDER OF TEACHING

From original paper on GORDON 1998
(see handout)

2-4 ICW – order of teaching for developing spoken sentences

1. Start with verb + 1 argument
e.g. *verb: actor* (DLS *person + action*)
2. Increase variety of verbs/nouns
3. Add different argument
e.g. *verb: theme*, *verb: location*
(DLS *'action+ object'*, *'action+ place'*)
4. Increase variety of verbs/nouns
5. Introduce verb +2 arguments. Same vocab
e.g. *verb: actor, theme* *verb: actor, location*
(DLS *person + action + object* *person + action + place*)

1 participant + verb



1 participant + verb

WHO + DOING

→ Then increase variety of nouns & verbs

Different –1 participant + verb

1 participant + verb

DOING + WHAT

DOING + WHERE

→ Then increase variety of nouns & verbs



2 participants + verb

WHO+DOING+WHAT
I + eat + a carrot

WHO+DOING+WHERE
I + go + to school

→ Then increase variety of nouns & verbs



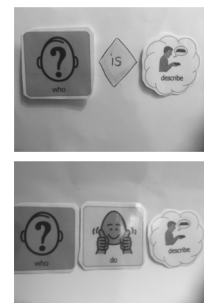
2-4 ICW – order of teaching (cont'd)

6. Increase verb and noun variety
7. Contrast with non argument:- 'What like?'
e.g. "He is eating" v "He is tall"
8. Introduce verb + 3 arguments [e.g. put/give/show]
e.g. 'give' = *verb: actor, theme, recipient*
(DLS = transfer of object to person 4 ICW)
'put' = *verb: actor, theme, location/goal*
(DLS = movement of object to stated place 4 ICW)

Contrast with non-argument 'WHAT LIKE'

WHO+Diamond+ CLOUD
e.g. He + is + cold

WHO + DO + CLOUD
e.g. He + feels + happy



3 participants + verb



WHO+DOING+WHAT+WHERE
I + put + a hat + on my head

Order of teaching (cont'd)

- ▶ **But** need to be child led &/or curriculum led
- ▶ Generally don't teach arguments in isolation from verb !
- ▶ But older child can just focus on problematic isolated role/non argument or sentence type
 - e.g. why questions, passives
- ▶ Higher level sentence coding will include more non-argument structures

The Instructions

Each time a thematic role is introduced the adult

- ▶ **Signs the question word + Asks the question?**

i.e. *actor* :- "Who [+sign] is it?"

verb :- "What is he doing [+ sign doing] ?

- ▶ **establishes the colour/shape link**

i.e. "Yes, that's what she's *doing* [+sign]. The *doing* [+sign] words are yellow/oval"

- ▶ Continue to emphasise repeatedly throughout activities. Encourage child to express the links

Variables

- ▶ In KS1 the key words are generally represented with **symbols**
 - e.g. Rebus [unless child good at literacy]
- ▶ Can progress onto coding just using **coloured lines** once familiar with system
- ▶ If you want to focus on two key words in one argument then use 2 symbols/lines but keep colour the same
 - [e.g. If working on prepositions then highlight separately i.e. in the chair]

The same words may be used in different roles in sentences

E.G

Bob mended the chair

v

Bob the Builder sat in the chair

REMEMBER.....

Question words ARE THE KEY TO CODING

- ▶ Find the verb and ask the right question to get the answer you want.
- ▶ Then choose the colour/shape that goes with that question

What do you already know ?

- ▶ Consider these two sentences.

The children gave sweets to the teacher
The teacher gave sweets to the children

The words and grammar are the same but the meaning is different. WHY?

- ▶ *The people doing the action has changed*
 i.e. the words that mean 'WHO' is doing the action

What does Colourful Semantics target?

- ▶ Now consider these two sentences.

The children gave sweets to the teacher
The children have given some sweets to the teacher

The grammar has changed but the meaning is the same. WHY?

- ▶ *The WHO, WHAT and WHO TO of the sentence has not changed*

What does it target?

The **WHO DOES WHAT TO WHOM** of sentences

- ▶ By asking questions we can find out the words that go with these and see how the parts of the sentence are linked to give the sentence it's meaning

i.e.

WHO is it? What are they DOING?

WHERE are they? WHAT did they do it to?

WHO did they do it TO?

Colour Coding for Classroom Support

i.e. *We can use coding to*

- ▶ Support children saying better sentences
- ▶ Support understanding of sentences
- ▶ Learn new words
- ▶ Record their work
- ▶ Do creative writing

EXAMPLE

Using Coding to Learn Vocabulary

An example of the effectiveness was shown by a clinic child who increased their word recall of school vocabulary from 9 to 17 using a coded mind map.

