An introduction to Colourful Semantics

DEVISED BY
ALISON BRYAN
[with shapes by Susan Ebbels]

Contact details

Email: alison.colourfulsemantics@gmail.com

Twitter: @alisoncolourfu1

Websites:
www.integratedtreatmentservices.co.uk

www.londonspeechtherapy.co.uk

Colourful Semantics

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

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

For Speech Pathologists, Teachers and other education professionals

It all started with Gordon

- Gordon started at Speech and Language base attached to mainstream school in Autumn 1991 [age 5]
- Started as SLT at base in Jan 1992
- Gordon and Eirian Jones' stroke patient BB (1986)!

BB – Eirian Jones 1986

- Stroke patient
- Preoccupied with grammar structure [the, ing etc]
- ? Related to previous traditional SLT programme
- Hypothesis → difficulty at 'Functional Level' of the Garrett model
- New therapy developed with semantic focus

Gordon 1992

- OK at social phrases
- Best sentences in simple picture description
- **Action Picture Test overly focused on using 'the' 'is' 'ing' and struggled to find the other words**
- Previous programme SVO picture description + the /is/ ing

Verb problems

- Over reliance on ‘have’

‘sausages have breakfast’

Silly picture of someone pouring sausages out of a cereal box

‘The dog is have….dog…..have dog’s biscuits…and then have eat them’

A boy pouring biscuits into the dog’s bowl & the dog eats them

‘Man have carrot on hand’

Man holding a carrot

Verb problems

- Omitted

‘Lady upside-down pencil’

Lady writing with pencil wrong way round

‘Kettle …um…tee-shirt’

Lady ironing with a kettle

- Non words

***‘kow* baby up the post office’**

Woman lifting a child up so he can post a letter in the letter box

Word finding and word order

WORD ORDER

- Open window Mummy

WORD FINDING [verbs and nouns]

- ‘**Riding** up the ladder’ for ‘climbing’
- ‘Girl **jumper** over the gate’
- ‘ Hanger in the ……..’

Without pictures !

- ++ word order and word finding problems

'News me like'

- Single words rather than sentences

'tissue'

Where did you put your book? →

'Um…um…um.. book bag

- Sometimes unable to even start a sentence → anxious silence at 'News time'

'……Burger King'

Bus Story [Renfrew]

Age = 5:08

- **Information content** = 7
  → below mean for 3 years

- **Average of 5 longest sentences** = 3.5 words
  → below mean for 3 years

Gordon and BB

- Similar profiles
- So…try similar therapy !
- Focus on sentence semantics not grammar

→ **COLOURFUL SEMANTICS**

Bus Story – pre & post testing

	Pre programme Age 5:08	6 months later Age 6:03
Information content	**Score= 7** **Age Equivalent = Below mean for 3 years**	**Score = 22** **Age Equivalent = 4:00 years**
Average of 5 longest sentences	**Score = 3.5** Age Equivalent = Below mean for 3 years	**Score = 6** Age Equivalent = Below mean for 3 years

Action Picture Test – Information Score pre & post testing

	Pre programme Age 5:10	5 months later Age 6:03
Information Score	Score= 20 Age Equivalent = 4:06	Score = 31 Age Equivalent = 5:06-5:11 years

Pre	Post
'Kow' baby up the post office	She..um…lifting the baby up….put the letter in…in the post office

‘News’ after 4-5 weeks

“I played with my friend at his house”

“I watched TV”

‘News’ after 8 weeks

“ I have my Easter Egg home” [Written]

“I see Hook…Hook is a baddie…I see pirate ship…my tooth hurts”

“I stayed at home…watched tele all day long”

‘News’ after 3 months

“My sister go to my carnival on Sunday…My Nanny coming over on Sunday have dinner in the dining room…Claire holding the bucket…money in it…my Nanny go home on Sunday..at night”

Conference and Publication

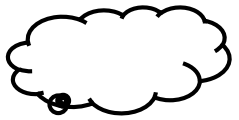
- Conference:-Making New Connections 1996

- Language Disorders in Children and Adults: Psycholinguistic Approaches to Therapy 1997

Conference and Publication

- Conference:-Making New Connections 1996
- Language Disorders in Children and Adults: Psycholinguistic Approaches to Therapy 1997
- **Warning** → Colour Changes …WHY?

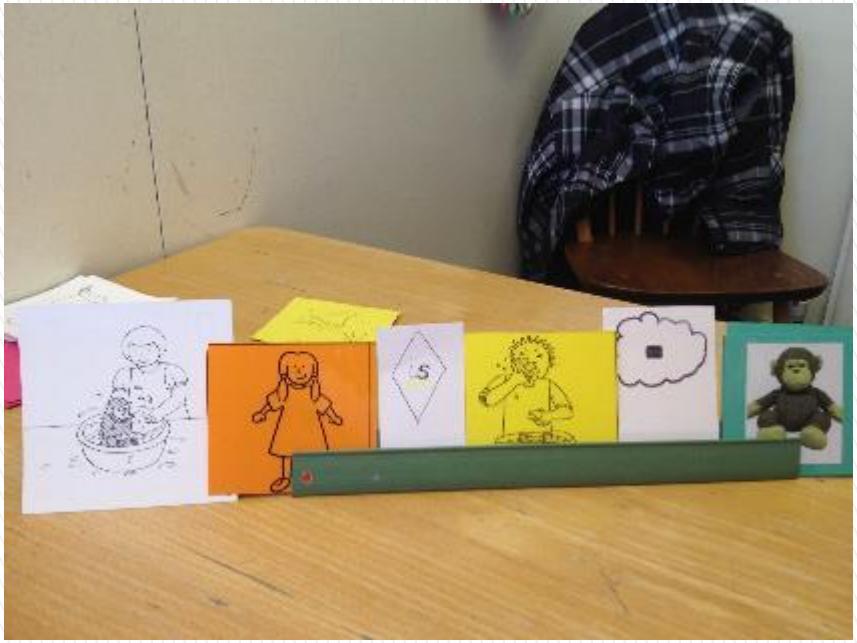
Colours updated and coding extended

Question Word	Original Coding	Updated Coding
(What) **Doing** ?	yellow	yellow
Who ?	orange	orange
What ?	green	green
Where ?	red	blue
Who **to** ?	pink	pink
What **like**?	blue	

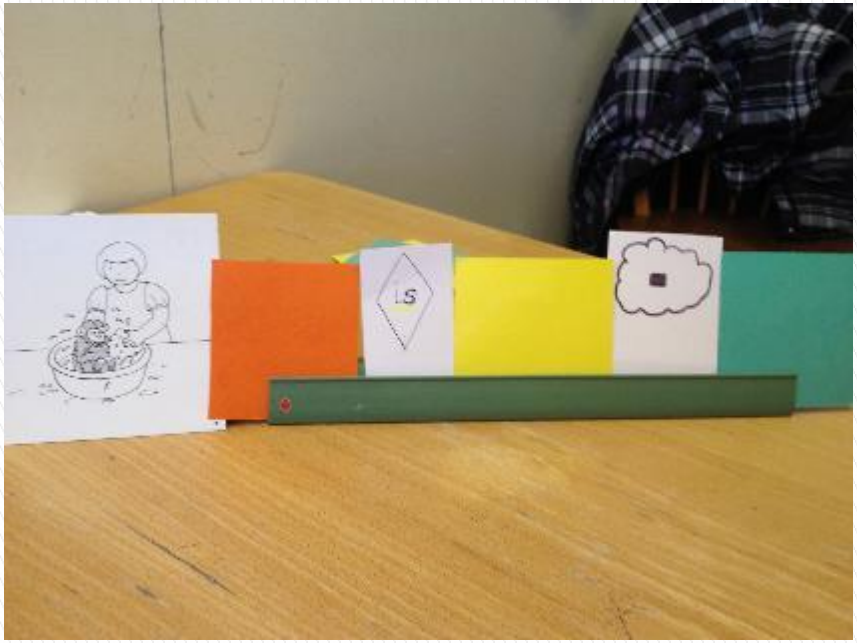
WHO DOING WHAT

Complete coding

4ICW Colours +/- symbols



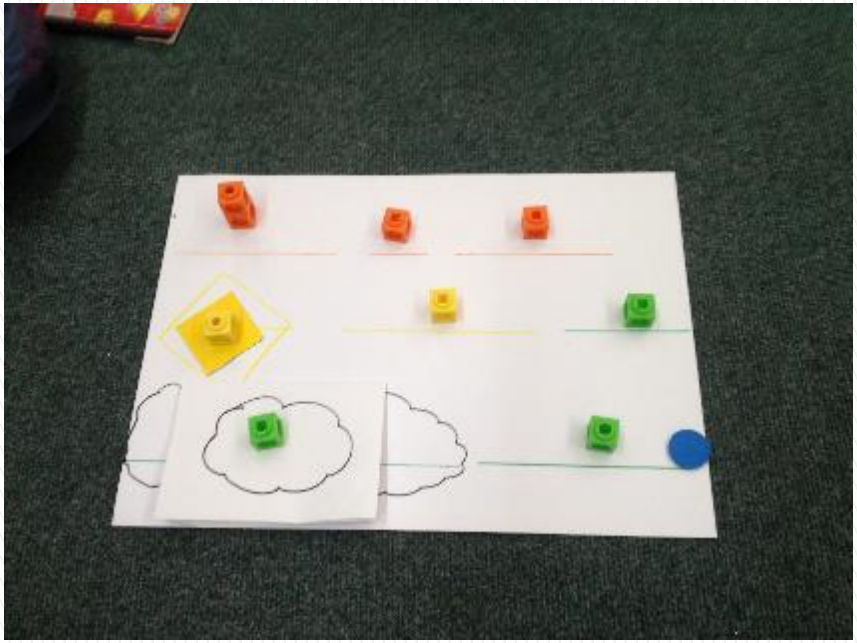
Colours PLUS symbols



Colours MINUS key symbols

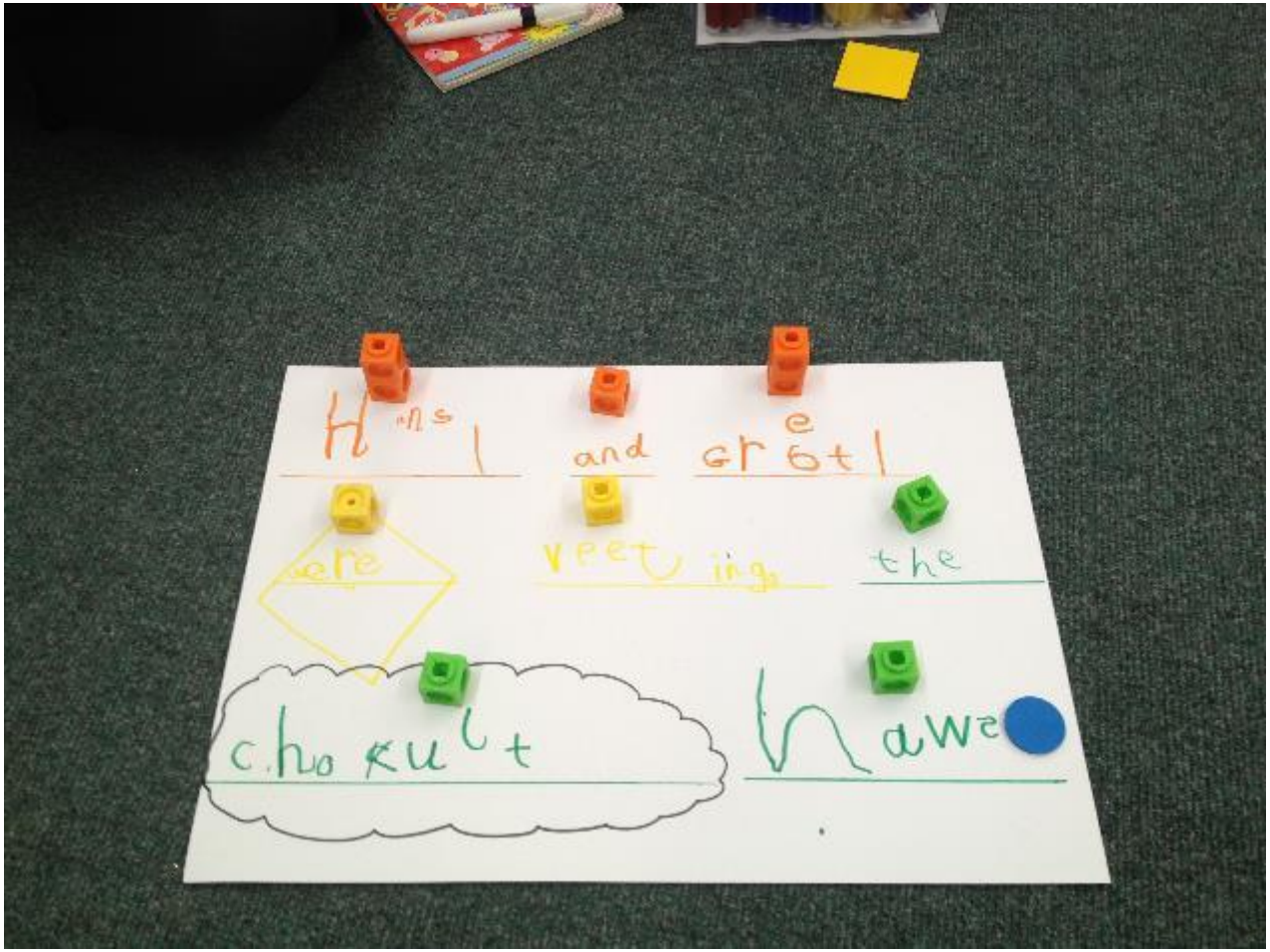
Coding and Literacy : shared writing task

Planning the sentence

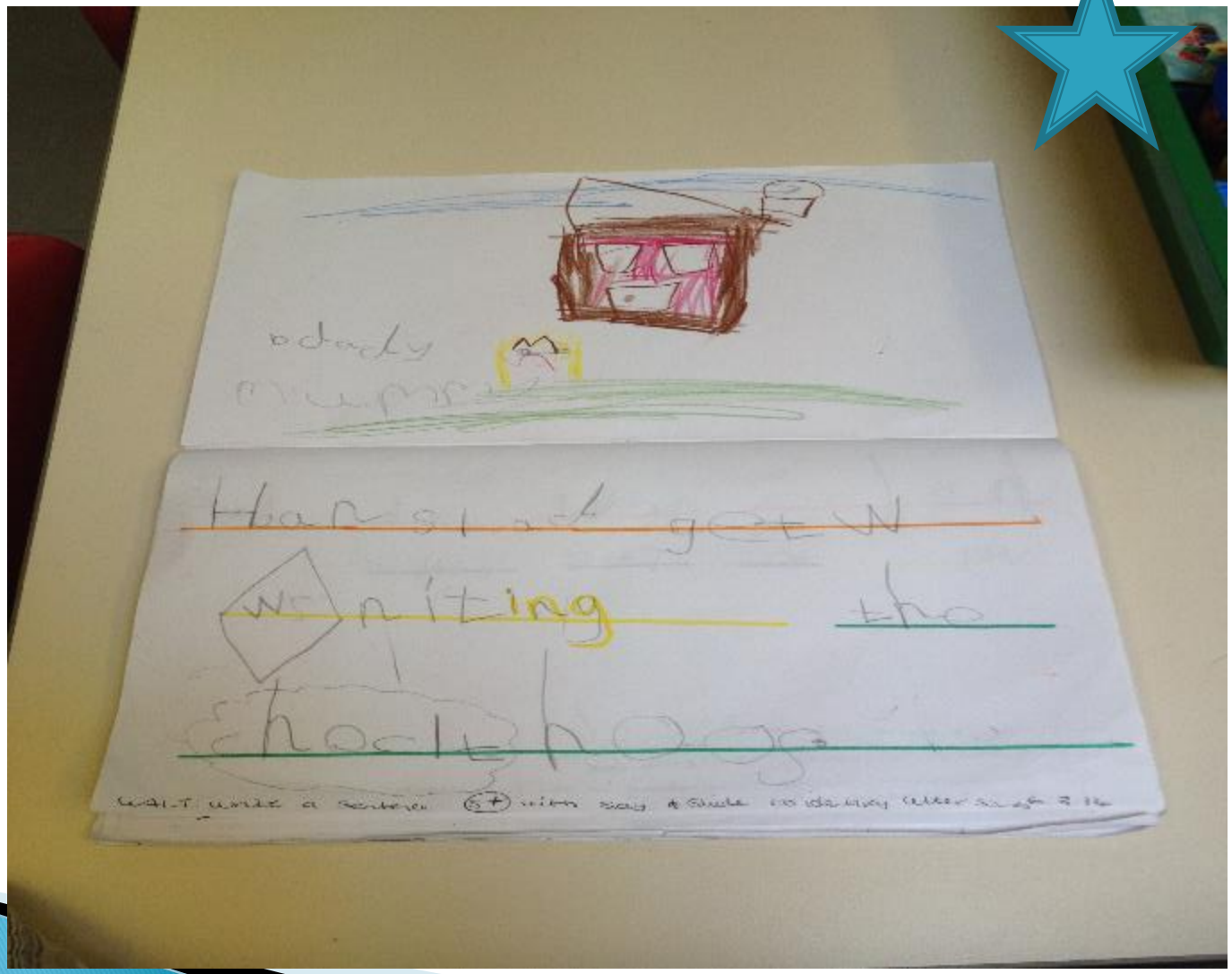


Creating the sentence

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

Colourful Semantics –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.
- Develops a shared ‘vocabulary’ to talk about language

What is it?

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.

Where does coding come from?

- 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 core meaning content of the sentence does not change

Consider these two sentences

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

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

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

Now 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

We do NOT code everything !

- Tool not a straightjacket – 80% correct is OK!
- 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 my NHS service?

We 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
- Now have a fully integrated visual coding system in our service

Incorporating grammar shapes

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

Theory !

- One theory of how children normally acquire language
  [Bootstrapping Theory]

- Verb Semantics

- A model of how we move from having an idea to saying a sentence
  [Garrett model]

Theory references

- Bootstrapping
  Chiat (2000)

- Functional argument structure/verb semantics
  Garrett 1980, *Black & Chiat (2003)*

  |

- Non-argument structure
  Pinker (1989), Black & Chiat (2003)

Bootstrapping – *CHIAT [2000]*

- Children use familiar sentence structures to work out the meaning and function of a new VERB *[syntactic bootstrapping]*
- Children watch the event and hear the new VERB → work out how to use it in a sentence *[semantic bootstrapping]*
- Children use intonation/stress patterns to locate verbs/nouns *[phonological bootstrapping]*

‘Verb semantics’

- 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’***]

‘Verb semantics’

- Some ‘participants’ [arguments] are essential, others are optional

- Also other information in the sentence, not linked to the verb , but still add meaning
  [linguists call these ‘***non-arguments***’]

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

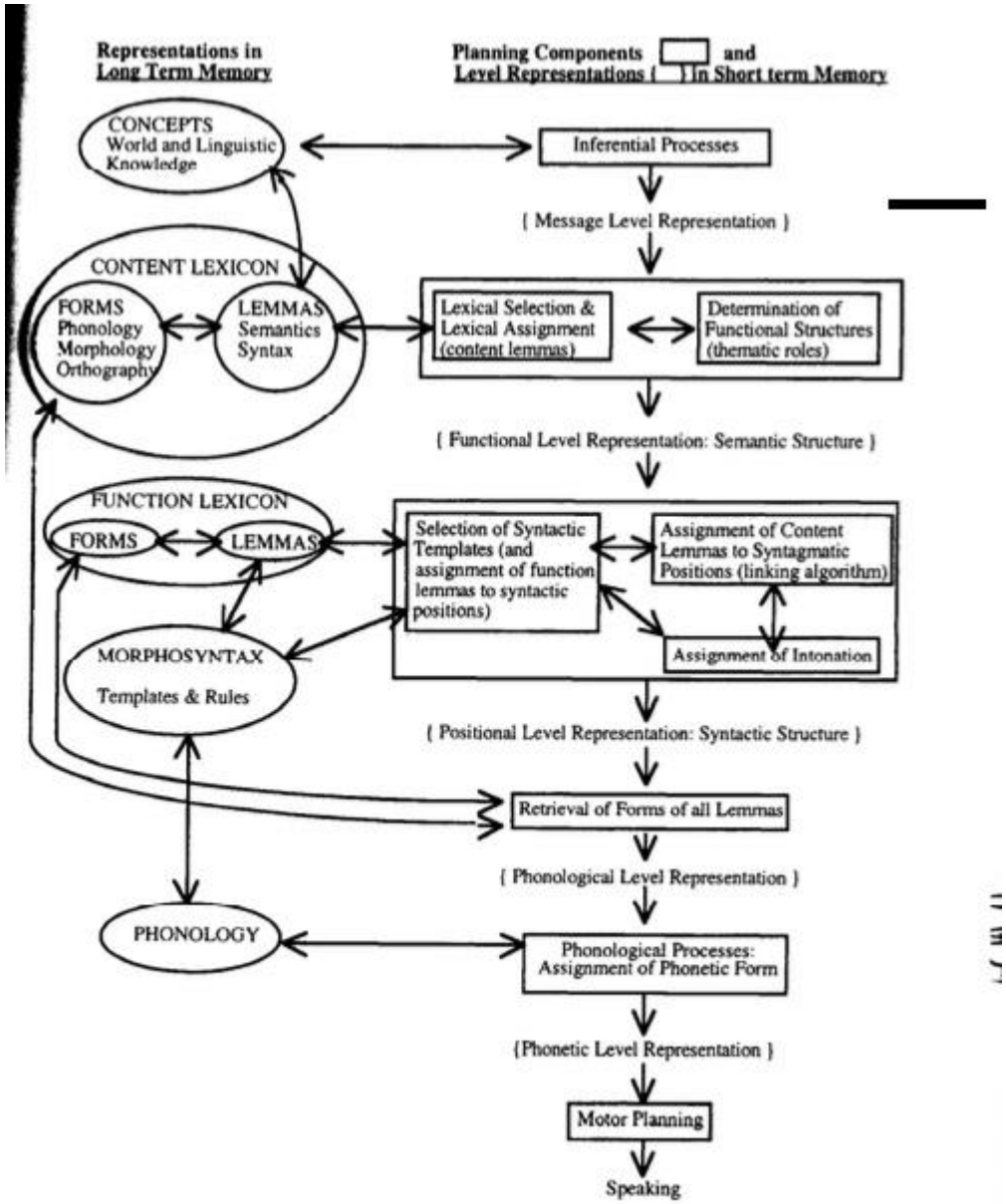
Kids Slips Jeri J Jaeger 2005

- Looked at children with normally developing language

- Noted errors which were 'slips of the tongue' and not part of developing language skills → '*Kids SOT's are similar to adults in most ways'*

- An interactive version of the Garrett Model is appropriate to use when looking at children's normal expressive language development

Representation & Processing Components Model [RPC]



Functional Level of Representation

- Main Level addressed by Colourful Semantics

- Planning of
  - **verb semantics**
    [functional argument structure]
  - **semantic content**

via 3 processes →

Processes [& potential problems]

1. Lexical selection

2. Creation of verb 'argument structure'

3. Assignment of the lexical items

"Who-does-what-to whom"

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]

Errors

Lexical selection error

"I cut dinner my fork"

Verb Semantics error

[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**

The problem with verbs ! [Chiat 200]

- Events focusing on verb are brief/transient

- Poor event perception or joint attention affects **identification & storage of verb semantics**

Positional level

- Planning frame created + intonation
- **Final 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"

Positional level → other sentence information

- 'Other information' [Non argument] in sentences that are not directly related to the verb/verb semantics

- 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"

Scope of Colourful Semantics

- Supports understanding and creating verb semantics structure
- Supports assigning the right words the right 'slots'
- Supports normal language learning skills
  - Using familiar structures to learn new verbs
  - Information from events
  - Slows speakers speed and increases stress patterns

Scope of Colourful Semantics

Colourful Semantics supports normal language acquisition skills

Scope of Colourful Semantics

- Also includes some support for 'other sentence information [non-argument]
- Can add in other visual support systems for 'morphology' support :- verb tenses, plurals
  e.g. Shape Coding lines and arrows

Colour coding

- Is it new?
- Language through reading
- **Grammatical structure** [*surface structure*]
  - v **verb semantics**

    [*deep structure*]

Gordon is drawing a picture in his book

v

Gordon is drawing a picture in his book

QUESTION WORDS
ARE THE KEY TO CODING

HOW DO WE CODE?

By linking each participant/other info with

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

For simple sentences →
Associating a target sentence structure with the resulting colour sequence.

