

Colourful Semantics
Specialist Speech and Language Therapist

who
doing what
when
with what
to who(m)

ITS Integrated Treatment Services
Developmental Therapy

1

What we will achieve by the end of the training

- Know the colours used for Colourful Semantics
- Practical implementation considerations
- How this can be embedded across the curriculum.
- How we can make Colourful Semantics interactive
- Resources

ITS Integrated Treatment Services
Developmental Therapy

2

**Think of the students you want to target.
What are their presenting difficulties?**

ITS Integrated Treatment Services
Developmental Therapy

3



4

Benefits of Colourful Semantics:

- Improves language skills - using longer sentences
- Expands vocabulary
- Introduces adjectives, prepositions, adverbs
- Helps answer 'wh' questions
- Can be transferred to written sentences
- Can help reading comprehension
- Can help with storytelling (spoken and written)
- Uses different modalities to learn about making sentences.

ITS Integrated Treatment Services Development Therapy

5

What is it?

- Colourful semantics is an approach created by Alison Bryan. It is aimed at helping children to develop their grammar but it is rooted in the meaning of words (semantics). Colourful semantics reassembles sentences by cutting them up into their thematic roles and then colour codes them.

- 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

ITS Integrated Treatment Services Development Therapy

6

Semantics???????

[si-man-tiks]

noun (used with a singular verb)

1. Linguistics

- 1. the study of meaning.
- 2. the study of linguistic development by classifying and examining changes in meaning and form.
- 2. Also called significs, the branch of semiotics dealing with the relations between signs and what they denote.
- 3. The meaning, or an interpretation of the meaning, of a word, sign, sentence, etc.: *Let's not argue about semantics.*



7

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



8

Common Responses



9

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]



10

What's the difference?

Colourful semantics

- › Uses colours only to code the verb and its arguments
- › Works well with KS 1 and KS2 children. Comprehensive enough for some higher sentence-level language difficulties

Shape coding

- › Uses shapes to code the verb and argument
- › Also uses colour to code surface grammar (nouns/adjectives/prepositions) **Some colours are different**
- › Also codes surface verb grammar (tense/number) with lines and arrows under the verb phrase
- › Works well for KS2 & KS3. Experience has shown that many younger children relate to colour better than shapes



11

Theory

- Verb Semantics
- How we move from having an idea to saying a sentence.
- References:
 - Verb semantics/ Functional argument structure
 - Garrett 1980, Black and Chiat (2003)
 - Non-argument structure
 - Pinker (1989), Black and Chiat (2003)



12

'Verb Semantics'

- Verbs are the core of the sentence.
- Verbs are not stored in our memories in isolation.
- All verbs are linked to 'participants' that need to be there for the sentence to make sense.

➡ 'who' does 'what' to 'whom'.

* Linguists call these participants 'arguments'.



13

'Verb Semantics'

- Some 'participants' are essential, others are optional
- Sentences can contain other information in the sentence that is not linked to the verb, but can still add meaning. E.g. when, how.



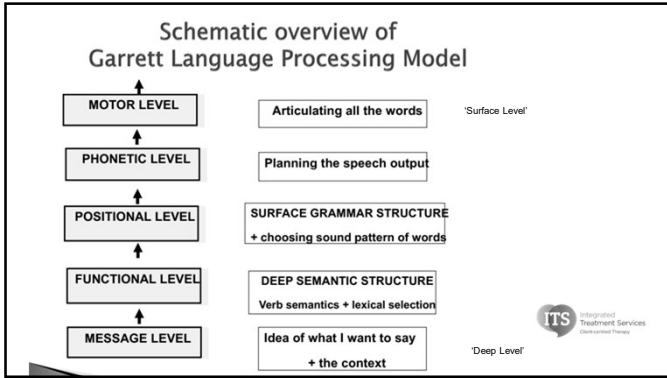
14

Which verbs fit ?

