

Effective Literacy Intervention Strategies

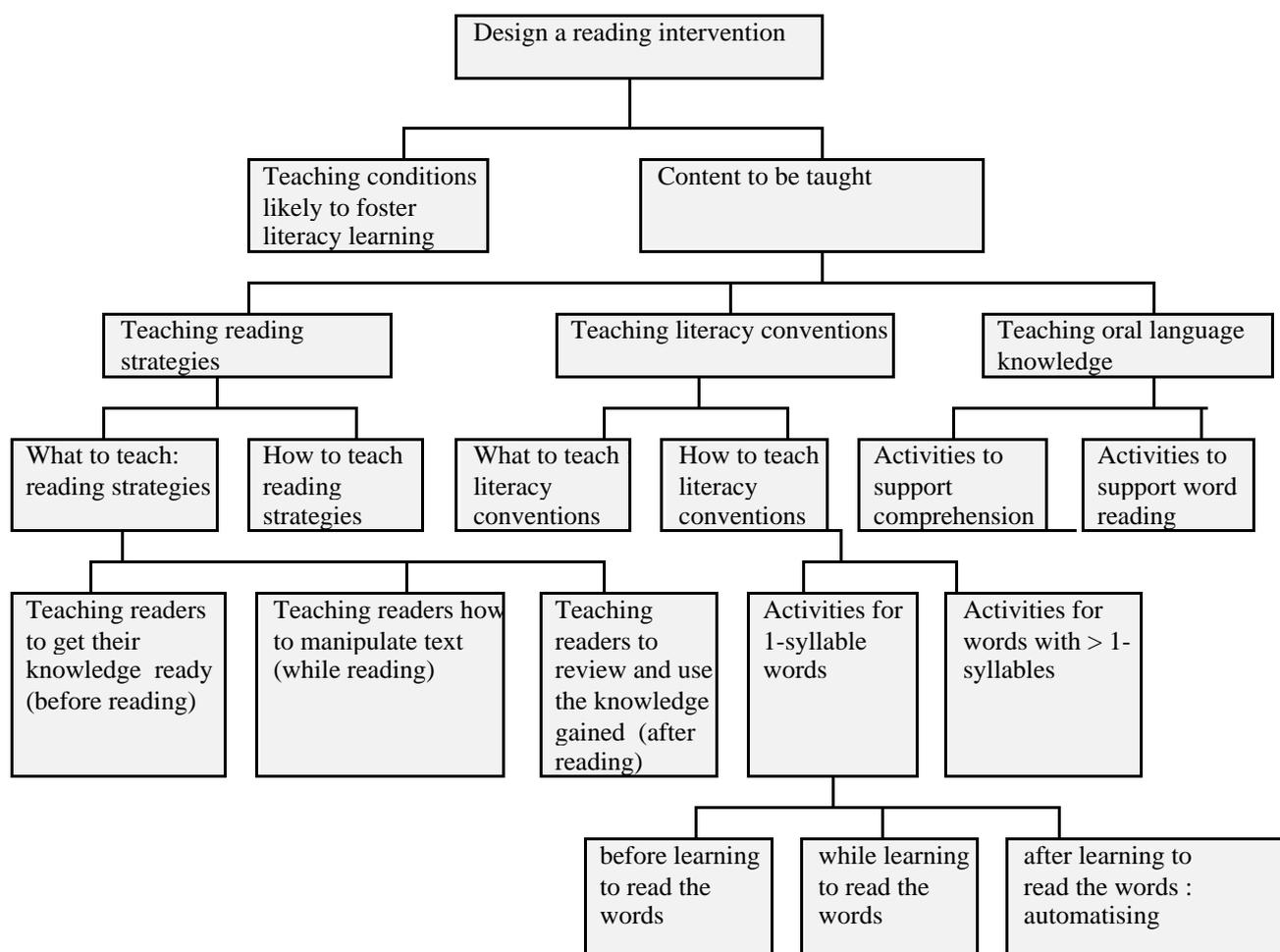
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Part 5 : Intervention strategies

Designing a reading intervention: The reading intervention needs to teach knowledge in the areas noted in our model of reading:

| | | | | |
|--|--|---|--|----------------------------------|
| Teaching literacy knowledge, the knowledge of written text | | | Teaching readers how to manage their literacy activity | Teaching oral language knowledge |
| teaching the conventions of writing | fostering beliefs about how one reads and writes, why it is useful | teaching reading and writing strategies | | |

We need teaching in each of these areas at each of the levels of literacy. To teach the literacy knowledge, we need to look at two aspects: the teaching conditions that help readers improve their knowledge of reading and the content to teach.



The teaching conditions likely to foster learning

The following teaching conditions help readers improve their knowledge of reading.

The ground rules for reading aloud. Establish the ground rules for reading aloud with readers. It is essential that they be reassured that the goal or purpose of reading aloud is not word-perfect, errorless reading, but instead, discovering what the writer wanted to tell them. They should be aware that they can do whatever they want to achieve this goal; they can -

- (1) pause at any point and consolidate what is known about the print, perhaps by asking questions such as "*What do I know now? What could this mean?*" etc.,
- (2) experiment while reading, guess at what the print might be about, .
- (3) re-read parts that didn't make sense, self-correct, guess unfamiliar words and check guesses against the text.
- (4) read at their own pace and to change pace if they want to.
- (5) re-read a section several times to achieve fluency, to pick up the thread of the reading,
- (6) stop at any point and say "*That didn't sound right/make sense*", etc.
- (7) point at words while reading, run finger along the text as they read, use fingers to segment words.

They should also be aware that the purpose of reading is to discover the writer's message, that they can do whatever they want to achieve this. Many children who have had a history of reading difficulties will need to learn to see reading aloud as a technique that can help them to read. Their earlier experiences of reading aloud may well have provoked anxiety and fear.

