Reading Fluency

Building Capacity for Comprehension

Comprehension is the goal of all reading instruction – being able not only to read the lines but also between and beyond them, using prior knowledge to make sense of what is written, making inferences about possible, intended meanings and thinking critically about the perspectives, information and ideas presented in the text. Yet this goal eludes us if our students are not able to read the lines. We have all encountered students who demonstrate acceptable word reading skills but do not demonstrate adequate comprehension. Reading is more than recognizing words. Nonetheless, students must be able to read the words in order to move forward as independent meaning-makers.

This monograph offers some practical strategies for developing fluent readers in a comprehensive literacy program.

Why the rich get richer

It is hard to pay attention to two aspects of a complex task at once. This is because our “working memory” – the part of our mind that holds information for processing – “is quite limited in capacity ... we can hold only so much information in our conscious awareness at one time” (Martinez, 2006, p. 698). By automating some aspects of a task, we free up “cognitive space” for attending to others. Readers need to automate their ability to identify words so that they can direct more cognitive energy to constructing meaning and monitoring and repairing understanding. At the automatic level, students “do not have to examine closely or sound out most of the words they encounter; they simply recognize the words instantly and accurately on sight” (Rasinski, 2004). If identifying words is not automated and decoding requires significant cognitive resources to be diverted to that task, then comprehension is likely to suffer.
Avoid isolated phonics activities...

“Children should practice their phonics skills to mastery and use them in reading ‘real books’ not just in isolated phonics exercises. Any phonics program should be carefully paced and sequenced to appropriately challenge children, but should be only one (albeit very important) part of a balanced literacy approach which involves work on exploring and understanding a range of texts, writing and spelling. Such approaches can, if well-delivered, be fun, enjoyable and motivating.” (Savage, 2008)

Automaticity also plays a role in motivating students to read. Because students who develop automaticity at an early stage find reading less laborious, they are likely to read more both in and out of school. Wide reading contributes to improved fluency, comprehension, vocabulary and background knowledge. For these students, reading becomes even easier and more enjoyable which in turn encourages them to read even more. Conversely, students who do not develop automaticity early on find reading more laborious and less enjoyable, leading to less reading practice and a widening gap in reading achievement between themselves and their more successful peers. Keith Stanovich (1986) has termed these phenomena in which “the rich get richer” and the “poor get poorer” as Matthew Effects.

Key elements of reading fluency

The relationship between reading fluency and comprehension is well established; accurate and quick word recognition allows students to redirect attention from decoding words to constructing meaning. More recently, researchers have added another defining element to fluency. Accurate decoding and automatic word recognition are key but so is a grasp of syntax and rhythm — an aspect of word knowledge referred to as “prosody.” Prosodic reading requires chunking text into meaningful phrases or units in accordance with syntactic structure, expressing the natural rise and fall of pitch that is both the result and expression of understanding (Schwanenflugel et al., 2004).

The key elements of reading fluency can be summarized as follows:

- **Automaticity** — Moving from frequent pauses to solve unknown words toward automatic word recognition and rapid word solving with few pauses, repetitions or deviations to distract from the meaning of text.
- **Phrasing** — Moving from reading word by word through two-, three- or four- word phrases toward phrasing in varied phrase groups, illustrating the use of syntactic clues (e.g., language patterns, punctuation) and preserving meaning.
- **Expression** — Moving from a monotone through the use of visual cues (e.g., bold font, exclamation mark) toward a natural rise and fall in pitch, tone and rhythm as text is read with expressive interpretation to enhance meaning.

