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Reading, Reading Comprehension, and Story Grammar Analysis

Reading, Reading Comprehension and Story Grammar Analysis

Objective

1.   Introduce reading error analysis.
2.   To explain the rationale for Question Comprehension baselines.
3.   Introduce the principles of story grammar assessment.

Analysis of Reading Errors

The reading error analysis screen can provide insight into a student's ability to decode unfamiliar text and can act as a basis for diagnosis for error types and provide a blueprint for effective intervention planning. There are two error categories: accuracy errors and fluency errors. Accuracy reading errors indicate a reader struggles to decode unfamiliar text and so may not be able to adequately access a text's meaning. Fluency related errors may increase when a student encounters a particularly difficult patch of text, which reduces reading rate and also affects comprehension.

Accuracy Reading Errors

•   **Words Replaced**

   The student substitutes an unfamiliar word he/she cannot decode with a word they do understand.

•   **Words Added**

   The student inserts a word into the reading that is not on the printed page. An added word can change the meaning of a passage.

•   **Words Deleted**

   Words that are on the printed page are omitted, which can change the meaning of a passage.

•   **Words Incorrect**

   The student cannot read a word and abandons all attempts to decode the word.

Fluency Reading Errors

- Words Repeated

  The student repeats a word.

- Word by Word Reading

  The student reads word by word, which affects fluency.

- Pauses While Reading

  The student pauses while attempting to decode a difficult word.

- Self Correction

  The student corrects a previously miscued word.

Reading Error Analysis Guide

1. The student reads from an unfamiliar text, in this case *Guff's Journey.* The student encounters text that they are unfamiliar with.

2. Record each reading error using the symbols found on the Error Analysis Symbols chart on page 36. The reading session should be recorded with a recording device. Most mobile (cell) phones have a voice recording feature.

3. Find a quiet area. Sit across from the student and ensure that the recording device works properly. The child reads from the selected text.

4. Make certain that you have a photocopy of the selected text so that you can mark errors with the miscue symbols as the student reads from the passage. Prior to the reading assessment, count the number of words in the target passage and record the number of words under Total Words on the record form.

5. Begin the analysis by saying to the student, "Please read this story (or passage) out loud to me in a clear voice. When you come to a word you don't know have a go at working it out, but if you can't work it out then move onto the next word as soon as you can. At the end of the passage, I'm going to ask you a few questions about the passage and then I'll ask you to tell me about the story in as much detail as you can." (Both time and record the session)

6.   After the reading is completed, allow the student a few minutes to relax and then begin the comprehension questions. (Refer to the Reading Comprehension Guide on page 39).

7.   Once the comprehension questions are complete, the student can provide an oral retell of the story. (Refer to the Story Grammar Guide on page 47)

8.   Transcribe the errors from the photocopied passage to the Reading Errors Record Form. Use the example form as a guide if needed. Your mobile (cell) phone should have a calculator in the apps section to calculate the totals.
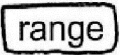

Reading Error Analysis – Example

This section demonstrates a reading error analysis completed with our 10 year old student, Daniel who read from the original story, *Guff's Journey*.

As we can see from the above example, the student made several reading miscues. The reading sample indicates that the student paused when he encountered an unfamiliar word and attempted to decode it. The word complain was miscued as company and the word field was miscued as feel, which changes the meaning of the passage somewhat. The student also deleted the word quiet. The student's overall reading fluency was poor due to the pauses and the word for word reading. The student did self-correct the word mammoth as can be seen with the symbol sc. This short sample demonstrates the usefulness of what is a simple informal test. But even this very short sample gives us an insight into this student's reading difficulty.

Reading Error Symbols (Accuracy Error Symbols)

Reading Error	Symbol	Method
Words Replaced	wa~~t~~er ~~winter~~	Draw a line through the replaced word and write the substituted word above.
Words Added	Snow $\wedge$	Draw a small triangle and write the added word above.
Words Deleted	~~silent~~	Draw a line through the deleted word.
Incorrect Words	range	Draw a square or circle around the miscued word.