Reading underachievers need to experience these ground rules being used practically. They need to hear teachers praise them for re-reading, for experimenting or for changing pace, and to see that their attempts at "playing by these rules" are valued. Praise the reader for re-reading, guessing, taking risks, changing pace and help the reader to see that attempts at "playing by these rules" are valued.

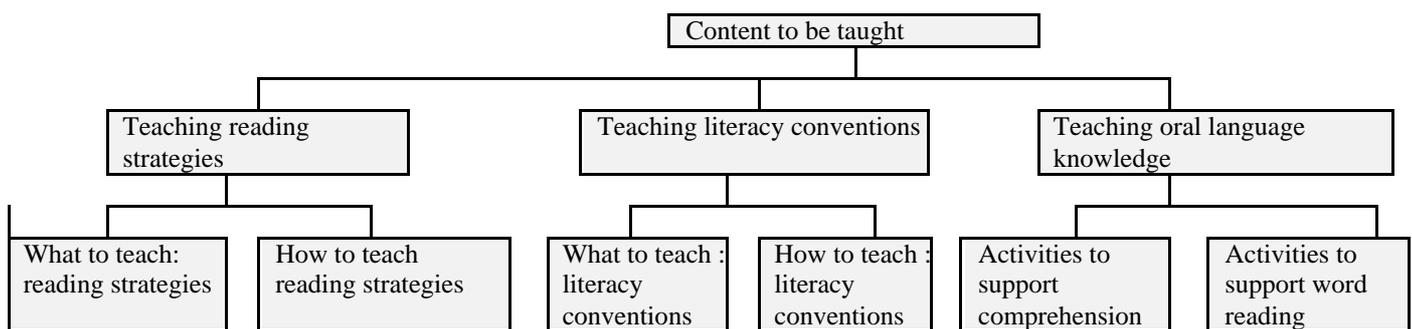
- **read aloud as often as possible.** The more frequently a person reads, whether aloud or silently, the more the person will learn about reading and in particular, about the structures of words and will automatize orthographic knowledge (Stanovich & West, 1989). Readers should be encouraged to read aloud to themselves, in small groups and in choral reading in larger groups.
- **discuss the purposes and values of reading aloud.** When readers have clear purposes or reasons for reading, they have targets to aim towards. Discussing purposes gives students directions in which to aim.
- **model oral reading actions.** Model oral reading as often as possible and draw attention to the reading actions that need to be learnt. Students become aware of the actions that they can use when they read. When readers discuss with others the actions that they use, others can try out their actions and perhaps take them on for themselves. Use group collaborative learning in which students work together on text, discuss their interpretations and why they made them
- **encourage experimenting and risk taking** Encourage readers to experiment and to take risks when reading aloud. Associated with the ground rules is encouraging them to see reading as a problem-solving activity in which they are trying to guess the writer's intention. Reading aloud

permits them to "think aloud" and to learn and practise an increasing range of reading actions or strategies. Help children see the text as a "playing field" or "sandpit" on which they are free to experiment with various actions to achieve a goal. They need to see that they have the freedom to experiment while reading aloud and that this is valued by the teacher.

- **relax the reader before reading** It may be necessary to assist the reader to relax prior to reading aloud; this can be achieved through visual imagery techniques, and allowing the reader to review and practise reading the print by her/himself before beginning to read aloud.
- **helping students get ready' for reading** Your teaching may need to consider:
 - recode nonverbal knowledge to verbal form
 - expanding readers' background knowledge and repertoire of reading strategies.
 - drawing attention to the purposes of reading, and discuss the appropriate reading strategies for these purposes.
- **'feeding back' the knowledge readers gain by reading.** The teaching can help students add new ideas, vocabulary, new purposes of reading and new reading strategies to what they already know.
- **having readers write can contribute substantially to reading ability.**
- **reading programs are best implemented developmentally.** Progress through a reading program can be indicated by the reader's ability to read an increasingly broad range of text: read text that
 - increases in grammatical complexity; ideas sequenced in different ways
 - involves words with increasingly more complex and sophisticated meanings.
 - requires a greater level of inference and prediction for its comprehension.

The content to be taught

Readers need to learn various types of literacy knowledge. These were identified in the model of reading. These include a knowledge of the conventions for writing and reading the units in text (words, sentences, paragraphs and longer text), a knowledge of how to act on the units in order to comprehend them (the reading actions or strategies) and the oral language knowledge necessary to support and scaffold the reading activity. The pathway through the content is shown in the following diagram.



Students either read aloud or read silently. When readers read aloud (that is, engage in 'oral reading', we are able to see what they are doing while they read and intervene if necessary. There are five types of oral reading activity.

| types of oral reading activity | | | | |
|---|---|-------------------------------------|---|-----------------------------------|
| interactive reading aloud | solo reading aloud | paired reading | shared reading | multiple or repeated readings |
| learn and practise particular reading actions | practise reading aloud, possibly onto an audio tape | read text aloud with another person | read plays, novels, etc, with other readers and | read the same text more than once |

All of the activities are important.

When readers read silently, it is more difficult to intervene while the reader reads. However, as we will show, we can engage in interactive reading silently. In the following sections we target interactive reading aloud and silently.

Teaching reading strategies

Readers need to know how to read, that is, to use reading strategies. Reading strategies are actions that connect or link ideas in two ways :

- they link ideas in the text at any time with ideas that they have read earlier in the text.
- they link ideas in the text with ideas they have already learnt and stored in their existing knowledge.

It is useful to identify two types of strategies students need to learn to use when reading : how to comprehend the text they read and how to manage their reading activity:

- comprehending strategies ; these are the actions readers use to manipulate and link ideas at each level, e.g., visualising, inferring, summarise. These are part of a readers' literacy knowledge, their knowledge of how to make sense of written text.
- the actions readers use to manage and direct the use of the comprehending strategies, for example, decide when and why to use each action, evaluate how well it works in terms of a goal and frame up goals for reading. These are the actions readers use to manage and direct their activity while reading.

