COMPREHENSION

- **1-2**. Index.
- **3-5**. Summary of what comprehension is. Some ideas for improving comprehension.
- **5- 6.** Spalding. Exam tips for seniors. Lower level Skills Hierarchy. Comprehension skills: a traditional list of comprehension skills.
- 7-12. Scientifically based reading research to improve understanding of dyslexia/ reading disorder. Birsch.
- **8.** Areas to address in written expression.
- **9-12.** Other comprehension factors. Comprehension Thesaurus.
- **13-15. (DET)** Factors affecting comprehension. How reading fluency affects. Finding correct text level. Background knowledge. Metacognitive skills.
- **16-17**. **(DET).** Characteristics of good & poor readers. Text factors affecting comprehension. The reading process.
- **18-20**. DET: English K-6. Syllabus & Support document. Variables that Influence Comprehension. Code emphasis texts. Assumed causes for reading failure. List of ideas in Strategies Comprehension document.
- 21. Introduction to SKORE (Structured procedures for mastering content subjects).
 - **22. Phase 1**: preparing the text.
 - i. Surveying & scanning.
 - ii. Setting up the mind map.
 - iii. Preparing cue cards... then add definitions to them.
 - 23. Phase 2: selecting & organising the information.
 - i. Abstracting (condensing) the text: must keep the author's words.
 - ii. Taking notes in the mind map.
 - iii. Consulting with the instructor.
 - iv. Colour coding and graphics.
 - v. Creating mnemonics.

Working with the Mind Map.

24-26. Phase 3: summarising, writing précis, outlining & note-taking.

- i. Summarising.
- ii. Writing précis. (P. 25)
- iii. Outlining. (p. 26).
- iv. Note-taking: general & from lectures. (See Strategies Comprehension document for:

Comprehension: **SKORE** training. <u>i. Semantic mapping</u>: synonym-antonym. Related features maps.

Multiple meanings map: concept mapping; creating lexicons by geometric progression; systematic study of non-literal language, esp. idioms & metaphors).

27-30. **(DET)**. Ideas for developing subject specific vocabulary: A plan for strategic reading. Vocabulary instruction. Making predictions. Example of a semantic mapping script.

(See Strategies Comprehension for the following Before reading strategies: (higher level comprehension.. of complex text). Before & after charts. Structured overview. Retelling. Note-taking. Modelling & deconstruction. Main ideas. Critical literacy. Skimming & scanning. Making predictions. Read the pictures. Analysing text for layout. Brainstorming. S.Q.R.R.R: Survey. Question. Read. Recall. Review. K.W.L: What I know. What I want to learn. What I learned).

- 31. Structured overview.
- 32. Modelling and deconstruction (biographical recounts).
- 33-34. Semantics of language. Summary with a piece of rope.
- **35-36**: Reading comprehension: nature, assessment & teaching. Professor Maggie Snowling. *Speld News* 2010.
- **37-38**: Comprehension assessment involves both decoding assessment & comprehension assessment. Developing Reading Comprehension Strategies.
- **39-40.** Rosner: help those who have problems with comprehending. Categorising activities.
- 41-47: Edward de Bono's 6 hats.
- 43-54: **HELP** books.

Reading is **constructing meaning** from text. It consists of every individual's **personal interpretation** of the text. As such, the **background knowledge** that the student brings to the task is crucial: the **experiences**, **knowledge**, **background** the reader can draw on.

Ascertaining and building up the background knowledge:

*what do they already know about the topic: **brainstorm** and record this. Can use **semantic mapping** to show relationships/ associations between concepts/ ideas/ facts/.

*predict what the text may be about: teach **skimming:** read the title, chapter headings, subheading, captions under pictures and diagrams, interpret graphs.

*provide background information through other media first: DVD, YouTube, documentaries, talking computers, books.

*Sort this knowledge, using the 5 W questions.

This is also known as advance warning of content and vocabulary.

There are **4 levels** of comprehension skills:

Read for a purpose. Knowledge of text types is imperative.

- 1. Literal: strengthening the ability to retain literal information. Specific facs/ issues that are actually mentioned in the text. Reading the lines.
 - *recall
 - *grasp of sequence or order.
 - *main idea.
 - *sequence.
 - *details.
 - *punctuation awareness.
 - *recognition of cause and effect when stated.
 - *comparisons
 - *contrast.
 - *following directions: oral & written.
 - *organisation.
 - *character traits.
- 2. Interpretive/ inferential: The reader must supply/ interpret the information that is not actually stated in the text. Reading between the lines.

As for 1.

- *recognition of cause and effect when not stated.
- *Synthesising.
- *Reasoning cause and effect.
- *Drawing conclusions.
- *Making inferences.
- *Generalising.
- *Speculating.
- *Anticipating/ predicting endings.
- *Noting.
- *Predicting outcomes.
- *Making comparisons.

- *Locating.
- *Skimming.
- *Classifying.
- *Summarising.
- *Details.
- *Discovering relationships.
- *Linking information among sentences.
- *sensing the motives of a character or of the author.

3. Critical:

- *Judgement of quality, value, accuracy, truthfulness. Individual judgments relating to text.
- *Detecting bias or over-statement.
- *Detecting propaganda.
- *Analysing.
- *Checking validity.
- *Checking author's reputation, biases & purposes.
- *Evaluating what has been read/pulling it all together.
- *Relating to own experience.
- *Applying to the broader societal milieu...> purpose/ moral of the story.

4. Creative:

- *Generating new ideas and new insights.
- *Applying information to a new situation.
- *Responding emotionally.

General skills:

- *Summarise the main ideas & relate facts to support the main idea.
- *Select an appropriate title after reading.
- *Answers specific detailed questions.
- *Finds factual & inferential information.
- *Interprets descriptive words & phrases.
- *Recognises shifts of meaning caused by using words in different context.
- *Selects meaning of a specific word when meaning is implied.
- *Interprets literal & figurative meaning.
- *Draws logical conclusions.
- *Predicts possible endings based on previous events.
- *Identifies relationships among characters in a story.
- *Recognise that characters change as a story develops.
- *Makes inferences about material read.
- *Recognised structure or plot.
- *Compares similar elements in different stories.

Successful reading (being able to understand what the writer has said) depends on 4 things:

- *being able to **interpret** the written sounds/ words/ sentences (graphological information) and give **meaning** to what is being read (semantic information).
- *using knowledge of the structures that dictate written language (grammar) and giving **meaning** to what is being read (semantic information).
- * using sound-symbol association (phonological information) and grammar to read and write text. Use of semantic and syntactic clues.
- * using the written word and knowledge if sound-symbol association (phonological information) to "work out" what has been written.

Teachers must:

- *activate prior knowledge.
- *instruct at students' level of understanding.
- *help students focus on main points.
- *monitor comprehension during reading.
- *fill gaps in knowledge.
- *help students relate new knowledge to old.
- *explicitly teach the above strategies.
- *help student identify when to apply strategies.

SPALDING:

- *Comprehension is one of the 4 elements of the Spalding approach. The others are: spelling, writing and the Spalding philosophy.
- *Many students have not made the connection between **listening and reading comprehension.** To do this they need:
- *to monitor their own comprehension. Those with good vocabulary have an advantage. Vocabulary can be increased by using dictation to define most frequently used words. It can also be increased by treating unfamiliar words that crop up in reading.
 - *encourage the re-reading strategy.
 - *encourage the idea that reading must make sense.
 - *encourage thinking about ideas and information, not just phonics/ spelling etc.
- *to make connections in the text. Students need to understand and talk about how literature connects with their personal feelings, memories and experiences. For children who have not been read to, this needs to be modelled. For example: in a story about a lost pet, the teacher could ask how the child would feel/ discuss how she felt when her pet f=got lost/ how would you feel?
- *to make predictions about the events, actions and outcomes in a text. It will involve drawing conclusions from prior information in the text and thinking about the relationships between the things that have been read about.

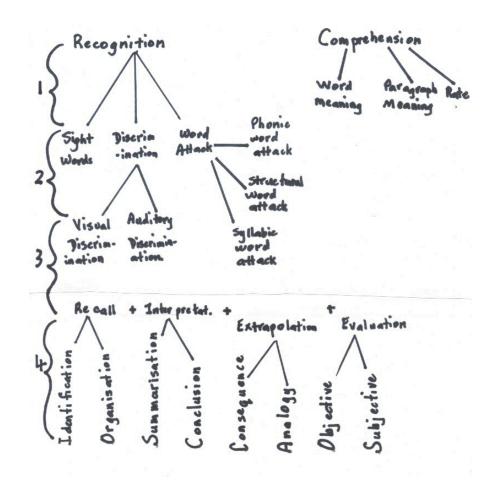
SENIORS: exam tips re comprehension

- 1. Read the front page **VERY CAREFULLY**. It contains **vital information**.
 - (a). Time allowed.
 - (b). Basic instructions
 - 2. Make sure read the italicised *lead in* to the passage.
- 3. Read through he first passage quickly to get an idea of what is contained in the passage.
 - 4. "Scan" the questions, noting the marks allocated for each one.
 - 5. **STOP!** Now ask yourself the following questions.
 - (a). What is the passage about: think *linearly*.
 - (b). What do the questions ask?
- 6. **NOW** read the question **very carefully.** What is wanted? Are there parts to the question? If so, how many, and what marks are allocated to each?
- 7. **READ VERY CAREFULLY** the part in the passage where the information is contained. (Normally, but not always, the early questions will be concerned with the first part of the text.)
- 8. **ORGANISE** your thoughts----**REMEMBER** full sentence answers, with proper "lead in", unless told otherwise.
- 9. KEEP AN EYE ON THE TIME. DEEP BREATH if you start to panic.

Seniors: note taking:

*outlining *Mapping. *Diagramming. *Summarising.

Lower level skills hierarchy:



Comprehension skills: a traditional list of comprehension skills.

*authors' intent purpose & bias.

*cause and effect.

*classification: categories.

*comparison

*conclusion

*detail recognition.

*empathy and emotional reaction.

*evaluation: subjective and by external criteria/ judgement.

*exaggeration and hyperbole recognition.

*extending interpretation/ extrapolation.

*factual recall.

*following directions.

*generalisations.

*inference.

*literary style.

*main idea.

*mental imagery.

*mood.

*organisation

.*plot, story problems.

*propaganda detection.

*restatement.

*sequence/ time relationships

*separation of fact from opinion. (figurative from literal)

*summarising.

*whole-part recognition.

Scientifically based reading research to improve understanding of dyslexia/ reading disorder. Birsch,

Oral language: oral language is the foundation of comprehension & helps the reader use decoding skills. Ideally, the following skills have developed prior to school: language play (listening to rhymes, discussing & examining books, developing oral vocabulary & verbal reasoning, learning the purposes of reading). Also fine motor writing activities.

Phonemic Awareness: is the ability to understand the sound structure in spoken words. It facilitates and predicts later reading success. Ideally the following activities are present and during learning to read.