Reading Error Symbols (Fluency Errors Symbols)

Reading Error	Symbol	Method
Words Repeated	r	Write *r* above any words that are repeated.
Word by Word	<u>with</u> <u>silent</u> <u>grace</u>	Draw a line under each word that is read word by word.
Self-Correction	SC	Write sc above any words that are self-corrected by the reader.
Pauses while Reading	p	Use *p* to signal when a student pauses for an extended length of time.

Reading Error Record Form

Student: _____   Date: _____   Total Words: _____

Reading Time: _____   Reading Rate: _____ (*words per min*). To tally words per

minute, count the time it took the student to complete the passage. Then divide the total no. of

words in passage by total time (*in seconds*). Reading Rate = no. of words / time x 60.

Reading Errors *(Accuracy Errors)*

Words Replaced   _____   Words Deleted   _____

Words Added   _____   Words Incorrect   _____

Accuracy Errors   _____

Reading Errors *(Fluency Errors)*

Words Repeated   _____   Pauses While Reading   _____

Word by Word   _____

Self-Correction   _____

Fluency Errors   _____

Add the total number of **accuracy** errors and **fluency** errors.

Combined Errors   (ac + fl)   _____

Divide **accuracy** errors and **fluency** errors by **combined errors** and multiply by 100 to

work out the percentage of errors in a passage.

Like this...

Accuracy Errors

No. of **accuracy** errors ____ / _____ combined errors = _____ x 100 = _____ % ac

Fluency Errors

No. of **fluency** errors ____ / _____ combined errors = _____ x 100 = _____ % fl

Reading Error Record Form – *Example*

Student: Daniel   Date: 12/10/2016   Total Words: 550

Reading Time: 370 secs   Reading Rate: 89.20 (*words per min*). To tally words per minute, count the time it took the student to complete the passage. Then divide the total no. of words in passage by total time (*in seconds*). Reading Rate = no. of words / time x 60.

Reading Errors *(Accuracy Errors)*

Words Replaced	*5*	Words Deleted	*4*
Words Added	*4*	Words Incorrect	*6*
Accuracy Errors	*19*		

Reading Errors *(Fluency Errors)*

Words Repeated	*2*	Pauses While Reading	*10*
Word by Word	*5*		
Self-Corrections	*6*		
Fluency Errors	*23*		

Add the total number of **accuracy** errors and **fluency** errors.

Combined Errors   (ac + fl)   *19 + 23 = 42* errors

Divide **accuracy** errors and **fluency** errors by **combined errors** and multiply by 100 to work out the percentage of errors in a passage.

Like this...

Accuracy Errors

No. of **accuracy** errors *19 /42* combined errors = 0.45 x 100 = 45 % ac

Fluency Errors

No. of **fluency** errors   *23 /42* combined errors =   0.54 x 100 = 54 % fl

Baselines for Reading Comprehension

Baselines can provide a starting point for language intervention planning. To obtain a baseline level of a student's abilities with oral and written language a clinician must first conduct specific assessments. In this workbook, the two language skills that are assessed are oral and reading comprehension and story grammar.

Question Comprehension

If a student struggles with decoding, do they also struggle with *comprehension* of text? Targeted inference and story detail questions can help determine this. When establishing a baseline, clinicians and teachers will have a range of potential intervention areas to target if a student struggles with either reading fluency and accuracy or oral comprehension. The question comprehension tasks in this chapter provide a checklist of story detail and inferential questions to examine students' oral and reading comprehension skills.

Narrative/Story Grammar

Children with language difficulty struggle to produce coherent and detailed oral narratives. In general, children with language difficulty have shorter narratives that lack both detail and complexity. This difficulty also affects the ability of students to infer important information in a story, understand story details, and comprehend narrative sequence. Consequently, students who experience language comprehension difficulties often have poor understanding of a story's setting, a reduced insight into character motivation and exchanges, and their oral narrative retells lack detail and awareness. Analyses of both oral and written narratives are considered macrostructure tasks, in that they assess the overall structure of a student's oral or written retell.

The assessment components will be used to establish a baseline with our fictional 10-year-old school student, Daniel.

Sample Text: The sample text will be an excerpt from the story, *Guff's Journey*. To establish a baseline for question comprehension and narrative retell in literature based assessment, there is a sequence of steps that need to be completed.