Higher Level Language Group

- ▶ Colour coded mind map for 'school' topic
- ▶ People = orange
 Activities = yellow
 Objects = green
 Places = blue
- ▶ 1 minute to recall as many words as possible
 before = 9
 after = 17

EXAMPLE – Ashleigh

- ▶ 9 year old – PNI school
- ▶ Non verbal
- ▶ Cerebral palsy
- ▶ Right hemiplegia
- ▶ Single word level comprehension
- ▶ Expression – vocalisations + pointing

AIM

- ▶ Increase comprehension
- ▶ Enable symbol use to express herself

Plan – WHO, DOING, WHAT & WHERE

Resources = symbols and BPS action pics

1. WHO + WHERE
 - COMPREHENSION → moving toys to symbol line
2. DOING +WHAT moving toys to symbol line
 - COMPREHENSION → moving toys to symbol line
 - EXPRESSION → select symbols for line for adult actions

Plan – WHO, DOING, WHAT & WHERE

3. Mixed 2 word level
 - COMP –select 1 /6 pictures to match symbol line
 - EXPRESS– chooses 2 symbols to describe picture
4. 3 ICW
 - COMPREHENSION → selects 1/8 pictures to match symbol line
 - EXPRESSION → select symbols for line for action picture

INTRODUCED WHERE

At end of the year

- ▶ Increased confidence
- ▶ Decreased anxiety
- ▶ Increased signing
- ▶ Less need to copy others
- ▶ Increased vocalisations
- ▶ Literacy skills now developing [50 sight words]
- ▶ Improvement in all areas of curriculum
- ▶ Increased attempts to communicate with staff and parents

Quote

“ Having seen little, if any, improvement in Ashleigh's language over the past few years, we have noted significant progress since starting this programme in October”

OUTCOME – Oct → July

- ▶ Understands 23 verbs [sign, symbol and spoke word]
- ▶ Produces 3 symbol sentences to describe picture or action
- ▶ Understands a 3 symbol sentence

What is the Basic coding?

Each colour is linked with a **question word**

- ▶ *who*
- ▶ *What*
- ▶ *Where*
- ▶ *Doing*
- ▶ *who to*

N.B

You don't have to be an expert at analysing sentences to find these essential word meanings!

Verbs are the core of the sentence

So we can see that when we first plan a sentence the verb we choose and the accuracy of the verb semantics is crucial

So lets look at some verbs and how the 'Questions' can help us focus on this underlying argument structure

When deciding which shape/colour to use the coding, asking the right QUESTION will be an essential the key

If in doubt, think about WHAT QUESTION you asked to get the answer you needed.

Verb Activity

- ▶ So lets look at some verbs
- ▶ Which of these questions **have** to be put with the verb for a sentence to make sense?

WHO	[is doing the action]
WHAT	[is the action done to]
WHERE	[is the action happening]
WHO to	[who is the action done to]

Verb Activity

'EAT' – what are the essential questions

- ✓ WHO ate ?
- ✓ WHAT did they eat?
- x WHERE did they eat?
- x Who did they eat TO ?

Verb Activity

'SIT' – what are the essential questions

- ✓ WHO sat?
- x WHAT did they sit?
- ✓ WHERE did they sit?
- x Who did they sit TO ?

Verb Activity

'GIVE' – what are the essential questions

- ✓ WHO gave?
- ✓ WHAT did they give?
- x WHERE did they give?
- ✓ Who did they give TO ?

Verb Activity

Get into 2's & 3's and try to decide what are the ESSENTIAL questions for each verb

i.e. What MUST be included to use this verb in a sentence

sat	pour	catch
put	filter	showing
invented	travelled	

Question word coding

For each question there is a colour or shape.

To decide on which one

- ASK the question which gives the words you want in the answer !
- Code **ALL** those words in the linked colour/shape

All the words should be coded

- **There should be no words left uncoded** ...if there are you may need to try again ☺

My Mum sat on the sofa X

My Mum sat on the sofa ✓

Key to Basic Coding

So the key to basic coding skill that everyone starts of with is

- ▶ think of the **VERB**
- ▶ decide what **QUESTION WORDS** go with that verb to make a sensible sentence
- ▶ this is how you work out which colour/ shape you need

Use the VERB to help you

Quick Hint!!

*Think about the verb and the questions you ask **before** deciding what colour it is....*

NB

WHO - you would ask this for people and characters

[so in a story 'The Gruffulo and the Mouse' would be WHO → orange]

WHAT - you might ask this for things/objects, but also for animals not personified [not a Character]

So "Camels live in Egypt" - you'd probably ask **WHAT** lives in Egypt → green?

Basic colour coding - essential question words






<u>Question Word</u>	<u>Colour Coding</u>	<u>Example</u>
(What) Doing ?	yellow	Ben <u>is giving</u> a biscuit to the dog
Who ?	orange	<u>Ben</u> is giving a biscuit to the dog
What ?	green	Ben is giving a <u>biscuit</u> to the dog
Where ?	blue	Ben is putting a biscuit <u>in the bowl</u>
To Who(m) ?	pink	Ben is giving a biscuit <u>to the dog</u>

Practising the meaning mantra !!!

- ▶ Orange words tell us **WHO**
- ▶ Yellow words tell us what they are **DOING**
- ▶ Green words tell us **WHAT**
- ▶ Blue words tell us **WHERE**
- ▶ Pink words tell us who **TO**

- ▶ But we know there is other information in sentences [non arguments]
- ▶ Other sorts of word meanings that are **not** essentially linked to the verb
- ▶ These can still be coded and are also linked to question words

Additional coding chart

Other information	Question	Colour/shape
Adjective / concept <small>i.e. description related to noun</small>	What like?	
Adverb [time]	When?	Brown
Adverb [manner]	How?	Black
Cause & effect	Why?	Purple arrow 
Sentence joining	[Joining up words]	Purple rectangle 
Auxiliary Verbs	[Little doing words]	Yellow + 
Possesives	Whose?	