*intensive oral play of sufficient duration: identifying & making rhymes; counting and working with syllables in words; segmenting initial and final phonemes; hearing and blending sounds; analysing initial and final sounds in words and segmenting words.

To learn to read, children must be able to pay attention to, and manipulate, the sequences of sounds or phonemes in words. It can be difficult because of the coarticulation (running together) of the separate sounds in spoken words.

Alphabet knowledge: the following skills are powerful predictors of later reading success: saying the sounds and names of the letters; recognising letter shapes; writing the letters; knowing the difference between upper and lower case letters.

Phonics: explicit, systematic & sequential instruction on <u>letter names</u> and <u>predictable letter-sound</u> <u>correspondences</u> are needed for at least 25% of the student population. Also, fast and accurate decoding of familiar and familiar words and spelling rests on the <u>alphabetic principle</u>. **DECADES** of research support this.

Fluency: is crucial for comprehending written text. Fluency & comprehension depend on accuracy and speed of word recognition. Reduced attentional and memory resources can adversely affect fluency. Improved fluency rates **come from practice**. (See Multilit resource). Reading fluency goals from 1st to 8th grade can assist (Hasbruck & Tindal, 2006). Fluency needs to be addressed in each component of reading instruction.

NB: some dyslexics have a neural based deficit in speedy word recognition and fluency sprints can cause extreme anxiety and fear.

Vocabulary development: good vocabulary knowledge assists in the use of predictive strategies throughout the whole students' school experience. The following benefit vocabulary growth: repeated exposure to word meanings and use in context; studying morphology by direct, explicit instruction across the whole curriculum; wide reading.

Comprehension: depends on fluency, accurate decoding, self monitoring, activating prior knowledge, good oral language skills, vocabulary & sentence structure knowledge and the use of metacognitive strategies like questioning, predicting, making inferences, clarifying misunderstandings and summarising. Specific training in all these skills is needed. Using graphic organisers should be included in instruction and written expression strengthens comprehension skills.

Spelling: contrary to popular opinion, 87% of English orthography is reliable. Struggling readers benefit from **explicit instruction in the sounds of the language, spelling patterns (rules) and spelling regularities**. They need to know and be able to apply these predictable and logical rules and spelling patterns. Matching these to the correlated reading patterns doubles the amount learned.

Handwriting: is an extremely important part of literacy instruction. The multi sensory component (Say the sound/ hear the sound/feel the sound in your fingers and mouth and lips) is imperative for dyslexic students to learn the letter shapes and letter formation. Formal, multisensory handwriting instruction reinforces the knowledge of letter shapes & formation, connects the letter sounds with their letter names and assists the reading process. Later, good handwriting aids both legibility & fluency in compositions/ essays etc, improves spelling and helps in proofreading & note taking. Practice improves these motor skills. Learning keyboard skills can also be appropriate.

Written Expression: can be a great barrier to those with expressive language impairments. Three areas need to be addressed:

- 1. The purpose and structure of sentences, including grammar, word choice and sentence expansion.
- 2. Step by step building of paragraphs and compositions with emphasis on developing ideas for expository text
- 3. Revising and editing compositions.

Direct, explicit instruction is needed in grammar, punctuation and capitalisation, using multi sensory methods and specific to each individual needs. Include many oral language activities preliminary to paper and pencil tasks. **Working on complex ideas for sentence generation** has a direct effect on comprehension.

Well prepared teachers can effectively implement research-based instruction:

- *screen students effectively.
- *analyse their work/ monitor progress/ set achievable and realistic goals.
- *plan efficiently/ give constructive feedback/ allow for comprehensive review & practice.

More modern approaches to comprehension:

Student observable action output	Cognitive action Thinking
Recognising: examples: multiple choice item, underlining, matching. True-False Selecting correct answer in context, from choices given Recalling: examples: write short answer. Completion (cloze). remembering, not selecting. Paraphrasing: examples: summarising. Restating in own words, Classifying: examples: clustering ideas in article. Putting facts or ideas into some class (columns) Outline. Make table. Following directions: example: assemble toy,. Pencil activities. point to area on screen. Graphing: examples: Draw a map, picture, time line, curve, graph, flow chart. Oral reading; intonation, Phrasing.	Directly stated facts: little or no interpretation. most common items. Literal comprehension. Main idea: very common, but complicated and subjective concepts, involves conclusions, purpose, and or summary. Facts to support the main idea: common and sometimes useful concepts, similar to relationship. Sequence: time order, flashbacks, may be partly inferred. Extrapolation: going beyond stated facts. Predicting. Inference. Trends. Traits. Unstated conclusion. Use of previous learning. Appreciation: value. Judgements. Worth. Pleasing to reader: is it good? would others think it good? Emotional response. Evaluation: Validity. Truthfulness. Usefulness. Reality. Opinion. Fact. Author's report: Persuasion. Goals. Propaganda. Mood. Style. Schema: Plot. Script. Plan. Proposition. Organisation. units. Networks. Vocabulary: Word or phrase meaning in context. Relate one part of a character to another. Anaphora reference.

OTHER COMPREHENSION FACTORS:

The reader: Type of Material:

Age, IQ Fiction, Stories

Education Expository articles, Textbooks

Background, SES Advertisements

Out of school experiences Forms, Poetry

Fatigue, Health Different subjects (for example, history, science).

Readers' Purpose: Readability:

Find out the content, Learn Difficulty level,

Study for test, Clear writing

Recreation Personal words

Goals, Rewards Legibility, Imagery

Time: Length:

Delay, Need to remember Sentence, Paragraph

Immediate post test, Action Chapter, Book.

Environment: Graphs:

Classroom, Home Comprehend illustration.

Light, Noise, chair Bar chart, maps, tables

Comprehension Thesaurus: using terms from Part A & B, can generate 10,087 different comprehension terms. Take any term from Part A & link to one from Part B to make a reading comprehension skill.

Part A: the action:

Getting	Organising	Providing
Identifying	Outlining	Reading (for)
Understanding	Using	Following
Classifying	Locating	Previewing
Recalling	Retelling	Apprehending
Selecting	Reasoning (abou	Determining
Finding	Interpreting	Working (with)
Recognizing	Comprehending	Visualising
Summarising	Demonstrating	Thinking (about)
Grasping	Applying	Thinking (critically)
Drawing	Obtaining	Getting excited (about)
Evaluating	Predicting	Dealing (with)
Relating	Contrasting	Judging
Paraphrasing	Proving	Translating
Comparing	Anticipating	Synthesising
Transforming	Internalizing	Checking
Clarifying	Sitting	Deriving
Specifying	Inferring	Integrating
Matching	Referring (to)	Actively responding (to)
Criticising	Drawing	Describing
Analysing	Making	Questioning
Noting	Concluding	Verbalising
Perceiving	Forecasting	Processing
Extending	Extrapolating	Encoding
Restating	Foreshadowing	Learning
Restating	Forecasting	Processing
Reacting (to)	Producing (from	memory)

Part B: The Concept

Main ideas Ambiguous statements Climax

Central thoughts Mood Outcome

Author's purpose Tone Objective ideas

Author's intent Inference Subjective ideas

Point of view Inference about author Events

Thought units Conjecture Interactions

Story content Information Relevancies

Details Text information Semantic constraints

Essential details Humour Convictions

Specifics Directions Inclinations

Specific facts Trends Characterisations

Inferences Goals Personal reaction

Wholes and parts Aims Effects

Conclusions Principles Comparisons

Propositions Generalisations Time

Propositional relationships Universals Event to time relationship

Schema Abstractions Tense

Schemata Abstract ideas Propaganda

Constructs Structures Flashbacks

Meanings Judgements Repetitive refrain

Scenarios Literary style Personification

Scripts Elements of style Answers to questions

Sense Elements Directly stated answers

Classifications Imagery Indirectly stated answers

Categories Mental Imagery Extended answers

Multiple meanings Cause and effect Various purposes

Connotations Organisations Validity

Denotations Story line Antecedents

Causal relations Story problem References

Sequence Plot Experiences

Dyslexia training resources. 2020.

Sequence of events Plot structure Vicarious experiences

Sequence of ideas Time of action Concrete experiences

Chronological sequences Types of literature Concepts

Trends Context Familiar concepts

Seriation Affective content Unfamiliar concepts

Anaphora Answers Vocabulary

Associations General idea Vocabulary in context

Facts Facts Word Meaning

Deep structure Concepts Terminology

Analogies Relationships Descriptions

Figurative language Lexical relationships Criteria

Metaphors Textual relationships Attributes

Similes Written works Content

FACTORS AFFECTING COMPREHENSION:

*decoding ability.

*field knowledge_____> background knowledge, vocabulary.

*linguistic knowledge____> sentence structure, text structure.

*meta-comprehension, metacognitive skills > use of reading strategies.

Use of comprehension strategies:

*good vs poor readers.

*motivation.

Text factors:

*appropriate instructional level.

*content and topic.

*language used.....> vocabulary/ sentence structure.

*reading process.

*teaching strategies. (Maria, 1990)

Factors associated with reader:

Word recognition:

Relationship between comprehension & reading fluency:

Students will have great difficulty with recall and comprehension in reading unless they can process most of the words in a printed text instantly and without effort. Unless students achieve a level of accuracy, fluency and automaticity in word recognition they will have difficulty accessing meaning in text independently.

Consider the following information:

*word recognition is a prerequisite to comprehension.

*but comprehension should not be delayed.

*comprehension can commence with listening comprehension and move to reading comprehension as the student develops word recognition skills.

*word recognition includes both accuracy & fluency.

*automaticity in word recognition frees the student's working memory to focus on the meaning of the printed text.

Appropriate Instructional/ Text level:

*Independent: >95% accuracy.
*Instructional: 90-95% accuracy.
*Frustrational: <90% accuracy.

*Independent: >95% accuracy.

*students to practice the skills taught.

*to develop reading fluency.

*enjoyment.

*Instructional: 90-95% accuracy.

*to teach new skills.

*to practice skills previously taught.

... and new skills.

*Frustrational: <90% accuracy.

*suitable for shared reading to build field knowledge.

*support for text they don't read.

Choice of text: the variable/ factors that affect the difficulty of the written text:

*the level of difficulty of word recognition skills required.

*number of concepts introduced.

*reader's experience with these concepts.

Oral Reading Data Guide: words per minute.

	Kinder-year 2	Years 3-4	Year5>
Words in	20-30 wpm	30-45 wpm	40-50 wpm
Isolation	Correct	correct	correct
	0-2 errors.	0-2 errors.	0-2 errors.
Text reading	50-80 wpm	80-100 wpm	100-120 wpm
	Correct	correct	correct
	0-3 errors.	0-3 errors.	0-3 errors

Field Knowledge: Includes background and vocabulary knowledge.

Consider the following information:

Vocabulary: a reader's level of vocabulary is the best predictor of his/ her ability to understand text.

*poor readers have poor vocabulary and poor reading comprehension because they have less opportunity to read and are not provided with the same opportunities for gaining knowledge as good readers.