**Getting past the bottleneck of decoding**

Developing accurate and rapid word recognition is not about having students memorize words as whole units or shapes (using flashcard drills, for example) but rather providing instruction that helps them make connections between sounds and letters, words and meanings and store this knowledge in memory for later rapid retrieval (Ehri, 2007, p. 392). To get past the bottleneck so that decoding is automatic, teachers can help by providing intentional instruction in three key overlapping areas:

- **Phonological awareness** — Well-developed phonological awareness includes the ability to distinguish individual words in a spoken sentence, identify and produce words that share the same rhyme (sing/wing; bubble/trouble), hear individual syllables within a word (/ba/ /na/ /na/) and break a syllable into its onset and rime (/f/ and /an/). Phonologically aware children can also hear the smallest units of sound, the phonemes, in a spoken word. This aspect of phonological awareness — phonemic awareness — is critical if children are to understand how the letters in a written word are used to represent the sounds in the spoken word. Well-developed phonological awareness skills are a strong predictor of reading ability in the primary grades (O’Sullivan et al., 2009, p. 44).
Early readers practise fluency

Shared Reading

Shared reading is not only an important component of a comprehensive literacy program, but it also plays a significant role in developing fluency in context. During shared reading, children pay attention to aspects of the print the teacher chooses to highlight. In this way, teachers can embed explicit teaching of text features, alphabet letter knowledge and the alphabetic principle in a highly visible and engaging context. Early reading texts for shared reading are usually very simple, often having elements of repetition and rhyme that will make memorization and/or accessing text easier. This will allow for critical rereading practice, either independently or with a partner. As reading skills progress, so does the complexity of text selected for shared reading. Once the shift to more complex text is made, the teacher does most of the reading, but will stop several times for the students to “echo read,” emphasizing the sounds of oral language, structures and various aspects of fluency such as pacing, phrasing, tone and emphasis. Again, the teacher has an opportunity to model fluent, phrased reading and support students in practising fluency skills, while highlighting other reading strategies according to student needs.

Repeated Reading

Rereading familiar text offers clear benefits for fluency development contributing to increased accuracy and automaticity. Teacher or other adult modelling of expert prosodic reading further contributes to fluency development. Opportunities to reread text can be provided in a variety of ways. It can be done as an individual activity through independent reading or tape-assisted reading (for example). It may also involve an audience through choral reading, partner reading, echo reading or readers’ theatre. Since not all children develop skills at the same rate or in the same way, it is important to assess fluency on an ongoing basis.

During shared reading ...

- Have students look closely at the text.
- Count the number of sentences. Count the words in a sentence. Count the letters in a word.
- Clap to find the number of syllables in selected words.
- Find all the words that start with a stated letter (e.g., “Find all the words that start with the letter m.”).
- Choose a word with a common spelling pattern (e.g., like). Circle the onset (l) and highlight the rime (ike). Print a list of words that share the same rime (like, bike, Mike, trike, hike). Students can take turns doing this on the board or individually on paper or small whiteboards.
- Print the rhymes, poems, tongue twisters and alliterative sentences that students have learned “by ear.” Use these as shared text for exploring the letter and letter clusters that represent the sounds they hear.

(Adapted from Clay, 2005)
The reading-writing connection is key

Interactive Writing

One of the best ways for children to develop letter-sound knowledge is through writing. Composing a message during interactive writing provides an authentic context for practising letter-sound correspondence through spelling. It provides a real reason for children to listen for and segment the sounds in words and for representing those sounds with letters, strengthening both phonemic awareness skills and developing understanding of the alphabetic principle. The teacher can model “stretching out” the sounds and recording them and gradually transfer responsibility to the children for taking on more of this task. The teacher is also in a position to provide spellings for words that do not follow known patterns.

During interactive writing, teachers can choose from a variety of possible teaching points based on assessment of students’ needs and their levels of understanding of the alphabetic principle. With the whole group, small groups or with individuals, the teacher shares the pen with the children. First, the teacher asks students to divide the page into two, the top portion serving as a “practice area” for using Elkonin boxes, playing with analogies, demonstrating how to form letters, writing high-frequency words and exploring spellings. The bottom portion of the page is shared with the teacher who determines which sections of text the student(s) can take responsibility for writing.

