

Chapter Title: Using digital books to support children's language and literacies

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Using digital books to support children's language and literacies

In this chapter I consider the use of existing, commercially produced, digital books in the classroom. This focus is driven by the aim to support children's communication and language skills and digital literacy. The use of digital books is connected to the school curriculum and two core subjects taught in English-speaking Western countries: English (Language and Communication) and Design Technology (Digital Literacy and Competencies). Before I outline specific strategies for implementing digital books, I explain the reasons why the teacher's role needs to be perceived as central to mediating the use of technologies in classrooms. Towards the end of the chapter, scenarios of effective practice are followed by specific examples of UK teachers using digital books in their primary school classrooms.

Teachers' role in mediating technology use in the classroom

It is worth repeating that teachers are key stakeholders in mediating access to and ways of using learning resources, including digital books. Teachers' volition, however, is not exempt from external factors. In some schools teachers have more autonomy than in others, but it would be erroneous to assume that what happens in a classroom is entirely a teacher's agenda. In relation to technology, a school's practices depend on the national policy on children's use of technology, the age group catered for and teachers' own attitudes towards technology use. Some countries are more proactive than others in introducing digital literacy skills to schools and to teacher training. For example, the Finnish government introduced

digitalisation as a special investment area in 2015 (see Garbe et al. 2016) and continues to pioneer the use of technologies in state schools. In the UK and US, technology provision is more decentralised, with schools increasingly managing their own budgets independently.

Some teachers may think that their mediating role with digital books is limited because of the lack of technology in their classrooms. However, as the many examples in this book demonstrate, digital books do not need to be accessed via expensive touchscreens; they can also be introduced to the classroom on an interactive whiteboard or desktop PCs, which are present in most UK classrooms.

Teachers' own attitudes towards exploring digital texts are crucial but are not independent of the school curriculum. In *E-literature for Children: Enhancing Digital Literacy Learning*, Len Unsworth explains that children's opportunities to read on screen (or 'e-reading') very much depend on a successful marriage between teachers' facilitation and the school curriculum: 'if literary experience is to be widely nurtured in the cyberspace lives of future generations, knowledge about, and engagement with, the digital techniques of e-literature needs to be taken into account in English and literacy teaching in school contexts' (Unsworth 2006, p. 114).

In most countries, the educational curriculum is closely linked to the national government strategy and is often revised when a new party gets elected. As a result, there is often a pendulum effect in curriculum content, in that the ruling party pushes forward ideas that may clash with its opponents. For teachers who hold liberalist views of education, it is often difficult to follow a curriculum designed by conservative government advisors, and vice versa. The topics of creativity, digital literacy, community involvement and personalisation are currently sidelined in most national curricula. The efforts of teachers who are opposed to the idea of standardised tests, the schoolification of childhood and print-oriented reading practices are significantly restricted. These teachers need either to creatively interpret a restricting curriculum or find time for alternative activities in the small time margins that are available to them. This is not easy given the accountability pressure from the government and municipality representatives (as well as the children's parents). The intersection of technology and education is particularly conducive to critical reflection on these tensions. However, the full answer to curricular reforms is not a revolution in digital or media literacy. The fact that teachers have to negotiate their professional and personal agency in a busy classroom of 20-plus children needs to be considered from broader historical and international perspectives. This textbook can offer only a

small glimpse into curriculum discussions relating to educational technologies and digital stories.

As it stands, the English national curriculum provides sparse reference to children's reading on screen. Nevertheless, teachers interested in introducing digital books into classrooms can find a persuasive rationale in other sources. For instance, the National Foundation for Educational Research, which is the UK's largest independent provider of research, assessment and information services for education, training and children's services, provides a freely accessible FutureLab report that comprehensively summarises the importance of children's digital participation and digital literacy: <https://www.nfer.ac.uk/publications/FUTL08/FUTL08.pdf>

In this report, Hague and Williamson (2009) position digital literacy in relation to digital participation in society and propose a model of processes that students engage in when demonstrating digital literacy. They suggest that digital literacy is a combination of: 'Knowledge of digital tools: hardware/software' but also 'critical skills: evaluation and contextualisation' and 'social awareness: understanding your identity, collaborating, and communicating to audiences in context' (p. 8).

Thus, advanced digital literacy skills go beyond the use of a digital book and encompass critical engagement with the text, identifying its key themes in terms of diversity and global issues and contextualising its main messages. To develop these skills, digital books need to be used in conjunction with pedagogical guidance. Some believe the pedagogical guidance can be embedded in the resources children use. Whether the guidance is inside the resource or happens around its use, the use of digital books in a classroom needs to be coordinated by skilful teachers.