*direct vocabulary instruction is an important component of comprehension instructions.

Background Knowledge:

Activating students' prior knowledge and focusing on a purpose for reading will allow students to:

- a). think about what they already know about a subject.
- b). Acquire a general understating of how big ideas fit together.
- c). Increase their confidence and motivation to read more.

Linguistic knowledge:

*Sentence structure.

*text structure.

The following points may be made:

*since reading is a language process, the reader's knowledge about language in general and about written language in particular (ie knowledge about vocabulary, syntax, text structure and structural cue words such as conjunctions) have a strong effect on comprehension.

*we cannot read with understanding unless we already have some knowledge of the topic.

*however, we do learn new ideas by reading.

*it is likely that we do this by using our linguistic knowledge to make up for inadequate or incorrect background knowledge.

*children who do not have oral language problems may have problems comprehending written language due to a language disorder or lack of exposure to written language.

Metacognitive Skills: Metacognitive refers to the reader's ability to reflect on, monitor and evaluate their understanding as they read and to apply correction strategies when comprehension is impaired.

Strategies used by Readers:

- *awareness strategies.
- *monitoring strategies.
- *adjusting strategies.

Awareness strategies:

- *topic or background knowledge.
- *level of comprehension required.
- *purpose for reading.
- *different reading styles for different purposes.
- *text organisation.
- *text inaccuracies.
- *differences in explicit and implicit informations.

Monitoring Strategies:

Check understanding by:

- *summarising information.
- *paraphrasing information.
- *synthesising information.

Integrating prior knowledge with new text information / evaluating information:

- *confirming predictions and hypotheses.
- *evaluating consistency of main ideas and details.
- *critically considering information.

Adjusting strategies:

- *re-reading.
- *backward-forward searching.
- *self-questioning.
- *locating points of mis-comprehension.
- *substantiating information form the text.

CHARACTERISTICS OF GOOD AND POOR READERS:

Good Readers:

Before reading:

- *think about what they already know about a subject.
- *know the purpose for what they read.
- *Are motivated or interested to begin reading.
- *Have a general idea of how the BIG ideas fit together.

During reading:

- *Pay simultaneous attention to word and meaning.
- *read fluently.
- *concentrate while reading.
- *are willing to "risk" encountering difficult words and are able to grapple with text ambiguities.
- *construct efficient strategies to monitor comprehension.
- *stop to use a "fix-it" strategy when confused.
- *reading skills improve.

After reading:

- *Understand how the pieces of information fit together.
- *are able to identify what's salient.
- *interested in reading more.

Poor readers:

Before reading:

- *begin to read without thinking about the topic.
- *do not know why they are reading.
- *lack of interest and motivation to begin reading.
- *have little sense of how the BIG ideas will fit together.

During reading:

- *Over attend to individual words: miss the most important words.
- *read slower and at the same rate of speed.
- *Have difficulty concentrating, especially during silent reading.
- *unwilling to "risk"/ easily defeated by words and text.
- *unable to construct efficient strategies to monitor comprehension.
- *seldom use a "fix-it" strategy, plod on ahead, eager to finish.
- *reading progress is painfully slow.

After reading:

- *do not understand how the pieces of information fit together.
- *may focus on extraneous/ peripheral cues.
- *see reading as distasteful.

NB: poor readers need to be taught the metacognitive skills of good readers that are listed above & below.

*Cohesion is how well conjunctions, pronouns and adverbs signal relationships between sentences and within sentences.

- *text structure and content.
- *use of graphs.
- *layout.

Take note of the following points:

- *teachers should try to use "considerate" text with language and structure appropriate for the students they teach.
 - *however, appropriate language is not necessarily easy to read and understand.
 - *students need to be taught to understand written language and even "inconsiderate" text.
- *one of the main reasons students find language construction difficult it that they lack experience with it.
- *If students are not exposed to long words, long sentences, difficult constructions and structures, and new text types and taught the skills to deal with them they will not learn to understand them.

Choice of text:

- *All text is difficult for someone.
- *whether someone finds the text difficult depends on the reader, as well as the text.

Understanding the Reading Process:

Review the reading process using the following points:

- *good readers integrate all 4 processes.
- *semantic processing has to do with **individual word meanings** rather than textual meanings. A wide vocabulary and an understanding of the ways in which meanings are constructed in text, support students in learning to read for meaning and assist in improving the overall speed and accuracy of the word recognition process.
- *contextual processing is drawing on contextual features including grammatical features, layout and pictures for word recognition.
- *phonological processing involves using phonological awareness, knowledge of letter/sound correspondences and blending.
 - *graphological processing involves recognition of words by sight.

In summary: the Reading Process involves the following:

*semantic *contextual *phonological *graphological

DET: English K-6. Syllabus & Support document:

1. Defining:

What do I really want to find out?

What is my purpose?

Why do I need to find this out?

What are the key words and ideas of the task?

What do I need to do?

2. Locating:

Where can I find the information I need?

What do I know already?

What do I still need to find out?

What sources and equipment can I use?

3. Selecting:

What information do I really need to use?

What information can I leave out?

How relevant is the information I have found?

How credible is the information I have found?

How will I record the information I need?

4. Organising:

How can I best use this information?

Have I enough information for my purpose?

Do I need to use all this information?

How best can I combine information from different sources.

5. Presenting:

How can I present this information.

What will I do with this information?

With whom will I share this information?

6. Assessing:

What did I learn from this?

Did I fulfil my purpose?

How did I go_ with each step of the information process?

How did I go---- presenting the information?

Where do I go from here?

Variables that Influence Comprehension:

These variables are those outside the student that can affect comprehension.

- *Text variables.
- *Code emphasis texts.
- *Word difficulty
- *Vocabulary
- *Language syntax

Text variables: general organisers and overall structure:

General organisers:

*abstracts. Focus questions. Headings. Summaries

Overall structure: (the way the ideas are related to convey the message:

- *provide a signal to indicate what is relevant.
- *create cohesion.
- *create interruptions or misleading information.
- *Influence the quality of the response.
- *Contribute or interfere with the acquisition of adequate reading skills.

Readability formulas: were an attempt to address text difficulty. It has since been noted that complexity (word frequency, word length, sentence length) is **not a sole function of these factors.**

Text complexity is also linked to:

- *organisation at sentence level.
- *organisation at passage level.
- *density of ideas (propositions) within the text.

Code emphasis texts.

If controlled reading texts are included in a program, it is suggested that **less controlled** material also be included to ensure generalisation to more complex texts.

Word difficulty:

Text and student variables:

Text variables: Student variables:

Word frequency in Time spent reading

Word frequency in language Knowledge of vocabulary

Word fit with phonics rules Knowledge of content

Word fit with text content Fluency and accuracy in phonics

Fluency and accuracy in use of context clues.

Assumed causes for reading failure:

Comprehension is limited by:

- *rate of decoding the text.
- *density of text.
- *knowledge base of reader.

Decoding is a prerequisite to comprehension. It includes accuracy and fluency. Automaticity in decoding frees the students" short term memory to enable interaction with comprehension to take place.

Students need a basic core of knowledge to comprehend written text because comprehension is both an interaction of reader' knowledge with content as well as **anticipation** of content. Remembering what is read today will be part of readers' knowledge tomorrow.

The relationship between speed and comprehension is critical. Comprehension is limited if the student falls below a **minimal level of decoding fluency.** The minimal rate per minute has a critical threshold of 150-200 wpm, after Year 3.

Year 1	50 wpm
Year 2	100 wpm
Year 3	140 wpm
Year 4	150 wpm

Reading rate (speed) depends on text difficulty, which includes test font, size, amount of information and complexity of concepts covered.

STRUCTURED PROCEDURES FOR MASTERING CONTENT SUBJECTS: SKORE. From Birsch chapter 118). Also see: LEARNING PRINCIPLES EXECUTIVE functioning multi sensory techniques.

*<u>Devine</u>, 1981: dyslexics do not learn when things are disorganised. **Organisation** plays an important role in memory & concentration.

*Students with dyslexia are rarely taught strategies or techniques for **deep processing** (Deshler et al, 1996; Levine, 1987; Maria, 1990; McNeil, 1992):

SKORE procedures for organising material, elaborate deep processing, mind mapping, summarising, writing précis and notetaking offer faster, more reliable and effective strategies (better that word by word reading) that lead to embedding of long term memories. It is a Cognitive Repetitive Active and Physical method (CRAP). Closely articulates and cumulative skills are built systematically through explicit, direct, instruction (especially for extracting meaning), modelling, demonstration, rehearsal, guided practice, transfer and application to content subjects.

SKORE is designed to make significant improvement in one school year. It takes a year to make these changes. The 1st 2 phases are preparing & organising the material & are crucial to the process: direct & explicit instruction on what and how they need to study. It needs:

- *frequent contact with subject teachers.
- *continual self-generated questions.
- *habitual use of dictionary and Roget's Thesaurus (original version). Many lack alphabetising skills.
 - *systematic expansion of vocabulary.
 - *systematic explanation of abstract & nonliteral language.
 - *systematic use of mnemonic devices.
 - *Routine conversion of text to graphic displays.
 - *ongoing self-evaluation.

There is little similarity with SKORE and SQ3R (Survey, Question, Read, Recite, Review) as the latter depends on reading, mental rehearsal and rote learning. **SKORE depends on:**

- *preparing the text and setting up a skeleton web (mind map)
- *selecting & organising salient organisation.
- *generating graphic displays.
- *extending vocabulary & understanding of concepts.
- *summarising, composing précis, making conventional outlines and taking notes.

Materials needed: bindings (as described), coloured index cards, large manila envelope, A4 unlined paper, wide ruled loose leaf paper, dictionary and thesaurus.

Instructors role: demonstrate with short known text, using all procedures, then progress to longer text.

PHASE 1: PREPARING THE TEXT: advance familiarity with information vocabulary & important concepts.

i. Surveying & scanning: student skims the text for what "sticks up, stands out" from the body of the text: boldface & italic type, headings, marginal glossaries (printed commentary in the margins), boxed text, diagrams, photographs, drawings, charts & other graphics with captions. (**Not** footnotes.) Students should try reading aloud or sub vocalising & use which works best. Then write 1 to 3 sentences about what he thinks is the important information of the theme of the text.

<u>Scanning:</u> cursory reading of the text, beginning with introductory questions, concepts and /or summary (or the first 3 paragraphs); the 1st sentence of each subsequent paragraph, and the concluding summary and questions if any.

- **ii. Setting up the mind map:** Brainstorm the topic. use 1 to 3 words (in capitals) to designate the topic. A word or brief phrase to correspond with the headings in the text serve as the main branches of the map.
- **iii. Preparing cue cards:** student reads through whole text rapidly but at a comfortable pace, not trying to memorise the words etc, and using coding symbols for:
 - *unfamiliar words for vocabulary study (underline).
 - *circle unknown or difficult words for spelling practice.
 - *definitions (single asterisk in margin).
 - *important concepts and abstract terms (double asterisk in the margin).