Readers learn these actions initially in interactive reading activities. They can practise using them in a supported way in the paired and shared reading contexts and ultimately use them independently in solo reading aloud contexts.

What to teach : reading strategies

Literacy interventions need to teach the conventions of writing and the actions for manipulating this information. These actions are the reading and writing strategies.

In this section we identify the reading strategies that are useful to teach.

It is useful to think of the activity in which readers engage in three phases:

| | | |
|---|---|------------------------------|
| before reading | while reading | after reading |
| early stage of a reading act : getting ready or orienting | while-reading stage: processing the text in depth | post-reading or review stage |

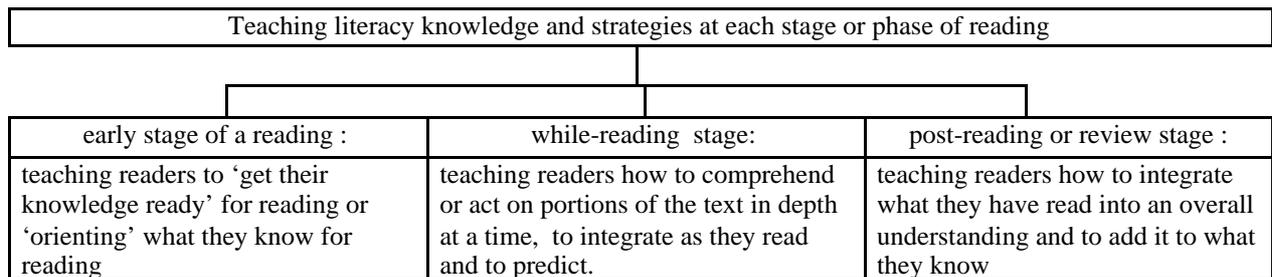
Each phase requires readers to use their knowledge in particular ways. There are actions readers use to get their knowledge ready for reading a particular text, for making sense of the text as they read and for learning from their reading activity.

Particular literacy knowledge and strategies can be taught at each stage. Some of these are shown for each type of text information in the following diagram, Readers can be taught to use their knowledge systematically while reading by learning what to do at each phase or stage during reading.

| Stages of reading | Levels of text processing | | | | |
|---|--|---|--|---|---|
| | Dispositional level | Topic level | Conceptual level | Sentence level | Word level |
| Getting ready or orienting stage | Focus on purposes for reading: <i>Why am I reading text? What will I look for as I read? What will I know when I have finished reading?</i> Readers say how they will read, the strategies they will use | Link text with what reader knows; by using title, pictures. <i>What do I think text is about? What might the key ideas be?</i> Extend knowledge necessary for understanding the text. | Link ideas in text with what you know, use mapping, networking. <i>What other ideas might come up with these? What might happen next? What questions can I ask about it?</i> | Focus on how the ideas might be said: <i>How would I put these ideas into sentences? How would I tell someone about them?</i> | <i>"What will I do as I read / come to a strange word?"</i> |
| | <ul style="list-style-type: none"> • Readers say how they will read, the strategies they will use. <i>"What will I do as I read/come to a strange word?"</i> • Am I ready to read? | | | | |
| Teaching readers how to manipulate the text: While-reading strategies | <p>Sentence level</p> <ul style="list-style-type: none"> • break text into digestible bits, decide where to pause, • listen to themselves as they read, • act on ideas, put themselves in the context, • paraphrase, • visualise what was read, • Does it make sense/fit in? • re-read <p>Conceptual level</p> <ul style="list-style-type: none"> • summarise, What is the main idea so far? • infer, Why did that happen? • think ahead, predict, anticipate • review and consolidate, What do I know now? • underline, note down useful information • relate then to what they expected • gradually build an impression of the text. <p>Word level</p> <ul style="list-style-type: none"> • use context of word + initial few sounds • read to end of sentence and re-read • use word analysis and re-read | | | | |

| | | | | | |
|------------------------------|---|--|---|---|----------------------------------|
| Post-reading or review stage | Respond emotionally to text. <i>How I liked the text? Were ideas useful /interesting? Why was the text written?</i> | Review text understanding: <i>What did the text tell me?</i> Review, evaluate reading strategies used: <i>What reading actions worked?</i> | Learn by reading. What new ideas have been learnt; how has reader's knowledge changed? <i>What new ideas will I remember?</i> | Add to their knowledge of language, for example, paraphrase ideas in text, note new ways of saying ideas. | What new words were in the text? |
|------------------------------|---|--|---|---|----------------------------------|

The intervention needs to teach literacy knowledge and strategies systematically at each stage or phase of reading.



Getting ready or orienting stage

Many readers need to be taught to get their knowledge ready. One aspect of this involves teaching readers to plan how they will read.

The types of knowledge readers use to 'get ready' for reading and types of teaching activities for each are shown in the following diagram. The self instructions readers learn to use are shown in italics.

| | |
|---|---|
| The purpose for reading? | Ask readers to describe <ul style="list-style-type: none"> • why they think they are reading • how they will need to use the information gained as a result of reading. |
| The likely theme of the text | <i>What might the text tell me ? How do I know? What will tell me what it could be about? What does the title tell me? "</i> Readers can begin by asking the '4W and 1H' questions. |
| Use what you know about the topic | <ul style="list-style-type: none"> • <i>"What do I know about this topic already? What do.(the pictures, title,) remind me of? What picture do I make when I hear the title?"</i> • <i>"What ideas / words might come up in the print ? What might the text tell me? What questions might the story answer?"</i> |
| How will you go about reading? | Readers say the actions they might use before they begin to read. |
| How will I organize the ideas as I read ? | Students note whether text is a narrative, factual text, descriptive text, argumentative text, etc., and decide how they will act to organize the ideas. |
| Am I ready to read? | Readers decide whether they have sufficient knowledge about the text to begin to read and feel sufficiently confident about reading. |

Readers can learn to use these strategies when they both read aloud and read silently.