The premise that teachers can and should encourage children's love of reading with all story media is shared among growing numbers of teachers. It was neatly summarised by John Murphy, an English and history teacher in Ireland: 'Introduce students to a wide variety of texts, mediums and genres – they may surprise themselves once they have faced preconceived ideas about what they consider enjoyable and embrace a diversity in what they read. Comics, ebooks, short stories, online articles and magazines shouldn't be ignored' (quoted in Williams 2014).

I focus on digital books as a means of encouraging teachers to enrich their existing practice and adopt a holistic approach to children's

literacies in their classrooms. The current curriculum in Western countries is dominated by print books and print-based reading and writing skills. Given the amount of reading and writing that happens on screen in adult life, a print-centric focus doesn't seem to square with the skills that children will need when they grow up. Many researchers have been advocating a change in school curricula and promoting a curriculum more oriented towards 'meaning-making and literate practice as multimodal, multimedia and multi-sensory' (Sefton-Green et al. 2016, p. 13). Digital books can be perceived to be part of this advocated change, providing rich opportunities for multimedia and multisensory engagement. Their use in the classroom doesn't mean abandoning existing best practice. On the contrary, it is important that teachers make digital books matter by means of a teaching model that does not privilege form but does elicit active engagement with stories.

Models for introducing digital books into the classroom

There exist many teaching models that can be adapted to inspire teachers interested in using digital books. One possible pedagogy is Salmon's (2011) Five Stage Model of teaching and learning. This is not a model that will work in every context and every school, but awareness of the individual stages may inspire teachers' planning. Salmon outlines four key processes that contribute to effective education. I chose four elements that are relevant to the pedagogy of digital books. These include:

1. Planning and the importance of a clear aim.
2. Encouraging exploration and building in motivation.
3. Focus on sharing and collaboration.
4. Ensuring that learning outcomes are aligned with assessment.

I have found these four stages relevant in my observations of effective practice among the teachers I have worked with. When applied to different learning objectives, they can provide a useful framework for introducing digital books into the classroom.

Salmon's pedagogical model was originally developed for online learning and provides broad parameters for effective teaching. Roskos,

Burstein and You (2012) offer an empirical model based on their observations of effective use of digital books in the classroom.

Roskos and colleagues observed 12 children in a US kindergarten and described in detail the different ways in which these children engaged with the digital books over an eight-week period. In this period, teachers used digital books in group reading sessions and individual sessions. Group sessions were led by the teacher, who presented the digital books on the classroom’s stationary touchscreen. Individual reading sessions were initiated by the children, who accessed their digital books on iPads and iPods. Roskos and colleagues highlight the various teacher-facilitated behaviours that children engaged in with digital books. They describe several types of ‘multisensory behaviours, such as looking, touching and listening’ and children’s verbal and non-verbal communication around the books. These behaviours are not too different from children’s active engagement print books. What differed from print books was that the children in Roskos and colleagues’ study also engaged in a range of interactions with the book’s surface, such as poking, touching and swiping. The researchers suggest that children’s engagement with digital books in the classroom is characterised by various behavioural facets. They add that teachers’ awareness of these various facets may encourage their occurrence in the classroom through teachers’ mediation. Table 4.1 summarises children’s multisensory engagement with digital books, with specific focus on haptic engagement, as well as verbal and non-verbal communication that teachers will be familiar with from print books.

Table 4.1 Facets of behaviour and communication to look for in children’s engagement with digital books

Multisensory engagement	Verbal communication	Non-verbal communication	Haptic (touch) engagement
Looking	Using language	Gesturing	Swiping
Moving the book or body	Using story-specific expressions	Making facial expressions	Dragging
Listening	Speaking in native language (if applicable)	Making noises	Circular moves
Touching	Self-talk	Body posture	Tapping

Source: adapted from Roskos et al.

Frameworks for using digital books in the classroom

The MESH Guide

A useful resource available to teachers in any country is the MESH Guide, available freely from this website:

<http://www.meshguides.org/>.

MESH stands for ‘Mapping Educational Specialist knowHow’ and offers a set of guides on various topics of classroom pedagogy. The guides can be translated with Google Translate and the site is currently used by educators from 186 countries. The guides are a community resource; educators can add their own comments and resources to the site. The key asset of MESH is that it provides evidence-based guidance, that is, all the guides have been written by educational researchers. This means that the guides are based on data and can be thought of as an ‘education system to generate, quality assure and update evidence-based summaries written for educators’.

I have contributed to the database with a MESH Guide for teachers who may have never used digital books before but are interested in introducing them into their classroom. The guide provides links to some of the key publications and research to guide teachers, including a step-by-step description of the process of bringing digital books into a classroom.