Then prepare vocabulary words: (colours are arbitrary):

- *print each vocabulary word in the upper left hand corner of a white index card.
- * use a medium thick black felt tip pen and write the spelling words **in cursive** in the middle of the card and use all the space on the card. Double check this spelling. Tracing these words is good practice for cursive writing if it is a good model.
- *copy the definition on gold index cards (as they appear in the text). The words in capitals and definition in upper or lowercase, whichever is appropriate.
- *Write the concept words or phrases on one side or an orange index card. Might have to use 4" x 6" cards and fold them to fit into folder.

Then add definitions to the cue cards:

*White vocabulary card:

On the back, copy the 1st 2 definitions from the *Webster's Dictionary* (for young students, just start with 1 definition). Number the definition. Write a simple sentence using the word. On the front, right next to the word, write the part of speech (n, adj, vb, advb...) In the upper right hand corner, write the language of origin (A-S, L, G). Later, inflected versions can be written: *planet-s, planet-ary, planet-ari-um...*show base words & affixes separately.

Trace each word separately, using the fleshy ends of the index and middle fingers, saying each letter aloud, while doing so. Say full word at the end. Do this 3 times. Read whole list at the end.

*Orange card: print the details of the concepts according to the related features semantic map (described later) or in a similar manner on the reverse side of the orange card.... Also see Deshler (chap 9) and Maria (chap 5).

Band all similar coloured cards together and put into folder in the front of the binder.

PHASE 2: SELECTING & ORGANISING THE INFORMATION:

Whilst doing phase 1, students must concurrently be trained in the following: cursive handwriting, abstracting, mind mapping, précis writing... also to practice self-monitoring of attention and concentration... (use a bell when he feels his attention wandering).

*abstracting information: begin by underling most salient information in simple sentences and paragraphs and working up to a selection of several paragraphs and brief chapter. (Lehman 1969a, 1960b)

*create a mind map: first fill in major details under topic lines, then create topic words & phrases for subsections with details filled in.

*dyslexic students need practice with categorising and classifying as well as detecting & verbalising relationships among and between concepts and terms.

*verbalising their thought processes helps clarify their thinking and helps tutor to monitor their thinking processes. Tutor repeats in grammatically correct, complete, coherent sentences.

In this phases there is conscious decision to maintain attention & concentration. Steps involve:

- i. Abstracting (condensing) the text: must keep the author's words: see p. 572. The aim is reduce the text by half, then later by 2/3rds. The student underlines the salient information only. (Dyslexics have trouble discarding superfluous information). Then re-write, using shortened sentences, in correct grammatical form. Paraphrasing is not allowed. Part of the process is for the student to ask himself questions, either the Socratic way (to get the correct answer...Murdoch, 1987) or open ended questions to get the student to think (Maria, 1990). Structured group discussion helps. Questions come from students. Once the abstract is teacher approved, the abstract is only ever used. The original document is put away.
- **ii.** Taking notes in the mind map: (see Buzan, 1983, although his method of note-taking is not recommended for dyslexics and Wycoff, 1991). Do not use **colour** in this step.

Use 11" by 17" unlined paper. Start at the 12 o'clock position and go clockwise around the page, printing in block letters, single words or brief phrases for each subtopic. (**No cursive, not long phrases or sentences**).

With tutor guidance, student should re examine each subtopic cluster to see if they are in the correct place. ... should it be reworded or split into more categories. Related concepts can be shown by joined dotted lines. Time and much practice is needed to master this strategy.

- iii. Consulting with the instructor: as above.. the give to subject Teacher.
- **iv. Colour coding and graphics:** choose a different colour for each module. Circle the module and underline the sub branches in the same colour. This establishes boundaries to the information and helps memory. Can also be aesthetically pleasing for the student. They can also use cartoons, graphics, graphs, sketches, diagrams, maps, & any other visual aids.
- v. Creating mnemonics: tutor created ones are better than teacher created ones (Deshler et al, 1996). Create lists of what is to be remembered on the mind map & then mnemonics to remember.

Working with the Mind Map: without memorising the map, and after completing it, students are asked to re write it from memory. They are often amazed that they can reproduce 60% -80% of the information and so only have to learn the parts they missed. This is very encouraging. So... persist with this strategy. Students may resent the process at the time, but come to embrace it. Review the coloured map and cue cards daily during the 1st week until the entire map can be reproduced without referring to it. Then review weekly and monthly to keep in LTM.

PHRASE III: SUMMARISING, WRITING PRECIS, OUTLINING & NOTE-TAKING: using the mind map, do the following.

i. Summarising: start the 12 o'clock position and label each main branch with a Roman numeral; the 1st level of sub branches with letters and the 2nd level (if there is one) with Arabic numeral. For example. TOPIC WORDS: **living things.**

I. Animals:

a. Birds:

i. Sea birds

When all branches and sub branches have been labelled:

- **a.** Students return to the branch labelled with the Roman numeral I and begin to create the **summary**. They use the notation on the main branch as the **topic sentence** of the 1st paragraph. (The Topic Sentence should also include the words that appear in the centre of the mind map). For example, the topic sentence of the first branch could be: *all animals are living things*.
- **b.** Students then make the details listed in the sub branches into grammatically complete and syntactically correct sentences. These are the supporting detail sentences.

Follow this procedure all around the clock and for each branch labelled with Roman numerals. Then formulate a closing paragraph, by either stressing the main point or by reemphasising the import of the author's point(s). The précis (described later) can be used as final paragraph. Then student is to proofread. **Proofreading is by now an automatic process, beginning back at training in the Level 2 Quick Tricks.**

Writing skills: the tutor tells the student that each paragraph must have at least 5 sentences and each theme or compositions must have at least 5 paragraphs. This is a formula that subject teachers will accept and it also is a formula that is precise for students to feel comfortable with. Students will need to be instructed in English sentence patterns (beyond the mechanical formulaic way of summarising, Helson, 1971); practice in elaborating sentences, first with adjectives & adjectival clauses, next with adverbs and adverb phrases, and then with clauses. Subjective clauses cause the greatest problems for students with dyslexia.

Uncomfortable, laboured handwriting will hinder this process. (King, 1985).

Wide reading is the best way to improve writing skills. For older (eg High school) students, get 4th grade trade texts etc (based on students' interest) in large clear print (from library etc) and have them read these. This is for **pleasure** only. Also read, for a few minutes each day from fiction, essays, biographies, poems etc... these can be linked to subject areas.

Some notable journalists are actually dyslexics... it has not stopped them pursuing a career in journalism: Agatha Christie, Winston Churchill, W. Somerset Maugham, Beatrix Potter, John Updike. Also Fred Friendly (former CBS News President); Richard Cohen (*The Washington Post*); Robert Scheer of *The Los Angeles Times*.

ii. Writing précis: This is different from the abstract as it must be written in the students' **own words.** It is highly condensed, maybe a book or chapter of a book reduced to a few sentences or paragraphs. Eg Aesop's fable> slow and steady wins the race.

Précis writing is invaluable to comprehension. It should be no more than one third to one fourth as long as the abstract and can be even shorter. The best method is for a group discussion at the start of the Dyslexia training resources. 2020.

essence of the abstract. See Christensen et al, 1991, for discussion technique focussed on problem solving, and Lehman 1960a for sub-skills needed prior to précis writing.

iii. Outlining: subject teachers may not accept the mind map, although every effort should be made for them to accept it, as they are valid summaries and it will waste the students' time to create an outline. If the teacher insists though, the tutor can provide the student with a template that the student can use the mind map to fill in. The template has the Roman numerals, alphabet and Arabic letters in order down the page and the student copies the branch; 1st sub branch; 2nd sub branch next to them.

iv. Notetaking: from works of fiction. Use index cards 3" x 5", and the following structured procedure. p. 576.

Information should be added to the cards in the order shown, and the cards should be numbered. When writing the paragraphs, the students should keep the 5 sentence rule in mind.

- 1. Title, author, illustrator (if any), publisher, date of publication.
- 2. Setting: time (or times), place.
- 3. a. Major characters.
 - b. Traits of major characters.
- 4. Story type (eg action, romance, historical account, fable).
- 5. a. Content: theme or main idea
 - b. The point at which the theme is expressed most clearly*

How often the theme is expressed*

Through which characters it is most clearly expressed*

- c. Conflict(s).
- 6. The author's purpose.
- 7. Actions that take place.
- 8. a. Technique: how is the text organised*
 - b. Kinds of characters, incidents, or images used.

Why these were used instead of others*

- c. Style of writing used (eg realistic, formal, informal).
- * Items marked with asterisk are for older students only.

Note taking from lectures: This can be very difficult for dyslexics because there are many sub skills involved as well as attending to the text of the lecture. (577). Sub skills need to be mastered, as well as **handwriting** proficiency & **note taking** from text, before attempting the following. Many of these skills have been mastered in SKORE. Student is to firstly get a copy of the lecture notes prior to the lecture. Inform subject teacher the accommodations are temporary, although could be for 12 months.

The sub skills of note taking include: processing, retaining information in working memory, using shorthand symbols & abbreviations. (/= the # = a *= if w = with @ = at) Maybe drop vowels from notes. Make sure they can read their notes back.

Tutor to read aloud brief passages of 3 or 4 sentences to assess processing & memory. Then ask student to orally repeat as much as they can remember in their own words. If this is o.k., then use other passages and have student record only a word or a phrase on a simple web to cue memory of important information. Do this without classifying etc The branches are simply spokes radiating out from a topic word or phrases in the centre. It is critical for this cuing system to be mastered before moving onto the next phase. Ie recording a word or phrase to call up the data.. with 80% accuracy. Gradually increase passage length.

Once this radial web of notes has been approved by the tutor, use the same process as expanding from mind map to reorder and reorganising the web according to the classification, categorisation and associated ideas. Use cue cards, semantic and concept maps, mnemonics & graphics, just as for working with text. Advantages of this process is that lecture and reading notes can be merged into a single web and webs made on large paper can be amended and extended for later review.

Key words: the key words used in this process are similar to the ones used on the columns of the more conventional 2 or 3 column note-taking system. Once this note taking system is mastered, the student will be able to use conventional systems as well with a little guided practice (Deshler et al, 1996)

See Strategies Comprehension document for:

- i. Semantic mapping: synonym-antonym. Related features maps. Multiple meanings map.
- ii. Concept mapping. (P. 29-30).
- iii. Creating lexicons by geometric progression. (p. 31).
- iv. Systematic study of non-literal language, esp. idioms & metaphors

Ideas for developing subject specific vocabulary.

Making Predictions: (This technique introduces new technical vocabulary and allow discussion of new concepts.)

Prediction is used to motivate students, activate content knowledge, increase anticipation and highlight important concept.

Description:

Predicting requires the student make a judgement or best guess about a text will contain. This is a process of preparing the mind-set for what is to come.

Purpose:

Activate prior knowledge.

Use context clues (and hear what clues other students are using).

Gain confidence in making a guess--- all answers are accepted.

