## Literacy and learning to read

# Mini-essays for the Pickatale platform (November 2020)

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## Climbing the vocabulary mountain

Vocabulary is the Mount Everest of language. Other features of a language are quite small, by comparison. In English, the alphabet has only 26 letters. There are just a dozen or so common punctuation marks. English pronunciation uses around forty vowels and consonants. There are a few dozen word endings, and a few hundred common ways of joining words together to make sentences. But there are well over a million words in English, and most adults know at least fifty thousand of them. That is the mountain children need to climb.

When does the climbing start? During the first year of life children come to understand several basic words to do with the family and the home, and most speak a 'first word' at around 12 months of age. This is quickly followed by others. By 18 months, they can use around 50 different words, and understand about five times as many. By 2, their spoken vocabulary has grown to over 200 words, and in the third year they learn new words so quickly that it becomes really difficult to keep track of them - words for people, animals, household objects, health, weather, toys, trips, birthdays, festivals ... The list is endless, and each topic brings with it a cluster of words and phrases that soon mount up. By 5, most children know around five thousand words; and if they have been given a fruitful reading experience, the number will be much greater.

How do they build up their vocabulary? The important principle is that they don't learn words in isolation, one at a time. They learn them in pairs or small groups. 'Don't touch the hot tap', instructs an adult. 'You can touch the cold one, not the hot one.' *Hot* and *cold* are being learned together. 'There horse' says a 2-year-old, pointing to a picture of a cow. 'No', says the adult, 'That's a cow. Look, it's got two big horns.' And the explanation doesn't stop there. 'Cows go moo. Horses go neigh. We can ride on a horse. We can't ride on a cow. And we get milk from cows...' Gradually, the child builds up a basic vocabulary of words to do with horses and words to do with cows, as well as useful general words like *two* and *big*. Books are ideal ways of building up vocabulary. The stories, themes, and characters provide threads of meaning, and show how words relate to each other.

Learning vocabulary also means appreciating that words relate to each other in many different ways. Here are some of them.

- They can have roughly the same meaning small, little, tiny...
- They can be opposite in meaning happy/sad, hot/cold...
- They can belong to the same field of meaning. *Red*, *green*, *yellow*... are all COLOURS. *Pigs*, *horses*, and *cows* are all ANIMALS.

- They can talk about parts and wholes a *wheel* is part of a *car*, a *leg* is part of a *body*.
- They can be part of a series Monday, Tuesday... January, February...
- They can help to tell differences: big/small, round/square, fast/slow...

Eventually children know enough vocabulary to be able to achieve one of the most important educational aims: making and understanding definitions. 'Who can tell me what a glacier is?' asks a teacher. 'What's the difference between a river and a canal?' Definitions are needed in all walks of life and areas of learning. They are the basis of all dictionaries and they play a major role in information books and textbooks. They are an essential lifelong skill, and books play a fundamental role in providing the vocabulary to acquire it.

## Bringing reading and speaking together

Speaking and listening go together: children listen before they can speak. Reading and writing go together: children read before they can write. So much is obvious.

But there's a third link that's not so obvious: reading and speaking go together.

There are two main ways to bring reading and speaking together. The first is of the kind provided by Pickatale: digitally enhanced books which allow children to hear what they read and to read what they hear. And the opportunities to engage in this way with a wide range of stories and topics are far greater than could ever be provided by any one parent or teacher.

In the second way, adults play a critical role. To become fluent readers, children need to read about what they like to talk about, and talk about what they like to read. There needs to be a bridge between reading and speaking, and this is provided by the people who are reading with them. Whether it is the child who is reading aloud, or the adult, it is a perfect situation to talk *about* what is in the book, and to relate the story or topic to their own world, and to the language they already know - or languages, for many children these days are growing up in a bilingual community.

It's well-known that joint reading fosters parent-child bonding, through the experience of enjoying a story together and recalling elements of it later. It's not something that all cultures do, but it's a very common practice in countries where English is a first language. (Adults bond in a similar way when they remind each other of favourite lines or scenes from films and programmes they have watched together, or from novels, poems, or plays they have all read.) How does it work?