Teaching readers how to manipulate the text: While-reading strategies

The aim of teaching the while-reading actions is to improve readers' use of comprehending actions while they are reading the text in depth. Readers use these actions to comprehend or process text units and to self-monitor, checking and cross-referencing what they have just read with what they already know.

Actions to use while reading aloud The types of actions readers use at each level of the text while reading aloud are shown in the following diagram. When first 'while reading' a text, readers read the text aloud as independently as possible.

| Level of text | Reading action |
|-----------------------------|--|
| sentence level strategies | <ul style="list-style-type: none"> • Organise the print to be read; • Listen to themselves as they read • Talk to one's self when reading, paraphrase • Visualise or 'make a mental picture' • Put your self into the context. • Re-read and monitor sentences for meaning • Question |
| conceptual level strategies | <ul style="list-style-type: none"> • Think ahead, predict what might happen next • Ask "Why did that happen?" and inferring. • Read between the lines |
| word level strategies | <ul style="list-style-type: none"> • use the context of the word in the sentence and its initial few sounds. • Read to the end of the sentence and then re-read word • Say the sentence containing the word in own words • Match a non-word read with a word in the student's oral language. |
| topic level strategies | <ul style="list-style-type: none"> • What are main ideas so far? How have ideas changed? • How do I skim, scan? • Linking up ideas as I read. Readers use semantic mapping procedures. • Using paragraph reading strategies. |

Actions to use while reading silently

Before or after readers read a sentence or a paragraph, you can remind them to

- paraphrase (that is, 'retell) or summarise the text. When readers pause after reading a sentence or paragraph silently, they can be asked: *What has the text been about? What do I know now?"*
- ask questions while reading about what is said, for example, *"Why did that happen?"* or *"Why am I told that? "What might happen next?"*
- use reading actions selectively.
- identify and record important information in the text. As the readers read, they can note key words, draw pictures, underline, use highlighter, add ideas to a concept map. Alternatively they can use the following framework for recording information about the text as they read.

| | Pre-reading ideas | While reading ideas | Post-reading ideas |
|---|-------------------|---------------------|--------------------|
| 1. <i>Where does the story take place?</i> | | | |
| 2. <i>When does the story take place?</i> | | | |
| 3. <i>Who are the main characters?</i> | | | |
| 4. <i>Who are other important characters?</i> | | | |
| 5. <i>What was the problem in the story?</i> | | | |
| 6. <i>How did _____ try to solve the problem? Explain</i> | | | |
| 7. <i>Was it hard to solve the problem? Explain</i> | | | |
| 8. <i>Was the problem solved? Explain</i> | | | |
| 9. <i>What did you learn by reading the story?</i> | | | |
| 10. <i>Can you think of a different ending?</i> | | | |

By using this sequence of questions, readers can gradually learn to use them as self instruction strategies.

Teaching readers to review and use the knowledge gained (after reading)

After-reading or post-reading strategies are the actions readers use to review what they have read, to integrate what they have read into an overall understanding, to reflect on its interest or value to them, to reflect on what they did to help them read and to add it to what they know. These actions can be used following reading aloud or silently.

This is the ‘value adding’ aspect of the reading. The various types of after- or post-reading strategies are as follows.

Show comprehension: Readers can show their comprehension of the text they have read

- in cloze activities.
- by re-telling or paraphrasing what has been read.
- by drawing a poster, pictures or by acting out (following a recipe etc.).
- by writing questions for the print read.
- by answering comprehension questions. Types of questions include
 - 'Right there' questions: for answers that were explicitly stated in the text,
 - Think and search questions: for answers that needed to be inferred from the text,
 - On my own questions: for answers that drew on readers' background knowledge.

Questions can be classified in different ways, for example:

- recall information directly from the text, for example, "What colour are fire engines?"
- reorganise, paraphrase, translate, analyse, synthesise or organise explicitly stated text.
- go beyond the information given in the text, interpret it; *"Why do you think fire engines are painted red, rather than brown or blue?"*
- evaluate the ideas in terms of an external criterion, for example, *"Do you think that it is a good idea to paint fire engines red?"*

- express an emotive response to the content, for example *"Did you get excited as you read the story about fire engines?"*

Readers can show comprehension at each level of text processing, for example,

- word level; use context to decide word meanings, why particular words used.
- sentence level; answer sentence level questions, paraphrase sentences.
- conceptual level; infer, anticipate, suggest alternative outcomes, apply ideas in other contexts.
- topic level; write or invent a similar text, extend the theme, draw a comic strip of the main events, invent a play based on the theme, play games described in it, etc.

Respond emotionally to the print; *How did I like the story" ? How did I feel while I was reading it? What made me feel that way? Would I like to read it again? Were there words or things that happened, that made me feel happy, excited, or worried?*

Review the reading 'actions' that worked while reading; *What reading actions worked for me? What did I do to work out this word? Did making a picture help here?* Students share the strategies that worked and list them, adding new ones.

Discuss why the material was written; *To amuse us, to make us feel happy, sad or to scare us, to teach us something, to let us know how other people live? To tell us about something that happened, to give us ideas about things that we could do?* The readers support opinions using the print; *"What helped to make me feel sad?*

Identify key ideas and store them in long-term memory; the student needs to learn how to change or add to her/his knowledge base in the content areas. They can:

- describe the main ideas as concisely as possible,
- link these ideas to the existing knowledge base; *What do these ideas remind me of? How are they like / different from things I've already learnt ?"*
- draw a picture of the main ideas, or use a concrete model of them,
- draw a semantic map of the ideas
- describe when the ideas might be used in the future.

Add new words and new meanings to their vocabulary: discuss new words, guess their meanings using the context of the text, use them in sentences, check the guess against dictionary meanings, put them in semantic categories; *What new words did I meet in the passage?" What could ___ mean? What can I guess about its meaning? Why did the writer use this word? What other words could have been used? What are opposites of the word? When might I use this word in the future?*

HOW to teach reading strategies

In this section we examine how the reading comprehension strategies can be taught. Readers need to learn to:

- know how and when to use each strategy,

- automatize the use of each strategy
- integrate the strategies into a set of guiding reading actions and
- monitor the use of the strategies, how effectively they work.