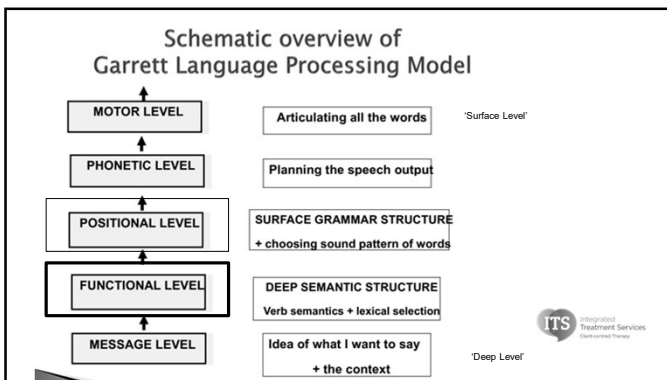
- › The child _____ the flowers
squashes, puts, falls
- › The cat _____
knocks, sleeps, kills
- › Our friends will _____
congratulate, find, win
- › You should _____ me a ticket
send, put, pay



15



16



17

Processes


- Lexical (vocabulary) selection
- Creation of verb semantics [argument structure]
- Assigning the content to the structure.

ITS
Integrated
Treatment Services
Developmental Therapy

18

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

- › Lexical items
verb = *put* nouns = *Ben, apple, bowl*
- › Argument structure/verb semantics for 'put'
Verb: WHO, WHAT, WHERE
- › Assignment
Verb: WHO, WHAT, WHERE
[put]: [Ben] [apple] [bowl]




19

Positional Level

- Final word order and grammatical form is planned and selected.
- 'Other information' [Non argument] in sentences that are not directly related to the verb.
- Still adds to semantic content of the sentence. E.g. adjectives, adverbs of time & manner.



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



20

Types of Verbs

- run
- gave
- carried
- hop
- smile

21

Scope of Colourful semantics

- Supports understanding and creating the underlying 'verb semantics structure'
- Supports assigning the right words to the right 'slots'
- Supports normal language learning skills
e.g. slows speaker's speed and increases stress patterns (phonological bootstrapping)



22

What is the Basic coding?

- Every verb has **essential word meanings** linked with them.
- These are the basic words which can be coded in **colour** or occasionally a shape
- 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!



23

Verbs are the core of the sentence

Principle One :- Find the verb, ask the questions

- › 'Questions' can help us get to the 'deep structure' of that verb
[i.e. verb semantics/ argument structure]
- › Your questions should give an answer that makes sense e.g. *The girl ate a biscuit*

WHAT did she eat → a biscuit
WHERE did she eat? → a biscuit????



24

How does this relate to our children???

- Are 'WH' questions important?
- When should children be able to answer these?



25

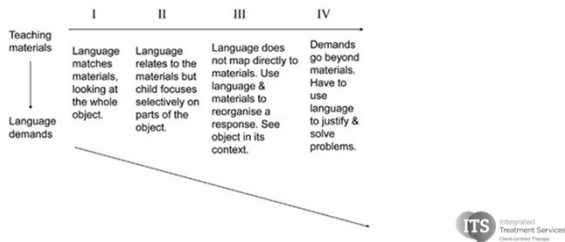
Typical development

- All children develop at different rates
- Typically children will be able to use level 4 by age 5/6
- Autistic children - spiky profile
- Developmental delay
- Generalisation



26

Blank level language development



27

Blank Level One

- Naming object
- Finding things by name
- Matching



28

Blank Level 2

- Features of an object, characteristics, function
- 'Wh' questions Who, doing What, Where, (not "Why")
- Sorting
- Same vs different
- Things together e.g. knife and



29

Blank Level 3

- Re-telling events
- Predictions – what next?
 - What others may say?
- Negatives
- Feelings
- Follow/ give a set of instructions



30

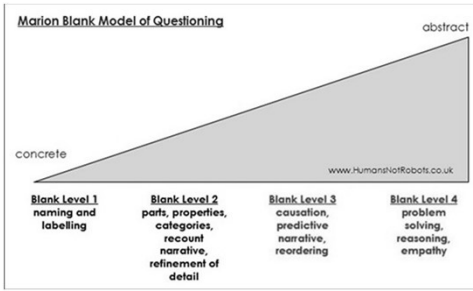
Blank Level 4

- "why" questions
- Problem solving
- Justifications



31

What level are your children at?