Practising the full meaning mantra

- ▶ Orange words tell us **WHO**
- ▶ Yellow words tell us what they are **DOING**
- ▶ Green words tell us **WHAT**
- ▶ Blue words tell us **WHERE**
- ▶ Pink words tell us who **TO**
- ▶ Brown words tell us **WHEN**
- ▶ **Black** words tell us **HOW**
- ▶ **Purple** words tell us **WHY** [& join things up]
- ▶ Cloud words tell us **WHAT** is it **LIKE**
- ▶ **Star** words tell us **WHOSE**

Non Argument Structure

»» Lets look at additional coding

Colourful Semantics PLUS

We have incorporated a few shapes:-



CLOUD 'what like' words [S.Ebbels]
[adjectives/concepts]



DIAMOND - e.g. *is, was* [S.Ebbels]
[copula & auxiliary verbs]



STAR words [possesives] **NEW!**

Additional coding - CLOUD words

'What like? clouds' - 3 different sorts of questions

- > What does it look like? [e.g. long, blue]
- > What does it feel like? [e.g. soft, cold]
- > How do you feel? [e.g. sad, worried]

'What like' clouds

The 'what like' cloud can have a small symbol in the corner to show what sort it is

What **looks like** What does it **feel like**? How do **you / the character feel**?



Diamond words

- > Children often leave out auxiliary verbs like 'is' 'was' 'were' 'has'
- > Auxiliary verbs are the 'little' words that are linked to the main verb and help show verb tense

e.g. *The boy **is** eating*
 *The cats **were** sleeping*

Diamond words

Sometime children leave out the 'little verbs' that stand on their own in a sentence too.

e.g. *The boys **were** in the playground*
 ***Is** your cat black?*
 ALL verbs are still yellow

Working on auxiliary verbs




Working on auxiliary verbs



COLOUR CODING – Making Questions

Dad  putting his coat on the chair

 Was Dad putting his coat on the chair ?

Newest shape !

Asking Questions **Whose?**



- ▶ Non argument coding
- ▶ Emphasise /sign final 'z' [or possession]
- ▶ Can go with Who or What or Where

So...



- ▶ Needs to be clear shape which can move about like clouds


-> STAR WORDS  My dog ate  Dad's shoe

Possessives

Eat  feddy's  apple

She put the book in  her drawer

 Mrs Bryan's  hair is straight

Give the sticker to  Kiera's friend

CODING and KEY WORD LEVEL

- ▶ Sorted into Key Word level according to the Derbyshire Language Scheme
- ▶ Can be used as a guide for the order of developing comprehension and expression using coding

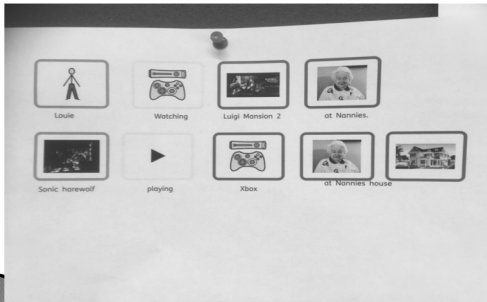
The Equipment

- ▶ Choose a way to represent roles
- ▶ Nursery/ Key stage 1 =symbols [e.g. Rebus, Makaton].
- ▶ Key stage 2 or literate child =written word

How to represent elements

- Symbols/words on **colour cards** – select and arrange in right order to match colour line
- Symbols/words on **white card** – arrange on colour lines
- Child draws **coloured lines under words** or shape round words
- Written sentences with **colour 'gaps' to be filled in**
- **Laminated coloured/shape boards** + draw/write/stick on words/symbols

Communication in print - writing sentences



The Activities

- Describing pictures/real events
- Use alongside simple oral sentence work e.g. Derbyshire language scheme
- Supporting basic vocabulary development [including verb semantics]
- Supporting creative writing
- Planning narratives
- Supporting Big Book
- Text comprehension
- Supporting topic vocabulary

The Children

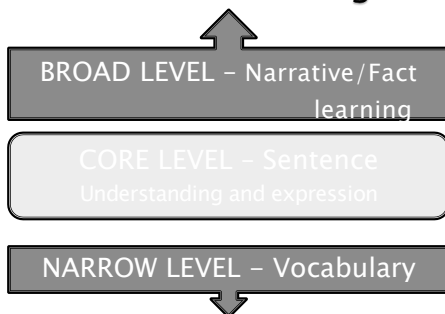
A) Expression

- word order problems e.g. ' news me like '
 - omissions of verbs or essential key semantic information from the sentence. Marked WFD
 - lack of sentence variety
 - tendency to 'word string'
 - tendency to start a sentence, then trails off when he gets stuck and tries another one
 - Problems reflected in written language
- ALSO children where motor planning problems limiting sentence structure

B) Comprehension

- Applicable to severe comprehension difficulties
- Focus on signs and colours/shapes as major support
- Therapy for difficulties with e.g.
 - 'question word' comprehension
 - DLS based comprehension work
 - Written text comprehension
 - Verb tense, plurals [*shape coding only*]

Levels of coding



CORE LEVEL SUPPORT

- Developing sentence structure
- Expressing reasons - science
- Development of 'interesting' sentences in creative writing [cloud words]
- Supports question comprehension
- Developmental order of understanding question words [WALL CHART]

Developing spoken sentences

Coding can be used to develop a child's ability to produce spoken sentences

- To increase the range of sentence types
- To increase the complexity of sentence structures

Targeting specific sentence types

- We may choose a specific sentence type to work on
- We can describe this in terms of key words &/or a colour pattern i.e.