Coding ‘other information’

- NOT related to the semantics of the verb

- Still use QUESTION WORDS

→ WHEN, HOW, WHY, What LIKE, WHOSE

[Non- Arguments]

Question words linked to 'other information'

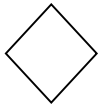
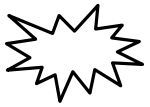
- ***'What look like'*** – gives descriptive information [e.g. conceptual language of size & colour]
- ***'What feel like'*** – gives descriptive information using conceptual language related to texture, solidity etc
- ***'How feel'*** – gives information about emotions

Question words linked to 'other information'

- *'When'* – gives information about time
- *'How'* – gives information about the manner of an action
- *'Why'* – gives causal information
- '*Whose'* – gives information on possessives

PLUS
Way to code surface grammar words
e.g. *verbs like 'is' 'were'*

Additional [non argument coding]

Other information	**Question**	**Colour/shape**
Adjective / concept *i.e description related to noun*	What like? *Cloud words*	
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? *Star words*	

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

1. Start with verb + 1 participant

   e.g. *WHO DOING* *(DLS = person + action)*

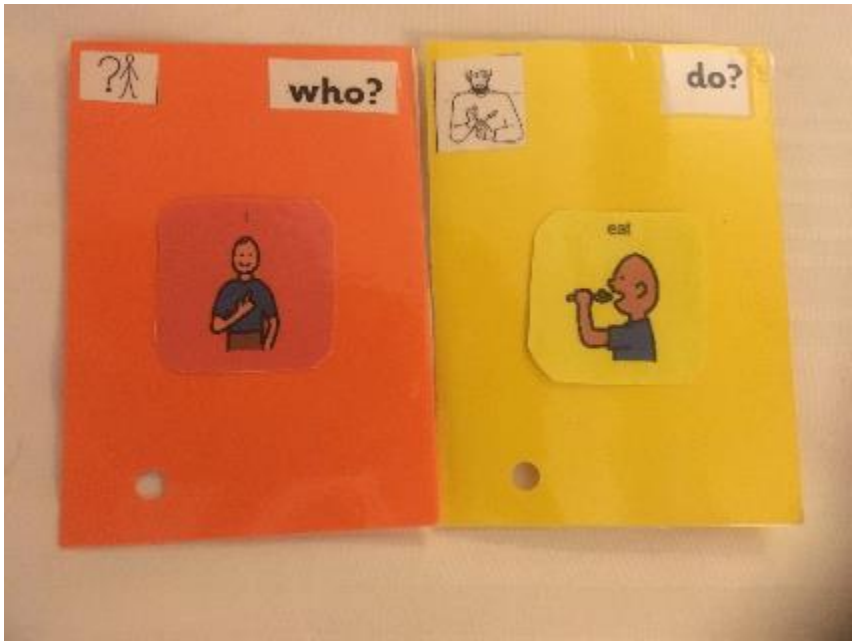
2. Increase variety of verbs/nouns

3. Add different participant

   DOING WHAT *DOING WHERE*

   action+ object *action+ place*

1 participant + verb



1 participant + verb

WHO + DOING

I + eat

→ Then increase variety of nouns & verbs

Different –1 participant + verb

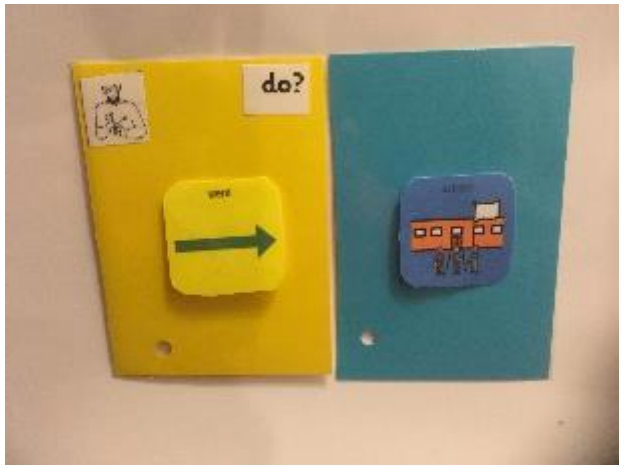
1 participant + verb

DOING + WHAT

Eating + carrot

DOING + WHERE

go + school



→ Then increase variety of nouns & verbs

2-4 ICW order of teaching for developing spoken sentences

4. Increase variety of verbs/nouns

5. Introduce verb +2 participants. Same vocab

e.g. *WHO DOING WHAT*

person + action + object

WHO DOING WHERE

person + action + place

2 participants + verb

WHO+DOING+WHAT

I + eat + a carrot

WHO+DOING+WHERE

I + go + to school

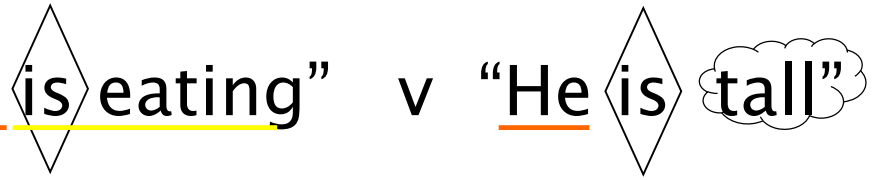
→ Then increase variety of nouns & verbs

2-4 ICW – order of teaching (cont'd)

6. Increase verb and noun variety

7. Contrast with 'What like?' [not verb related]

e.g. " He is eating" v "He is tall"



Contrast with 'WHAT LIKE' [not verb related]

WHO + Diamond + CLOUD

e.g. He + is + cold

WHO + DO + CLOUD

e.g. He + feels + happy

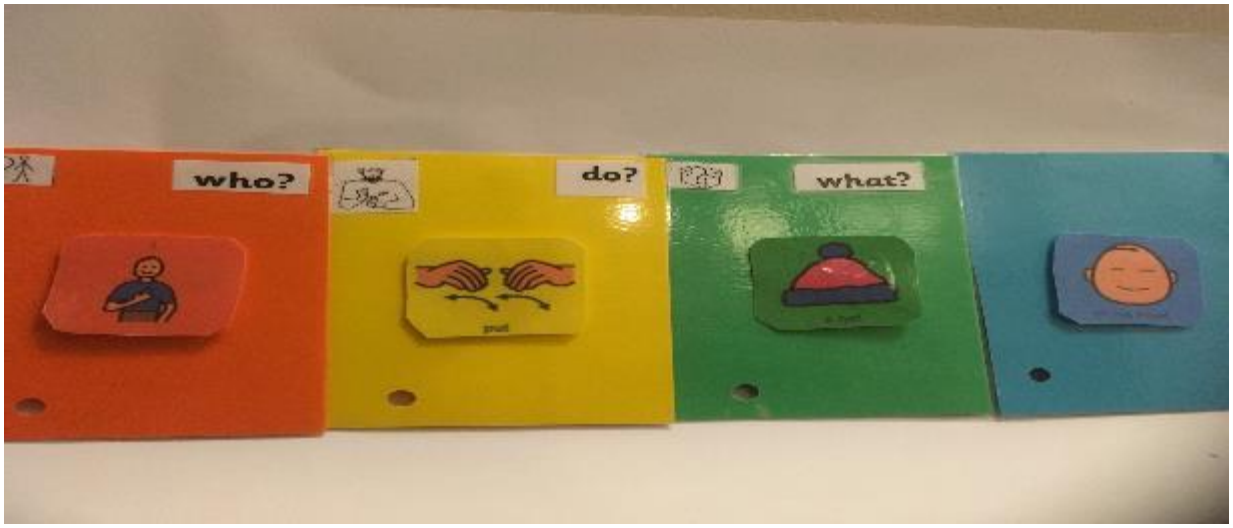
2-4 ICW – order of teaching (cont'd)

8. Introduce verb + 3 participants
   [e.g. give/show/put]

give/show *WHO DOING WHAT Who TO*
(DLS = transfer of object to person 4 ICW)

put *WHO DOING WHAT WHERE*
(DLS = movement of object to stated place 4 ICW)

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
- Please don't teach participants in isolation from verb !
- Higher level sentence coding will include more non-argument structures

WHO DOING WHAT WHERE train ☺

"The Mantra" – not just at the start

- **<u>Sign</u> the question word + <u>Ask</u> the question?**
  → "What is she **doing?**"
- **Establish the colour/shape link**
  "Yes, that's what she's *doing* [+sign].
  →***"Yellow words tell us what she is doing"***
- Continue to emphasise repeatedly throughout activities.
- Encourage child to 'complete the 'mantra' [word and sign]
  →***"Yellow words tell us what she is ……."***

Variables

- Represent with **symbols &/or words**
- 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

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

Principle ONE

Question words
ARE THE KEY TO CODING

Principle One :-

"Find the verb and ask the questions"

→ Then choose the colour/shape that goes with that question

Principle TWO

Question words
ARE THE KEY TO CODING

Principle two :-

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

Why are the questions important?

- Link to the "**WHO DOES WHAT TO WHOM**" of sentences
- Link to the related lexical items [key words]
- 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?

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, toys, action pics
- COMPREHENSION → moving toys/selecting pictures to symbol line
- EXPRESSION → select symbols for line for adult actions with toys or to describe action pictures

Plan – WHO, DOING, WHAT & WHERE

1. WHO + DOING
2. DOING +WHAT
3. Mixed 2 word level
4. 3 word level WHO + DOING + WHAT
5. Introduced WHERE → WHO + DOING + 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

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????

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 ! [Principle One]
- Code **ALL** those words in the linked colour/shape [Principle Two]

All the words should be coded

- **For the basic sentence there should be no words in the middle left uncoded**

…if there are you may need to try again ☺

My Mum sat on the sofa X

My Mum sat on the sofa √

Use the VERB to help you

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

WHO –for people and characters
so in '3 Little Pigs' the pigs would be WHO → orange

WHAT –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?

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"

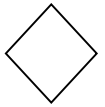
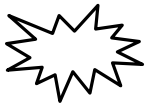
Basic colour coding – essential question words

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

Practising the current meaning mantra !!!

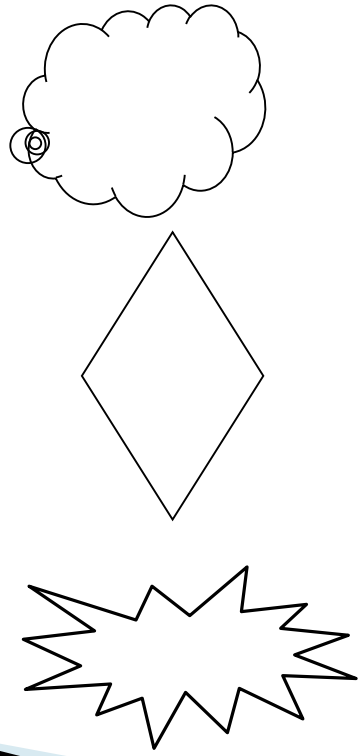
- Orange words tell us **WHO**
- Yellow words tell us what they are **DOING**
- Green words tell us **WHAT**
- Blue words tell us **WHERE**
- Pink words tell us who **TO**

Additional coding

Other information	Question	Colour/shape
Adjective / concept *i.e description related to noun*	What like? *Cloud words*	
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? *Star words*	

Colourful Semantics – non argument structure

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 [possessives] **[Alison's]**

Additional coding – CLOUD words

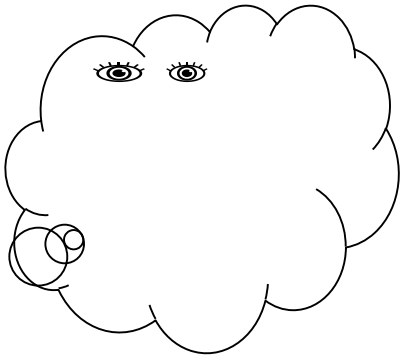
'What like? clouds' – 3 different sorts of questions

- 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]

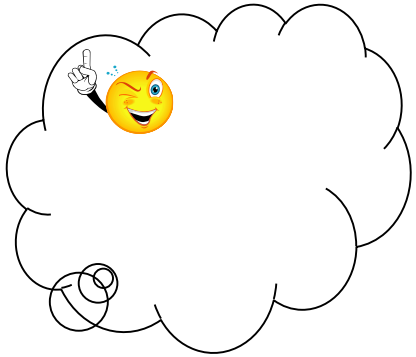
‘What like’ clouds

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

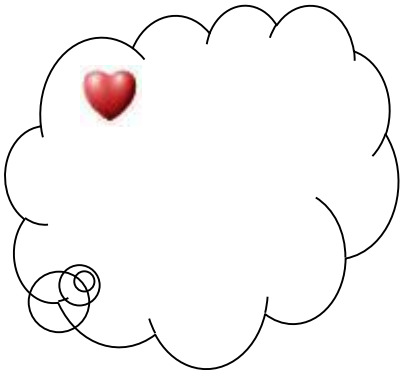
*What **looks like***



*What does it **feel like**?*



*How do **you** / the character **feel** ?*

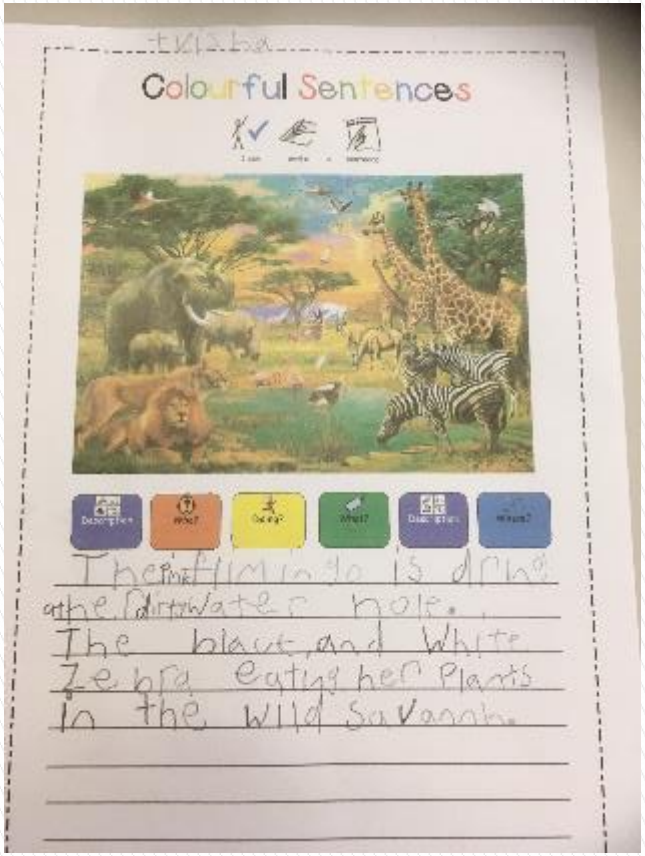


Australian Lang Dev Centre
Description words = purple

Modelling 1 x desc word

Written sentence

NEM Lang Dev Centre
Description words = purple



Modelling 2 x desc word

Written sentence

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

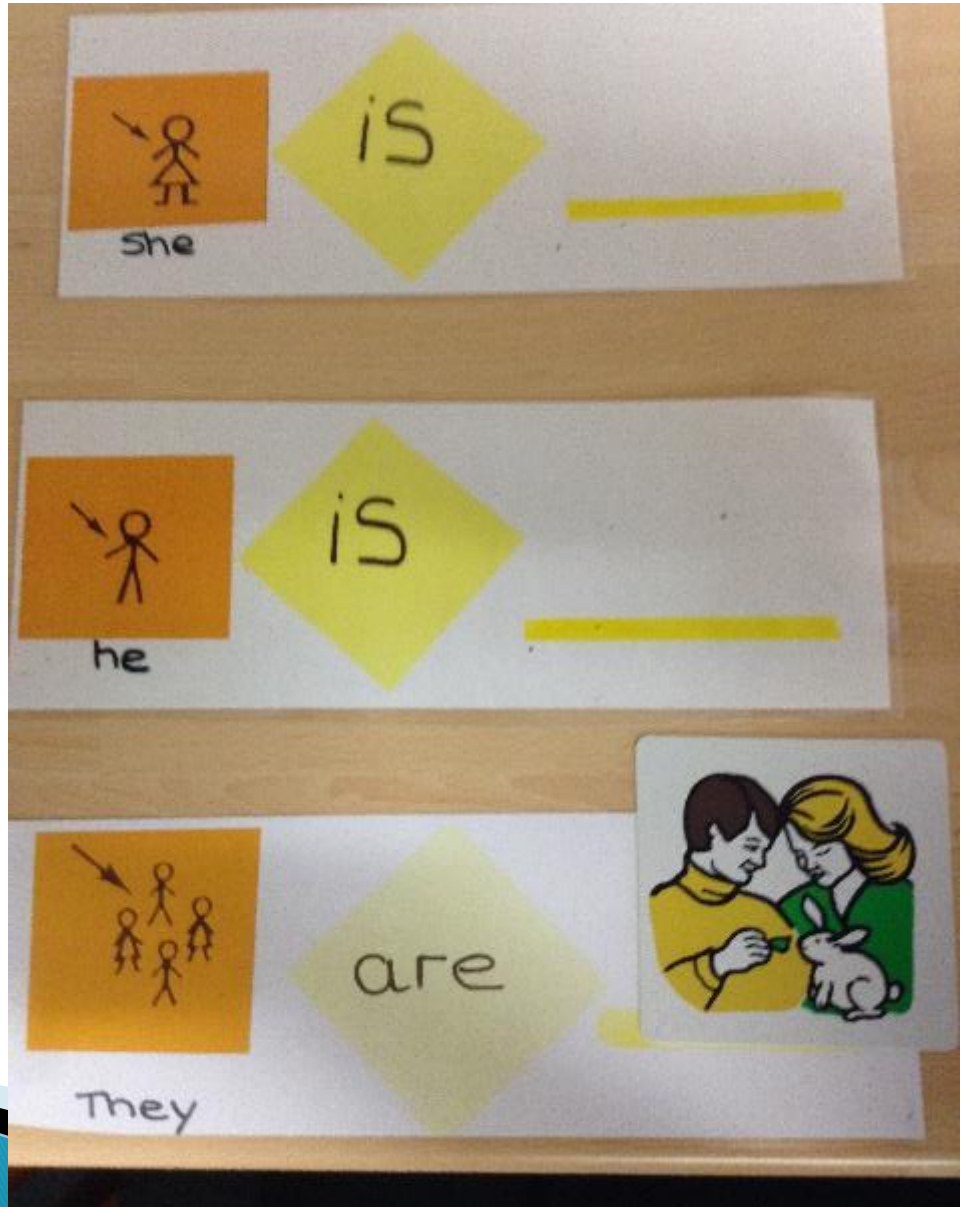
Sometime children leave out the ‘little verbs’ that stand on their own in a sentence too.

e.g. *The boys were in the playground*

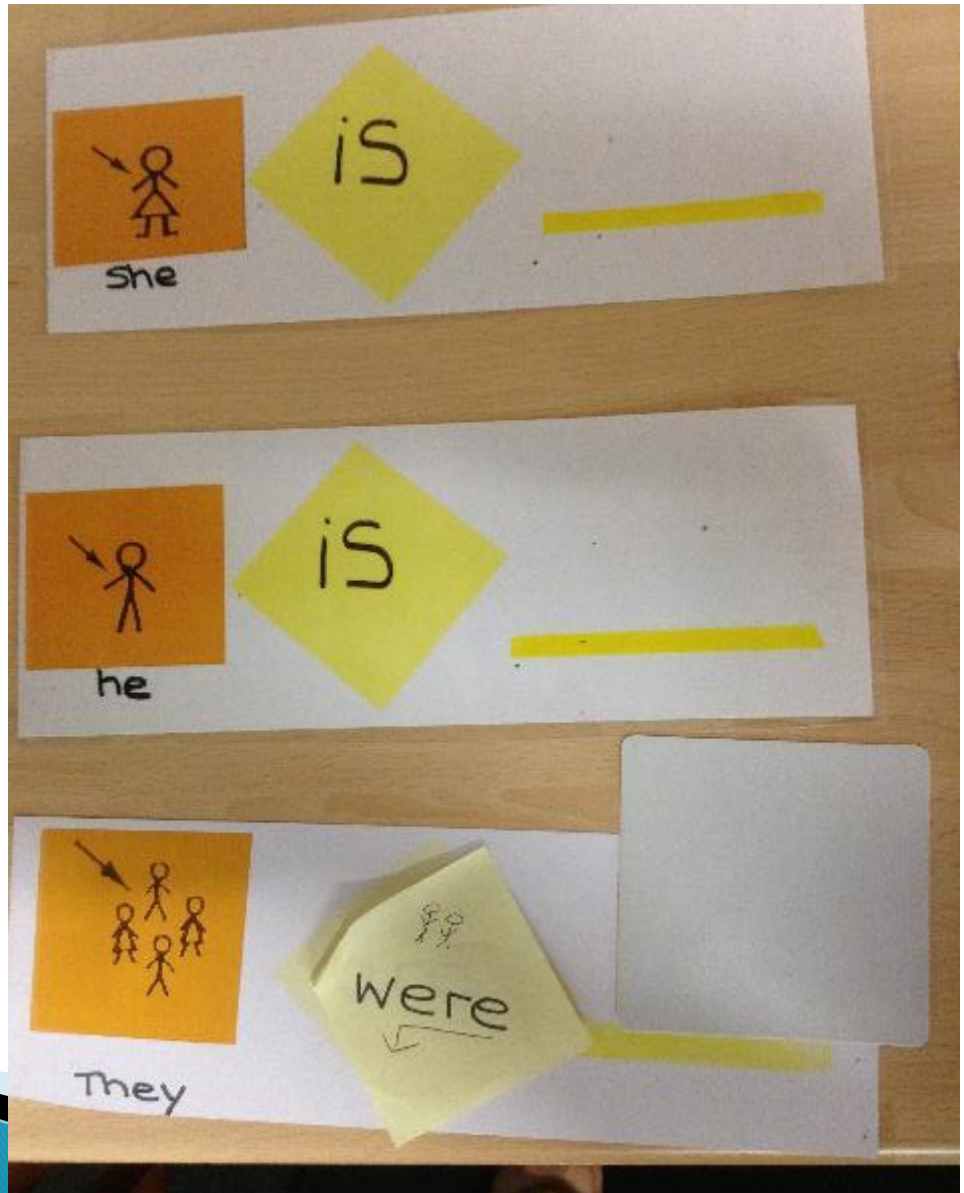
ALL verbs are still yellow

WHO + diamond + DOING

Working on auxiliary verbs

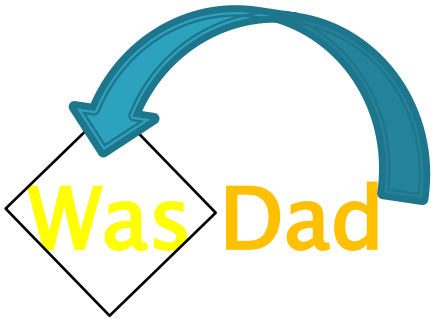


Working on auxiliary verbs



COLOUR CODING – Making Questions

Dad was putting his coat on the chair



Was Dad putting his coat on the chair ?

WHOSE

Asking Questions **Whose ?**

- 'Surface level' 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

DOING Star WHAT

Washing her hair

Possessives

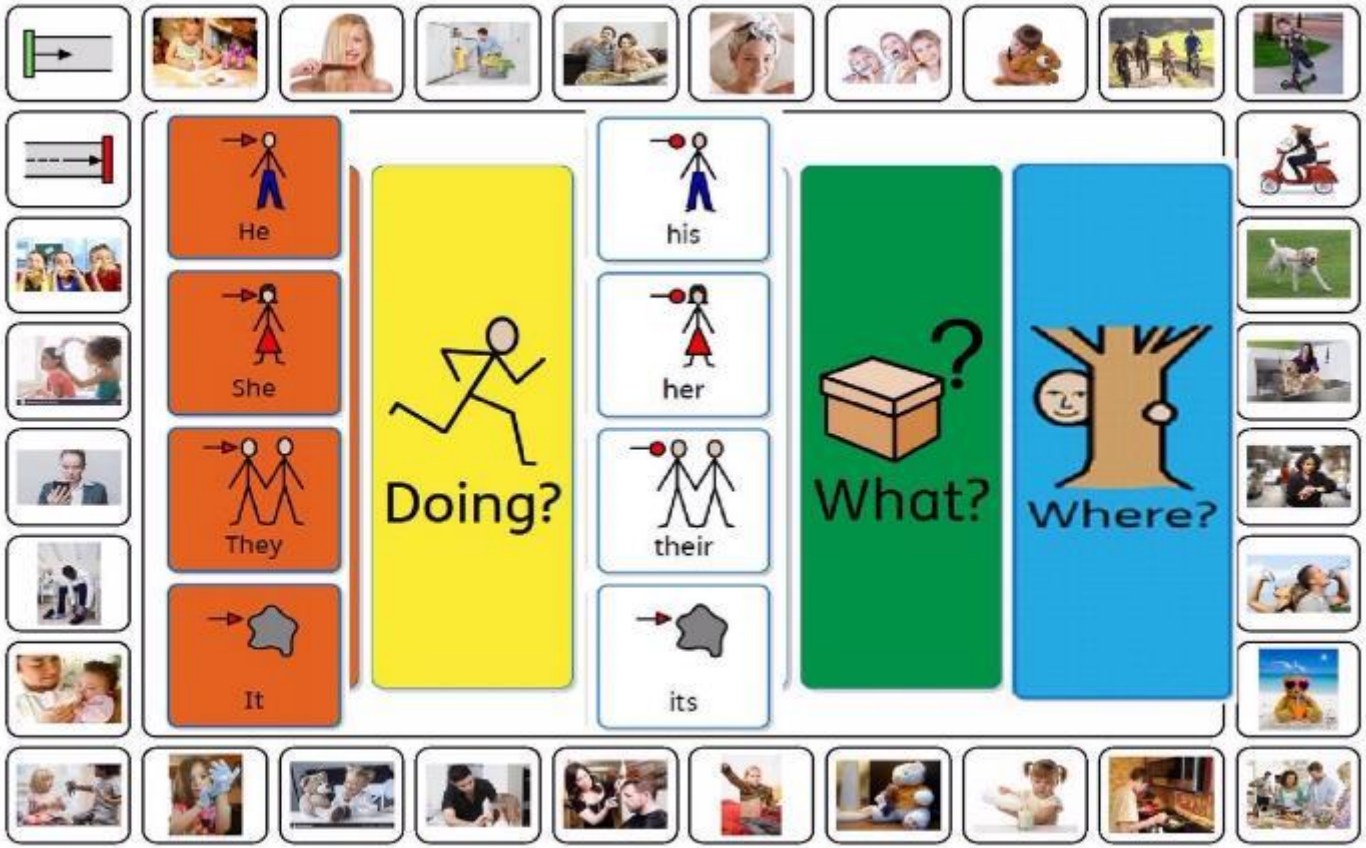
Eat teddy's apple

She put the book in her drawer

Mrs Bryan's hair is straight

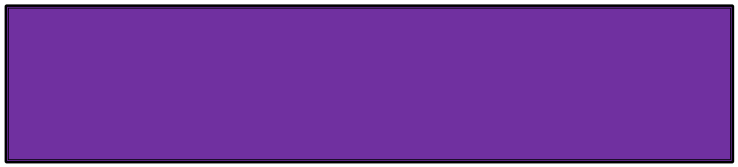
Give the sticker to Kiera's friend

Tower Hamlets Children's Therapies
WHO DOING WHAT WHERE + pronouns



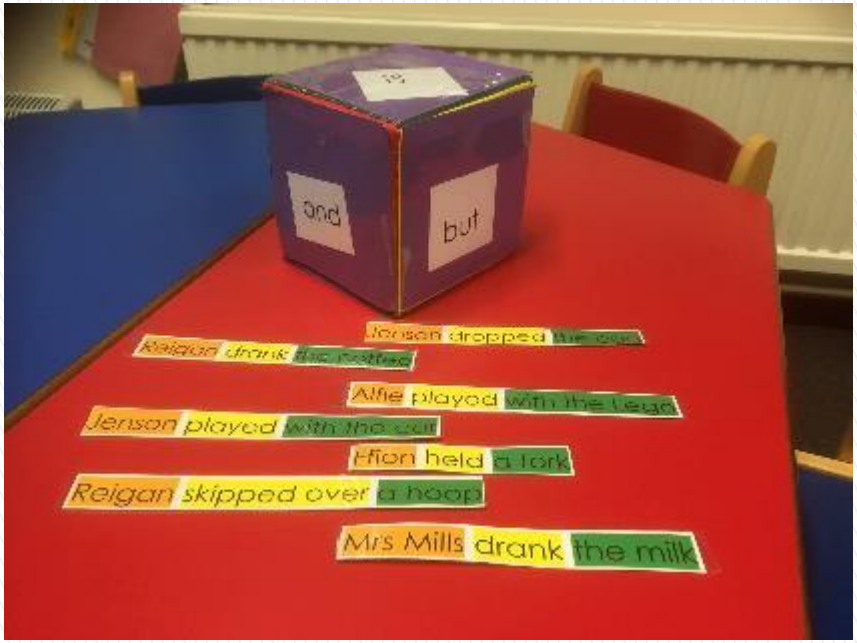
Purple joining up words

- Co-ordination



- Subordination

Purple Joining Up words



Roll a connective

Velcro sentences

Practising the full meaning mantra [current]