Sequence

The student is to read from a selected book targeted at the child's instructional level. The selected book should not be *too easy* to read but also not *too difficult*. The Fleisch Kincaid can be an effective tool in choosing suitable, age appropriate books for an individual student. For the purposes of this book, the story, *Guff's Journey* is the example text.

Instructions

Use the following sequence when establishing a question comprehension baseline.

- Begin the analysis by saying to the student… *"Please read this story (or scene) out loud to me in a clear voice. When you come to a word you don't know have a go at working it out, but if you can't get it then move onto the next word as soon as you can. At the end of the story I'm going to ask you a few questions about the story and then I'll ask you to tell me about the story in as much detail as you can."* (Both <u>time</u> and <u>record</u> the session)

- After the reading is completed, allow the student 5 minutes to relax and then begin the comprehension questions. (Refer to the **Question Comprehension Analysis**).

- Once the comprehension questions are complete, the student is to give an oral retell of the story or the scene or scenes they have read.

- To gain an understanding of students' reading comprehension abilities, it is necessary to spend time generating *factual, surface level* inference and *deep level* inference questions from the target text. Read the example provided for some ideas. Questions can be created well before the student begins the assessment. Factual questions can be generated from who, what, and where questions. Inference questions can be a little trickier to generate.

- It is important to note that factual questions centre on what the characters *did* in a story or on the events that happened in a story. Inference questions are generated from events not detailed in the story narrative but hinted at by the author. Correct and accurate answers to inference questions require a deeper understanding of a story's purpose.

- **Fact Based Question**: A question that has a specific answer and that is clearly stated in the text. (What did the character wear?)

- **Surface Level Inference Question**: A question which asks about something that is implied or hinted at in the text. (Why was the character frightened?)

- **Deep Level Inference Question**: A question that does not rely on textual information. The reader must draw on world and word knowledge, and problem solving abilities. (Was the character angry or just playing? Would you be angry in the same situation?)

Example Questions in Appendix D

A range of example questions that cover the seven scenes in the Guff's Journey story are in appendix D. Each of the seven scenes has three fact based questions, three shallow level inference questions and three deep level inference questions, a total of sixty three questions. The example questions are certainly not exhaustive, but do provide a guide to the type of questions that can be gleaned from the Guff's Journey text. Clinicians and teachers are encouraged to use the example questions as a guide to, in time, develop your own fact based and inference questions.

Question Comprehension Analysis – *Example*

Sample Text: This section demonstrates a question comprehension analysis completed with student Daniel who read the story, *Guff's Journey.*

Scene 1

The dry grass pressed fierce into Guff's legs as he lay in the dirt, but he did not complain. Guff was on his first hunt with the elders and he needed to be quiet as a field mouse. Above the hunters loomed a mighty bull muloth, its tusks curved and lethal. Sweat beaded Guff's forehead though the day was cold. Guff's father, Utha, anxious for Guff, met his eyes and smiled. Utha's arm muscles were tense and corded as if carved from oak. He lay flat beside other men of the tribe a short spear toss from Guff. Between the tribe's spears and fat calves was the bull.

In the above example text we have part of the first scene of the story. We can generate a number of *factual, shallow level inference* and *deep level inference* questions from this short section. The next section features example of questions generated from the *Guff's Journey* text.

There are multiple targets to form questions from this short sample. We have a rather tense scene where Guff lays in the dirt not daring to move or even breathe, the other worldly and exotic location set in prehistoric Europe and the unimaginably tense and terrifying image of a wild mammoth, an animal that would dwarf a modern day elephant, ripping out chunks of grass mere centimetres from the protagonist's head.

Each comprehension analysis form has space provided to write the initial question, the student's verbal response and the score assigned to each response with a handy score guide with *0* for an inaccurate or incomplete response, *1* for partially correct response and a score of *2* assigned to scores that are complete and accurate. Clinicians should use the example pages as a guide to generate questions from other sections or the same section from the *Guff's Journey* story and, eventually, from commercially available storybooks.