"We are working on *person + action + place*"


OR

"We are working on *WHO + DOING + WHERE*"

Examples of simple target sentences

1] person + action

e.g. Danny jumping. Me draw.

2] action +  + place

e.g. Sit on blue chair. Look in big book

Example of harder target sentence

3] Answering Why questions -

'Why is the boy sad?'

 because person action object

'Because he dropped his ice cream'

Practising target sentences

When developing spoken sentences we use lots of visual support, appropriate to child's ability


- Pictures/objects
- Colour coded symbols
- Colour coded lines/cards
- Signing

Practising target sentences

For example

When getting a child to describe an action

- Create a sequence of coded symbols which make an instruction or describe an action
- Child has to then use the coding and symbols to help them describe what they did

e.g. cut  apple
wash teddy's face

Verb picture ->
Who, doing, what



Supporting DLS/ICW's

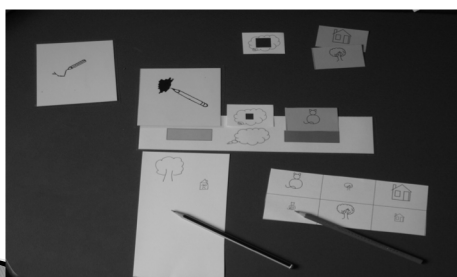
Can use colour coding to support

- ▶ Comprehension
- ▶ Description
- ▶ Command

in all DLS/ICW type activities

3 ICW comprehension - coloured symbols + coloured line

colour /draw big/little cat/house/tree



Reducing the coding support

- ▶ Once the child is secure with the full coding
→ reduce the support you are using
1. Use the colour cards or line but move from coloured symbols to white symbols
 2. Reduce the number of symbols, just leave the tricky ones there
 3. Use colour cards /lines but no symbols
 4. Gradually take some of the colours away, but encourage the child to touch where they were

Practising target sentences

Colour line only

- ▶ Sometime we just have a colour line for the sentence as a prompt
- ▶ the child uses the colours to help them say the sentence

Coded lines for 'because'



Coding Nuffield SVO sheets



Using target sentence types

During the school day you can get staff to support the child's *target* sentence(s) in other activities too

- *Sometimes you just need the colour line as a prompt*
- *Other times you may need to do a little preparation*

In regular activities

Sometimes a regular activity provides practice for a target sentence

- Have a piece of card with the line of colours/ coloured symbols on it – stick beside that activity or on the child's table
- Ask the child a question e.g. *'What did you do?'* *'What must you do now?'* + point to the colour lines/symbols to help them say the sentence

Target = 'put' + object + place

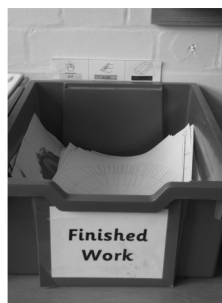
(*put* *what* *where*)

- ▶ Stuck up over their peg – coloured line to elicit "put coat on peg"
- ▶ Stuck on child's table – coloured line to elicit "put work in tray"

'Put coat on peg'



'Put work in tray' + / - symbols



In Topic Work

- ▶ Often a target sentence can be supported in topic work activitieswith a little preparation
- ▶ Use the colour line + symbols/line drawings to support the required sentence

'Forces' topic – push/pull



- ▶ *SLT Target* – to use adjectives with 'action + object'
'Pull **big** lorry'

In Music



2 key word level: action + object

Topic Worksheets

- ▶ Often it is hard for the children to record their work
- ▶ They may need a very simple, **repeated** structure
- ▶ YOU choose the sentence structure.... DON'T try to code what the child gives you
- ▶ Coded work sheets can be made for cloze tasks or copying tasks

Topic Worksheets

When recording an experiment you can have a worksheet with

- ▶ a coded line for the target sentence
- ▶ key vocabulary to copy from OR
- ▶ key vocabulary to cut out and stick on

'Seeds' – cut and stick

	water		in the pot
	seed		in the pot
1.	put	soil	in the pot
2.	put		
3.	put		

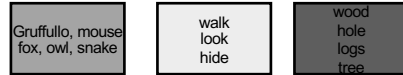
Key Texts [Big Book]

- ▶ Can use Key Texts to find vocabulary relating to *current sentence structures being targeted* by therapist or to create simple narratives
- ▶ Photocopy characters, locations from the book if the child cannot read key words.
- ▶ Use these to create a 'sentence' which can be 'read' out or written