Understand that a first prediction can constantly be revised in the light of new information.

Example:

Display the heading or title of the material (either on overhead or by distributing text face down and asking students to fold over the top of the page to reveal the heading only).

Students discuss in whole class, groups or pairs what the story might be about (all suggestions are acceptable). Students share their reasons for making specific predictions (eg what made you think that?) This helps students to identify and interpret a wide range of clues.

Students predict words that might occur.

Students read and revise or verify predictions.

After reading, students write down what they can remember and check with a partner.

Students discuss what they remembered and why they remember that part.

Semantic Mapping:

*originally developed by Pearson and Johnson (1978).

*describes any technique that gives a visual display of the relationships between a central concept and a number of other ideas that are related to it.

It is suggested as an effective technique to develop the following:

- *activating and building background knowledge before reading.
- *writing.
- *vocabulary instruction.
- *an effective post reading activity.
- *to help learning dibbled children develop a summary of a text they have read.

*a means to assess comprehension of a text.

*it is especially effective when dealing with content area that presents a number of concepts related to a central concept, but is also effective with simpler expository texts and narratives.

*to develop **prior knowledge**, select an appropriate central concept and ask the children to **brainstorm** their ideas to be **written** on the board.

*In Pearson and Johnson (1978) original article the central concept is placed in the middle of the page in an oval shape. Student's responses are recorded on the same page in this way:

*in an **oval** if it is an **example of the central concept in some way** or a the **superordinate classification of the central concept.** Eg "reptile" is the superordinate term for turtle. The join this box to the first oval with an arrow.

*the format **List-Group-Label** is used. It is too hard to probe the class for ideas and categorise while recording the responses, so just write the responses in any order and then classify and record on the map with class help:

*construct a visual display showing how ideas relate to the central concept and to each other. Ideas that relate to pne another are placed in categories and then labelled. Lines connect the categories to the central concept. A script exercise from the demonstration lesson I conducted with a group of seven eight-grade remedial readers and the semantic map constructed during that lesson follow:

First semantic map of turtles: semantic mapping script:

(After explaining that semantic mapping will help the children understand the article about turtle (Morning Forest 1978) that they are about to read, I began the technique).

T (writing the word *turtle* in the centre of the blackboard): What do you think of when I say the word turtle?

(A long silence).

Do you remember anything from the story that your teacher read to you yesterday?

(Again, a long silence).

T: Where do turtles live?

S1: Some live in the water.

S2: Sometimes they live on land.

T: Good. What else do you think when I say the word *turtle*?

(Silence).

Have you ever seen a turtle? Think about what it looks like. What does it have?

S2. A shell.

S3: It looks like a box.

T: Why do you say it looks like a box.

S3: because the head goes in.

T: The head goes in. Very good. So a turtle has ahead. What else does a turtle have?

S4: legs.

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T: legs, sure. He has a head. He has legs. What about his feet? What are his feet like?

This is addressed to one of the students who hasn't made a contribution yet (S5). This student doesn't respond.

T: Are they like your feet? Did you ever see a picture of a turtle's feet? What do they look like?

Student still doesn't reply. Teacher asks another student (S6) who hasn't participated yet, who does reply.

S6: They have claws.

T: Yes. Their feet do look something like claws. What about the shell? (A Student who hasn't responded yet (S7) is asked). Is is hard/ Is it soft?

S7: hard.

T: Good. Do you know what kind of animal a turtle is?

All the students: a reptile.

T: Good. I thought that maybe you wouldn't know that. ... and you did... really good.

(The teacher points to the words *water* and *land*). These 2 words go with the word *turtle*. What would you call this group? What would be the title for this list? What do these 2 words have to do with *turtle*?

Silence.

T: Are turtles made of water?

All students: no.

T: So the title can't be Things a Turtle Is Made Of. What do water and land have to do with a turtle?

S7: Turtles live on land and live in water.

T: That's right and both are where....?

S4: where turtles live...

T: Good. (writes title(*where turtles live*) above the list, puts box around the list and title, connects to the turtle picture with a line.

T then writes head, legs, claws, hard shell and points to it. What's this?

S2: a turtle's body.

T: So is this all the body? What do we call these? Each one is a?

S5: a part of the body.

T: Good. Parts of the body. Writes this as a title over the list of words. Puts a box around them and draws a line to the picture of the turtle.

Then writes *box* and *head*.

T: This is a little harder. What do box and head have to do with turtle?

S7: The turtle goes into its shell when in danger.

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T: Good. (writes *when he is in danger* over the 2 words. Puts a box around them and draws a line to turtle picture.

T: what does reptile have to do with turtle?

S1: It's what he is.

T: Good. Writes as title. When we read this article I want you to look for more information that we can add to this map and add information that we learned from reading the article.

The above script shows how difficult it was to get the students to participate. This was the 1st of this type of lesson they were exposed to. The classroom teacher's comprehension usually was a highly structured program aimed at getting the right answer to low level questions. These students obviously found it hard to think for themselves.

They participated much more in the second lesson.

These sorts of students need a great deal of **scaffolding** before they can use these strategies independently. In the 1st lesson, no reference was made to the students using scaffolding independently. The questions were rephrased to be easier to answer and the answers were framed so that the students just had to add the last part of the answer.

Developing and labelling the categories in the 2nd step of the process:

- 1. Consolidate the 1st step described above: teacher lists some of the related ideas and students find titles for the list (category).
 - 2. Students pick out the related ideas and name the categories.

In a variation on semantic mapping (called semantic webbing), lines are drawn from one related idea to another and then to the central idea, instead of listing words or phrases in categories. This visual display can be too confusing for remedial students.

Example of a concept map for Fame:		
What is fame?	Who is famous?	
FAME		
What are the advantages fame?	What are the disadvantages?	of

Why are these people famous?

"Work down" mind map on safety in the playground.

Helping other people

Handling Personal dress.

Equipment.

Safety in the playground.

Helpful hints: using small pieces of paper or "stickies" to record the brainstorm ideas to try to make it easier to try different groupings.

STRUCTURED OVERVIEW:

1.	What do I know about? grouping:	Brainstorm words related to topic. Use post it notes on cards for		
		TOPIC		
2. F	How can I group these? Discuss		groupings. TOPIC	
				

Phase: Modelling and deconstruction (contd).

It is important for students to realise that biographical recounts, like all texts, are created by people with particular points of view. Authors make choices about text structure, content and language depending upon their purpose and the message they want to convey. The positions taken by a text also can be influenced by events outside it, such as these two texts about Adolf Hitler. (These texts are not available but the first was from 1936, before the outbreak of WWII and the second was from 1991).

Provide students a copy of each of these biographical recounts. Have the students read each of them, then compare the 2 different positions taken by the different authors. Write these onto an overhead transparency. Use them to show how emotive language can convey a specific position. Highlight the adjectives that are used to convey these viewpoints. Discuss with the students how the events of history also influence the positions taken by the 2 writers.

Work with the students to plot the emotive words on a vocabulary cline.

A vocabulary cline is used to rank any group of words which can be placed in order. Words are written along an imaginary or drawn cline (ie a sloping line). The object is for students to place the words along the line so that they are in order of intensity.

Example if a cline (using v	verbs):				
hate					
despise					
ab	bhor				
		abominate			
			loathe		
				disgust	
					dislike.

THE SEMANTICS OF LANGUAGE.

Comprehension is the main goal of reading. Accurate and fluent reading facilitates students' comprehension but does not guarantee it. Just as with decoding, students need explicit instruction in comprehension. One important that needs to be taught is summarisation.

Wh-Question cards/ summary with a piece of rope are 2 strategies. (Carreker, 2004).

Wh-Question cards: After students have read a short story (See figure 3 below), they prepare 5 cards with the questions: Who? What? When? Why? They write 1 question on each card. They line up the cards along the left hand side of their desks in the order listed below. With a partner, they answer each question orally.

Who? Students name the characters (eg a lion or a mouse)

What? Students state all the events of the story in order and then determine the

most important event, the one event that allows the story to end as it does (eg the mouse saves the lion).

When? Students state the time(s) in which events take place (eg one afternoon).

Where? Students state the place(s) in which the events take place (eg on the savannah).

Why? Students state the reason why the most important event happened (eg the mouse is returning

the favour).

Figure 3:

The tall savannah grass fluttered in the slight breezes a great lion slept.

While he slept, something ran across his paw.

The lion awoke to see a small mouse nibbling on a seed of grass.

The lion scooped up the mouse in his paw and opened his fierce-looking mouth. But before the lion could eat it, the mouse cried: "Please let me go, I will be glad to return the favour someday". The lion roared with laughter at this thought. But because he was sleepy and not very hungry, the lion let the mouse go.

Later that afternoon, the lion awoke and felt hungry. He went to look for food. Soon he was caught in a net. He tried to get free, but could not break the ropes. The lion roared.

The mouse heard him and ran to see what the matter was. Seeing the great lion caught helplessly in the net

As students answer the questions, they move the card from the left hand side of the desk to the right hand side of the desk. When all the cards are n the righthand side, the rearrange the cards into the Who? What? When? Why? Order. This will help them summarise the passage into 3 sentences:

- 1. The story is abut (Who?).
- 2. It takes place (When? Where?)
- 3. (What?) happens because (Why?)

(The story is about a mouse (1). It takes place one afternoon on the savannah (2). The mouse saves the lion's live beach he is returning the favour.(3).

Summary with a piece of rope:

Instead of using the Wh-Queston Cards or in addition to the cards, students can summarise a narrative by using a piece of rope about 3 feet long to identify the 5 parts of the plot.

Exposition: the exposition of a plot lays out the initial facts of the story: characters, settings, what the characters are doing, and the complication that ignites the conflict that will fuel the action of the story. Students hold the rope straight & state the exposition (eg the characters are the lion & the mouse. The setting is one afternoon on the savannah. The lion is sleeping and the mouse is nibbling on a seed of grass. The complication is that the mouse runs cross the lion's paw.)

Rising action: once the complication is introduced, the action in the story becomes more intense. This is called the rising action. Students tie a loose knot & begin to recount the events. With each event, they pull the know tighter & tighter (eg the lion captures the mouse. The mouse pleads for its' life. The lion lets the mouse go. The lion takes a nap. The lion awakes & goes to find food. It gets caught in a net. The lion roars).

Climax: at the climax, the action is most intense & the knot is pulled as tightly as possible. At this point, fate intervenes or a character acts (eg the mouse comes to save the lion), makes a decision, changes, or realises the conflict.

Denouement: after the climax, the tension eases. This is the denouement, which means to separate the knot. The conflict that has fuelled the action is heading towards resolution. Students slowly loosen the knot as they recount the events after the climax. (Eg the mouse gnaws the ropes & the lion is freed).