Teachers can develop the notion that these are actions readers can use when they read. Ask them to

- talk about the reading actions that they use, the ones that seem to work best for them.
- see the strategies as 'reading actions' that they carry around in their heads, that these are things that they can do whenever they need to read.
- keep a list of 'reading actions' or strategies that they will use as they read. As they learn each new strategy they can add this to their list.

Group strategy practise Group of roughly comparable ability in reading and interest. The teacher

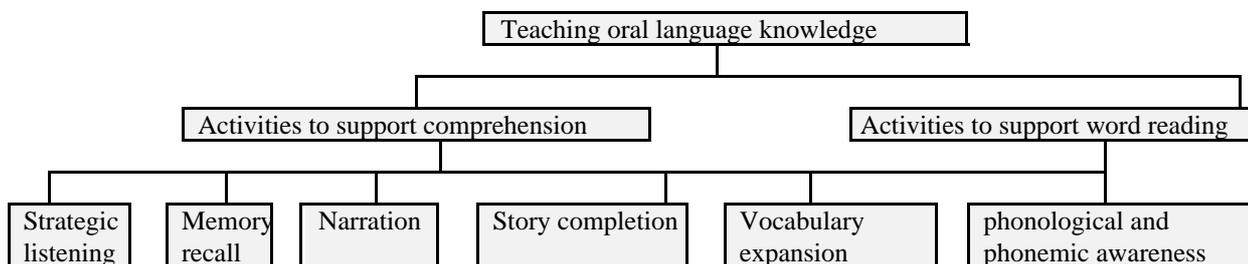
- selects a text at the group's instructional level.
- uses the orienting activities. Gradually students manage this.
- asks students to read the first part of the text, by themselves initially.
- has students discuss what they think it is about, what they have learnt and how they decided.
- asks the students to read the second section and repeat the discussion, interpret the text.
- monitor and assess reading outcomes and progress made by individual students.

Implement a group reading action plan or schedule;

- As students become more familiar with the procedure, observe and record how individual students read and the conditions under which they read best. You can gradually move away from basing the guided reading on the text and adapt to the needs of individual readers.
- Use the procedure for practising integrated sets of reading strategies.
- Plan to have groups work on narrative, expository and descriptive texts.
- Develop cumulative evaluation and monitoring procedures.

Teaching oral language knowledge

Oral language knowledge is necessary to scaffold both learning to read words and to store letter clusters and also to comprehend what is read. Particular aspects of phonological and phonemic knowledge are necessary for learning to read words. Aspects of oral language are necessary for comprehending text. In this section we examine activities for developing both oral language knowledge necessary for reading comprehension and oral language for learning to read words.



Activities to support text comprehension These activities are intended to help the students build the oral language knowledge and understanding necessary for comprehension. They include the following:

| | |
|--|---|
| Narration activities | students talk about ideas, sequence ideas, recount experiences, describe familiar situations and events, communicate intentions and to anticipate in real-life contexts. |
| Strategic listening and aural activities | Before learning to use reading strategies, practise matching oral strategies, for example, the student listens a text, etc., and <ul style="list-style-type: none"> visualise part of it, draws pictures, acts out or paraphrases what was heard, predict what may happen next or earlier, suggest the general context, use context and syntax to suggest meanings of words, test possible synonyms, recognise miscues or errors in the text. re-tell the story, suggest a title, describe the theme, the sequence of ideas in the story describes the actions used while listening and modify them |
| Memory activities | <ul style="list-style-type: none"> recall a word given its meaning and first letter/sound recall what they know about a word, picture when they last heard it, what it may refer to. suggest similes and opposites to a word. recall words from a semantic category are given a title (e.g., why I like ice-cream) and suggest likely words. |
| Story completion activities | <ul style="list-style-type: none"> hear part of a text and predict what might happen, finish it , say how they predicted complete a story given a title, add to a group story, a paragraph, talk about ideas, pursue arguments or discussions, activities in which they write plays or scripts |
| Vocabulary-expansion activities | students add new words and meanings to their oral vocabulary, say when a word isn't understood, guess its meaning using its context, suggest synonyms and opposites, when they might use the word in the future. |

Activities to support letter patterns : phonological and phonemic awareness activities

A developmental program to develop this knowledge needs to include

- (1) strategies for assessing it, children's accuracy of pronunciation of sounds,
- (2) activities for teaching it to an automatized level and
- (3) helping students build their knowledge of how to use it.

The types of activities useful at each year level are shown in the following table.

| | |
|-------------------------|--|
| Prep | <ul style="list-style-type: none"> spontaneous conversation; talk about pictures seen, experiences. learn to say words, imitate words of increasing complexity in play |
| Recall how to say words | <ul style="list-style-type: none"> recall the names of familiar objects and events, recalling names faster. recall a sequence of names, for example, numbers one to ten, versions of "I went window shopping", for example, "I went to beach and saw a seagull", "I went to beach and saw a seagull and a fish ", recognise and say rhyming words and words that alliterate. listen for and remember a shared sound |
| Grade 1 - 2 | <ul style="list-style-type: none"> segment words into onset and rime identify the first sound and the last sound in words segment a word into sounds, tap for each sound, and count the sounds in a word blend onset and rime to make a word blend a sequence of sounds to make a word segment 2- 3- or 4- syllable words into syllables by clapping, say each syllable and each sound comprehend short vs long vowel sound |
| Grade 3 | <ul style="list-style-type: none"> delete a sound from a word and saying the word left. substitute one sound for another identify sound shared by 2 or more words syllabify multi-syllabic words recognise syllables or morphemes in oral language, segment words into functional groups of sounds, (for example, look-ed, in-side , terr-ible), categorising sound groups, for example, long versus short sounds, listening for a sound pattern in multi-syllabic words, |

| | |
|-----------|---|
| Grade 4 + | <ul style="list-style-type: none"> • pronounce more sophisticated words, • recognise the same sound segment in 2- and 3- syllable words • blend 2-, 3- syllables to match a known word by modifying the stress pattern • discuss stress patterns, recognise the schwa in 2- and 3- syllable words • segment 2- and 3- syllable words into sounds, recognising the schwa • recalling multi-syllabic words that share a sound pattern, for example, "inside", "preside" or "microphone, microbe", or that rhyme, etc. |
|-----------|---|

What to teach : literacy conventions

This section examines teaching one of the conventions of literacy, the letter patterns used to write (that is, spell) words. The sequence in which readers learn to read particular types of letter patterns is shown in the following table. It indicates the order in which they need to be taught. A key aspect of development here is for readers to learn to read longer, more complex clusters of letter at once.