Question Comprehension Analysis – Factual

(Example)

Student: *Michael*	Date: *17/10/2016*	Year Level: *4*
School: *Mount Bump P.S.*	Book Title: *Guff's Journey –*	
	SCENE 1	

Factual Questions

Score each question 0, 1, or 2.

Question 1:   What pressed into Guff's legs?

Students Response: '*Dry grass*'

Score: 2

Question 2:   What were the main targets of the hunt?

Students Response: '*The mammoths or muloths*' (Correct answer – *several calves*)

Score: 1

Factual Question Score Guide

0   Inaccurate and incomplete

1   Partially correct, logical but not complete

Question Comprehension Analysis – Surface Level Inference *(Example)*

Student: *Michael*	Date: *17/10/2016* Year Level: *4*
School: *Mount Bump P.S.*	Book Title: *Guff's Journey – SCENE 1*

Surface Inference Questions

Score each question 0, 1, or 2.

Question 1:   Why was Guff's forehead slick with sweat?

Students Response: 'He was hot' (Incorrect answer – Guff is nervous)

Score: 0

Question 2:   Why are the muloth's tusks described as lethal?

Students Response: 'Because they are sharp and long"

Score: 1

Surface Level Inference Question Score Guide

0	Inaccurate and incomplete
1	Partially correct, logical but not complete

Question Comprehension Analysis – Deep Level Inference *(Example)*

Student: *Michael*	Date: *17/10/2016* Year Level: *4*
School: *Mount Bump P.S.*	Book Title: *Guff's Journey – SCENE 1*

Deep Level Inference Questions

Score each question 0, 1, or 2.

Question 1: Why was it important for hunters to be very quiet when hunting?

Students Response: *'Too much noise might scare away the animals'*

Score: 2

Question 2: For what reason would Neanderthals be hunting mammoths (muloths), particularly when they are so dangerous?

Students Response: *'Because they are hungry'* (Partially true – hunger, clothing, expert hunters)

Score: 1

Deep Level Inference Question Score Guide

0	Inaccurate and incomplete
1	Partially correct, logical but not complete

Analysis of Comprehension Responses

Factual Based Questions

As we can see with responses of fictional student, Daniel, he did quite well with factual questions related to simple, literal information. For the three factual questions the student scored nearly full marks. His only error was that he believed the mammoths' were the target of the hunt. The more accurate response would be that the calves were the target of the hunt.

Surface Level Inference Questions

The student struggled with questions that required him to interpret information that was present in the text. His understanding of *surface level inference* questions was average in that he understood the premise of the question but was unable to supply detailed information. He scored *3 points* out of a possible *6*.

Deep Level Inference Questions

 The student struggled to answer the inference questions. The student's response to the question, *'How old do you think Guff might be?'* is revealing in that the student believes Guff to be much younger than he actually is. Of course, with deep level inference questions there may be several correct answers to a question. In this instance, the student may not have the world knowledge or awareness to know that a very young child would *most likely* not be on a hunt with grown men particularly as they hunt large and dangerous mammoths.

On the basis of this brief analysis of question comprehension skills, we can conclude that the student's comprehension of the story's more complex themes is quite poor. The student is able to recognize and attend to the surface details of the text but doesn't have the language skills or inferential comprehension to unlock the story's deeper themes.

Oral Retell - Story Grammar Analysis

Children with language comprehension difficulty may have difficulty understanding and explaining story action and events, character motives and sequence of events. The accurate retelling of a recently read story also indicates that students with oral language comprehension difficulty may struggle to understand cause/affect structures within stories. The ability to comprehend and accurately identify the structure of complex texts is difficult for students who struggle to understand story grammar structure. Story grammar skills often need to be explicitly taught.

Sequence

After the student has read the nominated story or scene or has had the story read to them, allow the student to have a short break.

Instructions: Use the following sequence when establishing a story grammar baseline.

1. Ensure that you record the child's story retell. Most mobile (cell) phones have apps that allow you to record voices, or you can use a specially designed dictaphone to record students' voices.

Instructions: 'Let's look at this story together. It's a story set in prehistoric times about a boy named Guff. You need to listen carefully while I tell the story. When I've finished it will then be your turn to tell the story. Tell me everything you can about the story and make it the best you can.'