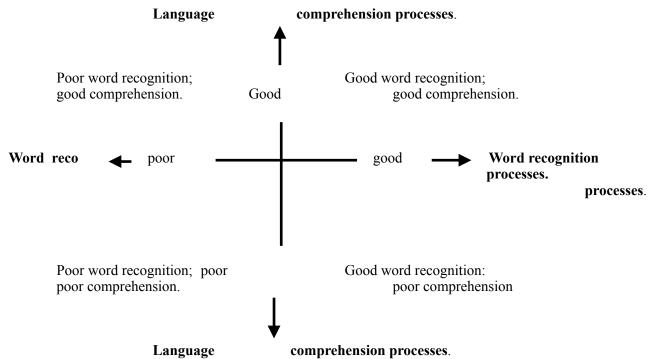
Resolution: the resolution is the point in the story where the conflict is solved. Students hold the top straight and state the ending of the story (eg the mouse and the lion are forever friends.

Summary: it may be some time before research definitively corroborates the value of the role of multi sensory instruction. In the meantime, teachers & practitioners can use activities such as the one presented in this article that explicitly teach the structure of language, engage multiple senses, & promote reading success by making sure that all bases are covered.

Reading Comprehension: nature, assessments and teaching. Maggie Snowling.

The simple view of reading clearly shows that 2 relatively separate skills underlie variations in reading development:

Word recognition skills (horizontal axis) and language comprehension processes (vertical axis).



Reading competence depends on these 2 processes: word recognition skills and language comprehension processes.

<u>Upper right quadrant</u>: good readers where both processes are present.

Upper left quadrant: those with dyslexia.

Lower quadrants: both of the quadrants have difficulty with comprehension.

<u>Lower left quadrant</u>: poor decoding skills are causing their comprehension problems.

<u>Lower right quadrant:</u> decoding skills are excellent, but comprehension is impaired. These students are the focus of this paper. They are often overlooked in the classroom. People overlook them because they can read fluently. They are called the "poor comprehenders". They are the focus of this article.

Comprehension involves:

*the understanding and integration of a string of sentences that form local coherence in the text.

*they also have to sort out how this local information fits together as a whole (global coherence).

*to integrate both local and global coherence, background knowledge and ideas have to be accessed from the long term memory bank.

Poor comprehenders comprises up to 10% of 7 to 11 year old students. Poor comprehenders don't only occur in English speaking students. They also occur in the more "regular" languages like Italian that are "easier" to decode than English.

Children with poor "listening" (oral) comprehension, experience problems comprehending spoken texts and in producing coherent narratives. They also often have poor comprehension of written text as well. **The same processes underly** both spoken and written comprehension.

Students in the upper left quadrant (dyslexics) perform well on the phonological awareness and speed and automaticity tests. They can decode nonword and single words. They showed some slight difficulty with unfamiliar exception words like *month/mouth*, but none of these word-level problems were enough to account for their comprehension difficulties.

Those poor comprehenders in the upper left quadrant have a range of difficulties including:

*metacognitive skills and control processes that help when making mental representations of text.

*oral language processes that underpin these processes.

*many poor comprehenders have limited working memory capacity & it is thought they have a lowered **standard of coherence**: they are more likely to accept inconsistencies in the text and just keep reading on.

It is possible that there are a number of different cognitive profiles involved in "poor reading comprehension":

Common areas of difficulty for "poor comprehenders".

Oral Language Skills.	Vocabulary, grammar/syntax, oral expression.
Higher-level Language Skills.	Narrative skills; figurative language; discourse processes.
Metacognitive Strategies.	Integration & inference making; Use of cohesive devices & context; Knowledge of Story Conventions & Structure; Comprehension monitoring.
Executive processes	Verbal working memory; Suppression/Inhibition.

Assessing Reading Comprehension:

There are many assessments available. The problem with assessing comprehension is that some of the skills needed are **covert** and therefore hard to assess. Reading comprehension is not a unitary construct, but is dependent on a number of cognitive processes:

1. **Decoding printed words:** this is easy to assess, but correct decoding does not guarantee comprehension. Eg **hypelexia** students whose decoding far outstrips their comprehension: they "bark at print".

2. Activating relevant background knowledge.

3. Generating inferences from information gathered during the reading.

PLUS:

4. **Control processes**: that monitor ongoing comprehension & the internal consistency of text......>allowing the reader to use "repair" strategies (like rereading a sentence).

Comprehension assessment involves both decoding assessment & comprehension assessment. (Below is a table of various comprehension assessments.

	Neale Analysis of Reading Ability (NARA- II): NFER- Nelson	York Assessment of Reading Comprehension (YARC) Primary: GL Assessment.	Suffolk Reading Scale: NFER-Nelson	.Group Reading Test (GRT2): NFER- Nelson.
Age range	Age 6-12 yrs	Age 4 to 11 yrs	Age 6-14: 11 yrs.	Age 6-14 yrs.
Administratin: *group *individual	X ✓	X ✓	x	x
Reading: *silent. *aloud (feedback)	X V	X •	× x	× x
Text: *simple sentences *short passages. *extended passage.	×	×	x x	×
Response format: *cloze *multiple choice	X X	X X	× x x	v v x
*short answer				
Measures	Accuracy Comprehension Reading rate.	Accuracy Comprehension Reading rate.	Reading comprehension	Reading comprehension
Stengths	Assesses sentence-level & text-level comprehension. Taps memory for literal information & inferencing skills.	comprehension. Taps a range of		
Limitations	Pupil receives feedback to bootstrap decoding. Some questions can be answered verbatim with reference to text. Reading rate confounded with accuracy.	Pupil receives feedback to bootstrap decoding. Reading rate confounded with accuracy.	Substantial load on decoding skill. Does not assess text-level comprehension strategies.	Substantial load on decoding skill. Focus is on sentence-level comprehension strategies (local coherence).

NB: these tests assess various skills. Take care with the following:

- *some are highly dependent on decoding skills and may not really be measuring comprehension.
- *some perform well on sentence level comprehension but fail when reading longer pieces of text.

For full "comprehension" assess, the following areas must be investigated:

- *decoding accuracy. *fluency. *oral language.
- *general cognitive resources. *working memory.
- *extended text reading (not just word or sentence level text).
- *also check their ability monitor their reading (self-correction/ "look back" strategy during reading).
- *their specific responses can also indicate their possible area of difficulty. (Running records).
- *for young readers, monitor their vocabulary & listening skills. If these are poor, future problems may be in store.

Developing Reading Comprehension Strategies: (from a meta analysis conducted by the US National Reading Panel (2000). Teaching the following skills has shown to be effective in promoting reading comprehension:

Reciprocal Teaching (RT). RT brings together any of the above techniques. It refers to an instructional activity that takes place as a form of dialogue between the student & teacher, regarding a segment of text. The teacher & student take turns assuming the role of the teacher in this dialogue, using the following 4 strategies:

*Clarifying. Question Generating. Summarising. Predicting.

Initial activities are highly scaffolded.

Other skills:

^{*}some comprehension test answered can be deduced, so children with broad general knowledge can guns. The correct answers without really reading the text. Conversely, those with poor general knowledge are penalised.

^{*}comprehension monitoring.

^{*}graphic/ semantic organisers (diagrams etc) for learning new vocabulary.

^{*}story structure training focussing on plots, characters & main events.

^{*}Ouestion answering.

^{*}Question generation

^{*}Summarisation (identifying & integrating details to create a coherent and succinct summary of a text.

^{*}Multiple strategy teaching.

^{*}inferencing & monitoring skills.

^{*}lexical inference resolution, question generation & prediction.

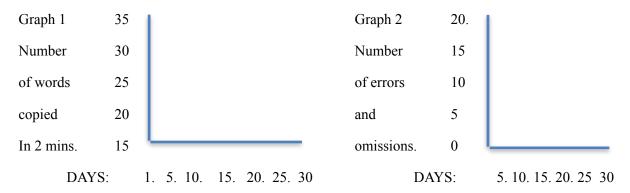
^{*}mental imagery encouraging mental representations & transformational pictures in their minds.

^{*}visualising/ verbalising.

Rosner: Helping Children with Learning Difficulties.

Stage III suggestions: helping the child who has difficulty comprehending what he reads:

- 1. Stage III skills are closely related to decoding abilities (Stage II) & higher level visual perceptual skills. If the child's visual perception skills are below what is expected for his grade level, spend some time on them. (Use Stage II strategies as well).
- **2.** Provide interesting reading materials. Ask local librarian etc for books. If they enjoy comics, use those. The aim is to get them to read well. The content does not matter at this stage.
- **3.** Discuss the stories. Use questions to show the important and not so important details in the story. Relate to his own background information. Take care not to introduce too may details. Make sure the main points have been noted by the reader.
- **4.** Encourage **reading in chunks**: use the following 2 graphs to record the increase in Words Read (graph 1) and the decrease in Errors Made (graph 2). (As words read increases, the Graph 1 line rises. As the errors made declines, the line in Graph 2 declines).



Tell the student, his speed will increase if he tries to increase the amount he is coming at each time. Taking larger "items" of the information.... (Like a white pointer taking bite out of a surfboard). His rate will also improve as he **repeats** what he is copying **to himself** as he does it (subvocalising). The goal is to improve his short term memory (by repeating information to himself) and his **reading** speed (taking bigger chunks will do this).

5. Show him how information in stories can be **classified** and **often**, **in more than way**. A poor organiser lacks organisation, tending to lump information together in a lump, and only perceiving (hearing) random, isolated bits of information. For instance in the following scenario:

Jim has a pet dog called Spot. Anne has a pet cat called Tiger. Spot chases Tiger. Anne gets frightened. Jim laughs. Anne gets angry with Jim. Spot stopped chasing Tiger. Anne and Jim became friends.

A poor comprehender will have the bits of information jumbled in his mind:

Jim. Spot. Cat. Anne. dog. Chased. friends. Angry. Laughed. Tiger.

A good comprehender will have something like:

boy-Jimhas dog Spot meets girl Anne has cat Tiger Spot chases Tiger. etc.

CHILDREN PETS EVENTS

Jim Spot Spot chases Tiger.

Anne Tiger No harm done.

Anne becomes angry with Jim.

They become friends.

A good comprehender is able to organise information, & reorganise it, as the situation demands. His ability ton effectively associate information enables him to see abstract ideas.

Teaching students how to organise information is an invaluable skill that can be allied to many different areas. For example: his family:

Parents.	Uncles & aunts.	Siblings.	Granc	lparents.	Cousins. n	ne.
A family tree o	can be organised li	ke this:				
Level 1	GRANDPARENT	S		GRANDPA	ARENTS	
Level 2	Uncles.	PARENTS.	Aunts.			
Level 3Cousins	S	Siblings	Me	Co	usins.	
Or this:						
Aunts	G	randparents		Uncles		
	_				_	
	_				etc	
<u>OR</u>						
Males				Females		
<u>OR</u>						
Father's family	•			Mother's fa	amily.	

More categorising activities:

Choose things the student is interested in: animals, vehicles, birds etc, and arrange them in many different ways:

Animals: habitats/ size/ reptiles or birds/ colour/ relationships with humans

Vehicles: diesel/ petrol. Number of wheels. 4 wheel drive. Heavy/ light etc.