- 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**

PRACTICAL ACTIVITY

- Look at the sheet of sentences
- Work in pairs
- Use the Question Words to work out the colours and if relevant -shapes too

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**

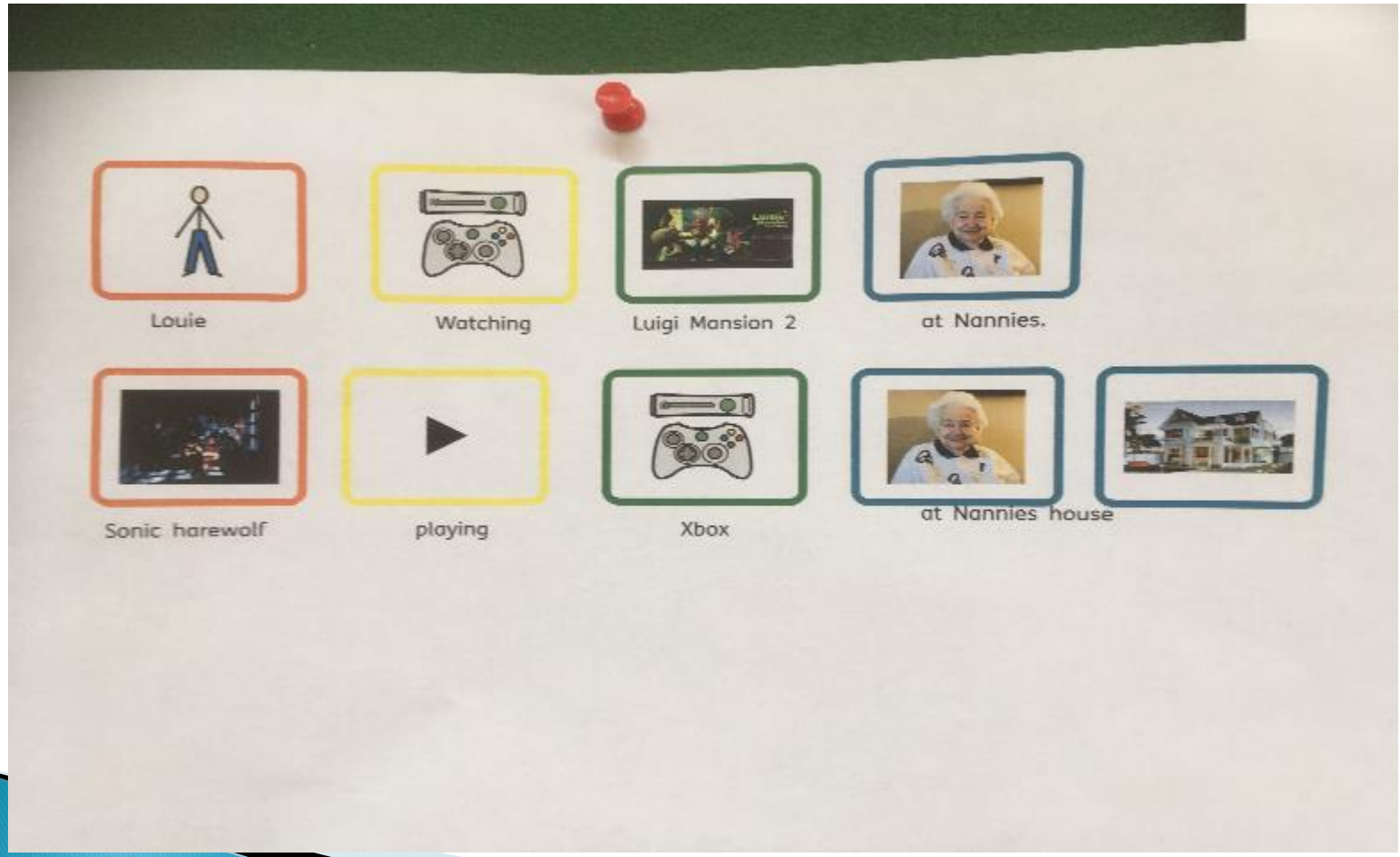
- Nursery/ Key stage 1 =symbols
  [e.g. Rebus, Makaton].

- Key stage 2 or literate child =written word

How to represent elements

- **colour cards** – select and arrange in right order to **match** colour line
- **white card** – arrange on colour lines
- **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
- Symbols programmes – **coloured outline**

Communication in print – writing sentences



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
- Just need to be able to ‘colour match’
- Focus on signs and colours/shapes as major support
- Therapy for difficulties with e.g.
  - ‘question word’ comprehension
  - Key Word based comprehension work
  - Written text comprehension

Levels of coding

BROAD LEVEL – Narrative/Fact learning

CORE LEVEL – Sentence
Understanding and expression

NARROW LEVEL – Vocabulary

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

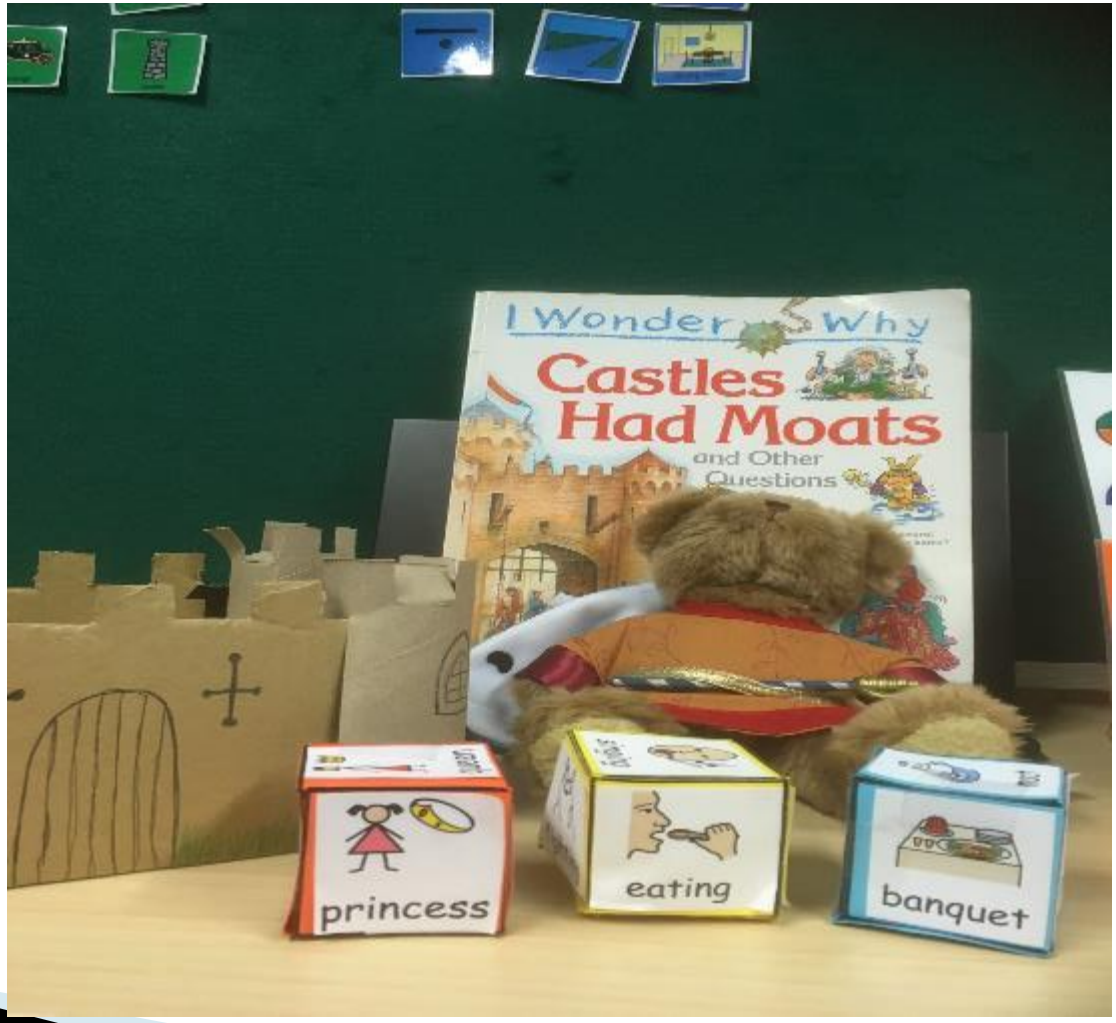
- To increase the range of sentence types
- To increase the complexity of sentence structures

Targeting specific sentence types

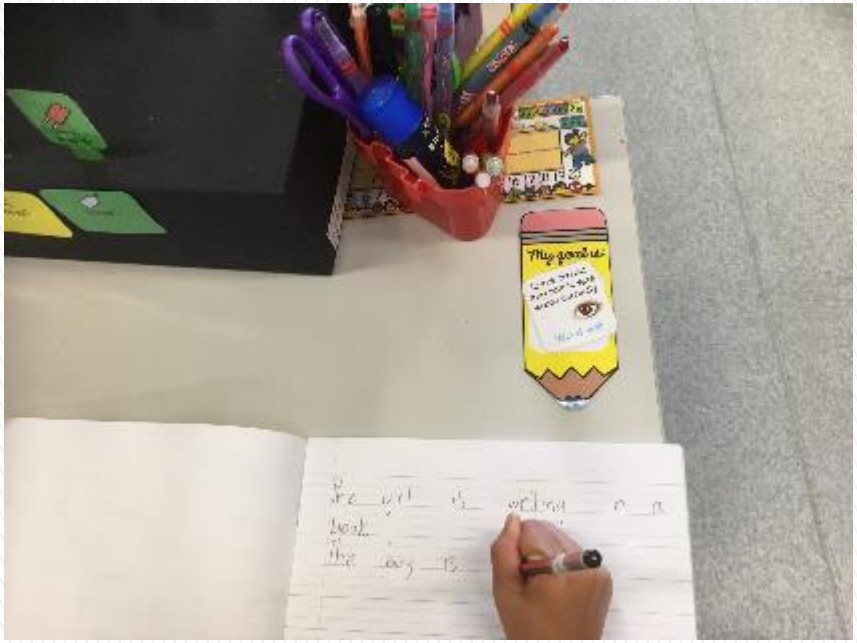
- We may choose a specific sentence type to work on
- We can describe this in terms of the Question words

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

Roll a sentence CASTLES



Independent sentence writing WHO DOING WHAT



Make a lollipop stick sentence

Write your sentence coding strip support

WHO DOING bags

Supporting Key word Level/ICW's

Can use colour coding to support

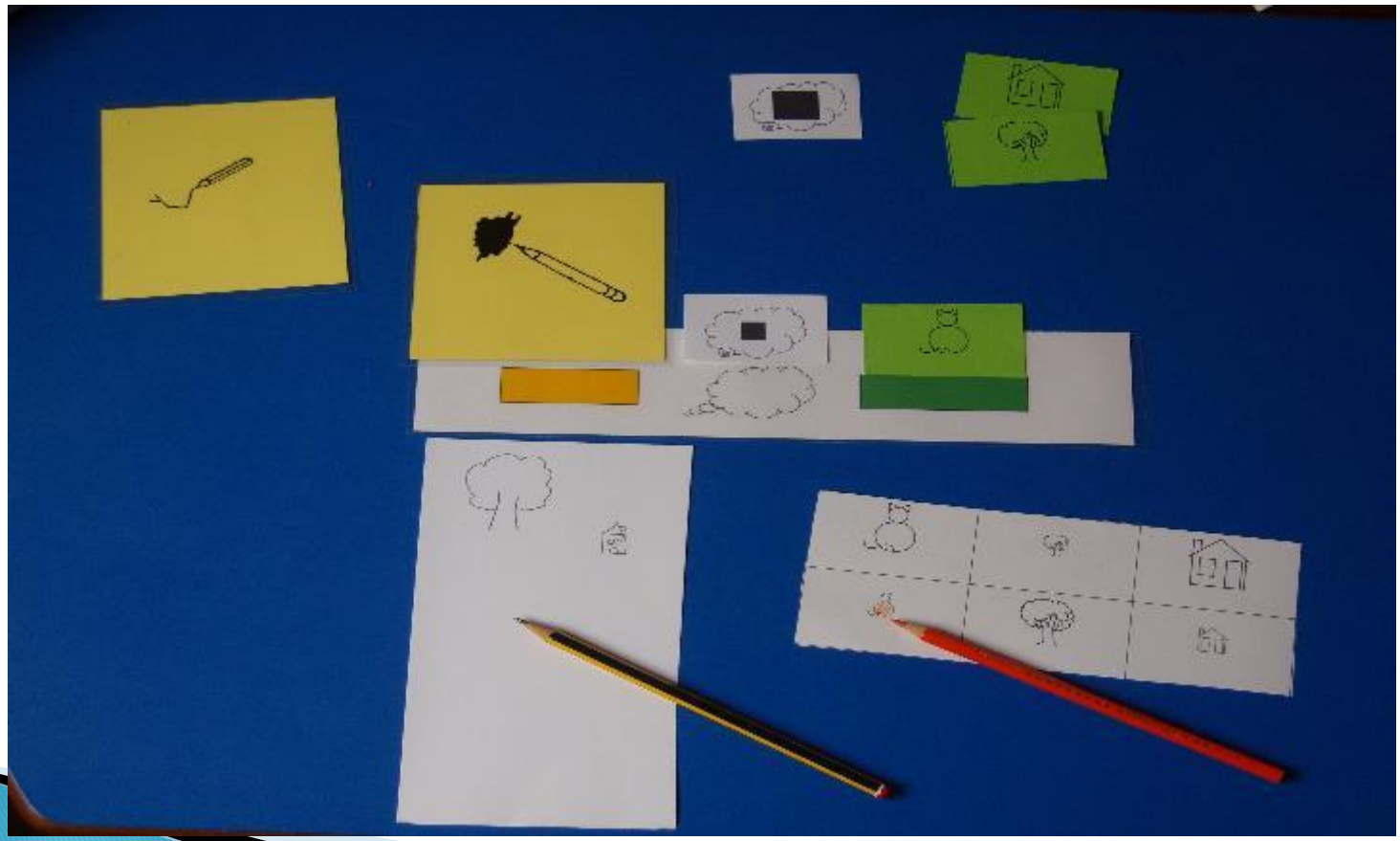
- Comprehension
- Description
- Command

in all Key word level /ICW type activities

e.g. Derbyshire Language Scheme [DLS]

3 ICW comprehension – coloured symbols + coloured line

colour /draw big/little cat/house/tree

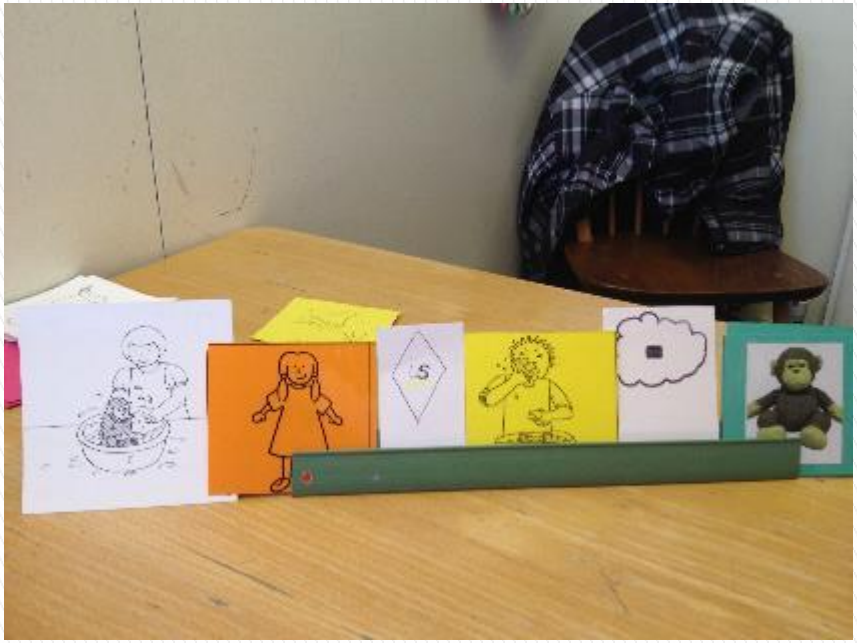


Reducing the coding support

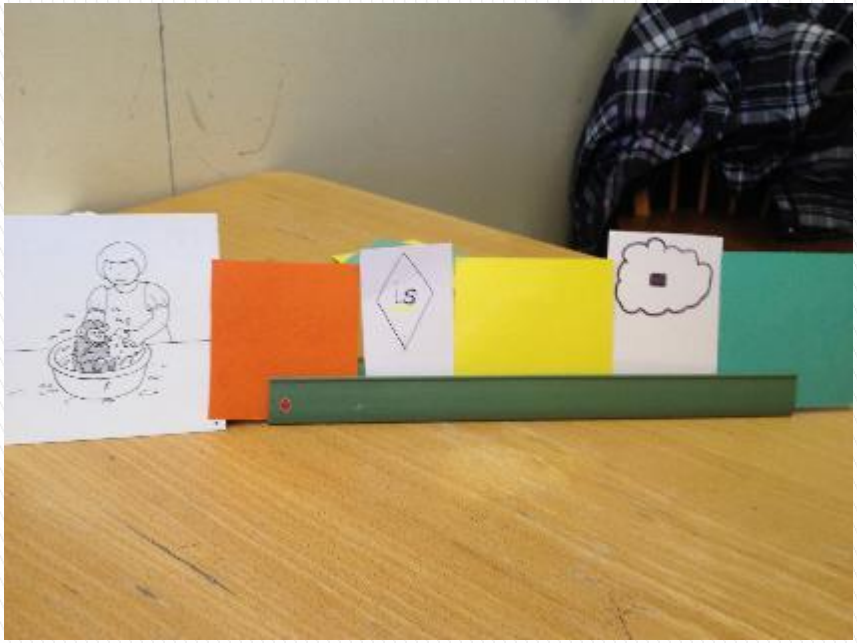
Once the child is secure with the full coding → reduce the support you are using

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

4ICW Colours +/- symbols



Colours PLUS symbols



Colours MINUS key symbols

Principle THREE

"Gradually reduce the amount of coding support!

Reducing coding support

Lowest levels of support

- Coloured pens
- Colour cards
- Tapping the table !

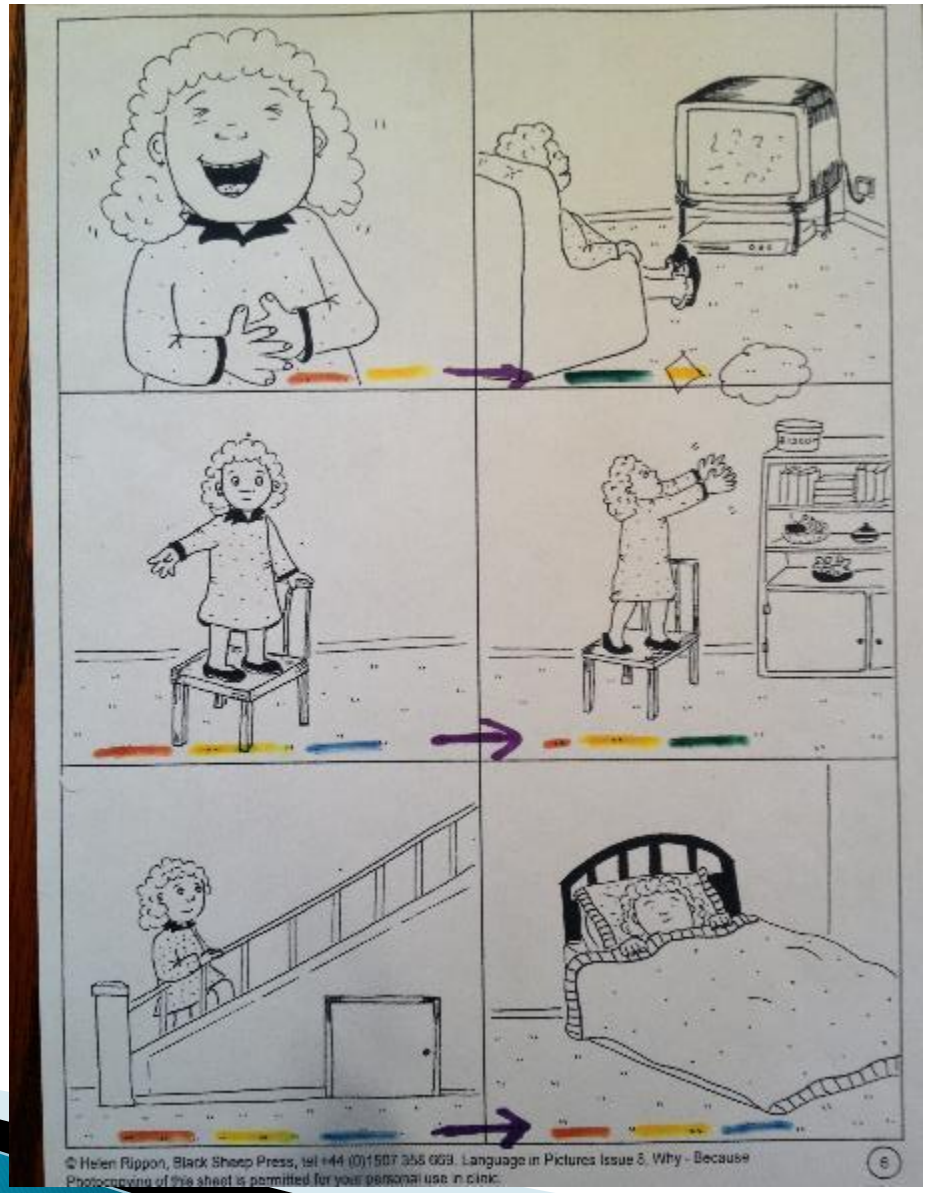
Practising target sentences

Colour line only

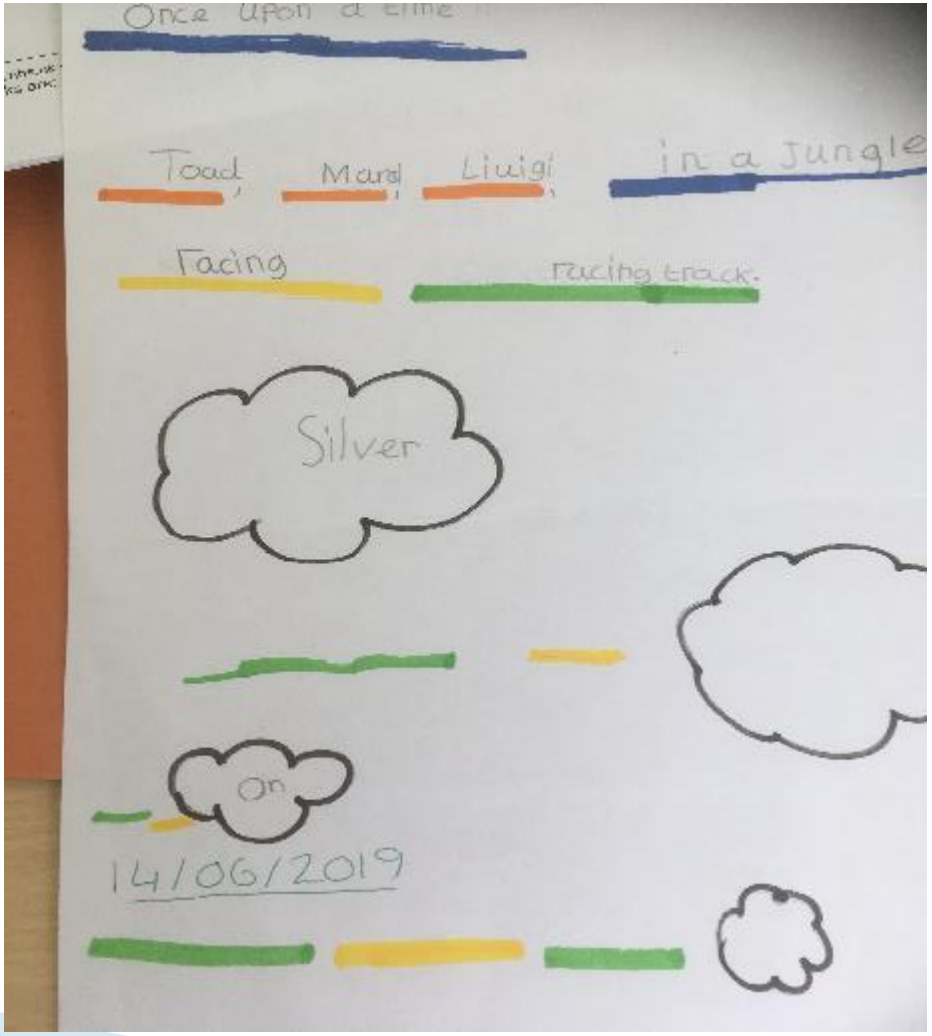
- Sometime we just have a colour line for the sentence as a prompt

- the child uses the colours to help them say the sentence

Coded lines for ‘because’



Idea planning in literacy year 3



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/card 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

By the Sand Pit DOING WHAT

In Topic Work

- Often a target sentence can be supported in topic work activities …..with a little preparation