For joint reading to be successful, full attention needs to be paid to the story, so that moments can be seized where the events or characters can be linked to the child's own background. And research has shown that interactive reading is especially helpful when it includes actions that the readers can perform. With print books, the activities might be opening a window on a page, pressing a symbol to produce a noise, activating a pop-up structure, or simply pointing to words or pictures. With a book on a screen, tapping, swiping, dragging, and other touching activities can produce animation, sound effects, and colour changes, and enable searches to find a favourite

passage. Audio can be interactive too, as when a narrator asks a question, gives an instruction, and offers a reaction to what the reader has done. It can be reinforced by visual effects, such as highlighting text while it is being read aloud, as in the Pickatale portfolio. With joint reading, activities add an extra level of involvement; and they provide extra motivation for maintaining attention when the child is reading alone.

## Talking about a book

There's no difference here between books that are full of make-believe and books that are about the realities of life. A story about a cat that wears boots can be related to the footwear in the family home - as can a story about how boots are made in a factory. But whatever the book, it's important to give children the chance to respond. Looking at a picture of the booted cat, there's a world of difference between an observation ('We've got boots in our cupboard') and a question ('Where do we keep our boots?'). The first doesn't require an answer; the second one does.

Note that there are different kinds of question, and some are more useful than others for eliciting responses.

- 'Has Grandma got boots like that?' The only answers are 'Yes', 'No', or 'Don't know'. The question doesn't lead anywhere.
- 'What sort of boots does Grandma wear?' This allows answers to go in several directions size, shape, colour, whether they're pretty, or muddy...? And if the child doesn't know what to say, it allows an easy prompt using an alternative: 'Are they red boots or green boots?' *What*, *Who*, and *Where* are the most fruitful question-words with very young readers. *When*, *How*, and *Why* are best left until later.
- The most open-ended questions begin with a *What* and a very non-specific actionword: 'What's the cat doing?' 'What's happening in this picture?' To answer these, a child has to have a confident command of verbs. 'It's running, jumping, swimming...' Children with special needs often find these questions especially difficult, as their command of verbs isn't as good as their knowledge of nouns. (This is where alternative questions can be very helpful.)

Sometimes the books do the job, especially for very young readers. A question on one page is answered by the writer on the next. The technique is familiar to adult readers: the cliff-hanger!

It can also be helpful to prepare the child for what is about to be read. For this to happen, adults need to read the story ahead of the child and note any words or concepts that are likely to be difficult. These can then be introduced and talked about in advance, so that the child becomes familiar with them in speaking and listening before meeting them in reading. The process is called *scaffolding*: we help children to build a mental framework using what they already know, so that new words and concepts will fall into place when they are encountered.

## Getting the language right

#### Directed speech

An important finding of research into child language acquisition: speech directed to the child has the greatest influence on the development of their spoken language. There can be a lot of speech in a child's environment - from the radio or television, or from adults or other children talking - but little of this background is going to help language develop. By contrast, we see the greatest progress when someone focuses on what children are trying to say, provides some feedback, and gives them time to respond.

## Directed reading

It is the same when reading aloud with a child. Pages can be so full of interesting detail that the young reader can get lost within them. Colourful pictures can overwhelm the written text - which is where the reading task actually lies. Adults can help by gently directing the child's attention to the words and the relevant parts of the pictures, and making the occasional comments on the way the story is unfolding. And always, always, by giving the child time to talk about what is happening in the story. For busy adults, finding the time to devote to reading can be the greatest difficulty. Reading aloud to a child, or listening to them reading aloud, should be a leisurely experience. Reading can't be taught in a rush.

## Matching levels in speech

It's important to give feedback that suits the language level a child has reached in speaking and listening. Most parents have an instinct for matching their speech to that level; but it's easy to forget and go beyond this when talking about what's happening in a book. For instance, a 2-year-old who is at the stage of speaking sentences that are only two or three words in length will be helped by adult feedback which provides a model to follow and which is only slightly longer. Here's an example:

Adult reads: So the little pig ran all the way home.