Information can be arranged in a simple way, or come. It can be multidimensional. Discuss then have the child arrange into categories. For young children have pictures (eg animals that live in the sea and animals that live on the land) and hoops with labels attached. Have the pictures put into the relevant hoops. Later these can be recorded on a 2 dimensional record:

		Size	Size
		Large	Small
Habitat	Air	Eagle	Hummingbird
Habitat	sea	Whale	Goldfish
Habitat	Land	Elephant	Mouse

Clothing: function, colour, fashion era, gender, weight. Household objects: usage, colour, size, location in the house etc.

Record as charts until he can do this his head without the pictorial reminder.

SIX HATS AT A GLANCE: (Six Thinking Hats For School: Edward de Bono).

Red hat: feelings. What are my feelings about?

Yellow hat: Strengths. What are the good points?

Black hat: Weaknesses. What is wrong with this?

Green hat: New ideas. What is possible?

White hat: Information. What are the facts?

Blue hat: Thinking about thinking. What thinking is needed?

Remember:

✓There are 6 different coloured hats.

- ✓ Each hat stands for one kind of thinking.
- ✓ You can put on or take off one of the hats. When you put on a hat, you play a role attached to that hat.
- ✓ You can take off a hat and ask someone else to put on a hat, or switch hats.
- ✓ When you are wearing a hat, you must use only the type of thinking indicated by that hat colour.

Put on your black hat (weaknesses):

1. It is suggested that if a bicycle rider breaks bicycle safety rules, a big red stripe should be painted on the bike's frame. This would show that the rider is dangerous. People would not want their bikes painted, so they would ride more carefully. Do some black hat thinking on this idea.

Suggested time: 2 minutes.

2. Do some black hat thinking to find the weaknesses in each of the following arguments:

Choose as many topics as you wish...

Suggested time: 1 minute per item.

- *I have two tall friends. Both of them are lazy. Think tall people are all lazy.
- *You should only lend money to people you don't like. Then you can be really nasty to them if they don't pay you back.
- *If I can watch TV at home when I am absent from school, then it makes sense to be absent from school as much as possible.
- 3. What would happen if we made the following changes? Use black hat thinking to check out the difficulties & dangers.

Choose as many topics as you wish.

Suggested time: 2 mins per item.

- *What if you had an extra eye in the back of your head?
- *What if you could tell exactly what people were thinking about you?
- *What if only the smartest students had to go to school?
- *What if the price of many kinds of food doubled?
- *What if you had to put money into your TV set to watch all programs?
- 4. Some people have suggested that all young people over the age of eight years must hold a paying job for five hours a week. That way they get used to the idea of working. Do some black hat thinking on this. How many black hat points can you find? What are they?

Suggested time: 3 mins.

5. People talk about each other a great deal. Sometimes the things they say are true, sometimes untrue and sometimes partly true (or exaggerated). People enjoy gossiping in this way, but what are the dangers and difficulties? Do some black hat thinking on this.

Suggested time: 3 mins.

6. Toni and Nicky are thinking of ways they can earn money to buy a new video game. They both make suggestions & they both wear their black hats to think about the weaknesses of each idea. Write a dialogue between the two showing what they might say. See if you can write a scene where each character speaks at least 3 times.

Suggested time: 8 mins.

Put on your yellow hat (strengths):

- 1. The maker of new band of ice-cream allows everyone under the age of 15 years to have all the ice cream they want for one day. Do some yellow hat thinking on this. Who will benefit? What are the benefits? *Suggested time: 2 mins.*
- 2. Someone suggests putting a large hook on the roofs of cars. Why do you think that idea was suggested? Use yellow hat thinking to list some possible good points.

Suggested time: 2 mins.

3. What is the likelihood that each of the following ideas work out as intended? Do some yellow hat thinking on each and give the reasons why you think the plan is likely to work out. If you do not think the plan will work, just say that it won't.

Choose as many topics as you wish...

Suggested time: 1 minute per item.

We should increase the number of police officers in order to reduce crime.

Students should be paid to do schoolwork so they will work harder.

Shops should stay open later at night so that they could do more business.

Restaurants should put more salt in the food so that people will get thirsty and drink more.

4. A restaurant decides to charge by time instead of food. You can eat as much as you want but are charged a fixed fee for every 15 minutes you are in the restaurant. Do some yellow hat thinking on this idea. List the benefits & reasons why you think the plan might work. Then do some black hat thinking to list the difficulties or problems....why it may not work. Finally, decide whether you think the restaurant has a good idea.

Suggested time: 5 minutes.

5. List as many yellow hat points as you can think of for the following idea: everybody must give a party once a year.

Suggested time: 5 minutes.

6. Your cat had 4 kittens. Do some yellow hat thinking on this.

Suggested time: 5 minutes.

Put on Your White Hat (information).

- 1. Describe yourself by giving just five true statement. Each statement must cover just one fact about you. *Suggested time: 3 minutes*.
- 2. Describe something you own by giving 5 true statements.

Suggested time: 3 minutes.

3. A friend asks you to go on a holiday with his (her) family. You can only ask 5 questions about the trip and each question must cover only one point. What five questions would you ask?

Suggested time: 2 minutes.

4. A friend wants you to help her sell soft drinks at football games. Put on your white hat to see what information you should have in order to be successful. What do the two of you need to know?

Suggested time: 4 minutes.

5. What information do you need in order to find out more about a career or job? Put on your white hat and list the questions you might ask and who you would ask. Also write down what sources you might consult to get the answers.

Suggested time: 4 minutes.

6. A person you do not know very well offers to sell you a camera at a low price. What white hat information do you need?

Suggested time: 4 minutes.

Elaboration: During the practice sessions, you and your students may have made additional observations on how the white hat is used. After the practice session, invite students to notice the ways they use the white hat in real life and for what purposes.

Invite students to write in their journals their uses of the white hat. Continue to give students time during class to swap journals, read and comment on each other's entries.

Conclusion: white hat thinking maps out what information is known and what information is needed. By using the white hat, we can stimulate thinking and check thinking. When wearing the white hat, we ask 3 questions:

*What information do we have?

*What information do we need?

*How do we get the information that we need?

Put on your green hat (new ideas):

1. What is **interesting** about the following things? What creative uses might you suggest for each?

Choose as many topics as you wish...

Suggested time: I minute per item.

*a plane that can fly very slowly.

*a cup with a handle on both sides.

*a book which is numbered backwards so that it begins with the highest number and ends with page one.

*a cat with no fur or hair.

2. Use the word *cornflakes* to generate some new ideas for a TV game show.

Suggested time: 3 mins.

3. A starting idea is any suggestion given to get thinking started. Starting ideas do not have to be logical or practical, but may lead to other ideas which are more usable. Give some starting ideas to help change each of the following situations.

Your parents have the volume on the TV set up very high and you can't do your homework.

There are too many stray cats in the neighbourhood.

Someone is making fun of you.

Suggested time: 2 mins per item.

4. In what way could you improve on an ordinary pencil? Use your green hat and the word **mouse** to help you get ideas (pencil PO mouse).

When you have an idea, use yellow hat thinking to make that idea as strong and practical as possible.

Suggested time: 2 mins green hat.

2 mins yellow hat.

5. Two inventors, Mike and Diana, have invented a talking o-yo. They are trying to persuade a manufacturer (Sam) to produce the yoyo. At the meeting, Mike is wearing a green hat, Diana is wearing a yellow hat and Sam is wearing a black hat. Write what they say at the meeting. Each person should talk at least 3 times & there should be a conclusion.

Suggested time: 15 mins per item.

6. Give some possible explanations for each of the following situations. Use your green hat thinking trout forward possibilities.

- *Why do people spray-paint graffiti on public property?
- *Why do some students work harder than others?
- *Why is there no school on Sundays in Australia?

Suggested time: 2 mins per item.

Put on your red hat (feelings):

- 1. Put on your red hat and think about what your feelings would be if any of the following happened to you:
 - *You are hit by a car and break a leg.
 - *Someone gives you a large sum of money
 - *You find that someone you thought was a friend has been saying bad things about you.
 - *You suddenly become very good at your favourite sport.
 - *You get to meet a film star.

Suggested time: 2 mins per item.

- 2. For each pair, which you like better:
 - *Coco Cola or Pepsi.
 - *Chocolate chip ice cream or vanilla ice cream.
 - *Video games or game shows.
 - *Loud music or not-so-loud music.
 - *Social studies or mathematics.

Softball or bushwalking.

Suggested time: 2 mins per item.

- 3. If you look into the future, what is your intuition about the following? Put on your red hat and tell what you think will happen. Remember, with the red hat, you do not have to explain your feelings.
 - *Will there be fewer or more children?
 - *Will there be more or less crime?
 - *Will people be more or less interested in sports?
 - *Will the school year be shorter, longer or about the same?

Suggested time: 3 mins per total?

- 4. What if red paint were sprayed on you in these different situations? Describe what your feelings would be in each case:
 - *as part of a TV show.
 - *as a practical joke played on you by your friends.
 - *as an accident when you walked under a ladder.
 - *as a stunt to raise funds for a charity.

Suggested time: 3 mins total.

5. There is a suggestion that all people (adults well as young people) should wear very brightly coloured clothing. Use the following sequence of hats to help you decide what you think of the idea:

YELLOW BLACK RED

Suggested time: 3 mins.

6. Write a scene where 3 friends find a briefcase stuffed with money. They suspect the money is stolen but disagree on what to do with it. Have each character give his or her red hat thinking on the subject. Each person should speak at least 3 times.

Suggested time: 15 mins.

Put on your blue hat (thinking about thinking):

- 1. Put on your blue hat and choose which of the other hats you would want to use first in each of the following situations.
 - *A man collapses in the street in front of you.
 - *Your friend is accused of cheating on a test, but you know that he or she didn't do it.
 - *You have been having a long argument with your mother, who wants you to clean up your room.

*You are at party and your father, who was going to give you a ride home, becomes ill and cannot pick you up.

*There is a bad smell in the room.

Choose as many topics as you wish... Suggested time: 1 minute per item.

2. Put on your blue hat and make up a plan for thinking about this problem:

The vacant block next door to the school is very dirty...even unhealthy. There are papers, cans and broken bottles all over the place.

Suggested time: 4 minutes.

- 3. Write a scene based on the following situation. A girl named Molly gets a box of chocolates as a gift from Jessica. The next day, Molly tells Jessica that, when she opened the box, half the chocolates were gone. What do the girls say to each other? Each character should speak 3 times. The blue hat must be mentioned twice.

 Suggested time: 6 minutes.
- 4. A neighbour has a fierce guard dog that gets out through a hole in the fence. This dog has not yet bitten anyone but it terrifies people. Use your blue hat to tell what hats you would use to think about this situation. Then go ahead and do the thinking. Finally, summarise your thinking & tell what you would do about the dog.

Suggested time: 10 minutes.