The chart below, reproduced from A Guide to Effective Instruction in Writing, Kindergarten to Grade 3, offers some possible teaching points for interactive writing.

<table>
<thead>
<tr>
<th>Some Possible Teaching Points for Interactive Writing</th>
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<tbody>
<tr>
<td>• Use of high-frequency words</td>
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<tr>
<td>• Use of word analogy (e.g., onset and rimes)</td>
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<tr>
<td>• Words to “say slowly”</td>
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<tr>
<td>• Use of spelling resources (e.g., word wall, calendar, dictionary, theme words)</td>
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<tr>
<td>• Letter-sound relationships</td>
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<td>• Print directionality</td>
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<tr>
<td>• Upper- and lower-case letters</td>
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<td>• Sentence structures</td>
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Daily Independent Writing

Providing students with regular opportunities to practise encoding skills independently is also important for building fluency (Burns, 2006). By encouraging the use of approximations in early writing, students learn to stretch out sounds and record words that they need for an authentic purpose. They can practise their new skills by trying out a variety of forms depending on their audience and purpose.

Although writing about personal experiences is a wonderful way to engage students, other ways include procedural or “how to” writing, “to do” lists, biographies of everyday and world heroes or rewriting a story from a different point of view. The teacher circulates as children write or takes a guided writing group, providing encouragement, by asking questions, helping students relate a sound to a letter, or perhaps having the child listen for a medial sound (the one in the middle) which is harder to identify. This provides a good opportunity as well to help children use the classroom word wall. The teacher can help the student locate the spelling of an irregular high-frequency word such as “come” or use analogy to a known word to spell an unfamiliar one (e.g., “Can you find the word ‘rain’ on our word wall? How can you use that word to help you spell ‘stain’?"
in your story?”). Writing high-frequency word wall words helps build automaticity. Practice using analogy when writing will make it more likely that students will also use this strategy when reading. In addition, encouraging children to read their own writing over and over will give them opportunity to practise using phrasing and reading more fluently.

Making decoding accurate, fast and fun!

1. Phonological awareness is about hearing words in sentences and individual sounds in words.

Most children who enter kindergarten can hear speech sounds; however, many require explicit instruction in fine-tuning their awareness (O’Sullivan, 2009, p. 44). Children need to be able to hear the individual phonemes in words (e.g., the spoken word /cat/ is made up of three sounds: /c/ /a/ /t/ but the word /plate/ has four sounds /p/ /l/ /a//t/) and recognize that individual sounds can be combined to produce words (e.g., when the sounds /c/ /u/ /p/ are blended together they produce the word /cup/). Phonemically aware students are able to manipulate the individual phonemes that make up words. They can, for example, isolate the first sound in the spoken word /mouse/, delete it and substitute the sound /h/ to pronounce the new word /house/, or substitute the sound /i/ for the sound /a/ in /bat/ to produce the word /bit/.

Some classroom activities to build phonological awareness ...

- Play “One word is different.” Say four or five words all of which rhyme with one exception. Challenge students to identify the one that does not rhyme (i.e., the “the one word that is different”). Pictures can also be used for this activity. Four or five pictures are displayed face down in a pocket chart. The teacher turns over the first picture and says the name; students repeat the name. As each subsequent picture is turned over, students show thumbs up or thumbs down to indicate whether the word rhymes or is the odd-man-out.
- Read and chant rhymes, poems and tongue twisters.
- Say a familiar sentence or phrase (e.g., “Jack and Jill went up the hill.”), have students repeat the sentence and clap each syllable as they say it.
- Present students with a hand puppet that has trouble saying words clearly. Have the puppet stretch out words so that each syllable is articulated slowly and separately. Challenge the children to blend the sounds together to show the puppet how to say the words smoothly.
- Show the children pictures of common objects. Have the students sort the cards. Words can be sorted by number of syllables (upstairs, cucumber, wiggle) or phonemes (spoon, fan, tree, boat).
- Manipulate the initial sounds (onset) in familiar songs. Have the children listen as you sing and then join in as you repeat the refrain. Ask the children to suggest a new sound and sing it again, this time encouraging the children to join in.
- Make up alliterative sentences (e.g., “Silly Sammy sings songs silently.”).