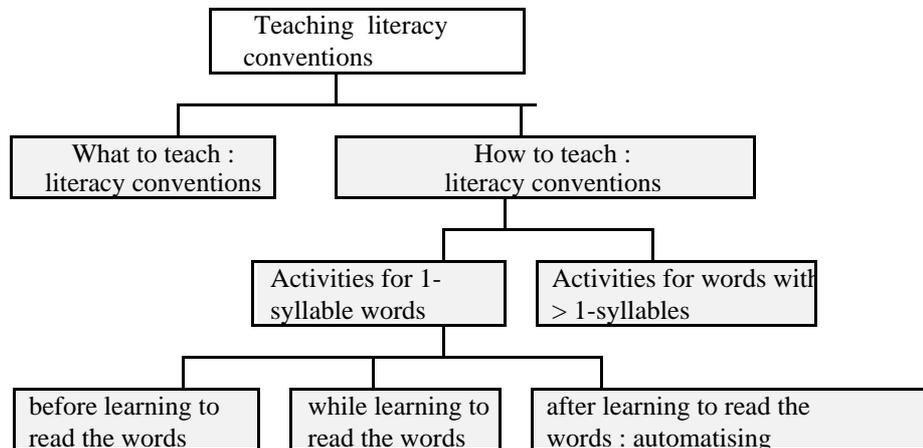
There are two types of letter cluster knowledge students need to learn for each type of pattern: Each awareness involves students being able to

- recognise particular letters and letter clusters in words of increasing complexity and
- do things with the letter clusters, act on words in various ways.

| Type of pattern | Example |
|---|--|
| of individual letter-sound patterns | <ul style="list-style-type: none"> • individual sounds map into a letter • each letter has a name |
| a short string of letters can be recoded to spoken word | Recode words with c-short vowel-c Each letter linked with a sound Example: hot, cat, dog |
| consonant clusters processed at once; a letter-cluster and matching sound pattern shared by several words | Develop first for onsets and rimes in 1-syllable word Example: 'hot' as h-ot and 'stop' as st-op |
| one-syllable simple word structure | Readers learn to recognise letter strings that have the consonant –vowel- consonant pattern (for example, dig, pet), the ccvc pattern (for example, stop, plug) and the cvcc pattern (for example, sump, post) |
| two or more consonants can be linked with the same sound | Example: Patterns - shell, chop, them |
| words with long versus short vowel sound | Two types of sounds associated with vowels; long and short vowel sounds |
| vowel-vowel and vowel-consonants digraphs | Example: tree, seem, star, far |
| different letter groups linked with same sound | Example: the long 'a' sound is linked with 'ay', 'ai', or 'a-e' as in may, main & mate |
| one letter cluster can be linked with different sound | Example: stool versus foot, farm versus fare |
| one-syllable more complex form of digraphs and trigraphs | |
| syllables and syllable-like units | Example: con + cert, in + side, out + side |
| 'silent letters' | Example: write, lamb, know |
| how to read two-syllables, one after the other | Example: button |
| stress patterns in two-syllable words | |
| two-syllable word structure | |
| letters surrounding a letter influence how it is said | Options for saying 'g' - gentle, grid, 'c' - cigar, current |
| letter cluster - meaning patterns | Example: micro, phone |
| how meaning is carried by particular letter clusters | Example: adding 'ing', 's' or 'ed' to a verb |
| syllabic structure of multi-syllabic words | Example: prefixes, suffixes and root words that aren't said how they are written; tion, ance, ble, er |

How to teach : The literacy conventions

This section examines how to teach one of the conventions of literacy, the letter patterns used to write (that is, spell) words. The sequence of activities for any type of word involves readers learning first the phonological knowledge, followed by the appropriate phonemic knowledge, the letter cluster – sound match and the automatic reading of the letter cluster. Teaching students to read 1-syllable words initially and then words of 2- or more syllables.



The key aspects of the teaching programme include the following areas of activity.

Activities for teaching students to read 1-syllable words

Before learning to read the words

Ensure that the children develop the necessary phonological knowledge.

Activities for developing and automatizing relevant phonological knowledge include having readers

- say accurately each of the words they will read
- distinguish between words that have and don't have the sound targeted
- suggest other words that rhyme or alliterate with the rime .
- discuss the shared sound pattern.
- segment spoken words such as *first*, *skirt*, *squirm*, *smirk*, into onset and rime.

Readers comprehend the meanings of words they are learning. Links between word meanings allow readers to predict unfamiliar words in prose reading. Useful activities include

- using each word in a sentence that illustrates its meaning,
- writing a paragraph or a short story using the list words.

Readers learn relevant phonemic knowledge. Readers

- segment words into separate sounds.
- blend separate sounds into the types of words to be learnt
- identify shared vowel sounds
- recognise a specified sound by comparing 2 or more 1-syllable words
- categorise vowels into long versus short. Work on several examples.
- delete sounds from 1-syllable words

- substitute consonants or vowels in a spoken 1-syllable words of up to 6 sounds long.

While learning to read the words.