- 5. Put on your blue hat and tell what thinking might be used to solve the following problems:
 - *You are trying to decide what to wear to a fancy dress party.
- *You have to spend an evening at home, but there are no good books to read & you have seen all the videos.
 - *All of your friends are going to a party, but you haven't been invited.
 - *You want to buy something, but don't have enough money with you.

Choose as many topics as you wish... Suggested time: 1 minute per item.

- 6. Your parents say you must spend Saturday mornings working around the house. You really don't like the idea, but you want to think about it. Use your blue hat to explain what hats you will use to think about it.

 Suggested time: 4 minutes.
- 7. The circus was planning to give 3 performances in the town. But a sudden storm has wrecked the circus tent. Imagine that you are the owner of the circus. Put on your blue hat and describe the thinking that should now take place.

Suggested time: 3 minutes.

Put on your six hats:

- 1. One evening, you and a friend walk over to a neighbour's house to practice shooting netball goals. But you find that your neighbour has to stay in and do homework. You and your friend think about what you could do instead. Which of the following sequences would be most useful to you why?
 - *First Idea: blue-white-green.
 - *Explanation: white-green
 - *Possibilities: green-blue
 - *Caution: white-black.

Suggested time: 1 minute.

- 2. A teacher is trying to decide between 2 parents to take on a school camp with the students. Which of the following sequences do you think she should use and why?
 - *Design: blue-green-red.
 - *Evaluation: yellow-black.
 - *Possibilities: green-black.
 - *Choice: yellow-black-red.

Suggested time: 1 minute.

- 3. You need some money to buy something that you want. You have decided that there are four ways to get the money:
 - *sell something.
 - *borrow the money.
 - *promise to pay for the item later.
 - *do odd jobs to earn the money.

Think about each choice using the Evaluation Sequence (yellow-black). Then use the red hat to make a choice.

Suggested time: 6 minutes.

4. Someone has written a mean note to you and put it in your locker. You know who it is and want to write something mean back. Before doing that, think abut the situation using the Direct Action Sequence (red-black).

Suggested time: 2 minutes.

5. A radio station is giving a free bicycle to the person who designs the best logo for a biker's T-shirt. Choose a sequence & use it to jot down some thoughts about the logo.

Suggested time: 4 minutes.

- 6. You have never been to this country before. You step off the plane in a crowded airport. Which of the following simple sequences would be most useful to you and why?
 - *Caution: white-black.
 - *Final Assessment: black-red.
 - *Opportunity: white-yellow.

Suggested time: 1 minute.

Sample application: Language Arts:

You're Invited.	Directions	
Focus: Letter writing.	Prewriting: Green hat: imagine an event like a party, special meal, sports contest, movie or concert to which you would like to invite others. Once you have your idea, begin to plan a letter you can write inviting a friend to this event.	Encourage student evaluators to respond to the first question on the review sheet & sign their name beside the comments.
Group: whole class or small groups. Skills: writing, peer review. Materials needed: 1 copy of You're Invited! Sheet for each student.	Red hat: Decide the tone of your letter. (Tone is the emotion readers feel when reading a work). Should the invitation be friendly, formal, mysterious, etc? What red hat feelings do you want rears to have? (You may wish to give students some examples of writing that establishes a definite tone). White hat: What white hat facts should you include in your letter? (You may also like to ask what white hat facts students know about proper letter form. Supply any missing information they will need).	Then ask them to pass the letter & review sheet to another student. This student responds to the 2nd question.
Background: Students should have had some experience writing letters.	After writing: after students have written and revised their letters, ask them ti divide into groups of 6. Then give each student a copy a peer review form of <i>You're Invited!</i> Ask students to attach the form to their letter and pass their letter to another person in their group.	Pages are rotated until peer review forms are completed. By the end of the rotation, each student will have used each of their 6 thinking hats once.

You're Invited Peer Review:

1. White hat : what facts does the writer give? What facts, if any, are missing? Comments:
Name:
2. Red hat : What is the tone (feeling) of the letter? Do you think this is the tone the writer wanted the letter to have? Comments:
Name:
3. Yellow hat: What are the good points of the letter? Comments:
Name:
4. Black hat: What are the weaknesses of the letter? Comments:
Name:
5. Green hat : What ideas do you have for improving the letter? Comments:
Name:
6. Blue hat: summary the group's thinking about the letter. Comments:
Name:

RESOURCES TO HELP WITH AUDITORY PROCESSING PROBLEMS:

The *LinguiSystems Inc.* continues to produce resources based on **evidence-based research.** An old, but excellent book that offers a wealth of information and ideas is *Help for Auditory Processing* by **Lazzari**, A. M. & **Peters**, P. M. (*LinguiSystems Inc*)

HELP FOR AUDITORY PROCESSING. (1994) Lazzari, A. M. & Peters, P. M. LinguiSystems, Inc.

Sections:

Book 1:

Introductions.

Word Classes.

Directions.

Details.

- A. Naming and Action words—Identify
- K. Opposites/ synonyms.
- H. Factual errors.
- L. Referents 4 pronouns. Specific words.

Information.

Getting information from conversations/ paragraphs/ inferences

Book 2:

Questions.

Sequencing.

- B, C, D: alphabetical order.
- D: sequencing words in sentences: grammar/ word order.
- F: Historical events.
- J. Sequencing in paragraphs.

Stories.

- A. Identifying characters. Reading comprehension.
- G. Paraphrasing stories.
- H. Interpretive stories.
- I Inferences
- K. Main Idea.

Sounds in Words.

Initial sounds. Medial sounds. Final sounds.

Sound position.

Blends/ digraphs/ vowels/ diphthongs/ hard and soft sounds etc

Auditory Processing Activities.

There is also a set of workbooks with detailed/ graded activities.

WORKBOOKS:

Book 1:

Word Classes:

- A. Answering Yes/ No Questions about Word Classes.
- B. Identifying word classes by descriptors.
- C. Relating items by word class.
- D. Discriminating word classes.
- E. Identifying word classes in sentences.
- F. Recognising relevant word classes.
- G. Substituting word classes in sentences.
- H. Completing analogies.
- I. Describing people, places, things.
- J. Using word classes to solve problems.

Directions:

- A. Identifying action words in directions.
- B. Identifying important information in directions.
- C. Eliminating inappropriate answers.
- D. Paraphrasing directions.
- E. Identifying activities from directions.
- F. Identifying missing information from directions
- G. Identifying actions to avoid when following directions.
- H. Identifying the number of steps in directions.
- I. Following conditional directions.
- J. Following directions with objects.

Details:

- A. Understanding word classes in sentences.
- B. Sorting information into word classes.
- C. Determining if a direction has been given.
- D. Identifying temporal information in directions.
- E. Identifying people in directions.
- F. Identifying locations in directions.
- G. Explaining absurdities.
- H. Correcting factual errors.
- I. Identifying listening cues.
- J. Identifying opposites.
- K. Identifying synonyms.
- L. Identifying referents for pronouns.
- M. Understanding details in statements.
- N. Identifying specific words in sentences.
- O. Understanding descriptors.

Information:

- A. Identifying items from word classes and descriptors.
- B. Determining what information is needed.
- C. Determining sources of information.
- D. Judging the quality of information.
- E. Understanding information in conversations.
- F. Understanding information in paragraphs.
- G. Using information to make inferences.
- H. Using information to make decisions.
- I. Identifying relevant information.
- J. Using information needed to perform tasks.

Questions:

- A. Answering questions about common objects.
- B. Answering questions using word classes.
- C. Answering questions about activities.
- D. Choosing appropriate questions.

- E. Making decisions by asking questions.
- F. Gathering information by asking questions.
- G. Asking questions to determine attributes.
- H. Choosing appropriate answers.

Sequencing:

- A. Prioritising daily activities.
- B. Putting information in order.
- C. Sequencing words in sentences.
- D. Sequencing alphabetically.
- E. Sequencing by physical features.
- F. Sequencing by historical events.
- G. Answering questions about sequences.
- H. Identifying initial steps.
- I. Sequencing life events.
- J. Understanding sequences in paragraphs.

Stories:

- A. Identifying characters.
- B. Identifying times.
- C. Identifying places.
- D. Identifying Characters, times, places.
- E. Using descriptive words from stories.
- F. Choosing story titles.
- G. Paraphrasing stories.
- H. Answering interpretive questions.
- I. Drawing inferences from stories.
- J. Asking questions about stories.
- K. Finding the Main Ideas.
- L. Choosing story titles from word groupings.

Sounds in Words:

A. Recognising initial sounds in words.

- B. Identifying initial sounds in words.
- C. Recognising final sounds in words.
- D. Identifying final sounds in words.
- E. Recognising medial sounds in words.
- F. Identifying medial sounds in words.
- G. Identifying positions of sounds in words.
- H. Recognising blends and digraphs in words.
- I. Recognising vowels and diphthongs in words.
- J. Discriminating hard and soft sounds.
- K. Identifying like sounds in words.
- L. Discriminating sounds in words in sentences.
- M. Correcting sounds in words in sentences.

HELP Book 1:

Question Comprehension: to adequately take part in verbal and written communication, a student's receptive language skills must be of a high level. This set of exercises provides practice in development of language concepts and gaining meaning form verbal material.

- *Can-questions.
- *Do/Does- questions.
- **If*-questions.
- *Quantity/ comparison questions.
- *Noun/Verb Questions requiring a Yes/ No response.
- *Two-variable questions requiring a Yes/ No response.
- *Mixed Yes/No questions.
- *Some/ All questions.
- *True/ false statements.
- *Always/ Sometimes/ Never statements.

HELP Book 3:

Concepts: **concepts** form the building blocks of language, allowing for the development of verbal expression and meaningful communication. Practice is given in discerning and describing the relationships between individuals, time, places, things, events and situations.

- *Telling where Items are found.
- *Identifying Spatial Relationships.
- *Correcting Spatial Relationship Statements.
- *Generating Spatial Relationships.
- *Part/Whole Relationships __recipes.
- *Identifying Activities from Items Used.
- *Identifying Appropriate Descriptive Words.
- *Describing Common Items.
- *Answering Relational Questions __ one variable.
- *Making Relational Choices.
- *Comparing Daily Events temporal relationships.
- *Comparing Situations and Events.
- *Arranging Descriptive Words in Order.
- *Comparing Historical Events Temporal Relationships.
- *Answering Relational Questions two variables.

HELP Book 4

Talking about Language: 97-143

- *Identifying the number of words in a sentence.
- *Identifying Rhyming Words.
- *Choosing Rhyming Words.
- *Building Compound words.
- *Segmenting Compound Words.
- *Combining Syllables to make Words.
- *Combining Sounds to make words.
- *Dividing words into syllables.
- *Identifying Syllables in Words.
- *Adding Suffixes to Words.
- *Adding Prefixes to Words.
- *Choosing Words with Sounds in Given Positions.
- *Identifying Sounds in words.

- *Adding Sounds to Words.
- *Segmenting Words by sounds.
- *Generating Words from Sounds.

*Generating Words from Letters.