The guide can be accessed via this link:

<http://www.meshguides.org/guides/node/567>

TPACK model

Another useful framework for teachers interested in digital books was put together by Brueck and Lenhart (2015). The authors summarise from the TPACK (technological pedagogical content knowledge) perspective what teachers need to know when using e-books. TPACK was formulated by Mishra and Koehler in 2006 and stands for three overlapping types of knowledge that teachers need to mobilise when implementing digital technology in schools: technological knowledge, pedagogical knowledge, and content.

To illustrate how this framework operates in practice, let me use the example of Nosy Crow’s digital book *Little Red Riding Hood*. If we were to apply the TPACK framework with this digital book, the three components would work as follows. The teachers’ *technological knowledge* is the teachers’ knowledge of how touchscreens work and how this

specific digital book works. This includes knowledge of how, for example, to switch the app on and off, to activate the ‘read to me’ or ‘read by myself’ feature, and to increase or lower the volume. Teachers’ *pedagogical knowledge* concerns how to incorporate the digital book into the existing curriculum. For example, teachers can choose to use the book to support peer learning and collaboration among individual children; or they can focus on the use of capitals in Little Red Riding Hood’s name or the use of punctuation at the end of sentences or skilled word reading (encouraging the pronunciation of unfamiliar and familiar words). Teachers’ *content knowledge* involves relating the book’s content to a specific subject area or skills. Teachers might decide to use the Nosy Crow app in children’s peer-to-peer discussion of the storyline to support story comprehension. For instance, they might ask how the different story endings (e.g. Little Red defeating the wolf by tickling him with feathers) relate to doing things others might not like (social skills and empathy) or how the reference to bees and honey relates to science and biology.

Having considered the wider framework for deploying digital books in a classroom, I now move to some specific strategies relevant to the classroom environment.

Strategies for using digital books in the classroom

When introducing digital books into the classroom, it is important to consider the entire classroom environment and the intention, or purpose, of the activity in hand. While motivating children to read might be a broader aim, teachers might wish to pursue specific educational goals with specific groups of children. Chapters 4 and 5 offer some suggestions for supporting individual children and using digital books for different types of activities.

The next section offers some ideas for how teachers can mediate children’s *effective* use of digital books in their classroom in a typical classroom setting of 20–30 children per one to two teachers. Effectiveness is typically assessed by external organisations, such as the Office for Standards in Education, Children’s Services and Skills (Ofsted) in the UK. My use of the word ‘effective’ here is different: it comprises children’s enjoyment of stories, their repeated engagement with them and their sustained interest in reading. The keyword for effective use of digital books is ‘personalised’. Personalising is the process through which

teachers make the book more relevant to individual children's lives and understanding. They can show the book cover on the interactive white-board and ask children to comment on the book's colours, pictures and typography. Do the visual cues resonate with children's aesthetic preferences? Teachers can ask about children's experiences relevant to the book's topic either by prompting reminiscing or by asking them to draw a picture or recount a story. Such *verbal personalising* is part and parcel of the effective classroom reading strategies known as 'dialogic reading'. Dialogic reading also involves introducing the book title to the children, explaining the book's main ideas, modelling questions, clarifying difficult words or passages, summarising and predicting the story plot. Whether the children read in pairs, individually or in groups, dialogic reading and personalisation should be at the forefront of teachers' minds. With this clarified, let me now summarise the practical strategies that you can use with digital books in one-to-one and group-reading set-ups.

One-to-one reading sessions with digital books

One-to-one reading sessions with digital books are possible if each child has their own device, that is, if you have access to several devices in your classroom and can rotate them in such a way that each child can have their own device for a while. Individualised access to *shared* devices can be facilitated using different log-in details for individual children or a personalised digital library system (more about these in Chapter 9). If children use shared devices, then one-to-one reading needs to be scheduled so that each child can have a turn.

Individual reading with the 'read to me' feature

Digital books offer the child a one-to-one experience with a digital reader that can read the story to the child. All that teachers need to do is to instruct the children to switch on the 'read to me' feature, which provides a voice-over of the text. The children can then engage in individual reading with the pre-recorded story read to them aloud by the digital book. In a class of 30 children it is not always practical to engage in one-to-one reading sessions. Shared book reading is therefore typically a parent-child rather than teacher-child activity. Teachers may wish to support one-to-one reading with digital books by creating quiet corners in which children can access their stories. If multiple devices are available and all the children read at once, they will need headsets to be able to enjoy the voiceover. Another practical point is the risk of distraction posed by multifunctional

devices. If digital books are accessed on a touchscreen with a wifi connection, it is important that they only contain books or apps for reading and have the internet function disabled. Alternatively, teachers can load up a series of relevant digital books on each child's touchscreen and allow them to choose a title from their own digital library.