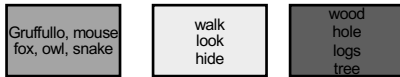
E.g. 'The Gruffulo'

Targeting sentences using *who' + 'what doing' + 'where'*

Write words or lay the pictures onto coloured cards



Recording the sentence(s)



- a) Child then chooses the words to write on a colour line
- or
- b) Child chooses the pictures to stick on colour line

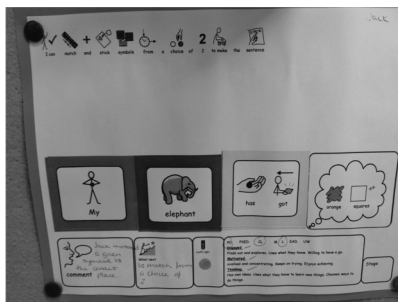
The Gruffullo is walking in the wood

N.B Some children can only use key words when talking not the full grammar i.e. 'Gruffullo walk wood'

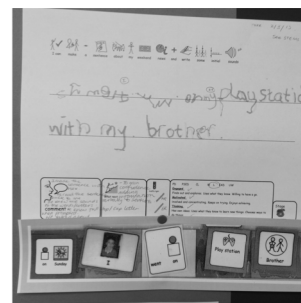
MLD KS1 - basic descriptive writing task



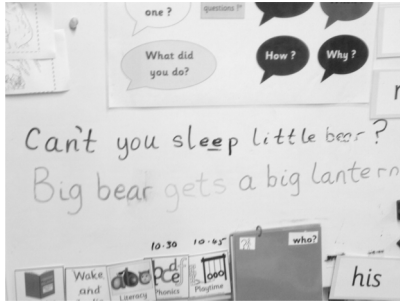
MLD KS1 - basic descriptive writing task



MLD - Writing 'news' KS1



Mainstream Year 1 writing task



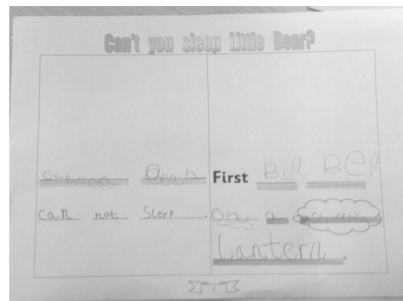
TA uses cards to support



Extension activity - harder cloud words



Written sentence work sheet

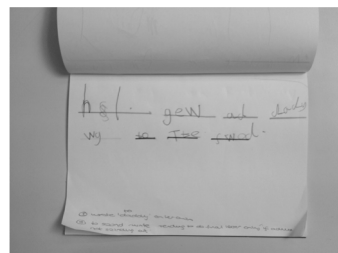


Planning and writing a sentence



No adult support, just lines

Planning and writing a sentence

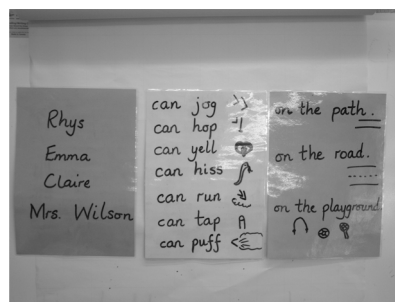


Adult supported writing

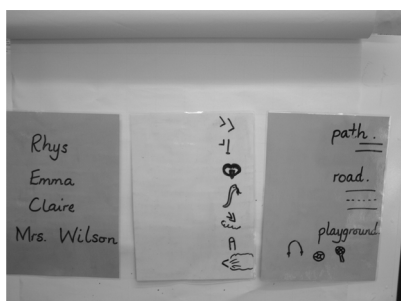
Using the same simple sentence for descriptive writing

- ▶ Brainstorm vocabulary for each colour
- ▶ Children practices creating several sentences out loud with same structure, changing the vocabulary
- ▶ Rub out the words the children can spell themselves
- ▶ Children write sentences and draw pictures

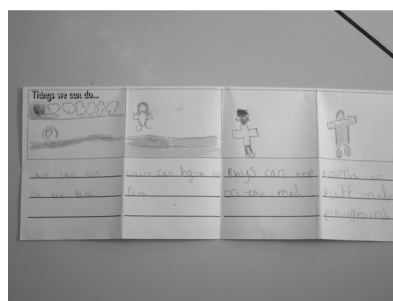
'Things we can do - brainstorm



Rubbed out words they can spell for themselves



'Things we can do' booklet



Supporting descriptive writing

Remember

- ▶ Coding works best with a **simple, repeated** structure
- ▶ **YOU** choose the sentence structure.... DON'T try to code what the child gives you

Instruction sequence

1. Draw large, big picture on the card
2. Cut up scraps of material
3. Glue scraps on the picture
4. Feel the scraps on the picture


Three Little Pigs

[from – Integrated therapy services]

- ▶ Pig 1 built a house of straw
- ▶ Pig 2 built a house of wood
- ▶ Pig 3 built a house of bricks
- ▶ The bad wolf blew the house of straw down
- ▶ The bad wolf blew the house of wood down
- ▶ The bad wolf climbed the house of bricks
- ▶ The bad wolf fell down the chimney
- ▶ The bad wolf fell in the pot of boiling water

Use of 'What like' clouds in spoken & written sentences


- ▶ You can develop use of adjectives & concepts by showing how to add 'cloud' words to tell you more about one of the colours


'The  dragon breathed fire'


'Here the cloud word tells us more about 'what'

Use of 'What like' clouds

- ▶ Cloud words are very useful since they can **float about** like real clouds!
- ▶ You can show that the *same* cloud words can float around in sentences

The  ghost heard a noise in the forest.