This is the phase at which you work on the letter cluster-sound links; you teach the students to link the letter cluster with the sound pattern that you targeted in the before learning to read the words phase.

The recommended teaching introduces the letter cluster in a word family of 4 to 5 words. An example is the –own rime unit shown in the following five words:

frown town clown crown brown

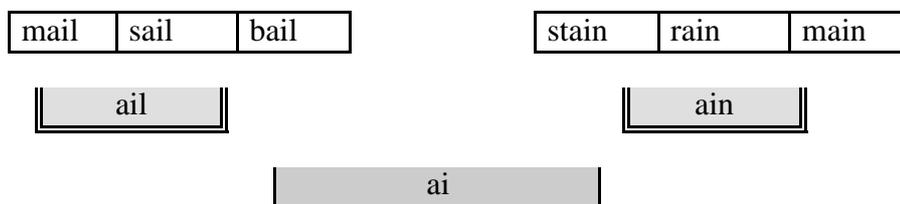
| | | | | | | | | | | | | | | | | | |
|--|---|---------|----------|-------|----------|----------------|---------|-----|------|------|------|--------|-------|-----|-----|-------|------|
| <i>Read each word</i> | Read each word with students. Students repeat reading each word 2 or 3 times. | | | | | | | | | | | | | | | | |
| <i>Read each word in segments</i> | Readers say the onset and rime of each word separately, pointing to each letter cluster as they say it, for example, for "town" say "t" and "own". | | | | | | | | | | | | | | | | |
| <i>Blending letter clusters.</i> | Teach students to read letter clusters by saying each part and blending <ul style="list-style-type: none"> • onsets and rimes into 1-syllable words • two letter clusters into a 2-syllable word. | | | | | | | | | | | | | | | | |
| <i>How the words are similar</i> | The readers read each word again and say <ul style="list-style-type: none"> • the rimes of the words in each category, for example, own and • what all members of the list share, both letter clusters and shared sounds. | | | | | | | | | | | | | | | | |
| <i>Visualise each word and aspects of the pattern</i> | Readers read each word, close their eyes, make a picture of it and write it. They <ul style="list-style-type: none"> • look at 2 or 3 instances, close their eyes, 'see' the words, imagine writing them and discuss how they are similar • visualise the letter cluster in a word that has the sound, eg., the 'ow' in an image of a crown • move the letter-sound cluster to other words. | | | | | | | | | | | | | | | | |
| <i>Spell the word</i> | Develop writing and spelling in parallel with reading. Show the letters that are in the correct sequential positions by ticking | | | | | | | | | | | | | | | | |
| <i>Transfer letter-sound rime units to other words</i> | Select other words that have the same rime but that you haven't taught. Use nonsense words with the rime, letter and rime cards to make up words that readers need to say as quickly as they can. Encourage readers to predict how to say unfamiliar words. | | | | | | | | | | | | | | | | |
| <i>Write a sentence</i> | Readers make up a sentence about each word that illustrates its meaning. | | | | | | | | | | | | | | | | |
| <i>Discriminate the word type from similar words.</i> | Students learning 'own' could read the following: <table style="width: 100%; border: none;"> <tr> <td style="padding: 0 10px;">frown</td> <td style="padding: 0 10px;">torn</td> <td style="padding: 0 10px;">town</td> <td style="padding: 0 10px;">fort</td> <td style="padding: 0 10px;">clot</td> <td style="padding: 0 10px;">clown</td> <td style="padding: 0 10px;">moo</td> <td style="padding: 0 10px;">tone</td> </tr> <tr> <td style="padding: 0 10px;">town</td> <td style="padding: 0 10px;">trod</td> <td style="padding: 0 10px;">thrown</td> <td style="padding: 0 10px;">crown</td> <td style="padding: 0 10px;">nod</td> <td style="padding: 0 10px;">now</td> <td style="padding: 0 10px;">brown</td> <td style="padding: 0 10px;">slow</td> </tr> </table> | frown | torn | town | fort | clot | clown | moo | tone | town | trod | thrown | crown | nod | now | brown | slow |
| frown | torn | town | fort | clot | clown | moo | tone | | | | | | | | | | |
| town | trod | thrown | crown | nod | now | brown | slow | | | | | | | | | | |
| <i>Reading prose</i> | Transfer the letter cluster to prose. The readers and / or the teacher can <ul style="list-style-type: none"> • invent and write short stories that contain the words. They read them. • read sentences containing some of the words. • read words containing the unit in prose. • scan prose they are reading for other words that have the letter cluster and list them. Avoid prose that repeats rime units in high frequency, unnatural ways. | | | | | | | | | | | | | | | | |
| <i>Read 2- and 3-syllable words</i> | <table style="width: 100%; border: none;"> <tr> <td style="padding: 0 10px;">frowned</td> <td style="padding: 0 10px;">drowning</td> <td style="padding: 0 10px;">clown</td> </tr> <tr> <td style="padding: 0 10px;">frowning</td> <td style="padding: 0 10px;">crowned downer</td> <td style="padding: 0 10px;">browner</td> </tr> </table> | frowned | drowning | clown | frowning | crowned downer | browner | | | | | | | | | | |
| frowned | drowning | clown | | | | | | | | | | | | | | | |
| frowning | crowned downer | browner | | | | | | | | | | | | | | | |
| <i>Dictation for sentences</i> | Provide dictation for sentences containing the words with the pattern. | | | | | | | | | | | | | | | | |

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| <i>Teach meta-phonemic knowledge directly.</i> | For the -own pattern, they discuss <ul style="list-style-type: none"> • what they know about letter cluster patterns • how they can use what they know about some words to read others • how they could make bigger words from the smaller words. • how they segment words, why segmenting words into 2 or 3 parts is useful. • talk about their developing knowledge of word patterns • recognise familiar letter cluster patterns in unfamiliar words • see themselves as 'self teachers'. |
|--|---|

Monitoring word reading progress

| New word | Not sure | More sure | Really sure | Know word perfectly |
|----------|----------|-----------|-------------|---------------------|
| rave | new | house | | car |

Abstract the letter cluster pattern. Students use regularities and patterns in rime letter clusters to learn more abstract patterns and use them to predict words.