- Use the colour line + symbols/line drawings to support the required sentence

Reception – Spin a Sentence
WHO DOING WHERE

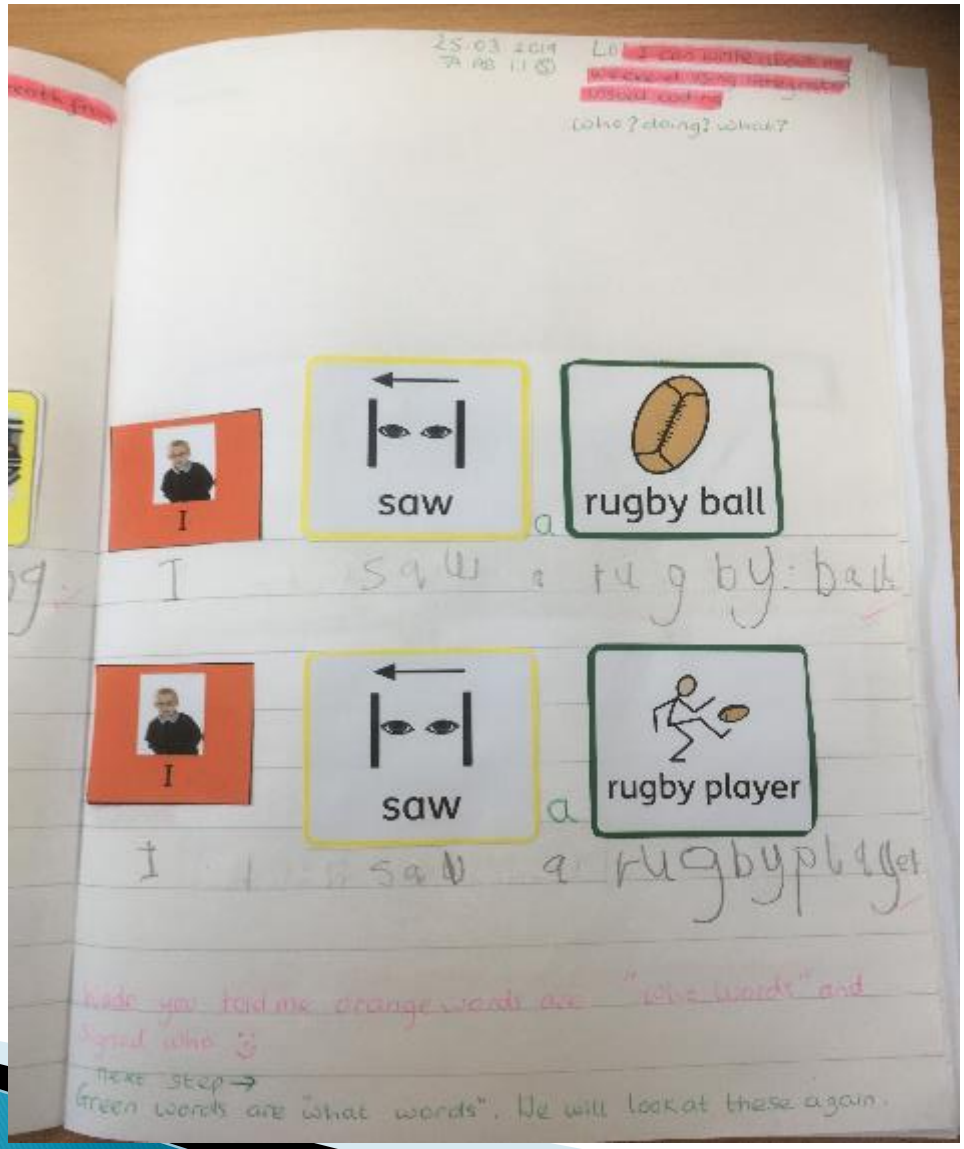
Spin a sentence board

Spin a Sentence area

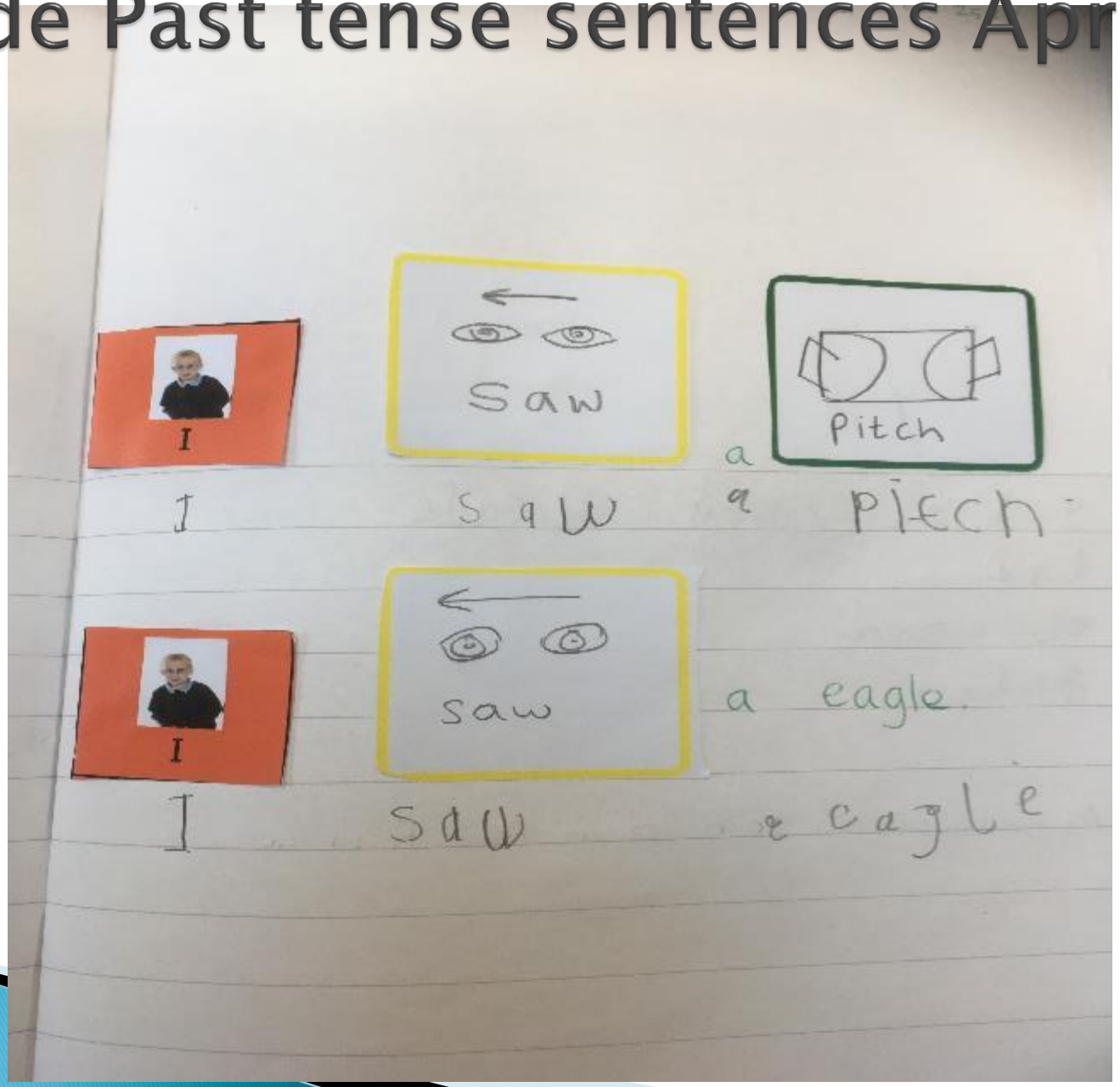
In Music

2 key word level: action + object

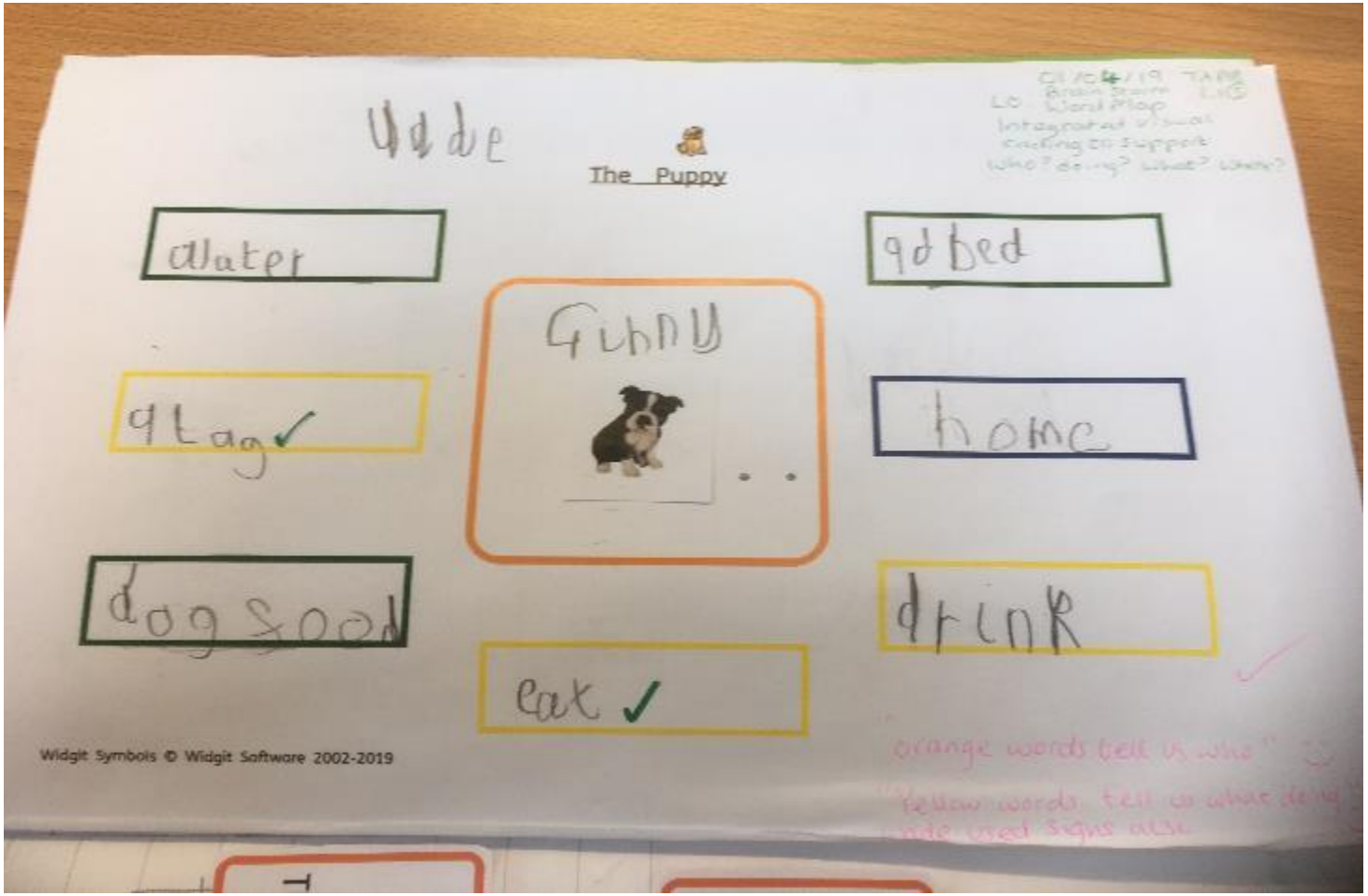
Wade Past tense sentences Mar 19



Wade Past tense sentences Apr19



Wade – Mind map for sentence



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 Gruffullo'

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

Write words or lay the pictures onto coloured cards

Gruffullo, mouse fox, owl, snake	walk look hide	wood hole logs tree

Recording the sentence(s)

Gruffullo, mouse fox, owl, snake	walk look hide	wood hole logs tree

a) Child then chooses the words to write on a colour line

or

b) Child chooses the pictures to stick on colour line

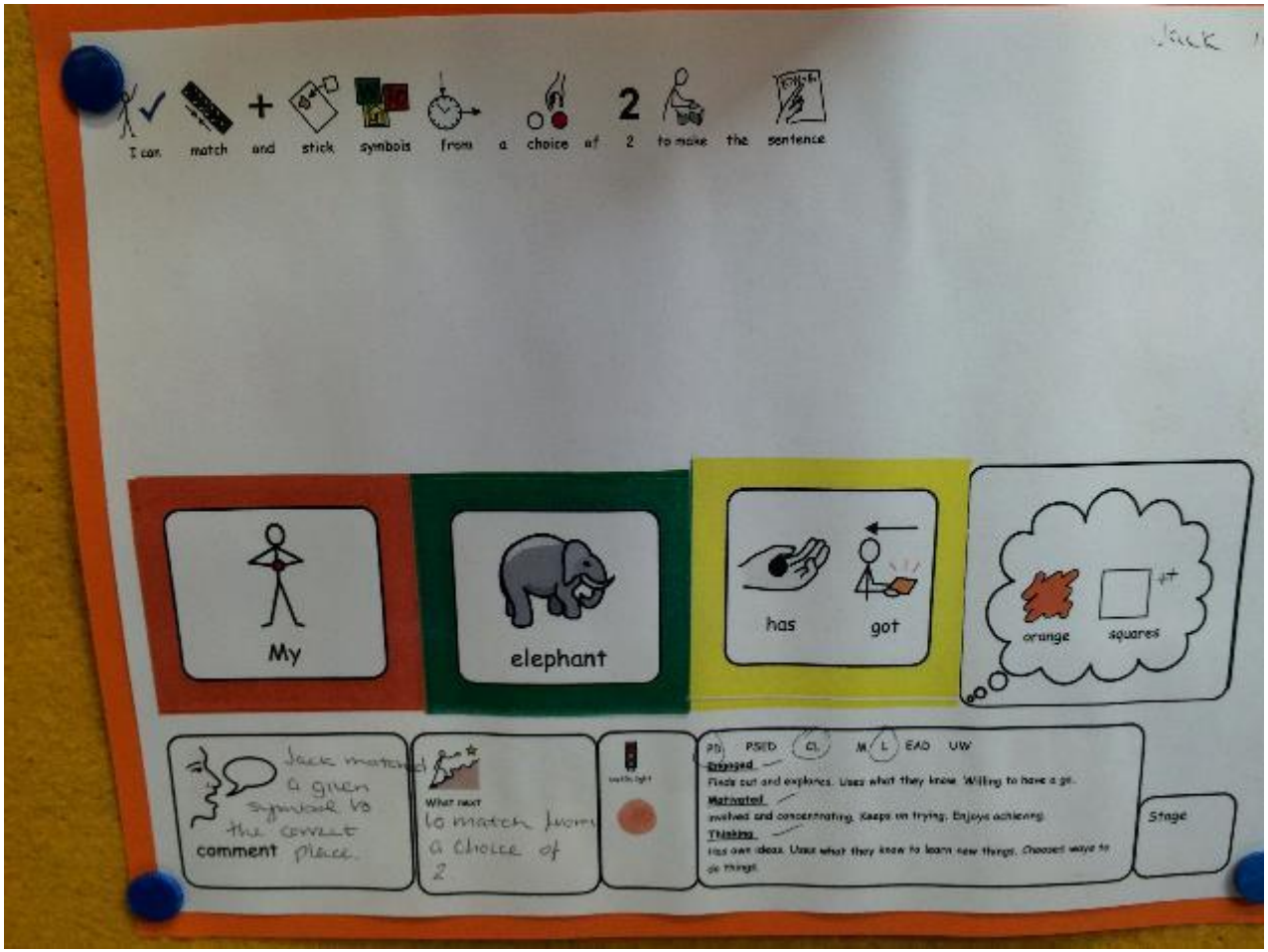
The Gruffullo is walking in the wood

Mainstream Reception

Whole class

Small group with support

MLD KS1 – basic descriptive writing task



Mainstream Year 1 writing task

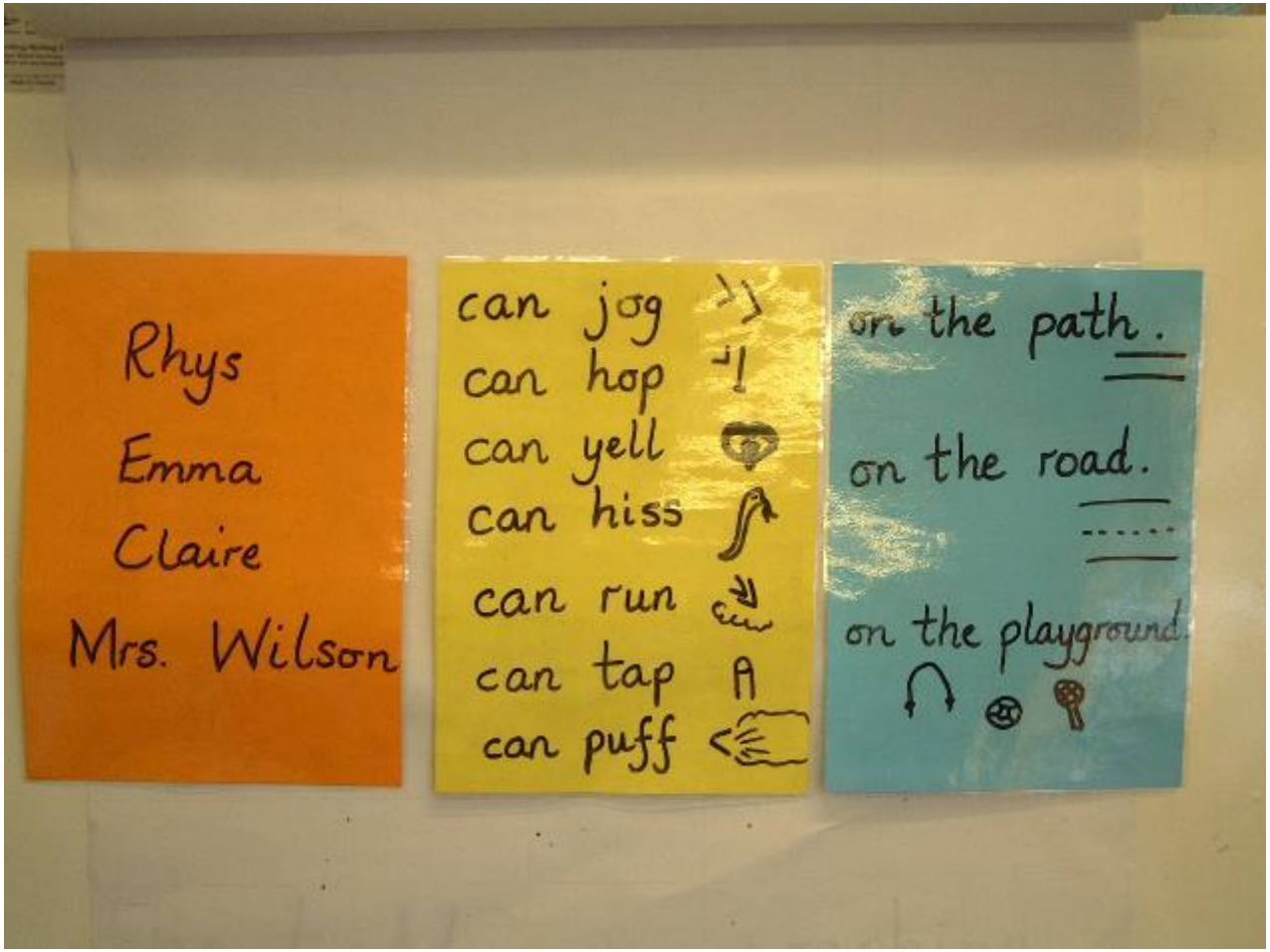
TA uses cards to support

Extension activity – harder cloud words

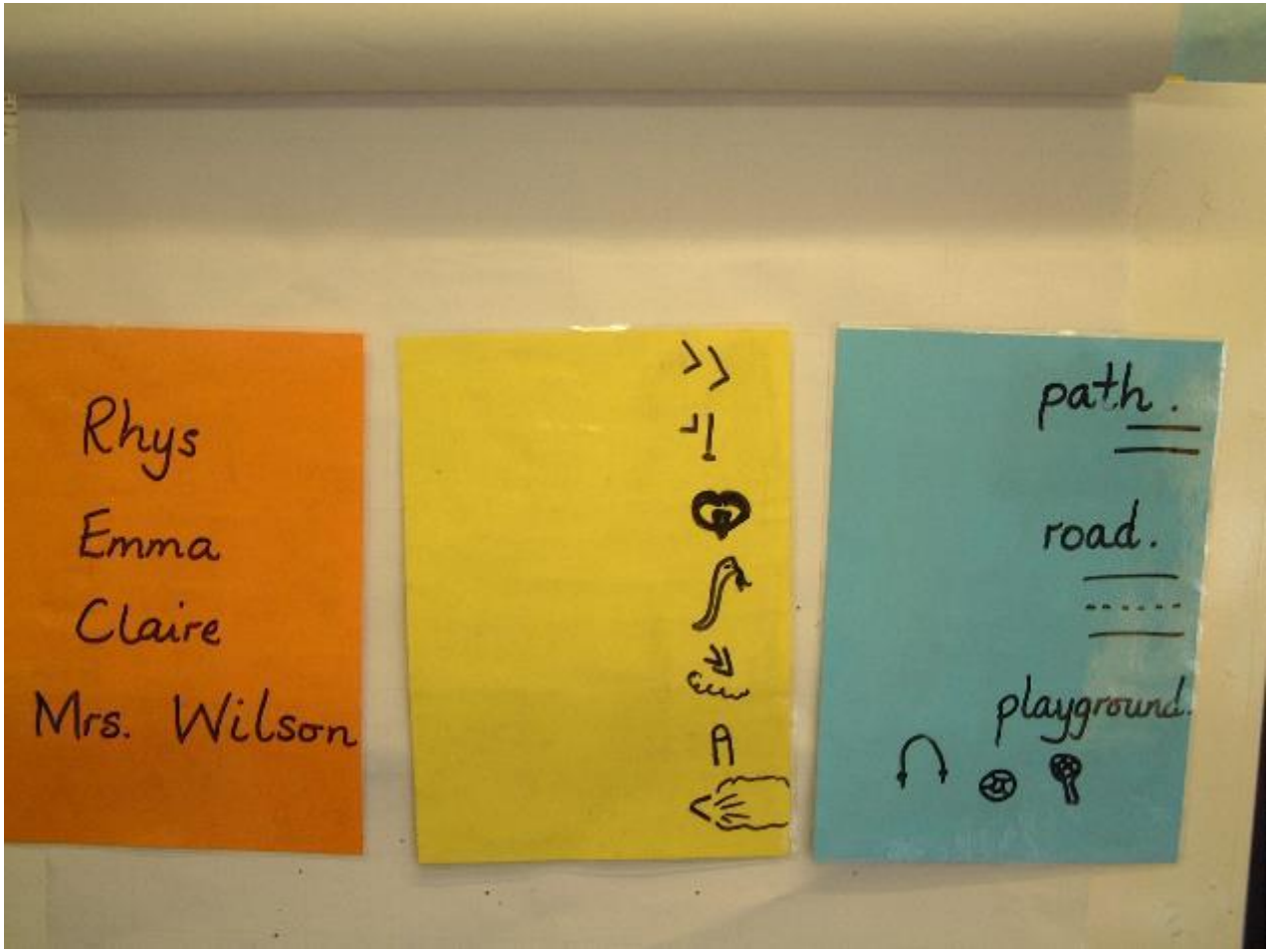
Using the same simple sentence for descriptive writing

- 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

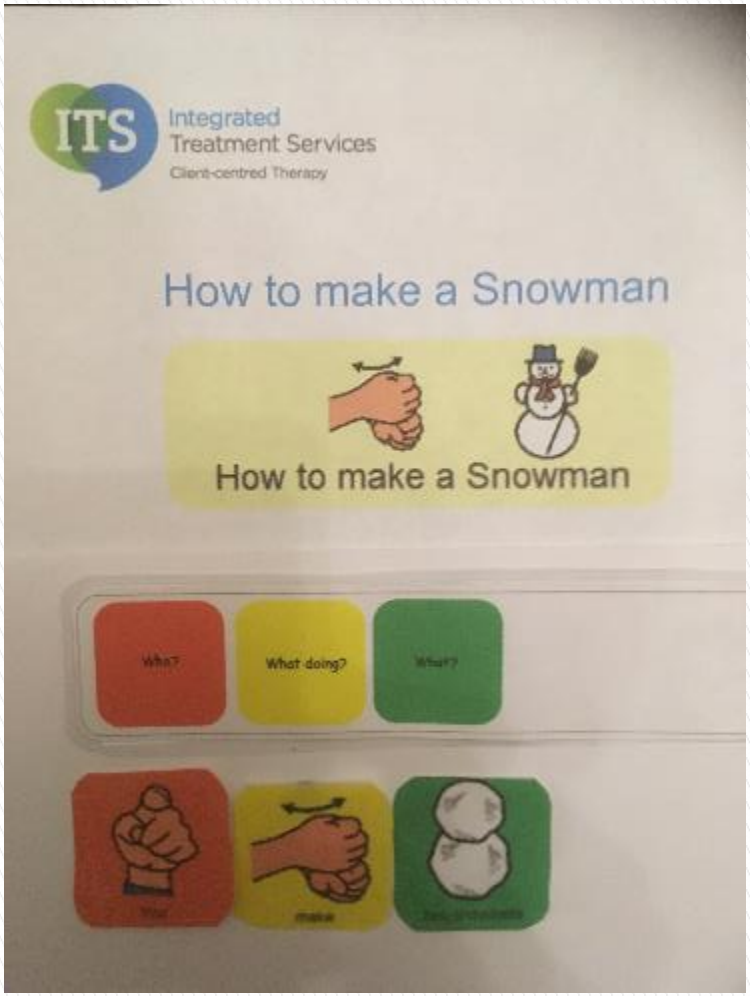
- Coding works best with a **simple**, **repeated** structure

- **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

Build a Snowman ITS



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

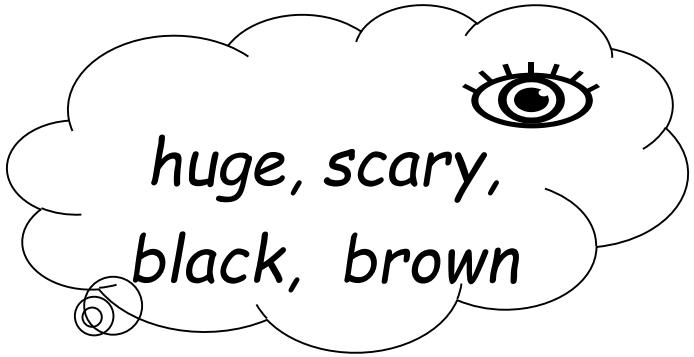
The ghost heard a noise in the

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'



He saw a .... bear.

Year 1 task

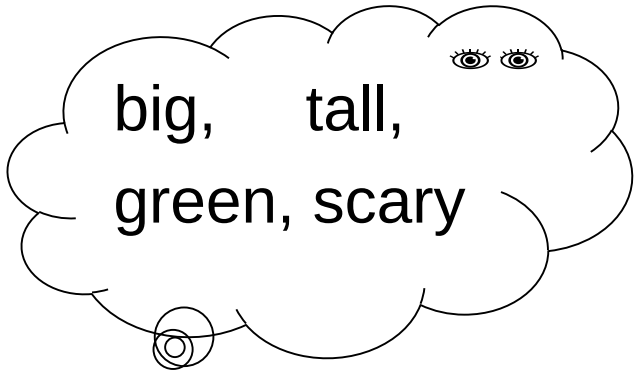
Using describing words for

'What does Shrek look like?

Who is it ?

What does he look like?