2. Transcribe the student's oral retell and score the student's response on the Oral Retell Macrostructure Analysis chart.

Oral Retell Story Grammar Analysis - *Example*

Sample Text: This section demonstrates an oral retell of a 10 year old student who narrates the story, *Guff's Journey* after having read the story with the clinician during a shared reading activity five minutes previously.

Student: 'There was a boy hunting with his dad. They were hunting mammoths. The boy got lost because a mammoth tried to hurt him. His dad got lost too. The boy fell down a hill and wakes up in a ditch. And he keeps waking up. He's scared cause there's no one there and he's all alone. He wants to go home. He finds a river and then finds a lake. He makes a fire and catches a fish to eat. A big cat sees him and chases him up a tree. He then gets rescued.'

The student's oral retell of *Guff's Journey* is recorded and later transcribed on to the *Story Retell Transcription* form. As we can see from the above example, the student has provided a retell that has some elements of story grammar but the retell is brief and lacks detail.

The grammar is poor and the student's vocabulary is below average for his age and there is very little complex language. The student's oral retell is analysed and his results entered onto the *Oral Retell Macrostructure Analysis* form.

Oral Retell *Guff's Journey* - Transcription

Student: Daniel   **DOB:** 10/ 09/ 2005   **Examiner:** David Newman

School: Mount Bump Primary School   **Date:** 17/10/2016

Record the student's oral retell of the story. Most modern cell or mobile phones have a voice recording app as standard, which can record a student's oral retell. Transcribe the student's retell onto the space provided.

Instructions: 'Let's look at this story together. It's a story set in prehistoric times about a boy named Guff. You need to listen carefully while I tell the story. When I've finished it will then be your turn to tell the story. Tell me everything you can about the story and make it the best you can.'

Student's response

'There was a boy hunting with his dad. They were hunting mammoths. The boy got lost because a mammoth tried to hurt him. His dad got lost too.

The boy fell down a hill and wakes up in a ditch. And he keeps waking up. He's scared cause there's no one there and he's all alone. He wants to go home.

He finds a river and then finds a lake. He makes a fire and catches a fish to eat. A big cat sees him and chases him up a tree. He then gets rescued.'

Oral Retell – Macrostructure Analysis Example

Story Element	Present	Absent
Beginning (One day, Once upon a time…)		√
Character Introduction Guff and his father Utha	√	
Initiating Event (Guff is on his first hunt…)		√
Plan: Cognitive verb used… (Guff knew he needed to be quiet….)		√
1. Attempt to solve the problem (Guff ran for his life to escape the mammoth)		√
Obstacle (Guff fall down a hill and lands in a ditch…)	√	
2. Attempt to solve the problem (Guff follows a river to find his tribe and home…)		√
Consequence (Guff makes a fire to cook a fish and attracts a saber-toothed cat)		√
Reaction/Resolution (Guff races to a tree and climbs up to escape the saber-toothed cat)		√
Closing Event (The fire has been seen by Guff's tribe who rescue Guff from the big cat.)		√

Indicate the level of prompts needed for the student to complete the oral retell. Please tick the appropriate box that best represented the use of prompts.

☐ **None:** The student completed the oral retell effectively without prompts.

☐ **General prompts:** The student needed some prompts, *'you're doing well…'*

☐ **Specific prompts:** *'Tell me how the story begins …how did he feel?*

Oral Retell – Macrostructure Analysis Form

Story Element	Present	Absent
Beginning (One day, Once upon a time…)		
Character Introduction Guff and his father Utha		
Initiating Event (Guff is on his first hunt…)		
Plan: Cognitive verb used… (Guff knew he needed to be quiet….)		
1. Attempt to solve the problem (Guff ran for his life to escape the mammoth)		
Obstacle (Guff fall down a hill and lands in a ditch…)		
2. Attempt to solve the problem (Guff follows a river to find his tribe and home…)		
Consequence (Guff makes a fire to cook a fish and attracts a saber tooth cat)		
Reaction/Resolution (Guff races to a tree and climbs up to escape the saber-tooth cat)		
Closing Event (The fire has been seen by Guff's tribe who rescue Guff from the big cat.)		

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