The ghost heard a  noise in the forest

The ghost heard a noise in the  forest

Multiple adjectives

- ▶ You can show that you need more than one in a sentence by using a number of clouds

'Use these words to tell me more about the character in the story'

 huge, scary, black, brown

He saw a   bear.

Year 1 task

Using describing words for
'What does Shrek look like?'

Who is it ?

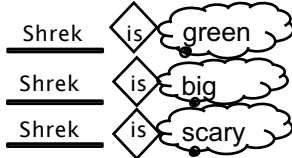
 Shrek

What does he look like?

 big, tall, green, scary

Year 1 task

Using describing words for
 'What does Shrek look like?'



SCIENCE – using purple joining words to express events v reasons

FLOATING & SINKING

We put a brick in the water

and

We put a feather in the water.

Framework for answers

Why did the brick sink?

Because it was heavy

Why did the feather float?

Because

CHART LINKING WITH SPAG

Question Word	Coding	GRAMMAR
(What) Doing ?	▬	VERBS
Who ? [people/characters]	▬	Single word = NOUNS
What ? [things]	▬	
When ?	▬	ADVERBS of Time
How ?	▬	Manner
Where?	▬	Place

CHART LINKING WITH SPAG

Question Word	Coding	GRAMMAR
What LIKE?	☁ Cloud Words	ADJECTIVES
PLUS 'little yellow words' e.g. is, were, can [linking verbs - be , get] Sentence joining e.g. 'and, then, so'	◇ Diamond Words	AUXILIARY VERBS [& 'linking verbs']
'because, although, until	▬ ▶ Joining up words	CONNECTIVES/ CONJUNCTIONS

SPAG WORD level- Year 2 - VERB TENSE /SUFFIXES

- ▶ Verb tense can be easily marked on text using a TIME LINE
- ▶ Could demonstrate the time line on your arm
 - NOW /PRESENT = point down onto wrist
 - PAST = draw line from NOW back to elbow , then point there
 - FUTURE = start at wrist and go forward to finger tips

→ FROM SHAPE CODING

This can then be drawn on a time line under the word

WORD level- VERB TENSE

- ▶ PRESENT TENSE ▽ "He is walking" " He walks"
- ▶ PAST TENSE ▽ "He walked"
- ▶ FUTURE TENSE → "He will walk"

Doesn't need colour...just draw the lines under the verb [which will be yellow, if it is coded]

Supporting Sentence Understanding

It's not just about the child saying sentences, some children need support to **understand** sentences.

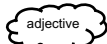
E.G.

1. Following instructions for certain sentence types
2. Understanding different parts of sentences
e.g different prepositions [in/under above/below]
3. Understanding question words

1. Following instructions

You can focus on one type of sentence to use in instructions you give the child

e.g.

action +  + object

- ▶ Think of times school could use these
- ▶ Have a card available with the colour line on to support the child's understanding.

Following instructions



1] P.E. -

"Kick the big ball" "Roll the red hoop"

2] Tidying Up -

"Wash the green paint pots" "Collect the new pencils"

3] Creative activities

"Draw a big monster" "Paint blue hair on him"

2. Understanding parts of sentences

- ▶ You can focus on developing the understanding of just one part of a sentence
- ▶ Use a coloured line and just have symbol/written support for that part

e.g. prepositions , time words

Understanding prepositions



Following a 3 key word instruction

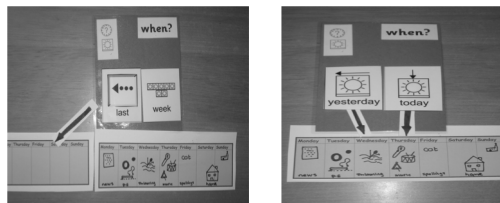
Put the glue stick in the mug

Only preposition supported [in /behind / in front]

Understanding time words

- ▶ Time words are often hard to understand
e.g. 'today, yesterday, last week, next week'
- ▶ Time words answer the question 'when'
- ▶ 'When' words are **brown**
- ▶ Explain that **brown** words change the **yellow** doing word
- ▶ You MUST have a familiar context and consistent language to teach 'time' words

Understanding time words



Using a time line to teach
last week yesterday / today

3. Understanding Question words

You can support *question comprehension* in class with colour coded cards which the adults can point to [& sign if appropriate]