Organize changing knowledge in a systematic easy-to-use way

| pattern | examples of each type of pattern | |
|---------|----------------------------------|------|
| oa | boat | boar |
| ai | train | fair |
| ee | feed | |

After learning to read the words : automatising.

The purpose of this phase is for students to automatise their knowledge of the letter pattern. Rather than needing to make the letter –sound link consciously, they are able to recognise the letter pattern automatically. This allows readers to engage in orthographic learning.

Recommended orthographic activities include:

- Categorizing, sorting, matching activities.
- Reading unfamiliar words by analogy.
- Memory activities.
- Awareness of word structures. Which of these: nam, mna, amn, man, could be words?
- Discuss aspects of the pattern.
- Develop the letter cluster pattern in applied and game activities.
- Teach students how to segment or chunk written words.
- What goes with what? Students predict the likely letters/ clusters that might follow a particular cluster in a word. For example, n n n a w

- Check readers can remember the letter cluster.

Activities for teaching students to read words of more than 1-syllable

Difficulties reading multi-syllabic words Some readers

- use distinctive visual features; select some letters and made a rapid guess
- select the first few letters after which they 'bog down'.
- have difficulty handling the unstressed vowels that are softened and blurred; these vowels are linked with the 'schwa' sound. Students need to develop an awareness of it as a vowel orally.

Teaching each type of multi syllabic word Multi syllabic words vary on several dimensions

- whether the word consists of a stem or root word + prefix and /or suffix, two smaller words or less common segments (for example, 'chaos').
- whether the stem is an identifiable, familiar root word (such as 'jumping', 'dived', 'unfit') or is not an identifiable, familiar root word (such as 'happy', 'receive')
- the syllable/s that are and are not stressed.

Activities for teaching students to read multi-syllabic words

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| | Teaching activities : students learn to |
| Teach students to recognise syllabic units through word building activities | <ul style="list-style-type: none"> • combine syllables, note how they join, how words are built. • use this to read syllables in words, to compare segmenting words in different ways. • look at how syllables are linked in 2-syllable words. Types: <ul style="list-style-type: none"> • those with an identifiable stem word and prefix / suffix ('jumping', 'beside') • those in which stem is not a familiar word ('insect', 'predict', 'begin'). • Generate 2-syllable words from 1-syllable words, eg., make hopping and hopped from hop, have students discuss how <ul style="list-style-type: none"> • the 2-syllable word differs from the 1-syllable word • the letter cluster that is shared by all of them • the 'stem' telling you what the words mean and the 'added part' • in some of the stem words the last letter is doubled. • identify the prefix/ suffix in words and explore what they mean, for example What people can do and the person who does it as in law and lawyer, drive and driver, tour and tourist. |
| Teach the syllabic structure of words | unstress a syllable; they learn how to use different stress patterns and to handle unstressed or silent sounds. |
| Become aware of the syllable structure of words | <ul style="list-style-type: none"> • recognise each syllable. Students segment 2-syllables word in 2 ways, <i>Pre-tend</i> <i>Pr-etend</i> <i>Which one sounds better? Why?</i> Students suggest their definition of 'syllable'. • say either part or syllable in words, They can <ul style="list-style-type: none"> • break words into syllables. "<i>Listen to how I say wander. wan-der.</i>" • hear 2 or 3 separate syllables said with equal stress and blend them into a word. • hear 2- and 3- syllable words and say the unstressed syllable, for example, attract, flannel, happen, customer, permanent. <i>Was the unstressed syllable/ first, second or third?</i> • gesture for each syllable they hear in a word, for example, they can clap, tap the table, stamp, click fingers, or shake a musical instrument such as a tambourine. |

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|---|---|
| Combining two or more syllables to make a word. | <ul style="list-style-type: none"> hold the first part of a word they read in short term memory, say the second part, blend them into a word and then alter the stress pattern to match what they say with a word they know. Examples are cap ture mix ture man age gar age. Many reading underachievers can't move from 1 to multiple syllabic units. They say the first part of a word and then can't progress. |
| Experience the use of having words syllabified | <ul style="list-style-type: none"> see the value of syllabifying; a word may be easier to read when it is syllabified. |
| How to segment different types of 2-syllable words by noting where the two separate vowels are. | <ul style="list-style-type: none"> Four patterns that affect how easily a word can be segmented: Words with 2 or more separate consonants (not part of a digraph) between the two vowels; in confuse, consent or lantern. Split between the two consonants. Words with 1 separate consonant between the two vowels; decide, protect, eject, tropic, serious, payment, label and total. These have-vcv- structure and are called 'open syllables' Words in which the two vowels, though separate, are adjacent as in 'create', 'chaos'. Words with a repeated consonant, for example, traffic, summer, accept, cabbage, pretty, gallop, tennis and collect. |
| | <p>read sets of 2-syllable words by</p> <ul style="list-style-type: none"> segmenting them into syllables as they go, say each syllable aloud and blend and if necessary modify the stress pattern. using analogy strategies learning instances of a prefix or suffix family, eg., for the re- word family, for example, repeat, remark, refuse, receipt, receive, recur, refine They <ul style="list-style-type: none"> link each word both with what they know about similar words and how it is said segment each written word into two letter clusters that match how they segmented the spoken word into syllables. visualise writing each word, predict how to spell and read similar words and gradually automatise this knowledge |

A developmental letter cluster program needs to include

- teaching functional letter clusters directly.
- an integrated approach across the year levels .
- an assessment device to test orthographic knowledge on program entry and at various stages.
- that students be familiar with the notion of orthographic knowledge, what it means and the journey that they are taking through learning it.

The focus is on students' ability to process each orthographic pattern relatively automatically in prose. Students will read clusters in individual words before they develop the general pattern.