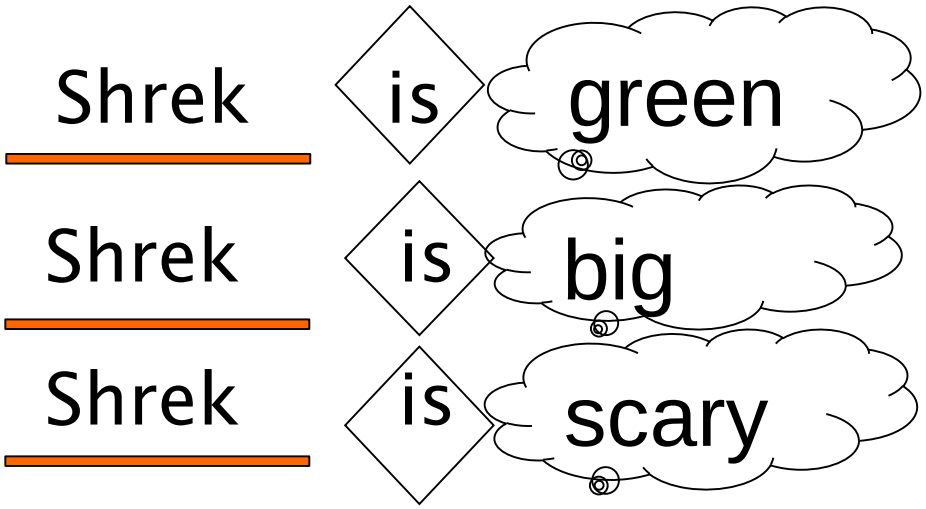
Shrek



Year 1 task

Using describing words for

'What does Shrek look like?



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

SCIENCE – using purple joining words to express events v reasons

FLOATING & SINKING

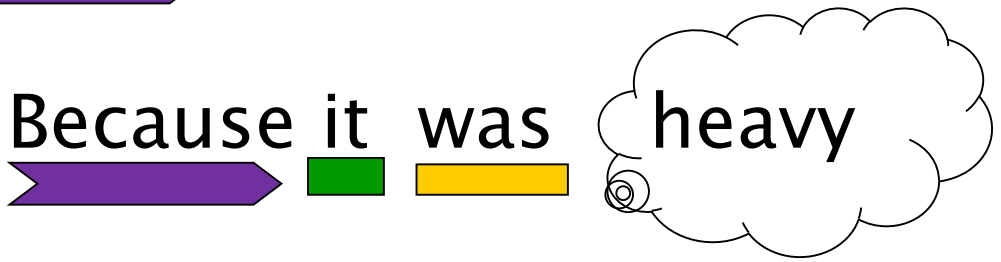
We put a brick in the water

and

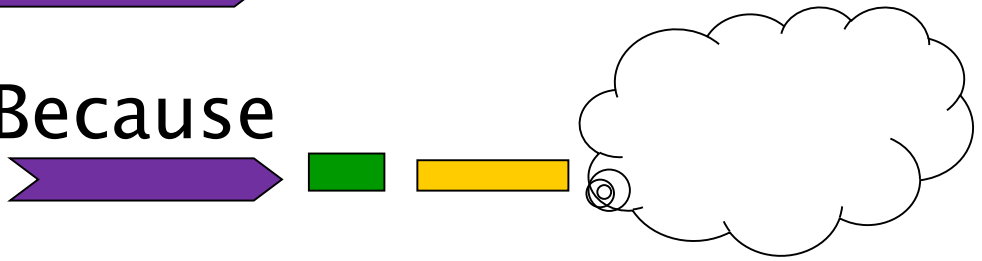
We put a feather in the water.

Framework for answers

Why did the brick sink?



Why did the feather float?



Coming out February 2020

Colourful Semantics:-

A Resource for Developing Children's Spoken and Written Language Skills

February 2020: 297x210: 840pp

Pb: 978-0-367-21050-2 | £55.99

Table of Contents

Foreword by Alison Bryan
Introduction
The Colourful Semantics Colour Coding System
Chapter 1: Using Colourful Semantics with Individual Children
Chapter 2: Colourful Semantics for Classes and Groups
Colourful Semantics Session Plans – Ages 4-6 years
Colourful Semantics Session Plans –Ages 5-8 years
Colourful Semantics Small Group Session Plans
Appendix 1: Cue Cards and Sentence Templates
A5 Cue Cards
A4 Cue Cards Sentence Templates
Appendix 2: Story Planner Grids
Appendix 3: Sentence Building Resources
Two-part sentences ('who', 'doing')
Three-part sentences ('who', 'doing', 'what')
Three-part sentences ('who', 'doing', 'where')
Four-part sentences ('who', 'doing', 'what', 'where')
Four-part sentences ('when', 'who', 'doing', 'what', 'where')
Sentences including 'why' Sentences including 'to who'
Example Sentence Templates
Appendix 4: A5 Vocabulary Cards
A5 'Who' vocabulary
A5 'Doing' vocabulary
A5 'Where' vocabulary A5 'When' vocabulary
Appendix 5: Small Vocabulary Cards
'Who' vocabulary
'Doing' vocabulary
'What' vocabulary
'Where' vocabulary
'When' vocabulary
Appendix 6: Silly Sentences Worksheets
'Draw a Line' Worksheets
'Cut and Stick' Worksheets
Appendix 7: Picture Description and Sequencing Worksheets
Appendix 8: Board Games

Available to purchase with a 20% discount

Colourful Semantics

A Resource for Developing Children's Spoken and Written Language Skills

NHS Forth Valley

This comprehensive resource pack, developed in conjunction with education staff, draws on the principles of Alison Bryan's original *Colourful Semantics* approach to provide professionals with an engaging, dynamic way to support children's language development. This practical resource consists of three parts: a printed book containing ready-made session plan ideas, black and white vocabulary cards and worksheets; an online version using the current *Colourful Semantics* colour coding system, and an online version using the colour coding system used by Speech and Language Therapists from NHS Forth Valley.

20% Discount Available - enter the code FLR40 at checkout*

Pb: 978-0-367-21050-2 | £44.79

** Offer cannot be used in conjunction with any other offer or discount and only applies to books purchased directly via our website.*

For more details, or to request a copy for review, please contact: Tom Eden, Marketing Manager, Education, tom.eden@tandf.co.uk

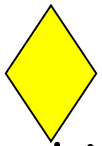
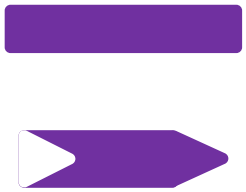
Routledge
Taylor & Francis Group

For more information visit:
www.routledge.com/9780367210502

Order Details

- Publisher:- www.routledge.com
- 20% EARLY ORDER DISCOUNT CODE FLR40
- Pb code : 976-0-367-21050-2
- Offer Price - £44.79 [£55.99]

CHART LINKING WITH GRAMMAR

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

Supporting Sentence Understanding

Don't forget coding can support understanding too

1. Following instructions for certain sentence types

2. Understanding different parts of sentences
   e.g. prepositions [in/under] 'little blue words'

3. Understanding question words

1. Following instructions

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

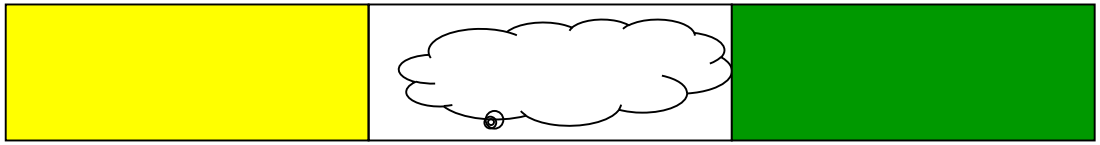
e.g.

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"*

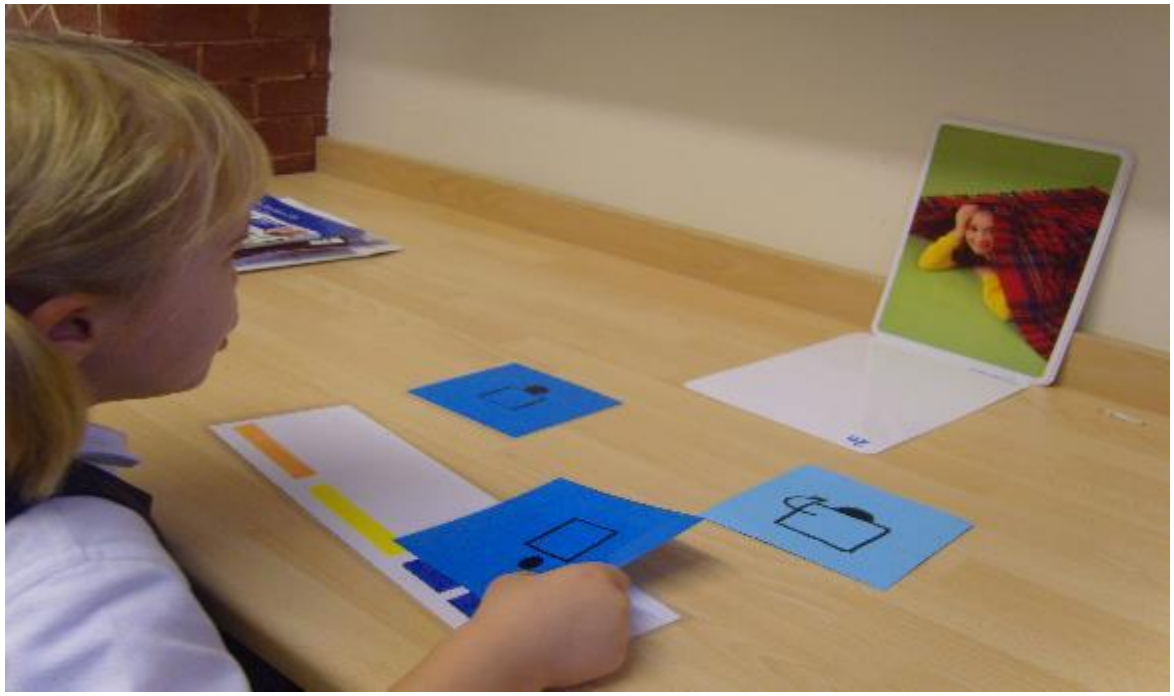
2. Understanding parts of sentences

- 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



Selecting the correct preposition symbol to go with the picture

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

3.Understanding Question words

You can support *question comprehension* in class with colour coded cards + signs

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

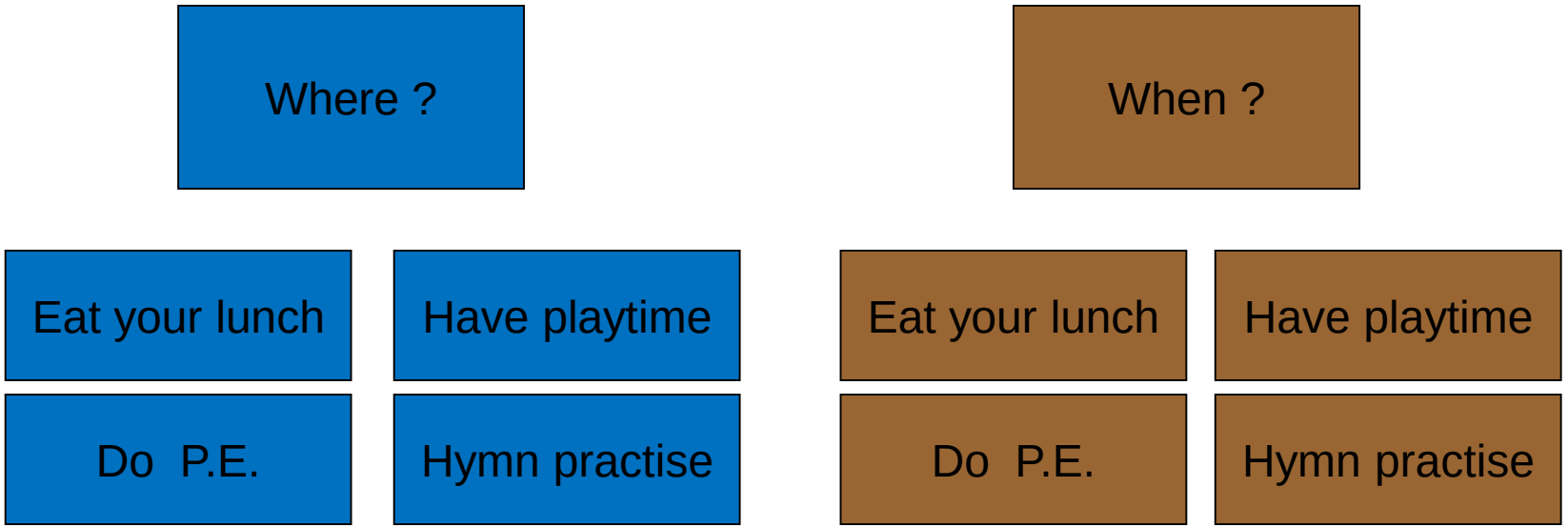
Teaching Question words

You can teach understanding of *question words*

- 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’



MLD KS1 – Coded symbols for all reading books !

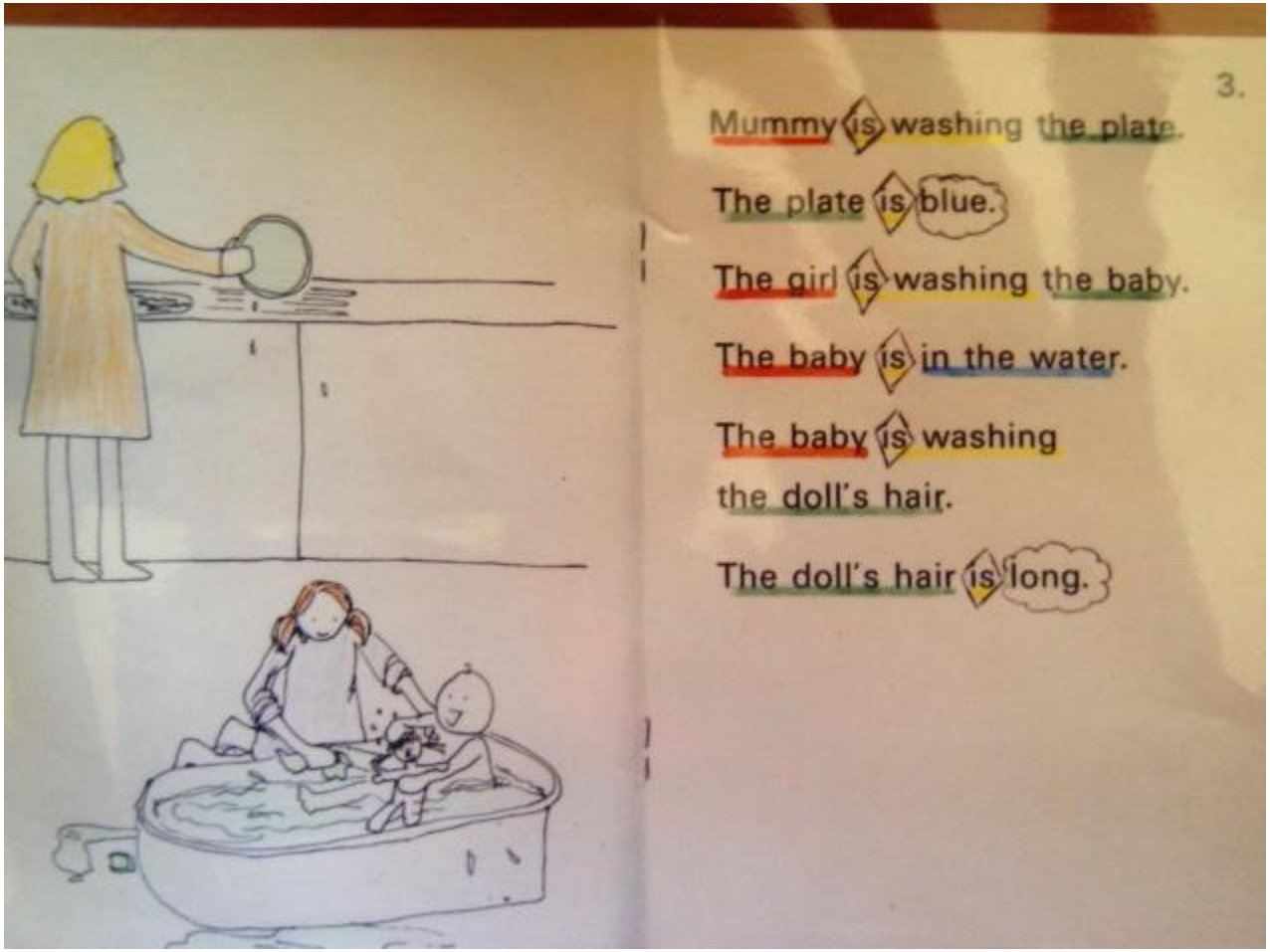
Understanding Written language

- 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.

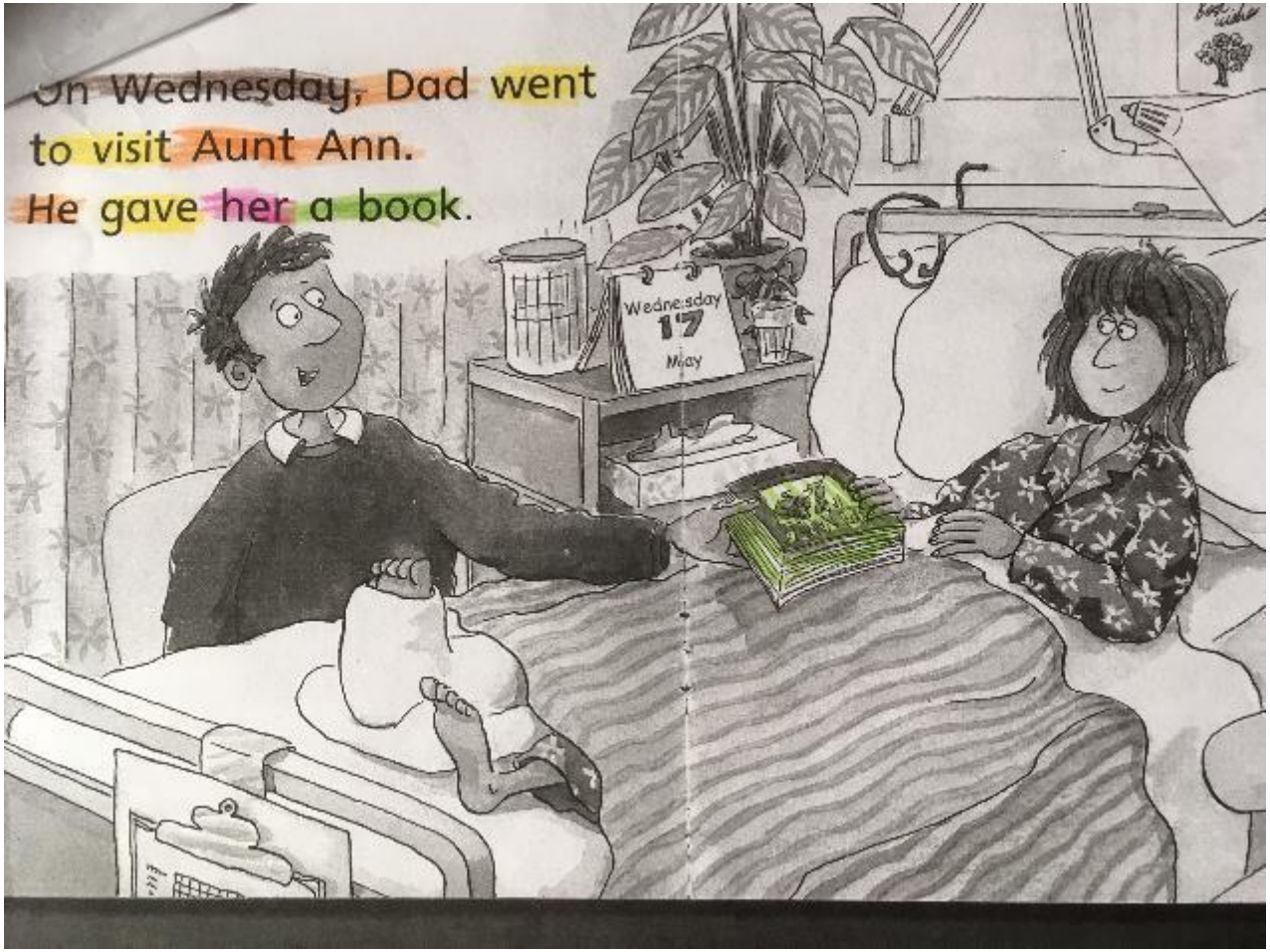
Supporting reading comprehension

- 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 – LTR



Aunt Anne Goes To Hospital



Levels of coding

BROAD LEVEL – Narrative/Fact learning

CORE LEVEL – Sentence

Understanding and expression

NARROW LEVEL – Vocabulary

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

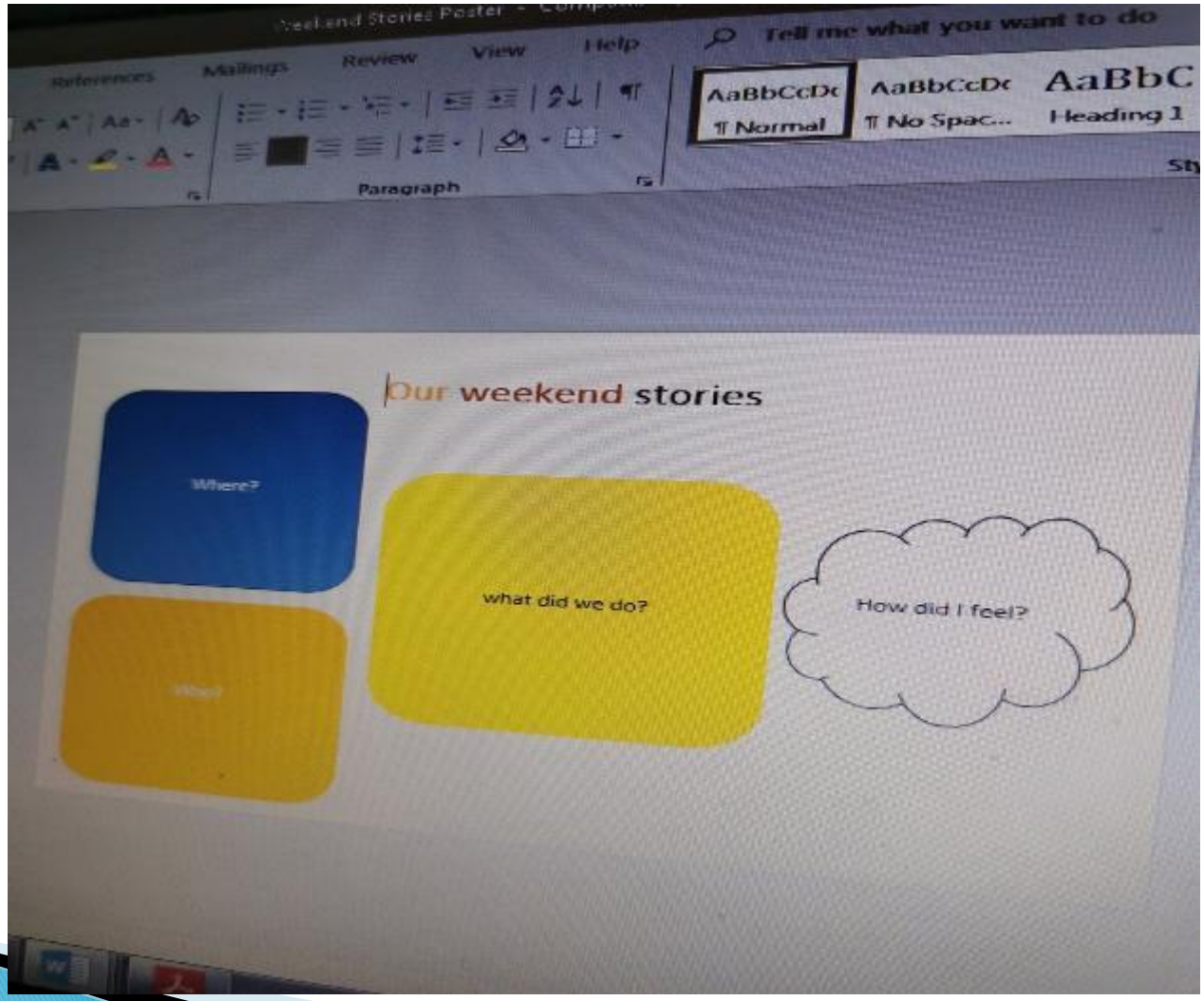
Types of Narrative Support

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

Structuring a narrative

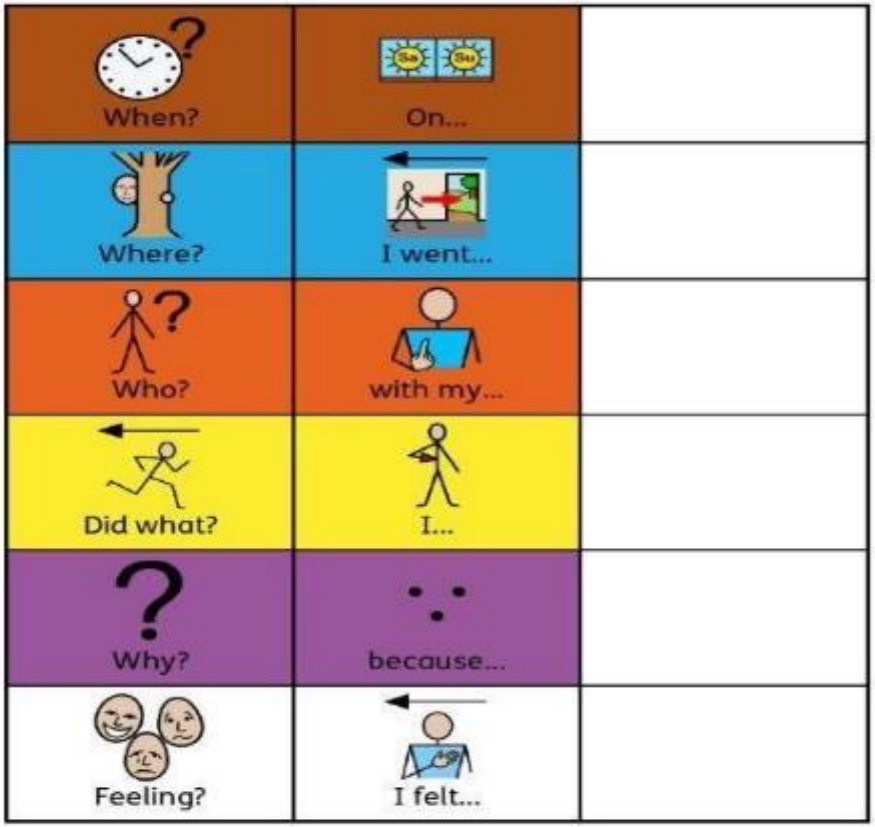
- Some children with very limited language benefit from a set visual structure they always use for narrative work
- In my KS1 Base we use the Black Sheep story planner.
- Coding can be used to support ANY narrative framework

Weekend Narrative



Tower Hamlets Children's Therapies Weekend Narrative

Weekend news Name:

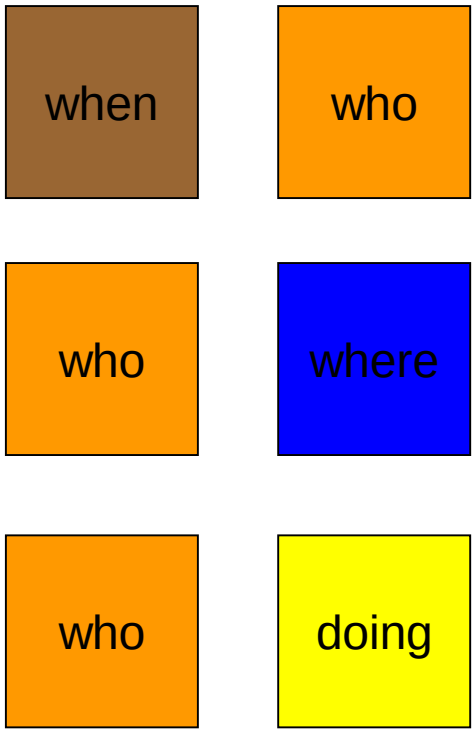


Created in WidgitOnline.com for BH Comm Paeds SLT

Widgit Symbols © Widgit Software 2002 - 2019

Story Structure Sticks

Simple Narrative Structure



(One day there was a boy)

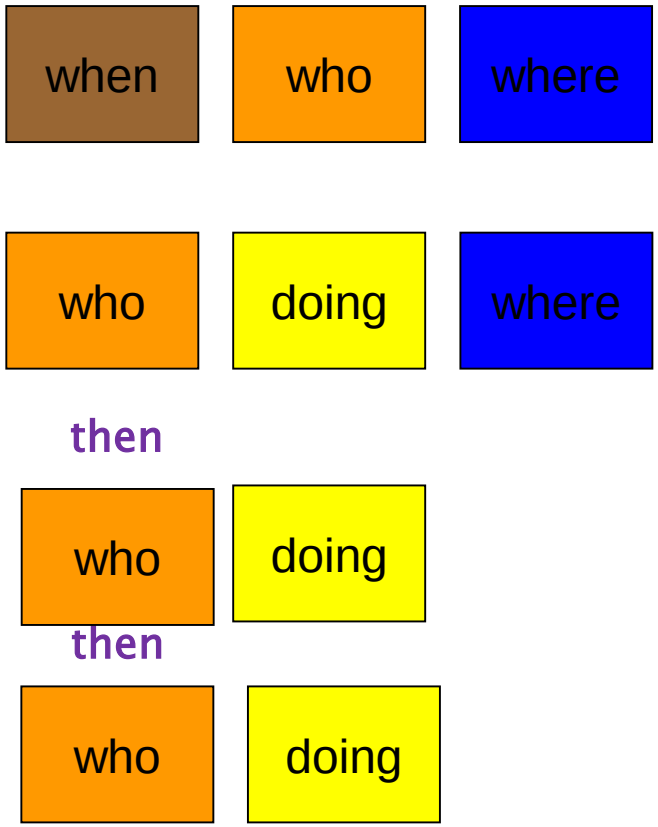
and

(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

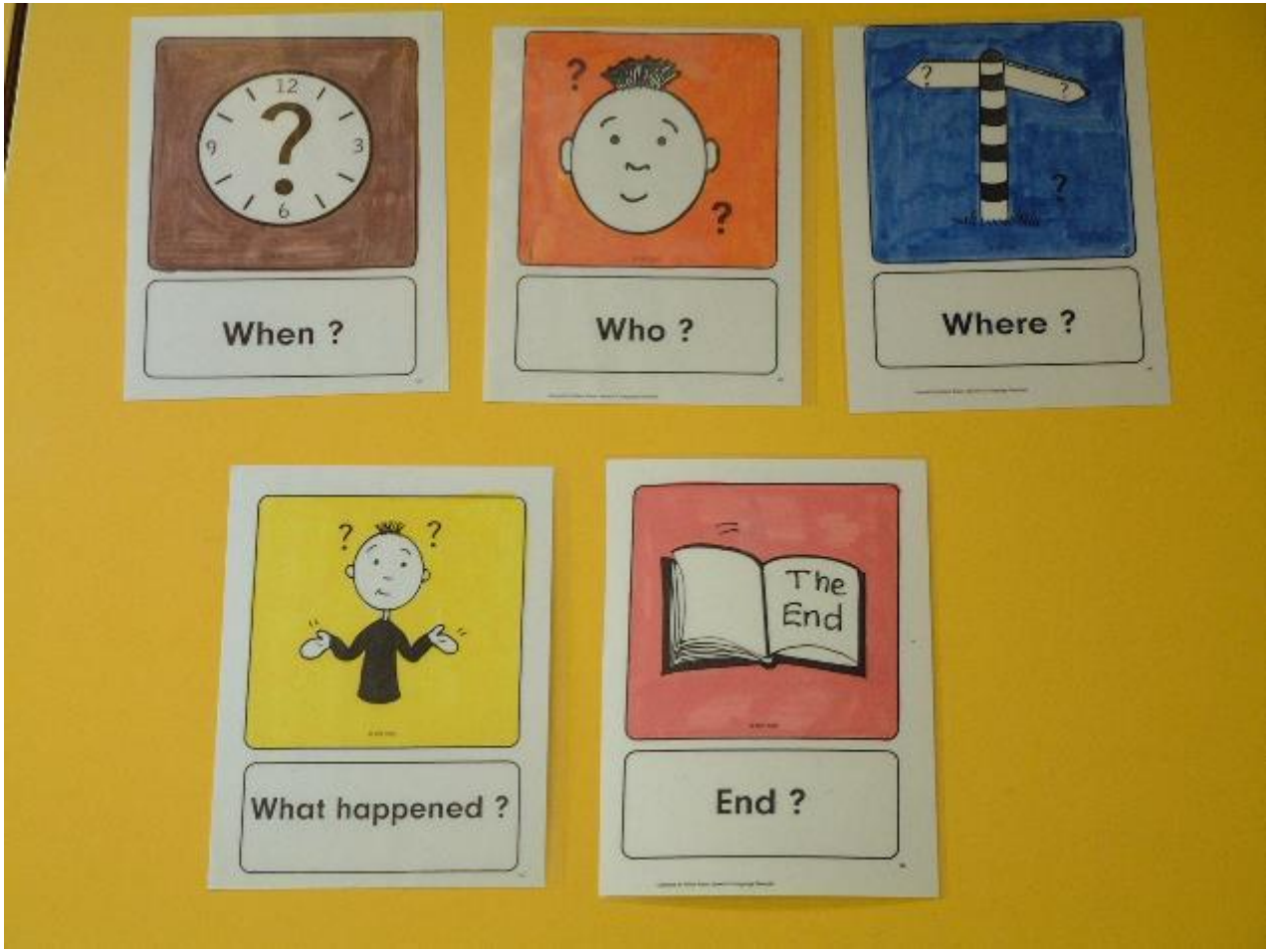
Resource : Black Sheep narrative packs

- Nursery Narrative Pack
- *story components:- who, when, what next*

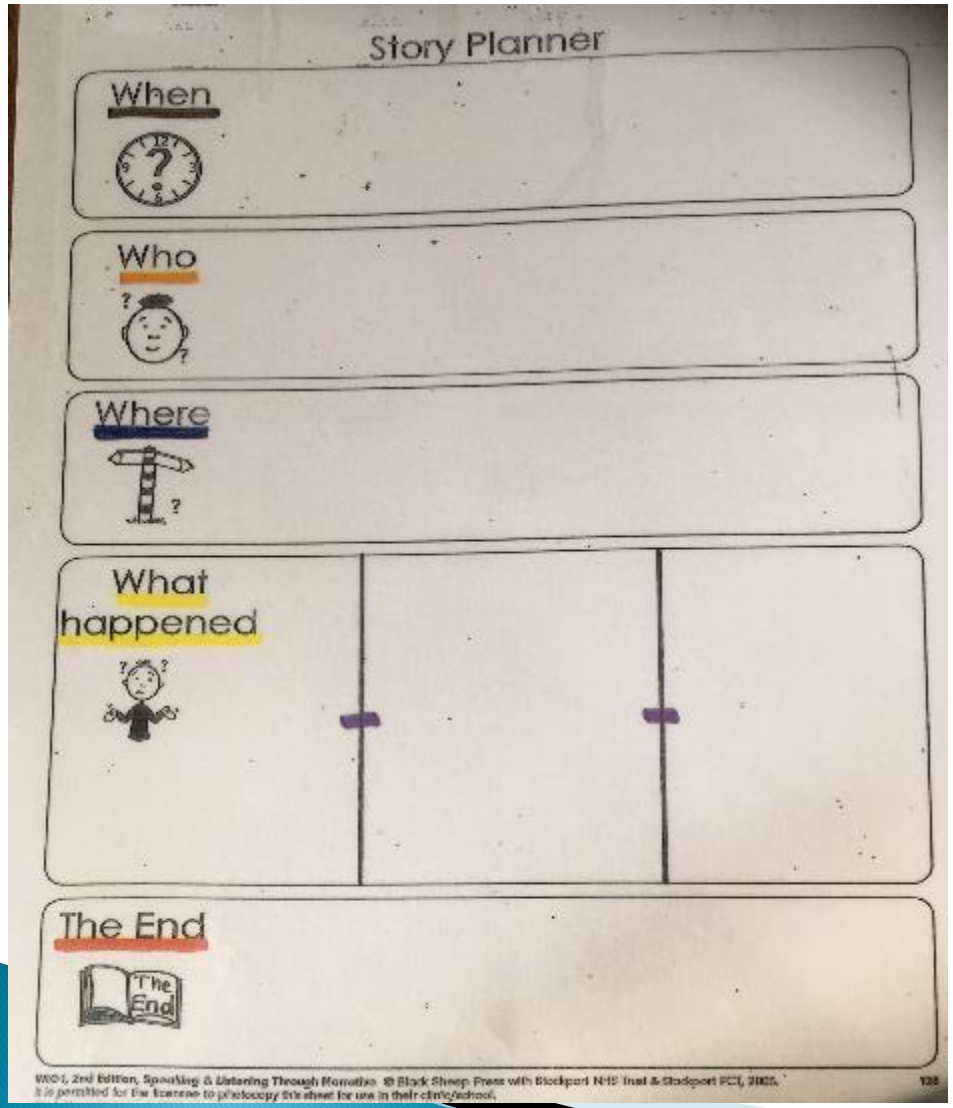
- Reception Narrative Pack
- *story components:- who, where, when, what happened next*

- Fun with Narrative [big books]

Reception Narrative – colour coded cue cards

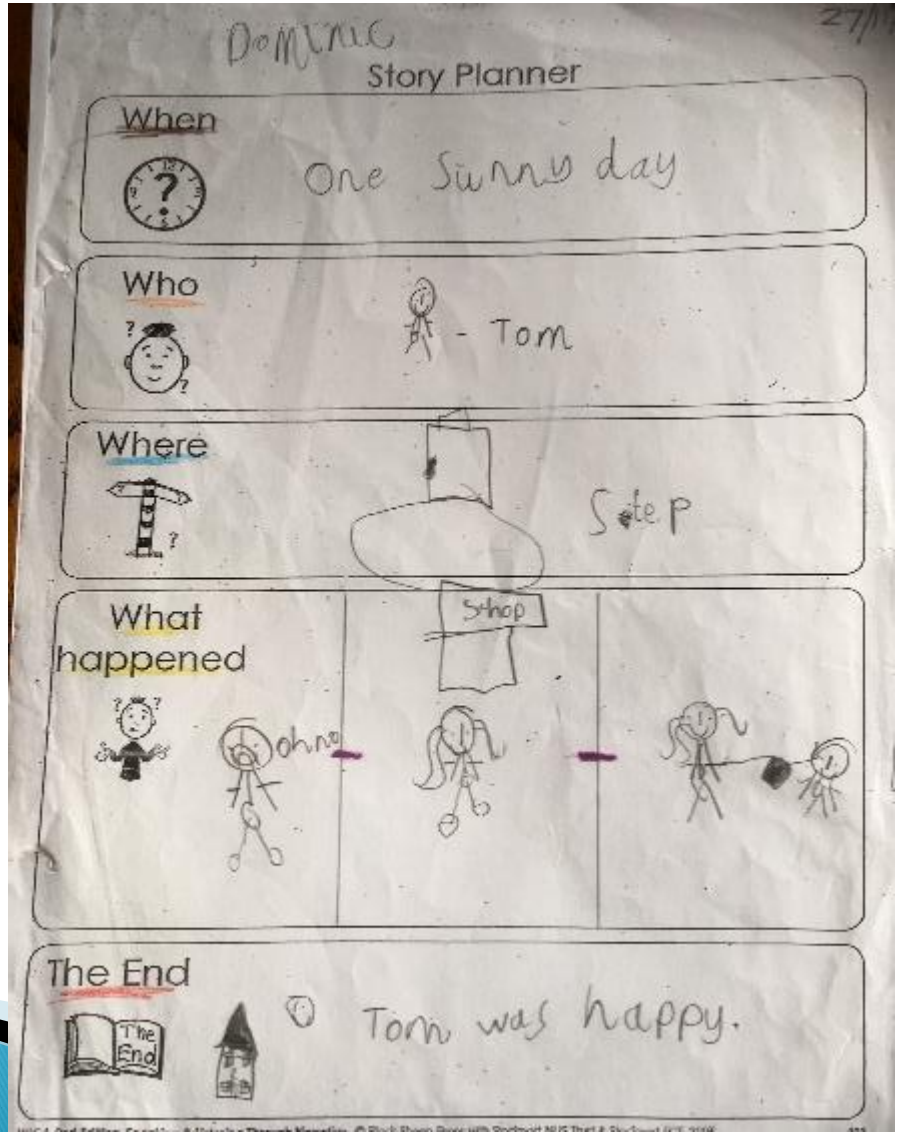


Black Sheep Press Story Planner

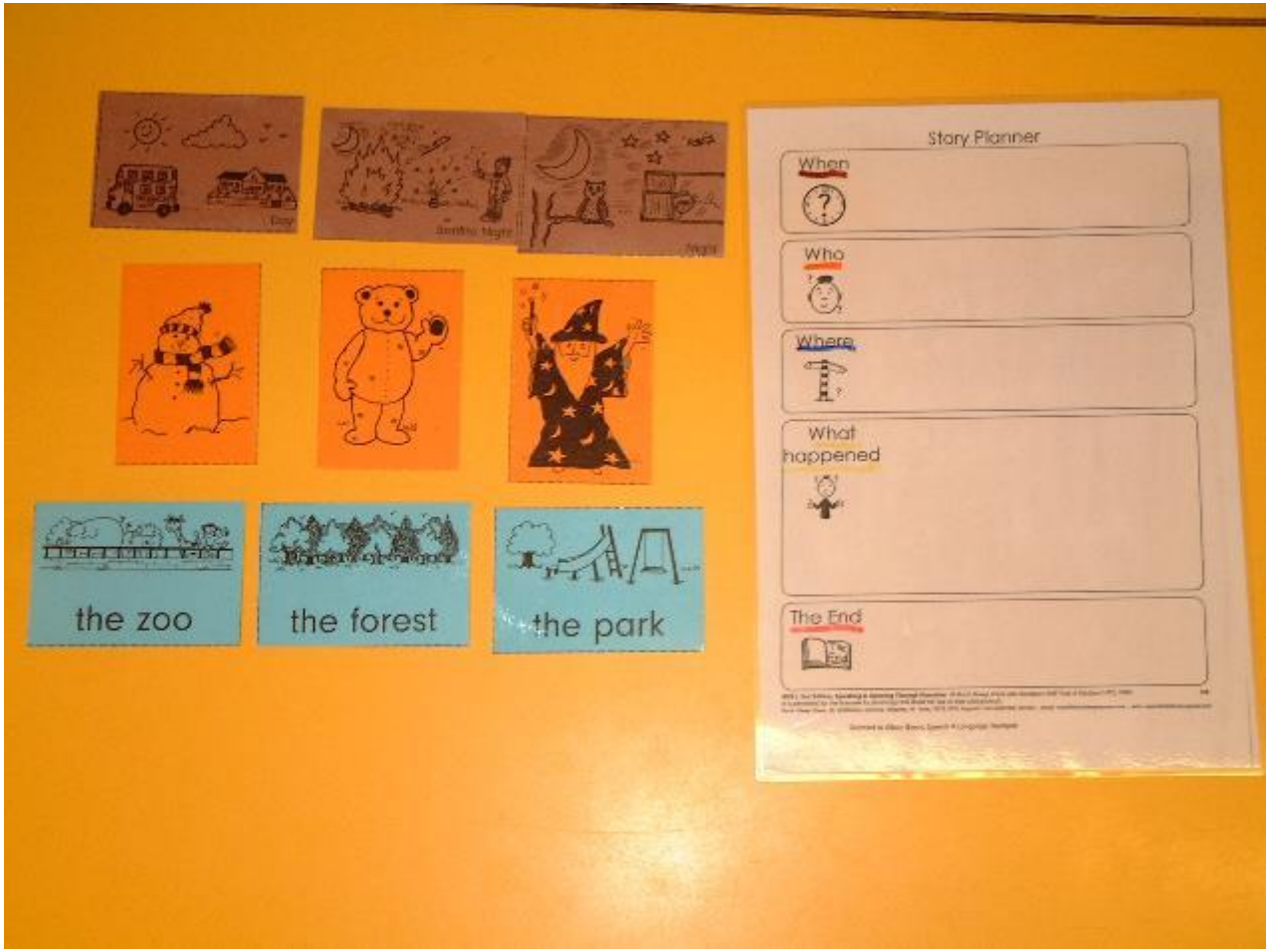


- WHAT HAPPENED divided into 3 sections
- Purple joining up words

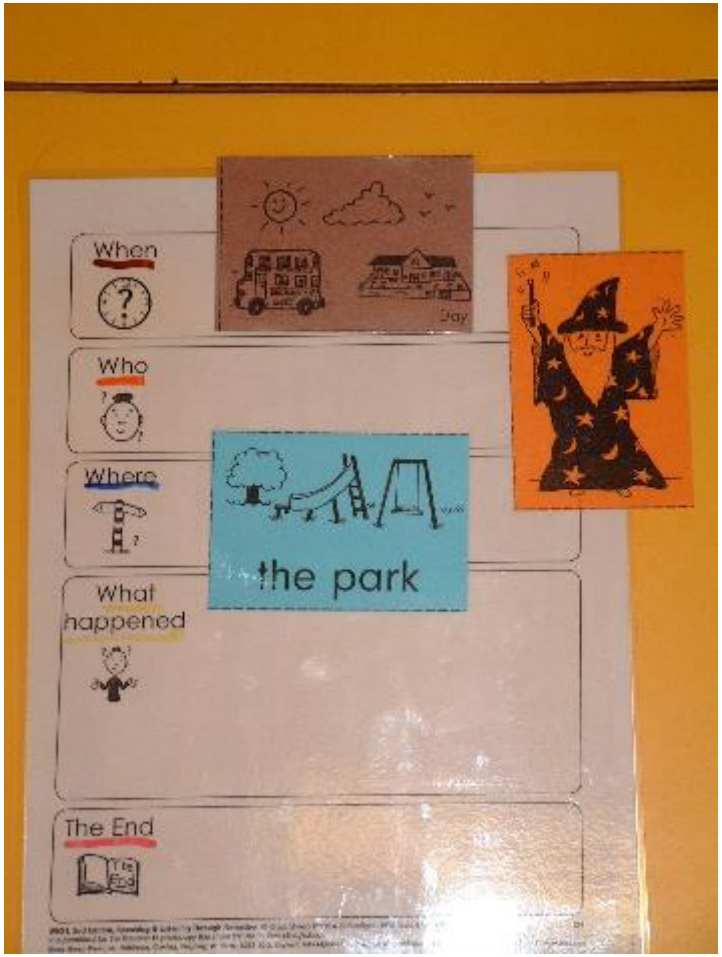
BSP Story Planner –Quick Draw



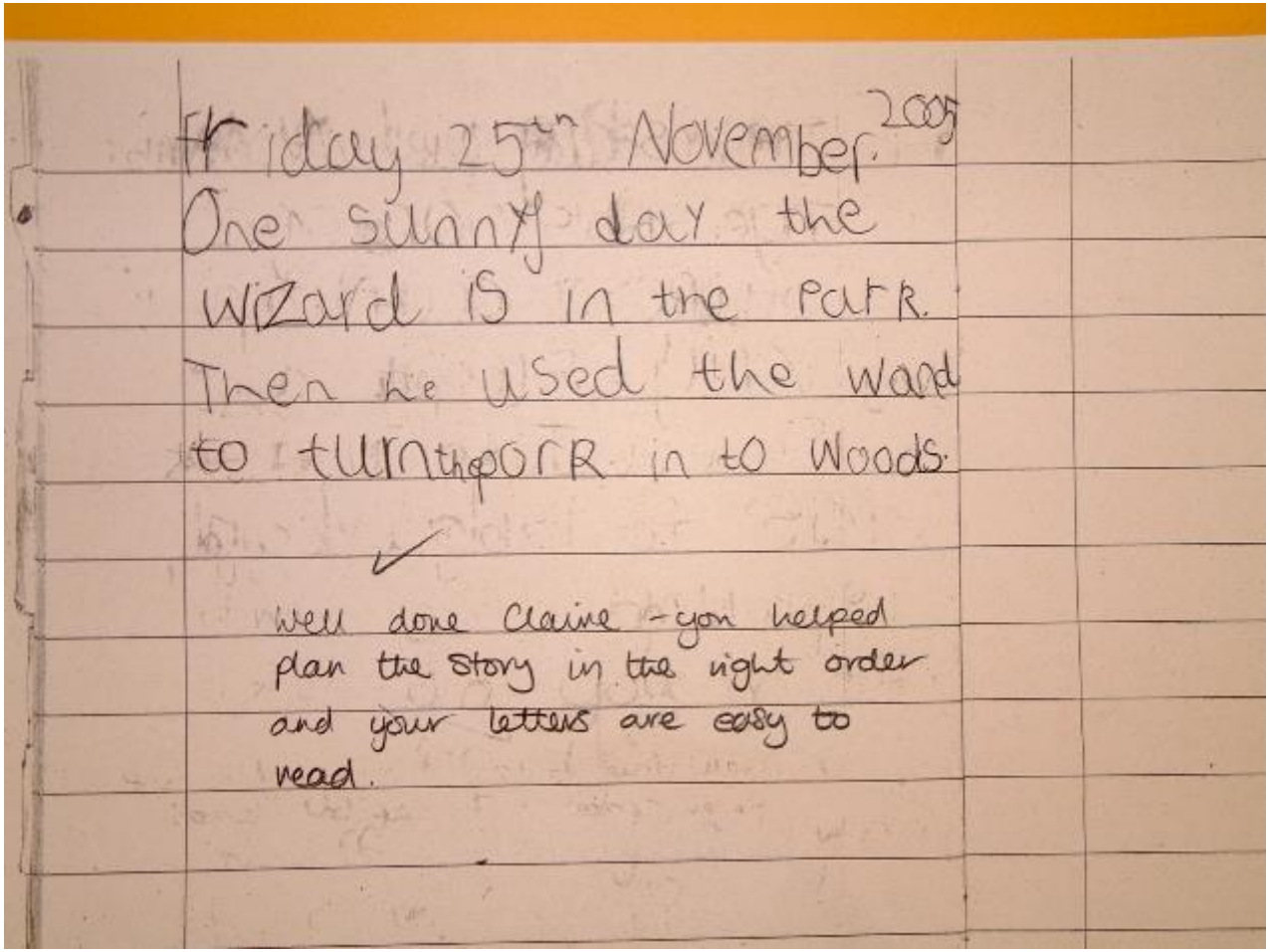
Story options – Creating the Story Starter



Selecting cue cards



Written story



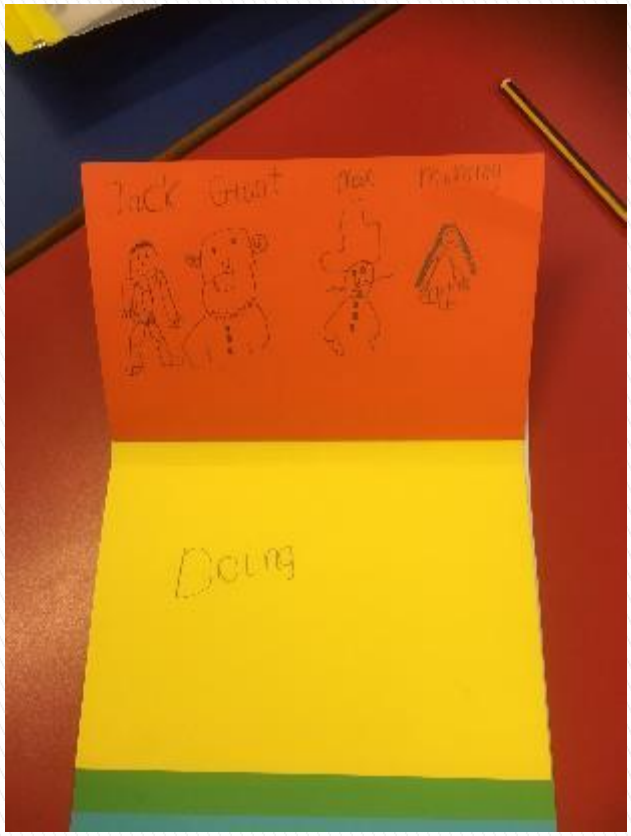
Friday 25th November 2005
One sunny day the
wizard is in the park.
Then he used the wand
to turn the park in to woods.

Well done Claire - you helped
plan the story in the right order
and your letters are easy to
read.