Maria chips in: Little pig home.

Adult comments: Yes, the little pig ran home.

Maria just needs a gentle clue about how her sentence might have been better formed: it needs a verb. The response shouldn't be too long. 'Yes, the little pig ran home because he was hungry and wanted his dinner', or the like, would be too much for her to take in, at this stage.

### Matching levels in books

From the end of the first year of life, there's a steady growth in spoken vocabulary and in the way sentences are constructed. Literacy research has shown that, in the first stages of learning to read, when children are working out how to link letters and sounds, they are greatly helped if what they read reflects what they can already speak and understand, as well as what they are interested in. The reading is at a level they can comfortably understand. And there's a second benefit: when they encounter new and interesting words, they can start to use them in their own speech. Once those first steps have been acquired, they will use their reading to enhance their speaking and to develop their interests. It is a learning process that will remain with them for the rest of their lives.

## The two worlds: print and digital

For children, as for adults, these days we have a choice over how we read: with a printed book; with an audio book, as on a CD; online, with an electronic written text; and online with a text presented in both spoken and written form, as with Pickatale. Each has its value and offers different learning opportunities and experiences. The challenge for parents and teachers is how to choose - how to find a balance between them, especially in a post-Covid world where children and parents may find themselves with more time together, and where work that would traditionally have taken place in a classroom has to be carried out online. In this 'new normal', it is important to appreciate the benefits and limitations of all methods, and especially the primary contrast between print and digital mediums.

## The benefits of audio

Listening is a natural, easy, and unconscious process. Humans are natural story-tellers, and everyone enjoys listening to a well-told story, whether it comes from a playwright, a preacher, a stand-up comedian, an after-dinner speaker... - or, in the present context, a narrator reading a book for children. The present-day popularity of audio books - for adults as well as for children - illustrates the point. And of course these are especially valuable for people who can't comfortably access print books, either because they have limited vision or they find the task of reading a real challenge.

The voice makes a book come alive, and provides an imaginative experience that can be very powerful, especially when distinctive voices are needed for fictional characters. Children can fall in love with a character's voice as much as with the character itself. Listening to how others tell their stories is also a useful lesson, as it fosters the development of performance skills. With good models to follow, children develop their ability to read with confidence, pace, feeling, and variety.

#### The benefits of print

A printed book offers a different experience. People read at their own comfortable speed. They can pause for a moment of reflection or let their imagination take hold. With audio, they have to follow the pace and rhythm of the narrator.

With print it's easy to skim over a section that we find less interesting, or reread a word or sentence that really catches our attention. With audio, we can't skim, and relistening is tricky, as it's not easy to find the right place in the playback.

The layout of a print book also gives the reader many opportunities to pause and take in what is being read - the end of a paragraph, a heading, a page turnover, a new chapter. Punctuation helps too: a full-stop, for example, gives a clear signal that a unit of sense has come to an end. With audio, the signposts aren't so clear: it's difficult to find breaks in the stream of speech, and few of the features of layout in written language can be detected in spoken form.

## Getting the best of both worlds

'Listen and read books' - or 'read-along books', as they're often called - bring the two mediums together, as in the Pickatale portfolio. It may be that in some circumstances this juxtaposition could interfere with a child's progress in reading, as listening and

reading at the same time could be making the brain do the same work twice. But a more powerful argument is that the two mediums complement and reinforce each other, especially when they motivate different kinds of activity on the part of the child.

Several benefits arise from the combined approach. Children learn how unfamiliar or irregularly spelled words and names are to be pronounced - a feature especially appreciated by second-language learners and by those who experience difficulty in reading. They are taken down avenues of reading they might not otherwise have entered, finding new genres and being exposed to new experiences - and are often motivated to try reading a book at a more advanced level.

The act of touching a screen, or clicking a mouse to select an option, also conveys some real benefits. It gives a sense of control or ownership over what is on the screen, in much the same way that people feel they have control over a book - opening and closing it, turning the pages, pointing to a line or a picture, and so on. With very young children, the actions also help the development of their fine motor control and their ability to coordinate hand and eye movements.