32

Let's have a look at the colour coding.

- **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



33

Key to Basic Coding→ *Can you remember the principles?*

Principle ONE :-

“Find the verb and ask the questions”

Principle TWO :-

“ALL the words that answer the question are the same colour”



34



People e.g. man, woman, girl, boy, baby, family members – e.g. Uncle Peter)

Occupations e.g. Speech Therapist, teacher, doctor, dentist

Characters e.g. The Gruffalo, Peppa Pig, Peter Rabbit (personifications)

NOT animals!!



35



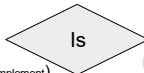
Doing what? -Verbs

• **Can include:**


- 'stand alone' verbs e.g. run, sit
- verbs associated with an object e.g. wash (car), brush (hair)
- different tenses (past, present, future)

• 'is' (copula)

(links the subject of a sentence to a subject complement)




36




With what or to what? Green words

Objects and animals:

The boy read the book
The cow ate the grass





37




Where? Blue words
e.g. on the car, in the cupboard, outside, at the park


Little blue words - prepositions.


38




Who to = pink = indirect objects
- e.g. The girl gave flowers to her mother.



When = brown
- e.g. yesterday, last week, at the weekend, tomorrow, next, after that










39

 What like? Adjective or concept

Can include:






- Feelings e.g. angry, scared, hungry
- Physical attributes e.g. old, tall, pretty and colours.


 Alfie  polished  the dirty  table  in 




40

Adjectives – describing words

look like?  sound like?  feel like?  taste like?  smell like? 


feel like? 








41


Basic coding – colours

| Question word | Colour coding | Example |
|---------------|---------------|--|
| (What) doing? | Yellow | Ben is giving the biscuit to the dog |
| Who? | Orange | Ben is giving the biscuit to the dog |
| What? | Green | Ben is giving the biscuit to the dog |
| Where? | Blue | Ben is putting the biscuit in the bowl |
| To Who(m)? | Pink | Ben is giving the biscuit to the dog |



42

| Other information | Question | Colour/shape |
|-------------------|--------------------|--|
| Adjective/concept | What like |  |
| Adverb (time) | when | Brown |
| Adverb (manner) | How | Black |
| Cause and effect | why | Purple arrow  |
| Sentence joining | Joining up words | Purple rectangle  |
| Auxiliary verbs | Little doing words | Yellow +  |
| Possessives | Whose? |  |

 ITS
Integrated Treatment Services
Development Therapy

43

Possessives – whose?

my/mine

your/s

their/s

her/s

his


our/s

Claire Shortland ITS CS 2021

44

Full 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

 ITS
Integrated Treatment Services
Development Therapy

45

We do NOT code everything!

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



46

Let's try these examples

1. Dad washed the car
2. Jump on the mat
3. The biscuit fell on the floor
4. She is happy
5. The car hit the tree
6. He is giving a sweet to the girl
7. Find my coat
8. The brick sank because it was heavy
9. He is looking under the car
10. Paint a big picture
11. The little girl is cutting the paper
12. We stopped because we were tired
13. He ate his pudding with a spoon
14. Yesterday i went to the shops



47

1. Dad washed the car
2. Jump on the mat
3. The biscuit fell on the floor
4. She is happy
5. The car hit the tree
6. He is giving a sweet to the girl
7. Find my coat