Giraffes Can't Dance – Creating own narrative

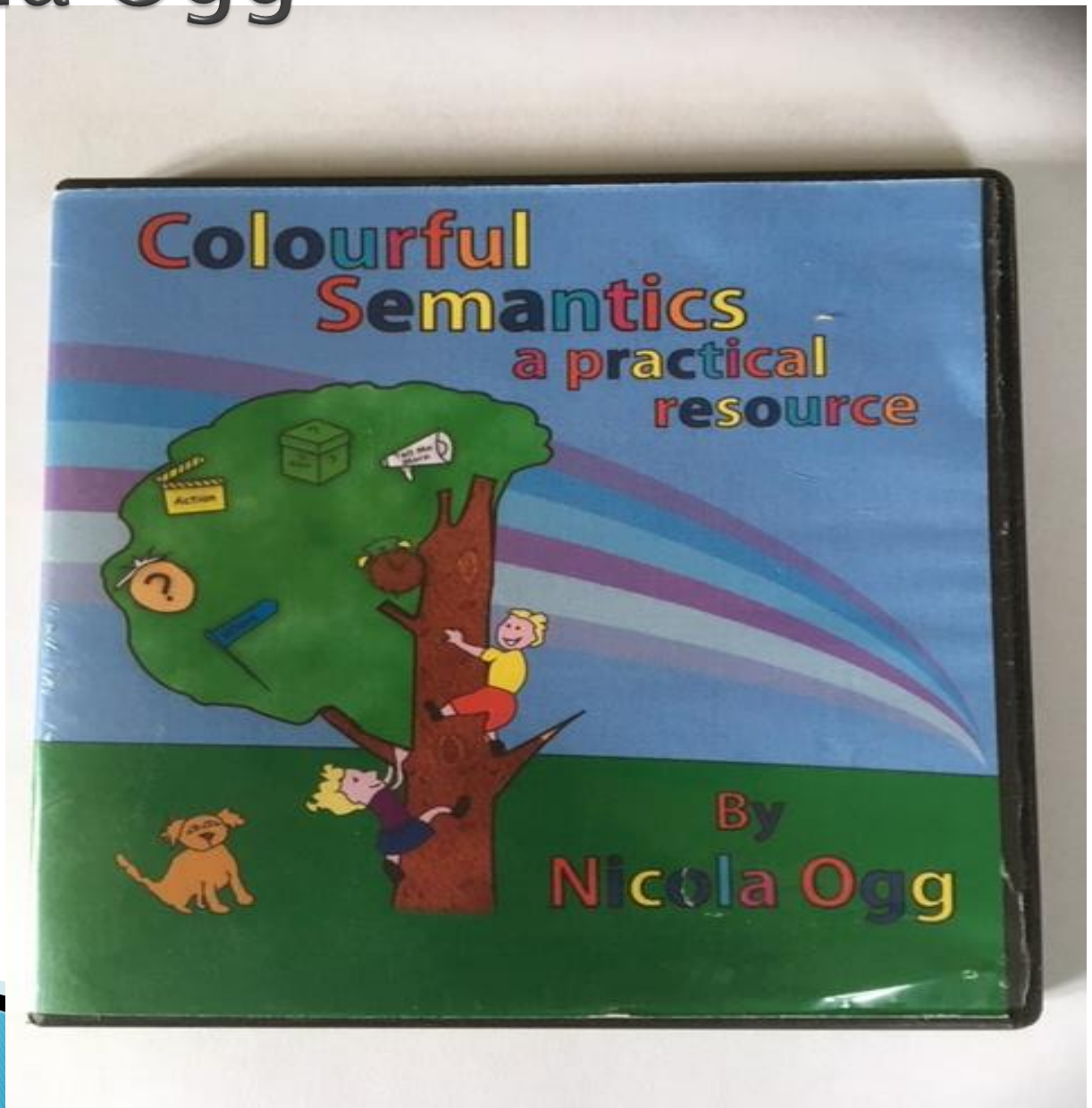
Narrative Vocab Flip Books

Wall Display

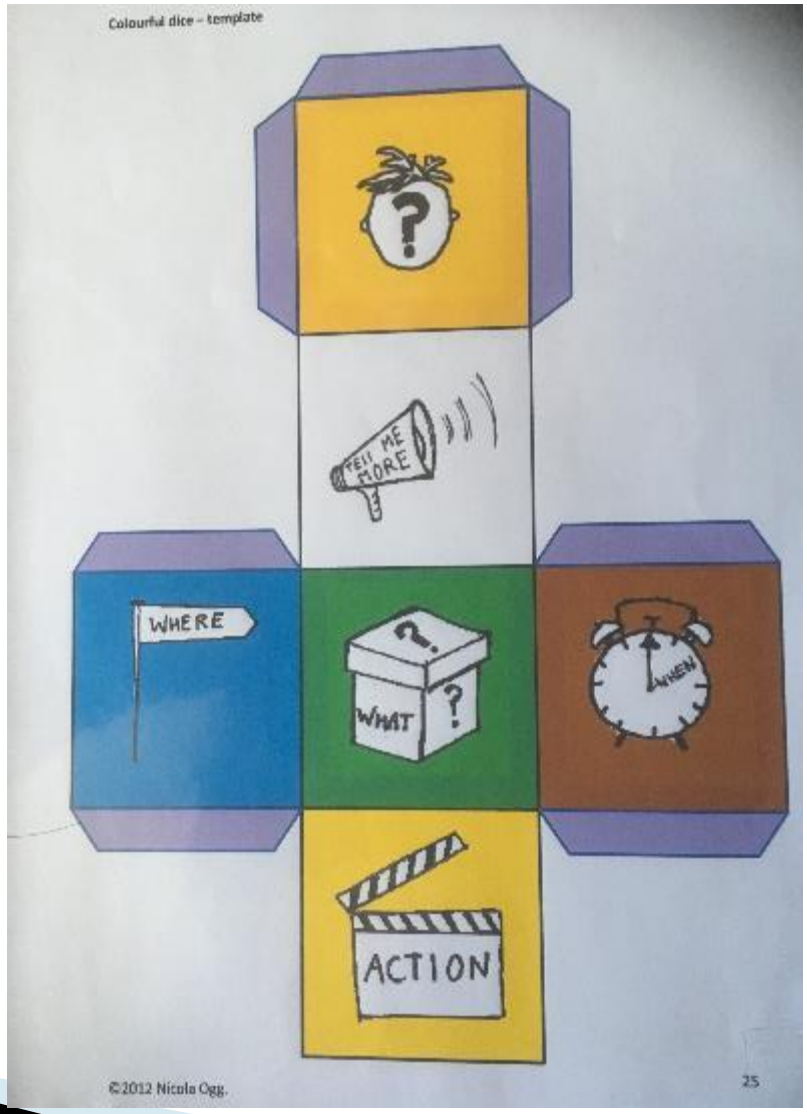


WHO

Nicola Ogg –



Nichola Ogg – Story Dice



Nicola Ogg- Bookmark Prompts

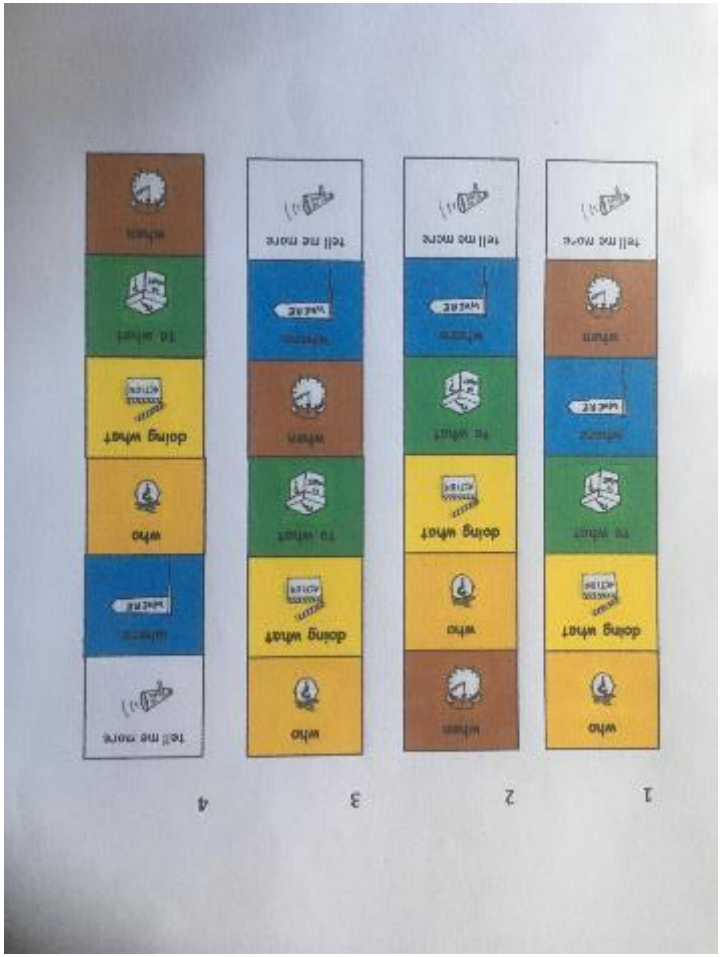


Table Top reminders

Levels of coding

BROAD LEVEL – Narrative/Fact learning

CORE LEVEL – Sentence

Understanding and expression

NARROW LEVEL – Vocabulary

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

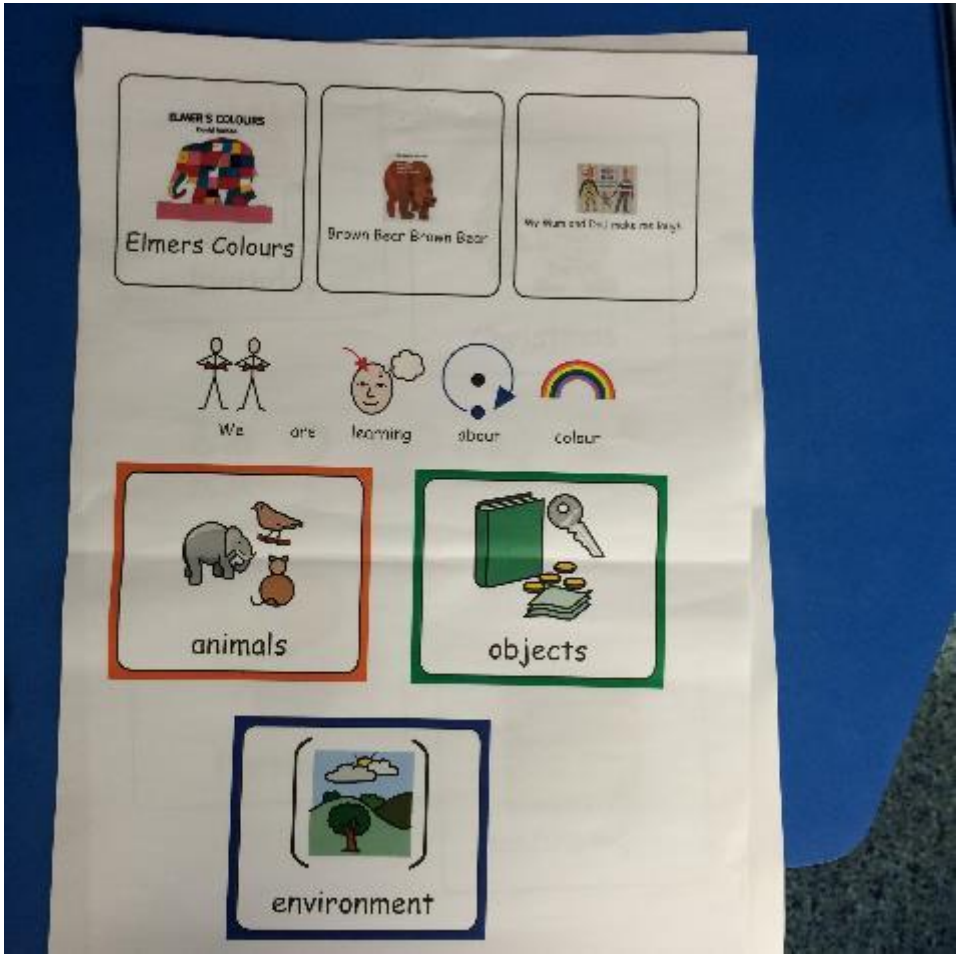
- Ask the questions in relation to the vocab and see which one it answers best

Sometimes 2 questions may fit. Use the one that is closest to the meaning you want.

Colour Coding – seaside vocab

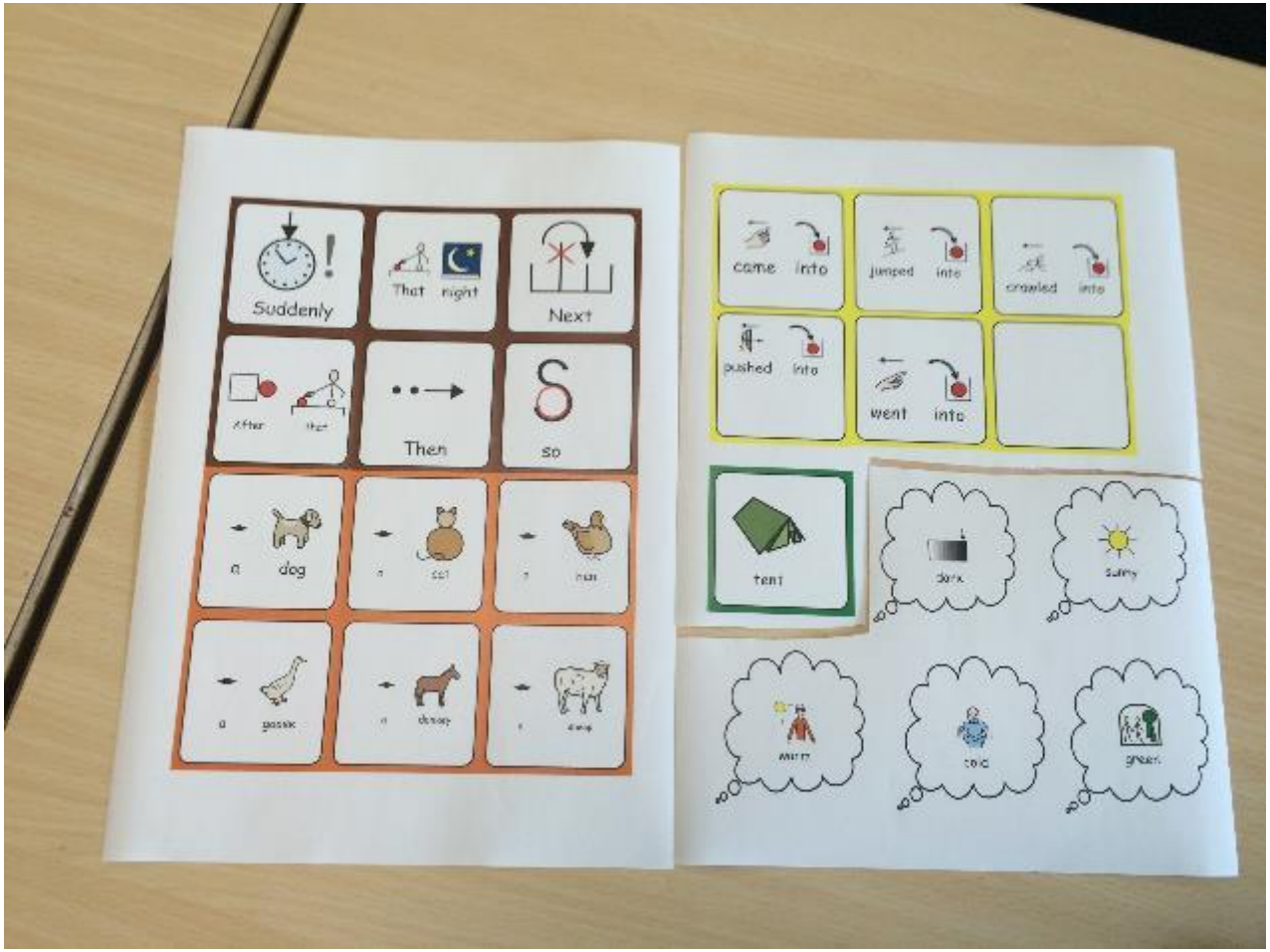
Leona –'seaside' Topic Mind Map

Big Books & Topic fact learning

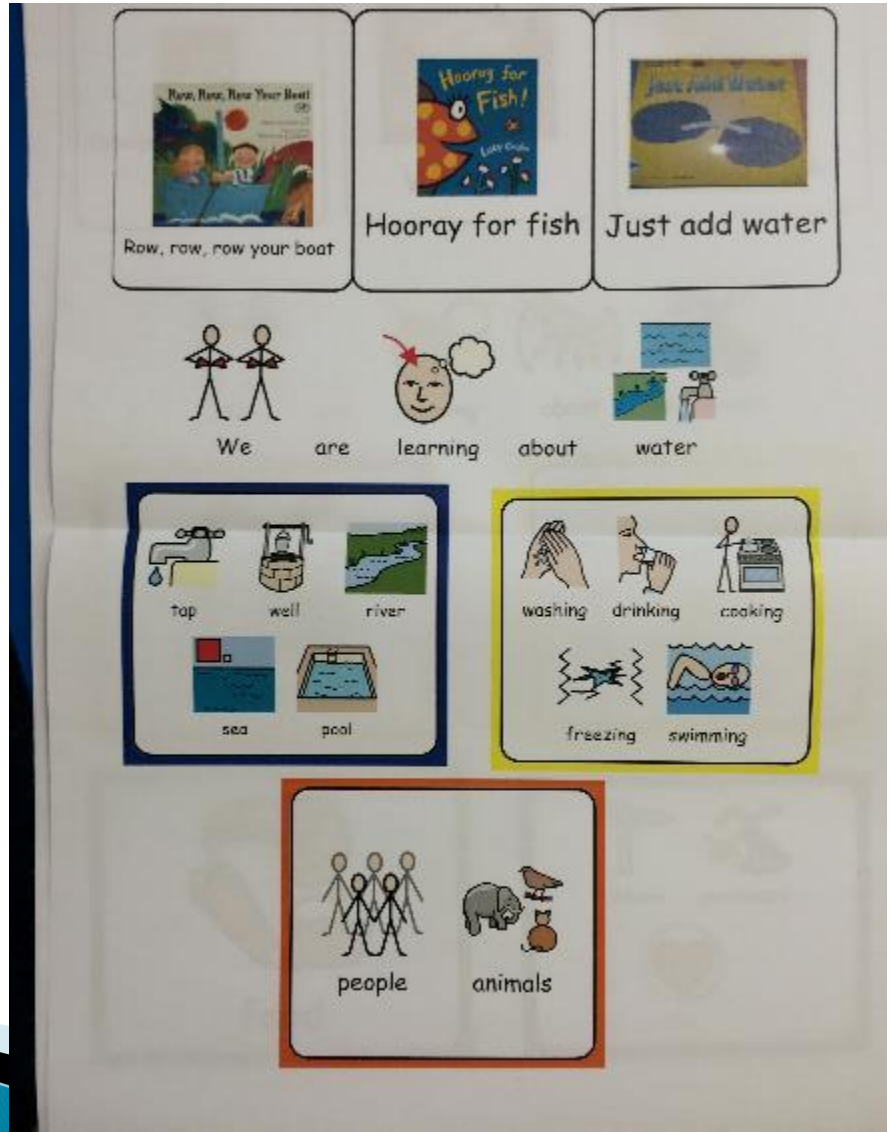


Vocab from class text → own sentence creation

MLD school



Topic Vocab summary sheet



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

prison
where?

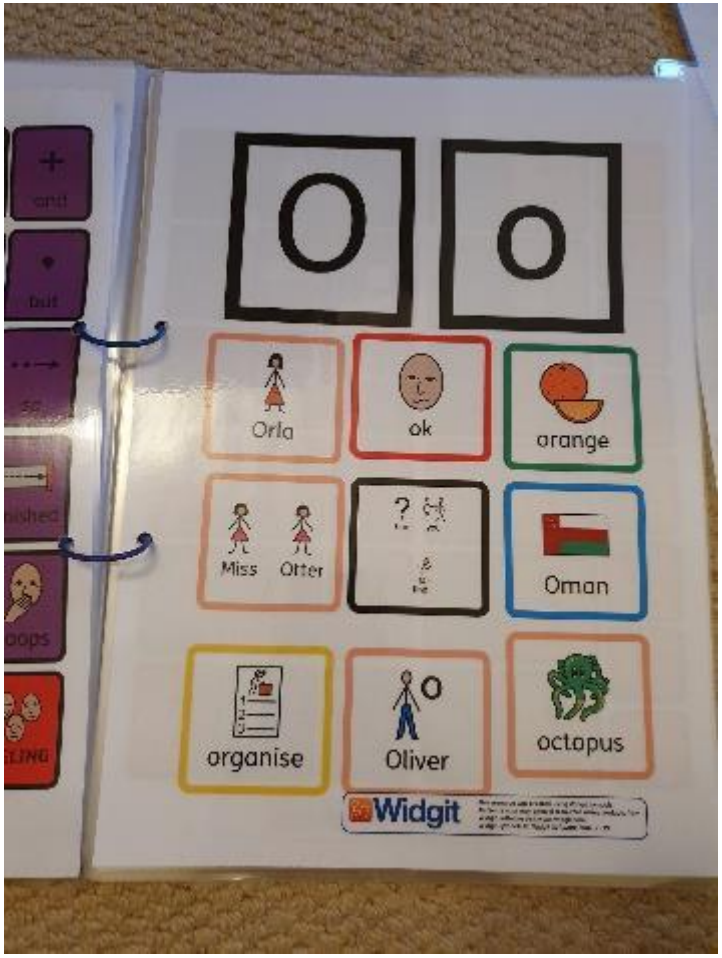
prisoner
who?

A burglar
Who did it?

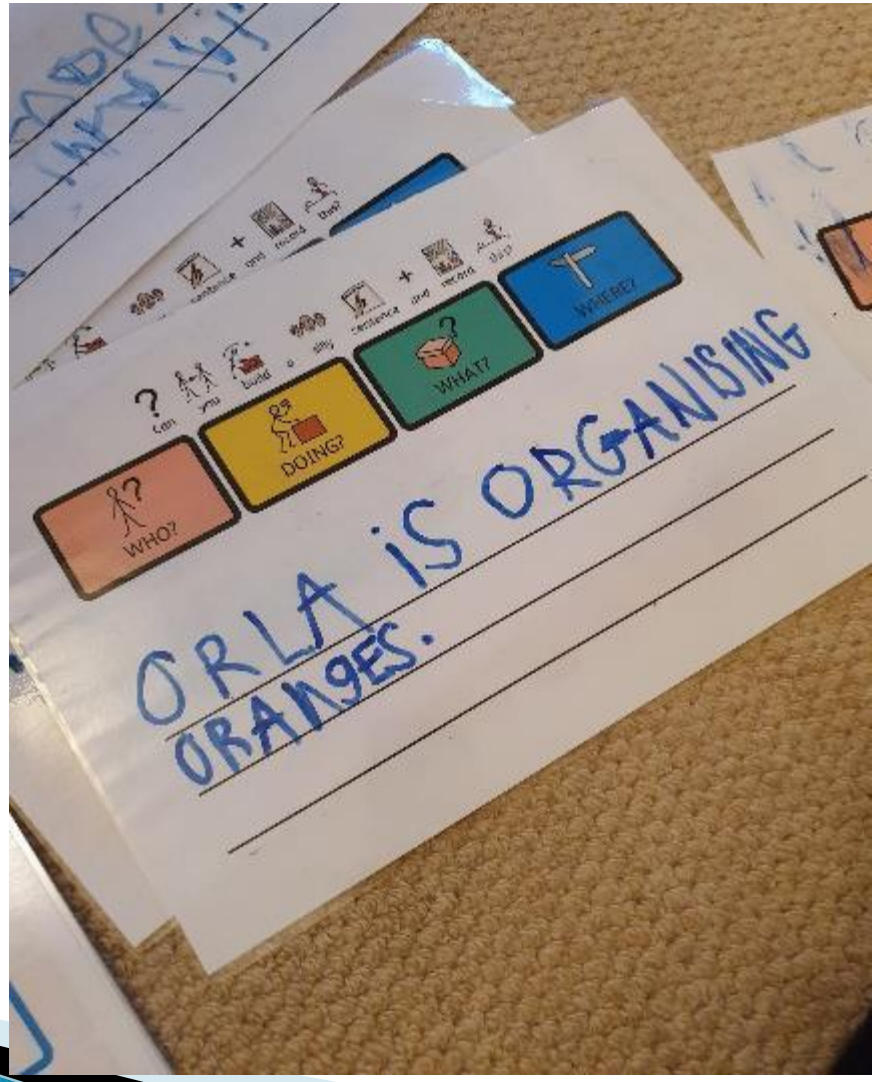
Burgled
What did he do?

A burglary
What is the crime?