- by teachers white board
- small laminated cards for use at tables

Understanding Question Words



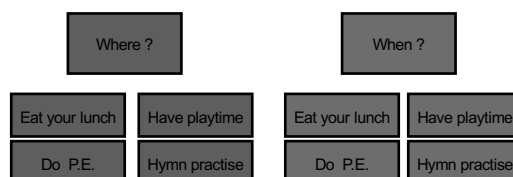
Teaching Question words

You can teach understanding of *question words*

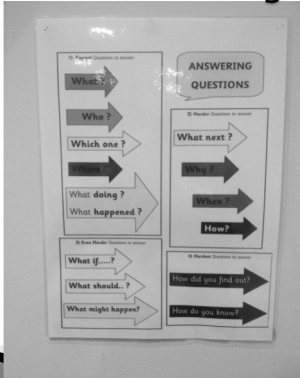
- ▶ by linking the word with the colour and sign + a symbol cue about the question meaning
[e.g. who = person symbol where = place symbol]
- ▶ thinking of simple questions that contrast 2 of the questions
- ▶ getting the child to decide what colour question it is BEFORE answering it

Using coding to teach understanding of question words

Understanding 'where' v 'when'



Question word teaching order



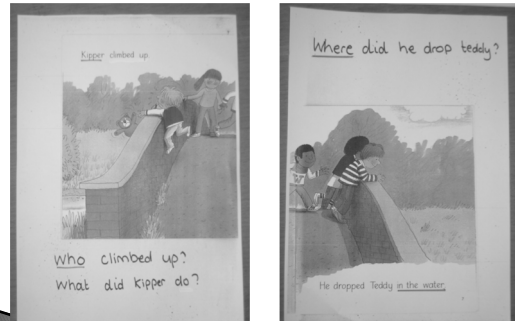
Understanding Written language

- By using the key questions + coding you can focus on understanding texts.
- Photocopying the text enables you/child to write on it!
- You can code work sheet questions to go with current class topic or texts.

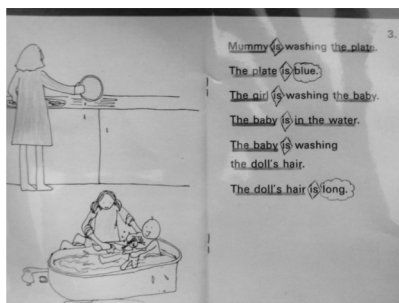
Supporting reading comprehension

- Adult asks the question and indicates what colour question it is e.g. 'What did Floppy do?' + point to 'yellow' card .
- If questions are written down - underline the '..do?' in yellow
- Child looks for words in the text that answer that question & child underlines those words in the right colour
- Child then answers questions verbally &/or writes answer down

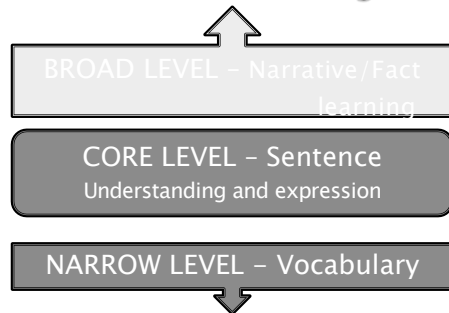
Coded Text Comprehension



Coded Text Comprehension – LTR



Levels of coding



Narrative Coding

- ▶ Question words form a structured framework to create a narrative
- ▶ Coding supports the understanding of question prompts
- ▶ Coding supports finding the elements the narrative e.g. who, when, where
- ▶ Drop coded structure when child is ready

Types of Narrative Support

- News
- Familiar texts/stories as a basis for narrative e.g. big book, fairy stories,
- Original narrative
- Non fiction narrative

Structuring a narrative

- ▶ Some children with very limited language benefit from a set visual structure they always use for narrative work
- ▶ In my KS1 Base we use the Black Sheep story planner.
- ▶ Coding can be used to support ANY narrative framework

Simple Narrative Structure



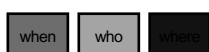
(One day there was a boy)

and
(The boy was in the park)

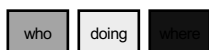
and

(The boy was playing)

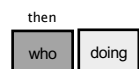
Harder narrative – familiar text



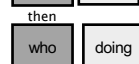
One day Cinderella was at home



Cinderella was crying in the kitchen



Then the Fairy Godmother appeared



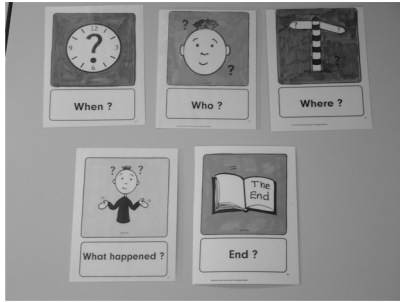
Then Cinderella went to the ball

ETC

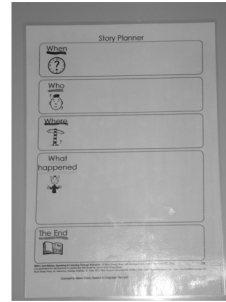
Resource : Black Sheep narrative packs

- ▶ Nursery Narrative Pack
 - *story components:- who, when, what next*
- ▶ Reception Narrative Pack
 - *story components:- who, where, when, what happened next*
- ▶ Fun with Narrative [big books]