48

8. The brick sank because it was heavy. →

9. He is looking under the car.


10. Paint a big picture.

11. The (little) girl is cutting the paper

12. We stopped because we were tired. →



13. He ate his pudding with a spoon.

14. Yesterday I went to the shops.

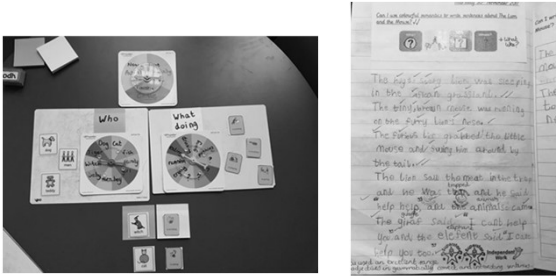



49

Examples of Colourful Semantics in the classroom

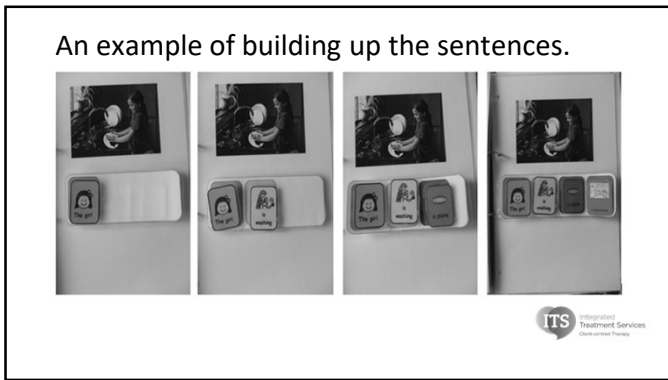
50

51



52



53

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

54

Information-Carrying Words.

- Devised by Knowles and Massidlover (1978) and underpins the Derbyshire Language Scheme.
- An ICW or key word is a word that carries meaning.
- Many words in a sentence are redundant.
- **If everyone is going out to play and the teacher holds up a child's coat and says, "Put your coat on" How many words (information-carrying words does the child need to understand?**



55

Activity one

Equipment: Scissors, pencil and rubber
 "pass me the scissors"

How many information carrying words?

Activity two

Equipment: Dolly, teddy, chair and table
 "put teddy on the chair"

How many information carrying words?

Activity three

Equipment: Brush and dolly
 "Brush dolly's hair"

How many information carrying words?



56

Activity four

Equipment: Big cat, little cat, big dog, little dog, car and boat
 "Put the big cat in the car"

How many information carrying words?

Activity five

Equipment: big dolly, small dolly, big teddy, small teddy
 "make the big dolly sleep"

How many information carrying words?

Activity six

Equipment: ball, jigsaw, book and car
 "Where's the ball?"

How many information carrying words?



57

Activity seven
 Equipment: Banana, apple, bag and basket
 "put the apple in the basket"


How many information carrying words?

Activity eight
 No equipment needed
 "Where's your nose?"

How many information carrying words?

Activity nine
 Equipment: pictures of snake, frog, swing and slide
 "put the snake under the swing"


How many information carrying words?



58

Activity Ten
 What equipment would be needed to make this instruction a 3-word information-carrying instruction?


'Give Lucy the small crayon'.



59

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*)



60

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)



61

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



62

Activity

- Have a look at the resources on your table. Working as a group, work out what sentences and colour codes can be achieved from the activities. How can the activity be extended to include additional information?



63

Full 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



64

Interventions.

- What school-based interventions are you using in school?
- What were the difficulties and positives encountered when setting up the intervention?



65


What do we need to consider?

- Curriculum-led or individual needs-led (targets in EHCP)
- Universal support v specialist intervention
- Nature of setting [mainstream v specialist provision]
- Level of SLT support on site



66


- Key Stage
- Communication-friendly classrooms status?
- Senior team engagement - top down v bottom up roll out
- School development plan
- Teachers' needs



67

What level of classroom application is appropriate to aim for?