Supporting phonics – alphabet book



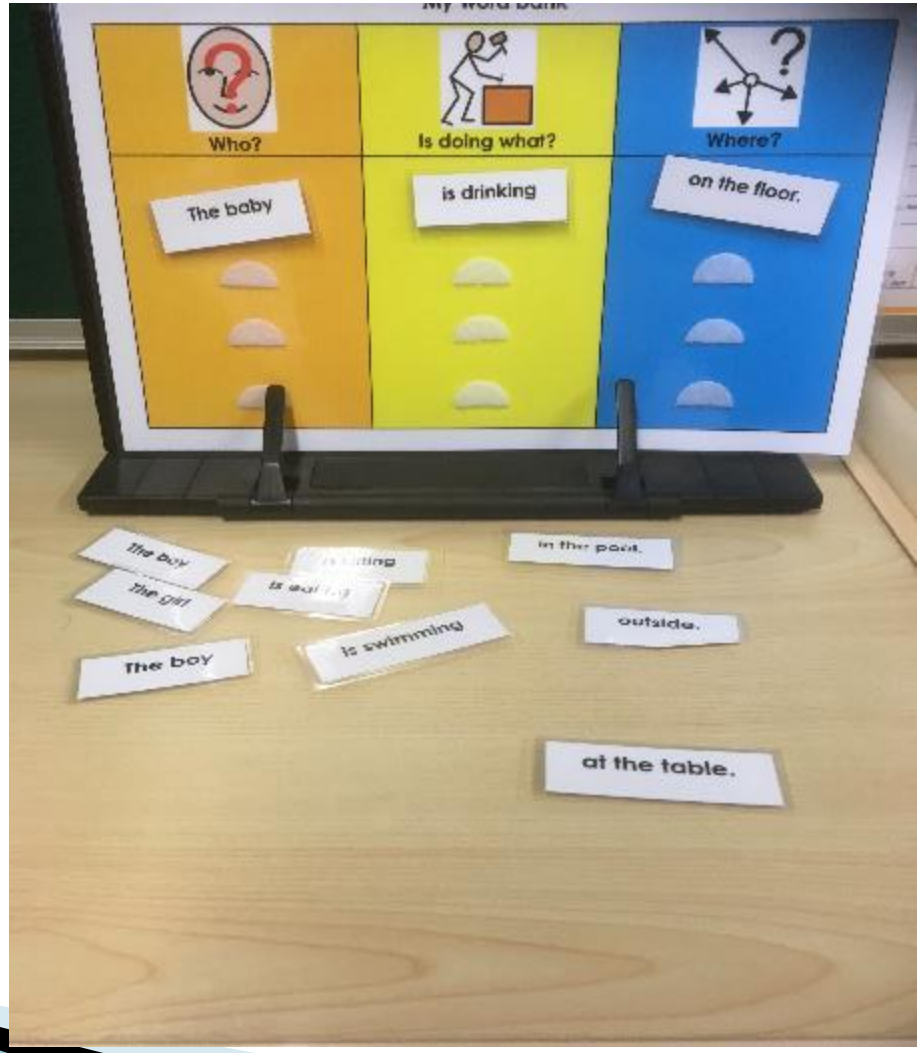
Supporting phonics – sentence



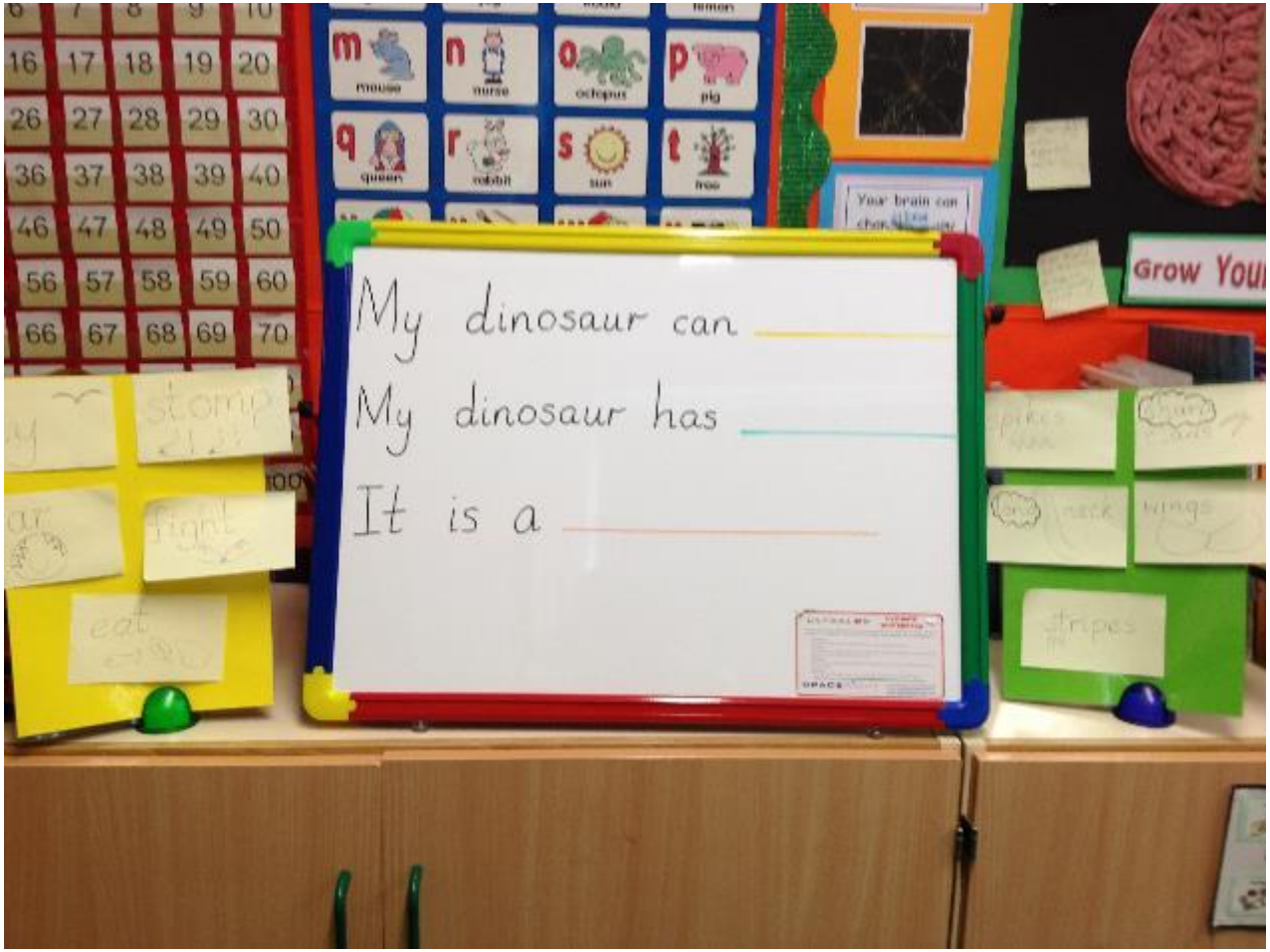
Mainstream KS1 YEAR 1

Mainstream and DLD Base

Sentence Builder

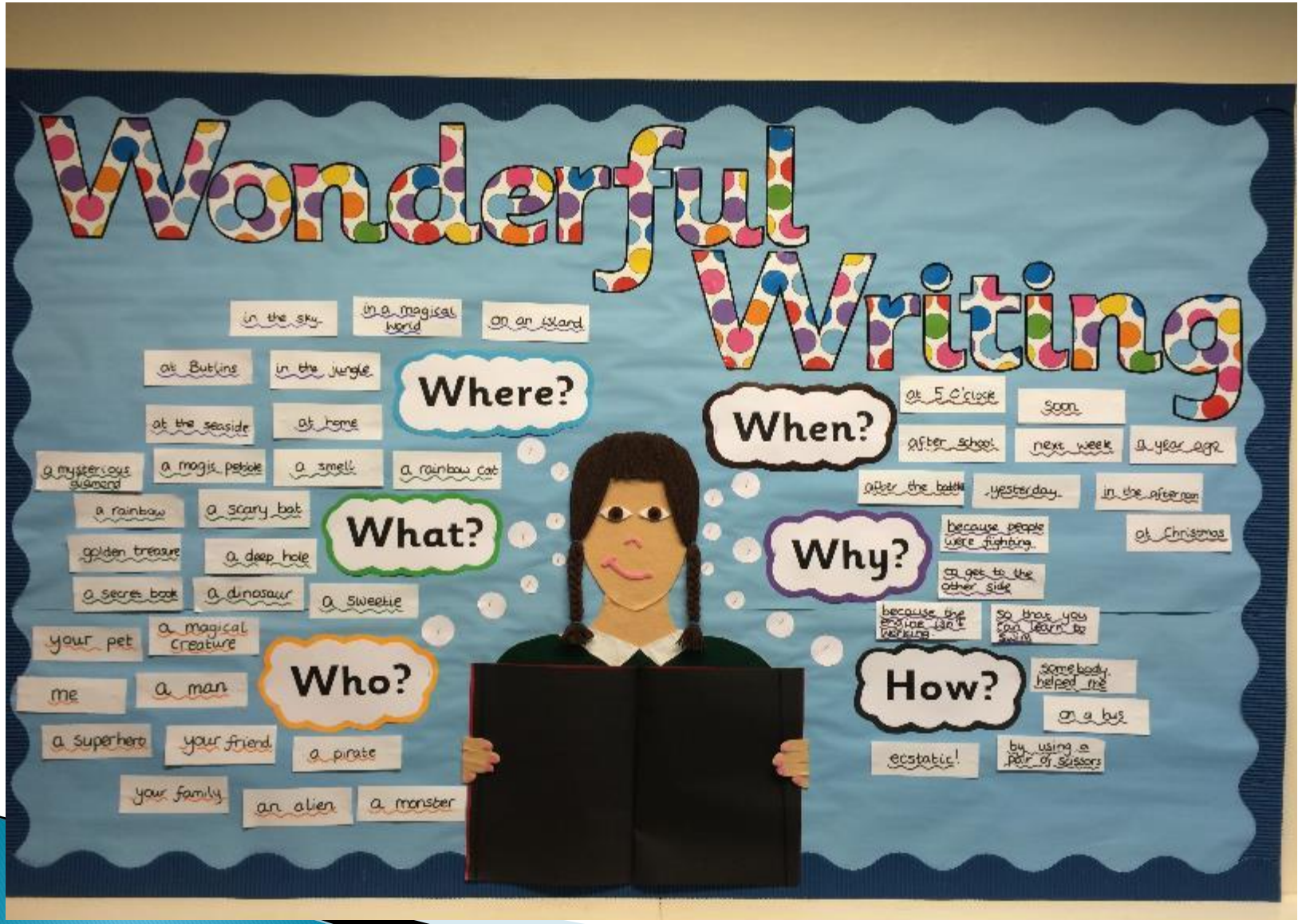


Riddle framework



Mainstream KS1 YEAR 2

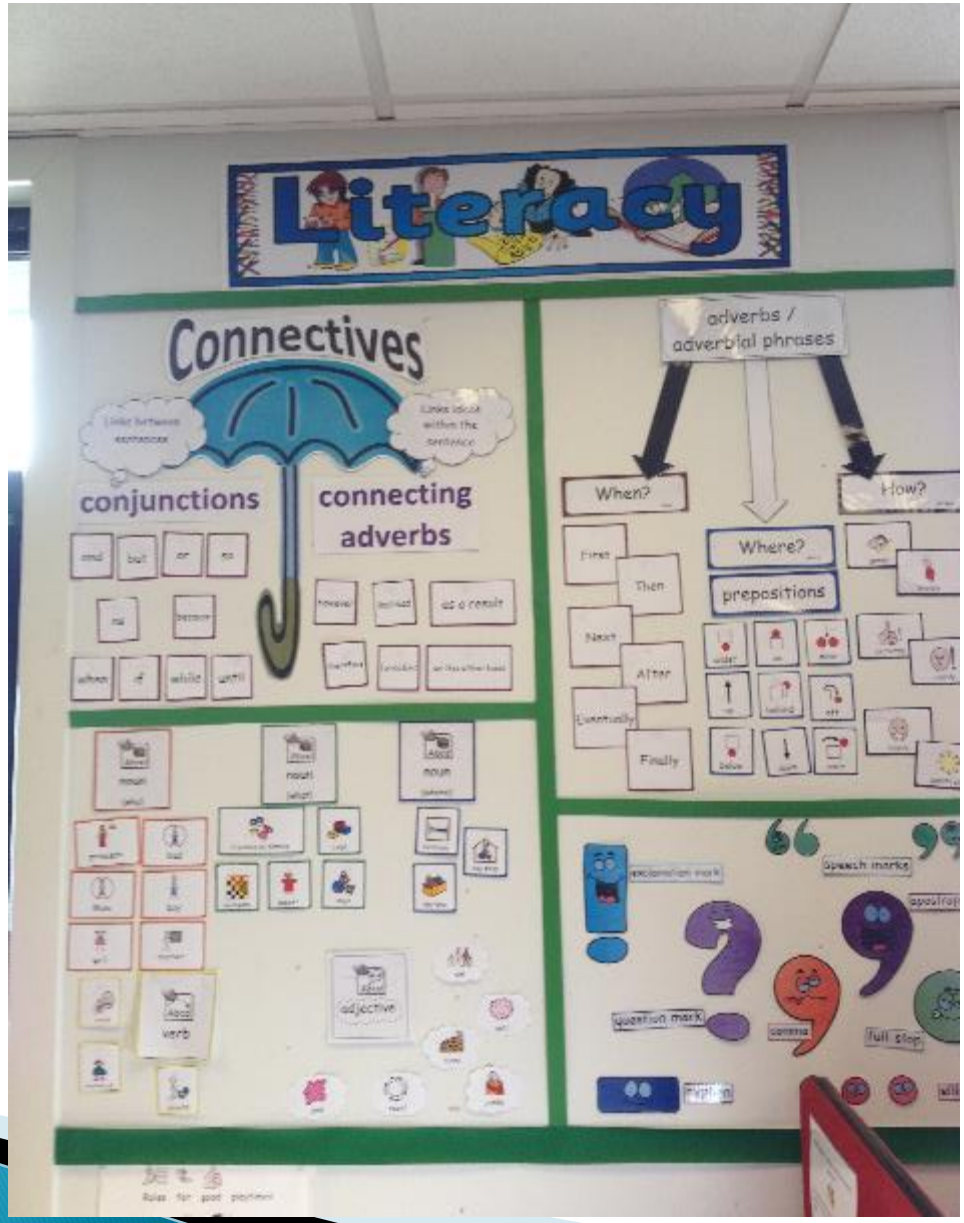
Year 2 – Mainstream Wall Display



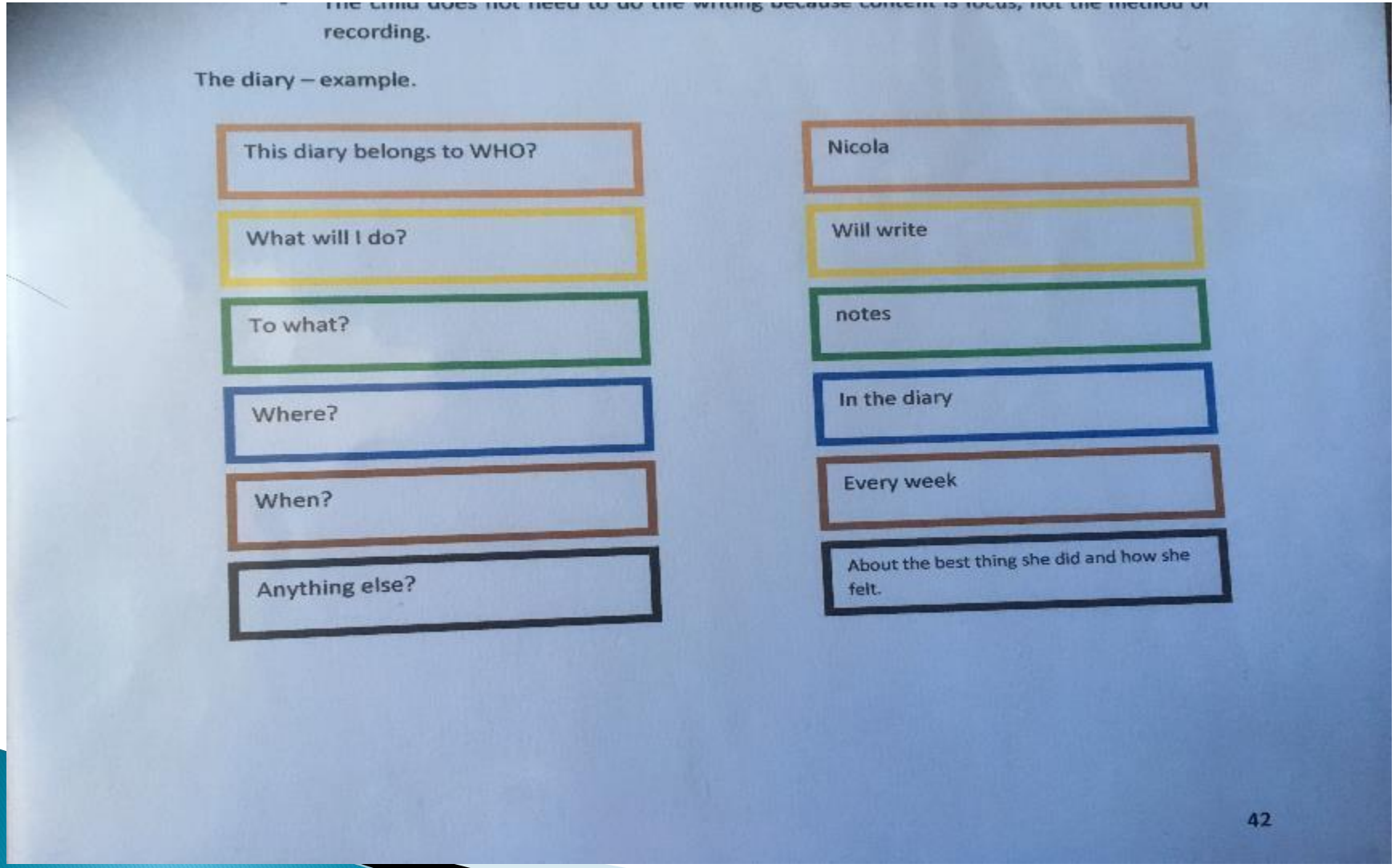
English Writing Wall
Brainstorming Adjectives and Adverbs

Mainstream KS2

KS2 – 'GRAMMAR' – Wall Display



N. Ogg – Diary


recording.
The diary – example.
This diary belongs to WHO?
Nicola
What will I do?
Will write
To what?
notes
Where?
In the diary
When?
Every week
Anything else?
About the best thing she did and how she felt.
42

MLD Primary School –

WHOLE SCHOOL APPROACH for literacy

MLD – Coding up in every class

Year 3/4

Year 5/6

Symbol Wall – *Scottish colours*

MLD School – class resource

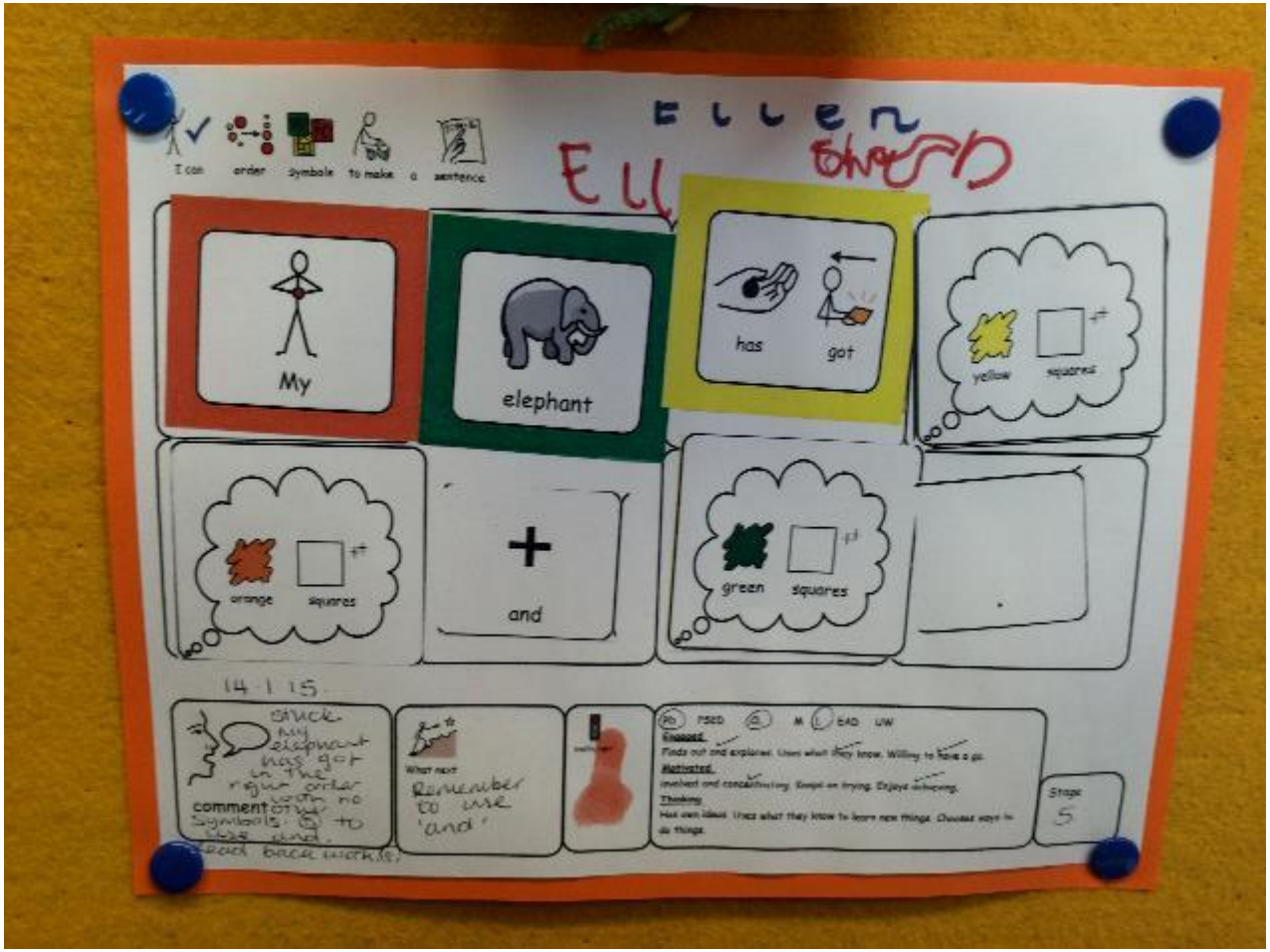
Vocab books – early years

WHEN + WHO

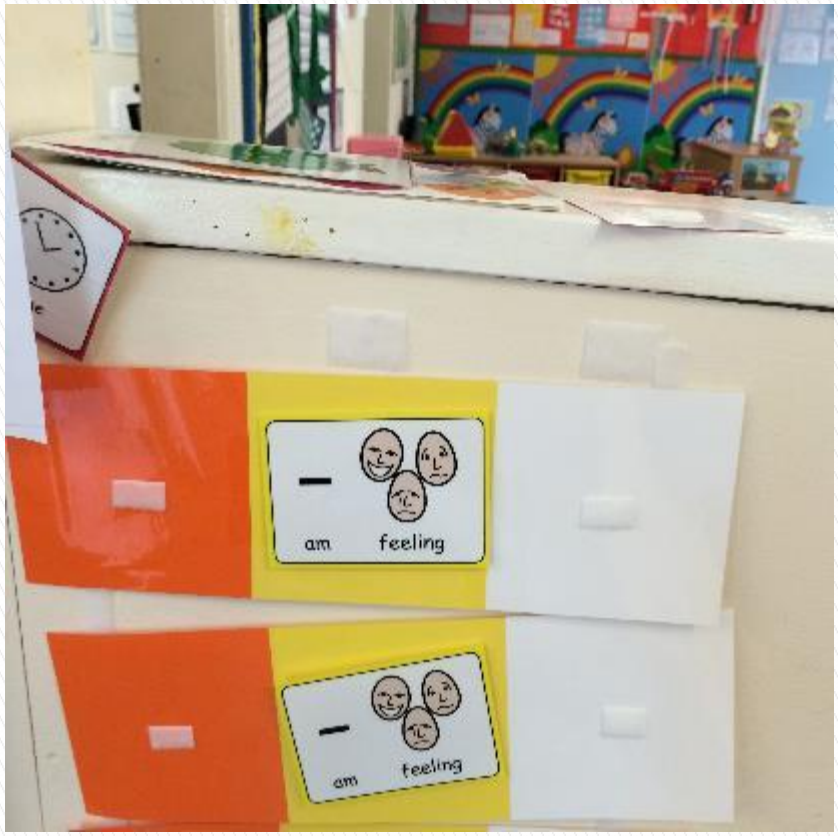
DOING + WHERE

Sentence strips – selected vocab

Elmer sentence 'writing'



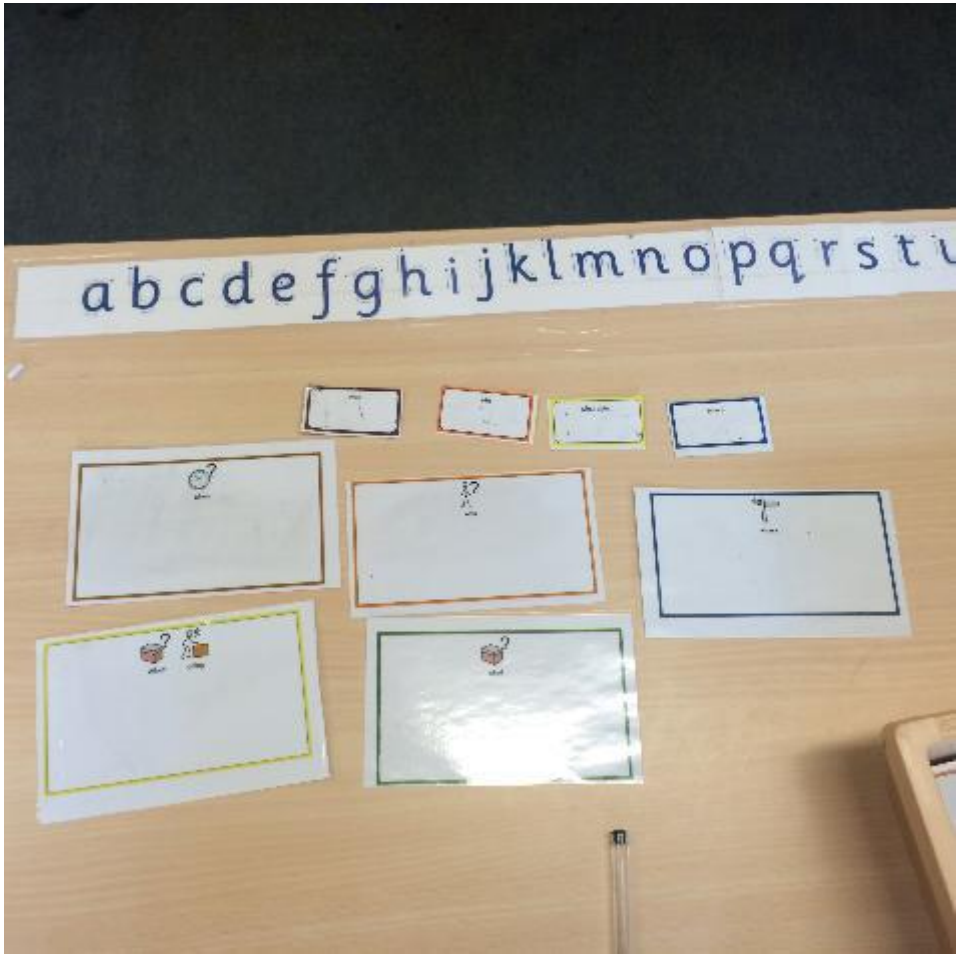
Feelings – WHO + DOING + CLOUD



Sentence Strip

Feelings ‘clouds’

Sentence writing – individual cards for each coded element



References

1. **Black M & Chiat S** (2003). *Linguistics for Clinicians* London:Arnold
2. **Bolderson** S et al (2013) *Child Language, Teaching & Therapy.* Colourful Semantics: A clinical investigation
3. **Bryan A.** (1997) Colourful Semantics. In Chiat S., Law.J & Marshall J. (Eds) *Language disorders in children & adults: psycholinguistic approaches to therapy.* London: Whurr
4. **Bryan A.** (1998) Colourful Semantics 2. In *Proceedings of 1998 NAPLIC conference "Language Impairment: theory and practise".*
5. **Bryan, A., Bolderson, S., Coelho, C. & Dosanjih, C.** (2007). Colourful Semantics: Application in school settings. Afasic 4th International Symposium: Unlocking speech and language. University of Warwick, UK
6. **Chiat S.**(2000) *Understanding Children with Language Problems*. London: Cambridge Univ. Press [Parts II & III]

References cont'd

6. **Ebbels S,**(2007) *Child Language, Teaching & Therapy* Teaching grammar to school aged children with SLI
7. **Hettiarachchi, S.** (2015) The effectiveness of Colourful Semantics on narrative skills with children with intellectual disabilities. Journal of intellectual Disabilities 2015
8. **Jager J. J.** (2005) *Kids Slips:- What young children's slips of the tongue reveal about language development.* Laurence Elbaum Associates.
9. **Jones, E.V.** (1986). Building the foundations for sentence production in a non-fluent aphasic. *British Journal of Disorders of Communication* **21**;1 p63-82
10. **Garrett M** (1988) Processes in language production. In F J Newmeyer (ed) Linguistics: The Cambridge Survey, Vol 3. Cambridge University Press.
11. **Pinker S.** (1989). *Learnability & Cognition: the acquisition of argument structure.* MIT Press.