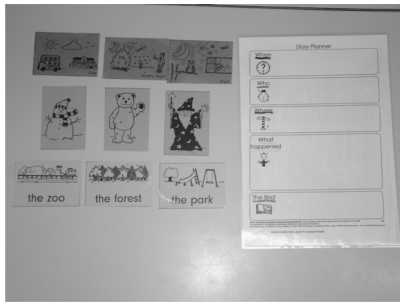
Reception Narrative – colour coded cue cards



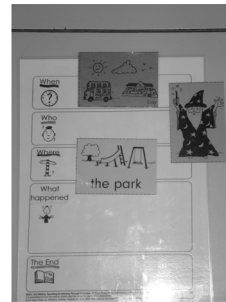
Story Planner



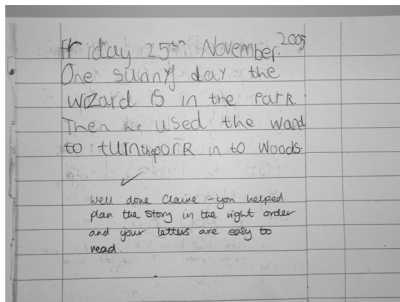
Story options – Creating the Story Starter



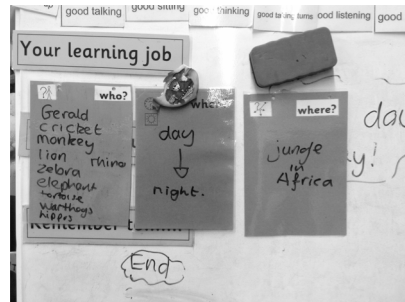
Selecting cue cards



Written story



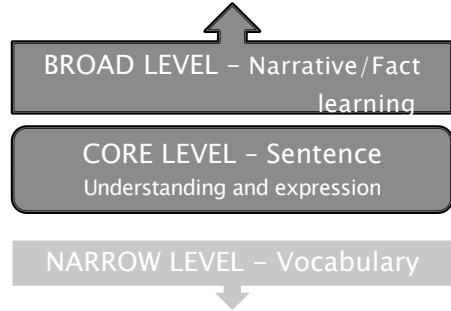
'Giraffes Can't Dance' – Brainstorm story content



Giraffes Can't Dance - Creating own narrative



Levels of coding



Vocabulary Coding

- Coding can be used to teach and practice key topic vocabulary through colour coding the vocabulary in
 - vocabulary books
 - Wall displays
 - Generating semantic webs/ mind maps

Coding Vocabulary

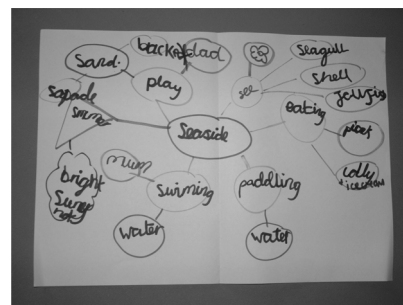
So HOW do you decide which colour/shape to code your vocabulary with?

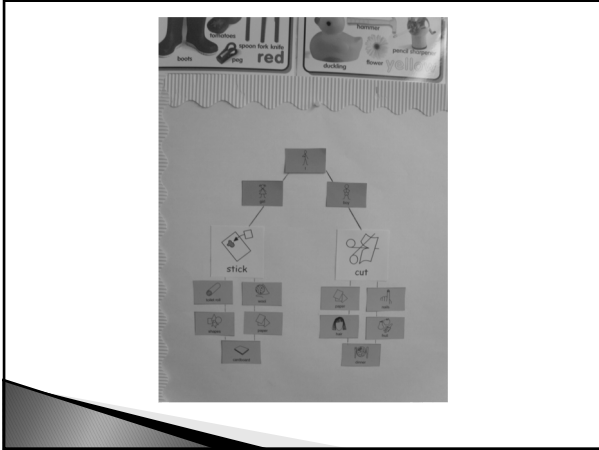
- Use the QUESTION WORDS
- Ask the questions in relation to the vocab and see which one it answers best
[Sometimes 2 questions may fit. Use the one that is closest to the meaning you want.]

Colour Coding - seaside vocab



Leona - 'seaside' Topic Mind Map





Learning Facts – KS2 history topic

Amy (Y6 mainstream) used **coded fact sheets** as basis for written work as well as learning the facts.

e.g. CHURCHILL [colour coded]

- > What kind of word [i.e. orange 'who']
- > When did he live ?
- > What did he do ?
- > What was his job?
- > Where was his office?
- > What was he like? etc.

1874 - 1965

Led country. Smoked cigars

Prime Minister

10 Downing Street

Short, balding, clever, good communicator

Similar vocabulary

Coding can be used to clarify the meaning of similar words

<p>prison where?</p> <p>A burglar Who did it?</p>	<p>prisoner who?</p> <p>Burgled What did he do?</p> <p>A burglary What is the crime?</p>
---	---

ANY QUESTIONS?

Sentence Coding –References

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2. **Black M & Chiat S** (2003). *Linguistics for Clinicians* London:Arnold
3. **Bolderson S** et al (2013) *Child Language, Teaching & Therapy*. Colourful Semantics: A clinical investigation
4. **Bryan A.** (1998) Colourful Semantics 2. In *Proceedings of 1998 NAPLIC conference 'Language Impairment: theory and practise'*.
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