The ultimate aim is to make children feel that reading is as comfortable an experience as listening is, even when they are reading by themselves. And to achieve this, it helps if activities are incorporated within the content of a book. These might take the form of asking readers a question, or setting a challenge. They might be allowed to choose among possible lines of development, as in a video game, or among alternative storyendings. They might be given the option of personalizing their books, such as by adding their name or photograph, or being given an opportunity to draw or write (or type) annotations. It all fosters a sense of intimacy between the reader and the text. We call this 'a love of reading'.

## Bridging the gap

Nothing beats parents reading a book with a child; joint reading promotes social bonding, provides mutual enjoyment, and presents many opportunities to have conversations about the way a story or a topic unfolds. Teachers, as well as story-tellers brought into class, provide a similar face-to-face experience. But it's a fact of life that family members and teachers are often not available, so how can opportunities to read be increased, especially for children who have not yet reached the stage of reading alone and silently?

Listen-and-read books build a bridge between joint reading and solo reading. But it is a bridge that needs to be used in the best possible way, to ensure that reading progress is made. Above all, read-along books shouldn't be thought of as electronic babysitters - as a means of giving parents an easy time. To use them well, adults need to give these books just as much energy as they would give when joint-reading a printed book. The narrator shouldn't be thought of as a replacement for a parent or teacher, but a collaborator.

The best strategy is to carry over to the digital setting the kind of conversation that takes place with print books. It can be while the child is reading, or - once the child

has got used to using a digital library, and is reading alone - after the book has been read. Sharing the best bits is always enjoyable, for parents as well as for children.

But be prepared for a complication. Entering the digital world is an intriguing, exciting experience, and an immediate consequence is that children focus on the technology and how it works, thereby distracting them from the book's content. This is especially likely if there are extra features that attract attention - hotspots or games that invite the reader to enter other worlds. Once taken away from the book it can be difficult to get back into it, or to restore the initial level of interest. (The same thing happens to adults, of course, when something distracts them from what they are reading.)

It is important, then, to be critical about what the digital experience offers. If the extra features are relevant to the story, then this will add to the motivation to read, and will improve comprehension. Animation, dynamic images, music, and sound effects that relate to the content can all be very effective, and help children to maintain a focus. So an important aim is to make them see the difference between digital features that are relevant to the book they are reading and those that are not. Otherwise, when left to read alone, the temptation to take the irrelevant but enticing path may be too strong to withstand. Several parents have reported leaving their child alone with a digital book, then returning to find that a click-through to another site has resulted in their child playing a video game with no reading involved at all.

Ownership is the ultimate aim. 'The author has written this story for ME!' After reading a story, children should feel that it has become a part of their life. And this may mean not accepting the way the narrator has told it. A character can have all kinds of voices, accents, and idiosyncrasies, and children have the right to try out their own interpretation, and decide that it is better. (Adults feel the same way when they watch a film of a favourite novel and say that an actor's portrayal of a character was nothing like what they imagined that character to be.) There's nothing wrong with children feeling that they have a better way of telling a story, or giving it a different ending. And those that think like this may, one day, be the novelists of the future.

## Five tips for early progress

Any new skill will develop well if the learning conditions are right. And for reading, that means avoiding distractions. The slightest thing can be distracting, at any age.

#### Make a noise check

If you're reading aloud, make sure the child can listen to what you say without distracting noise. Carry out a home noise check. It's surprising what can turn up. Is there a TV or radio on in the background? Are other children around playing noisily or just wanting to help? Are other adults in the house having an audible conversation? Is there a cat purring or a budgerigar chirping? Is there noise from passing traffic? Are there certain times of day when the noise levels increase? If so, identify the quieter times for reading aloud.