2. Alphabet letter knowledge is not just reciting letters but identifying, naming and writing them.

Automaticity in letter naming is an important goal. Drawing students’ attention to differences between letter shapes (sticks, curves, balls, tall, short, tails) helps to build visual discrimination between letters, making it easier to recognize individual letters and attach the correct letter name to the corresponding shape. Games, songs and manipulative activities encourage students to learn to name letters quickly.

Fine-tune hearing ...

- rhyme words
- divide sentences into words
- divide words into syllables
- segment and blend onsets and rimes
- identify beginning, medial and ending sounds in spoken words
- segment and blend individual sounds (phonemes) in spoken words

(Chard & Osborn, 1999)
Some classroom activities to build alphabet letter knowledge ...

• Provide letters or letter cards. Have students sort and name the letters (e.g., uppercase / lower case letters, short letters/tall letters, letters with sticks/letters with balls/letters with humps/letters with tails).

• Create a deck of upper and/or lower case letters. Students can play in pairs or groups of three or four. Shuffle the deck and turn the cards face down in a pile. Set a timer for one minute. One student turns the first card in the deck over and names it, repeating this until either she makes a naming error or the timer runs out. The student counts her cards and records her score. Place the cards back in the deck and reshuffle. Repeat with the next player.

• Give students a small whiteboard and marker. Place a blank transparency on an overhead projector. With the projector turned off, print an upper or lower case letter on the transparency. Turn the overhead light for two or three seconds and then turn it off. Have students name the letter. Turn the projector back on and check. Talk about how to form the letter and then have students practice making it on their whiteboard.

• Provide an array of magnetic alphabet letters with well-known letters being the majority of the array and with multiples of one or two less familiar or unknown letters. Ask students to quickly move the letters and name them.

3. The alphabetic principle is the understanding that letters and letter patterns represent the sounds of spoken language.

There is evidence emphasizing that explicit, systematic phonics instruction should be implemented in Kindergarten and Grade 1 (Walpole & McKenna, 2004). Instruction that is explicit tells students, for example, that the letter “t” is used to represent the sound /t/. Phonics instruction that is systematic introduces these correspondences in a logical sequence that allows children to read and write words early on. A logical sequence orders the introduction of letter-sound correspondence from simple to increasingly more complex, beginning with the most common consonant and vowel patterns and applying these to reading and spelling words. The letters s-a-t-p-i-n, for example, allow children to read and write many words from the very beginning. Other, more complex relationships such as consonant blends (bl, st, fr), digraphs (wh, th), vowel patterns (ai, ea) and the “silent e” rule and diphthongs (ow, oo, oi) follow. Savage (2008) suggests that “teaching a few skills such as segmenting and blending sounds in words is very important, and is best taught alongside the explicit teaching of letter sounds.” Children need explicit demonstrations and scaffolded practice in blending letters to pronounce words and segmenting sounds to spell words. Building words from individual letter-sounds and reading and writing “families” of words that share the same spelling pattern (e.g., look, cook, shook, took) are also important. These skills are then practised and applied in a variety of contexts on a regular basis.

As in all areas of learning, we need to remember that children learn at different rates. We need to differentiate the introduction of letters according to students needs, being aware of those letters that students know and don’t know. We must also be conscious of a pace that will move students’ learning forward, but will not overwhelm or confuse them or engage them in instruction in skills that they have already mastered. Ongoing assessment of students’ letter-sound knowledge and ability to apply that knowledge to reading and spelling words are important.

Some classroom activities to build understanding of the alphabetic principle ...