SPECIALIST SETTING



68


Advantages of a specialist setting

- More uniform population...ish
- Higher percentage of pupils viewed by staff as benefitting from the approach
- Staff more skilled at multiple support strategies
- Specialist visual support strategies already in place across the setting :- signing, symbol use, PECS, picture support
- Symbol writing software



69



- Highly-differentiated curriculum
- Restricted language input is more acceptable [as opposed to focus on expansion as priority]
- Overlearning/frameworks - reusable resources
- More inter-professional joint planning
- Probably higher SLT profile and presence
- Easier to integrate SLT programme into the curriculum ?









70


Story telling

- Colourful semantics works really well to support story telling / narrative work
- Look through the books provided and see how colourful semantics can work within the book to support story telling/narrative work

71



| | | |
|---|---|---|
|  |  |  |
|  |  |  |



72


Narrative resources

Bookmarks to support reading.






73

Telling news




- Very difficult for non-verbal children
- How can this be encouraged?
- How can colourful semantics support this?
- Work through the sentences colour coding them.
- How can the symbols best be arranged for this activity?

74


Supporting written lesson materials

- Picture description
- Write about what they have done
- Differentiated levels
 - Symbols and sentence strip
 - Cut the words and stick on coloured blocks
 - Coloured lines on the page.



75

Special events 


 **Christmas** <https://www.integratedtreatmentservices.co.uk/colourful-semantic-christmas-resources-pack/>

 **Halloween** <https://www.integratedtreatmentservices.co.uk/colourful-semantic-primary-school-resources/>


 **bonfire night** <https://www.integratedtreatmentservices.co.uk/colourful-semantic-pre-school-resources/>




76

 **special event**


<http://integratedtreatmentservices.co.uk/wp-content/uploads/2014/05/Colourful-semantic-easter-egg-hunt-1.pdf>

 **Easter**





What other special events could we make colourful semantics cards for?












77


P.E 

- P.E is a good subject area for colourful semantics as it is people doing actions.
 - Take pictures of the children doing sports and then describe them
 - Use the symbols as instructions for the children to follow


 Jack  jump  sun  the ball

 Helen  kick  the ball  to Sarah






 today  we  danced  in  the gym










78


Life skills. 

- Cooking – what did you make and how did you make it.







- Shopping - where did you go and what did you buy?


      



79

- Home management – who, did what, where?


     




80

Structured times within the day

- Sensory circuits





81

Snack time.

- Don't forget you can also use the pictures to give instructions as well as describe what is happening.

Paul give the grapes to Katie

Katie is eating the grapes

82

Aiding recall of new information

- Who was he? Churchill
- When did he live? 1874-1965
- What did he do? Led country. Smoked cigars
- What was his job? Prime Minister
- Where was his office? 10, Downing Street
- What was he like? Short, balding, clever, good communicator

83

Plan for my day

We are going ...

doing what

Will be there who?


We are going ...

Adapted from Worescter Speech and Language Therapy

84

Topic work – Christmas


Jolly Christmas Postman



Vocabulary maps

The Christmas Story

Writing Santa letters




85


What to use.....

Sentence strips


Boxes




Buttons/big mack switches




Coloured cubes



Boardmaker online







86

Let's work it through on Boardmaker online

How do we change the symbols for the different colours?
 How do I search for pictures not in the symbol bank?
 How can I upload children's photos into the media search?
 How can I make it interactive?





87

Where can I find resources ?

- Integrated Treatment Services
<https://www.integratedtreatmentservices.co.uk/>
- Blacksheep press
<https://www.blacksheepress.co.uk/>
- Twinkl
<https://www.twinkl.co.uk/resource/t-s-1653-make-a-sentence-who-what-doing-where>



88

USEFUL LINKS

An article on [Colourful Semantics](#)

[Downloadable resources](#) for Colourful Semantics and many others.

Examples: [Pre School](#), [Primary School](#), [Secondary School](#), [Christmas](#), [Language Levels](#)

Latest [news articles](#) written by members of our team and key experts in the fields of ASD, Education and more.

Further information on utilising our [Therapy Services](#) in your setting.



89