#### Make a vision check

Distraction can be visual as well as auditory. A favourite toy or game that is visible can be enough to start a young reader's attention wandering. If there's a pet in the home, keep it out of sight. With older children, the mere presence of a mobile phone nearby can be enough to distract, because part of their brain is thinking 'There might be a message coming in any moment now'. Mind-wandering is the ever-present risk when learning to read. Reading aloud is the best way of minimising it.

#### Paying attention

Adult listeners can themselves be a distraction - cooking, knitting, texting, or fixing a broken toy while the child is reading. Multi-tasking has its value, but not when children are reading. The principle is easy to state: give them - and their book - your full attention. If you show, through your facial expressions, eye contact, tone of voice, and body language, that you are finding the story interesting and exciting, the child will too.

#### Bring in the cavalry

Who helps? In a word: everyone. Everyone who is part of a household, that is. Leave behind the old notion that reading with a child is something that only one person does - traditionally, the mother. Anyone can help - relatives, older children, child-minders, visitors... Most people are delighted if asked to read something - and some turn out to be surprisingly good readers.

#### Repeated exposure

Have a 'book of the day' lying around, which can be read by all-comers. Or a 'word of the day' or 'letter of the day' on bits of paper or a noticeboard. With online books, touching something that is pictured can bring up its name and its sound, as in the Pickatale portfolio. In all cases, the aim is to promote letter or word recognition and to provide reinforcement through repetition. But all done in a playful, gentle way, to suit everyone's mood. The home shouldn't become a classroom.

#### Five ways to help early readers

#### When to start?

It's never too early. As soon as children are able to sit up and focus, it's possible to introduce them to the world of books. There doesn't have to be writing in the books. Learning to read involves far more than decoding letters and words. It involves learning how to hold a book, how and when to turn the pages, which direction to turn them, and - when some text is there - reading from left-to-right, or right-to-left, or in some other way, depending on the language being learned.

#### Use the world

It's surprising how soon some basic letter shapes and words can be recognised. We live in a highly literate world, and reading is all around us. The name plate or number on a house. A street sign. A cornflakes packet. A word on a T-shirt, or on a toy. A flashing advert in the main street. A shop name. And visual language is there too, often prominently, on television and on computer screens and phones. It can be large and colourful, and is often animated, which makes it even more exciting. It can help the development of reading awareness to draw attention to real-world uses of writing -

as long as the experience of being out and about is kept playful and fun, and not turned into a discipline. The outside world isn't a laboratory, for a young child. It's a playground.

#### Story-times

Humans are great story-tellers, and they love being told stories. So, read as many as you can. They need to be short, to begin with, but they can get longer as the child grows. Find the best time of day to suit the child's alertness. Bedtime is a lovely time for story-telling, but end-of-day tiredness makes it a less valuable time for learning. On the other hand, the evening is a good time for telling a different kind of story - what happened during the child's day. Some parents keep a daily diary, writing down in short and simple sentences their child's account of something that happened. That then becomes a bedtime story. (If you do this, don't throw them away afterwards. When children grow up, they find their early story-diaries fascinating - and even tell them to their own children!)

#### An enticing range

The availability of a wide range of characters, stories, and formats is a real advantage, as in the Pickatale portfolio. Children love to explore, whether in a bookshop or online. It's always wise to read through a story first, though, to check that the language isn't too advanced, or the length too demanding, and that there's nothing in it which might be personally upsetting.

#### More of the same

Be prepared for children to delight in a particular story and want to hear it over and over. Adults might think that repeated reading is going to be boring. It can indeed bore an adult - but it certainly doesn't bore a child! Children love the repetition - and moreover the exact repetition. They notice if you change the words, or leave out a line, or a page. And they learn some stories, or parts of a story, off by heart, so that when they get to the favourite bit they join in the reading - as when, in the story of *The Three Little Pigs*, they too huff and puff to blow the house down.

## Further reading

For an account of the research background to the above, I recommend the following two books:

Naomi S. Baron, *How We Read Now: Strategic Choices for Print, Screen, and Audio.* New York: Oxford University Press, to be published in March 2021

Roger Beard and Andrew Burrell, *Language Play and Children's Literacy*, UCL IoE Press, 2020.