To help children understand how letters are combined to make words, Marie Clay (2005) suggests:

• writing the word in big print while the child watches
• using water and a paint brush to make a disappearing word

Tips for forming letter-sound correspondences

• Using student assessment data, select a letter/digraph as a focus for a small/whole group shared reading lesson.
• Select an enlarged text with examples of the selected letter/digraph as an initial sound in a key word, preferably supported with meaning cues such as a picture (e.g., /b/ ball in the text and picture).
• Read the word, emphasizing the letter sound.
• Name the sound and point to the letter.
• Write the letter in a different place and invite students to write the letter/digraph in the air while they say the sound.
• Write the key word and circle the letter/digraph on an anchor chart or card that students can refer to later. Draw the picture, if applicable.
• Ask students to say the sound as you point to the circled letter/digraph.
• Ask students to say the sound as you return to the text and point to the letter/digraph used to represent that sound.
• Return to the anchor chart or card when students need additional practice or support in reading or representing the sound.
• using wet chalk to make an appearing word
• using magnetic letters for “making and breaking words”

To help children practise making and breaking words, you may wish to adapt the following hands-on activity using magnetic letters:

• Make a model of a familiar word, building from left to right, and read the word using a left to right sweeping motion. Then, break the letters away, moving them one by one to the left, reminding the child that to make or write the word you have to do it letter by letter. The child can then be asked to remake the word, prompting them to work from left to right.
• With the model at the child’s eye level, have him/her build a copy of the word passing the letters one by one in sequence. Ask the child to read the word. Once children can make and break a familiar word, you can move on to having them use analogy to build other words:
  – Compare three words in a set by changing the first letter.
  – Compare three words in a set by changing the last letter.
  – Change the onset and retain the rime.
  – Retain the onset and change the rime.

Making and breaking words can be included as a one- or two-minute segment as part of the guided lesson to build knowledge of the alphabetic principle (Cunningham, 2001). Soon, students will be able to work on making words in small groups using individual letter cards. When asking children to build words using letter cards, it is important to give clear directions:
  Start with a familiar word (e.g., cat).
  Change the first letter (e.g., to make bat).
  Add two letters (e.g., to make that).

Putting it all together

In designing learning opportunities with a fluency lens for the whole group, small groups and individuals, teachers must shift artfully between teaching in context and providing explicit practice for skills, depending on student needs. The gradual release of responsibility dynamically moves from daily modelling of fluent reading through interactive shared reading lessons to making informed decisions about explicit skill intervention for some students. Teachers must be persistent in ensuring that students know what reading fluently sounds like and how their own reading compares. All students need support to learn strategies to build automaticity and read at a good rate with phrasing and expression.

In Sum

Instruction that supports the development of fluency is an important part of a comprehensive program of reading and writing instruction. Good readers recognize words accurately, quickly and with automaticity. They are skilled at processing phrases and sentences as meaningful units as they read orally and silently and use appropriate tone, pauses, emphasis and expression to convey meaning (Klauda & Guthrie, 2008). Fluency is necessary for skilled reading, but it is not sufficient. It must not replace a focus on comprehension as the goal of reading. It is instead a requisite tool—an enabling skill—for achieving that goal. Fluency is not an end in itself but a critical bridge to comprehension, freeing the reader to interpret and make meaning.

Four ways to read words ...
• applying knowledge of letter-sound relationships to translate spelling into sounds that can be combined to pronounce the word
• using analogy, for example, reading the known word “spike” but substituting the first letter to arrive at “like”
• using some letters of the word and/or context cues to predict a word, for example, “The king lived in a large c ... .”
• by memory – these are words that have been previously encountered in print and their spellings stored in memory so that they are recognized “on sight” or automatically, without the need to decode, analogize or predict (Ehri & Rosenthal, 2007)

Collaborative and independent reading practice ...
• partner reading
• readers’ theatre
• listening centre
• repeated reading of:
  – familiar texts
  – poems and charts
  – students’ own writing
  – “easy” texts
References and Related Reading