In pre-school settings, digital books can be part of the school's provision of books and their content regularly updated rather than one has to refresh the titles in a physical library. A touchscreen used for reading can be placed alongside print books in a book corner, reinforcing the message that its purpose is for reading. In primary schools, digital books can be used during dedicated reading times or as part of a typical English lesson. Alternatively, digital books can be used on special occasions and offered to children as a 'golden time' activity. In many UK classrooms 'golden time' is a lesson or part of a lesson during which teachers leave the choice of activities to the children. If digital one-to-one reading is to be successful during golden time, there need to be enough devices and headsets for all the children.

Digital books to support one-to-one reading in the classroom

Given the absence of a real adult reading the book to the child in this specific arrangement, it is particularly important that the content of digital books used in children's individual reading is suitable. Before downloading a digital book, teachers need to check its ratings and description on expert and trusted review sites such as Common Sense Media or Literacy Apps, as outlined in Chapter 3. Two of my favourite digital books for one-to-one reading are *StoryPals* and the Dr Seuss books.

Story Pals

Story Pals by Expressive Solutions LLC is a story-making app that can also be used for reading stories. The app provides 24 sample stories with 'read to me' and 'read by myself' features. The stories finish with quizzes probing children's story comprehension. Some children enjoy doing quizzes; if they do, then by all means let them have fun. Generally, I'm not a great fan of story-comprehension quizzes at the end of each story, particularly if the purpose of the reading activity is to read for pleasure. As adult readers, we know what pleasure we derive from novels that we can immerse ourselves in without having to anticipate a comprehension test at the end. Children should have the same right to reading enjoyment.

With the 'read to me' feature in *Story Pals*, the text gets highlighted while it is read aloud. In the story-creating mode, children can

make their own stories using precreated illustrations that they can animate or enrich with images and text. Readers can also add their own audio-recording to the story. The app will be of particular interest to children with special requirements, thanks to its multiple possibilities for adjustment; for example, it allows the enlargement or justification of text, which can be helpful for children with reading or sight difficulties.

<https://itunes.apple.com/gb/app/storypals-basic/id568193934?mt=8>

Dr Seuss digital books

Dr Seuss (less widely known under the author's legal name Theodor Geisel) is one of the biggest-selling authors of all time and his books are loved by children across the globe. HarperCollins Publishing converted some titles by Dr Seuss into a suite of digital books. These can be read on any reading device and accessed from the HarperCollins website. For one-to-one reading sessions I recommend activating the 'read to me' feature. The digital version preserves the unique combination of entertainment and life's precious lessons which typifies Dr Seuss's titles.

<http://books.harpercollins.co.uk/dr-seuss/>

One-to-one reading sessions *with* teachers' mediation

If a teacher is available to engage in a shared reading session with the child, then the benefits of adults' mediation can be had. Although a 'read to me' feature can provide an audio version of text, it cannot tailor questions and provide prompts relevant to each individual child. Adults are uniquely able to personalise the story content to a child's life, by relating the story characters or motifs to the child's own experiences and memories. This verbal personalisation of story content is extremely important for children's story comprehension and learning from stories.

Therefore, if teachers can engage in shared reading of digital books in the classroom, it is best to read them without the pre-recorded voice-over, or to supplement it with their own questions, prompts and explanations. Some digital books provide some basic story-related prompts as part of the story recording. For instance, the series *iRead with Caillou* by Tribal Nova were designed in collaboration with researchers at McGill University and have some suggested prompts for adults. These prompts are embedded in the digital books. The series can be purchased from the App Store and downloaded on Apple devices:

<https://itunes.apple.com/us/app-bundle/iread-with-caillou-interactive-stories/id917756027?mt=8>

The lead professor behind the industry–university collaboration on these Tribal Nova digital books, Susan Rvachew, runs an informative blog about children’s reading on screen. On this blog she explains why and how reading digital books is different from reading print books with young children and cautions against treating digital books the same as print books when it comes to reading interactions. She suggests that parents need time to develop their own effective strategies to co-read digital books. Similar conclusions could be applied to teachers interested in co-reading digital books with children in their classrooms. It takes practice and time to find the most suitable reading strategy and it is possible that the adult–child dynamics will be different with the digital medium than what adults are used to from reading print books. When you read the digital book with a child for the first time, be patient and explore their responses. Over repeated readings, you will find your own way of accommodating the child’s responses using the book’s interactivity.

<https://digitalmediaprojectforchildren.wordpress.com/>

Group reading with digital books

Buddy reading

Children reading together, often referred to as ‘buddy reading’ or ‘paired reading’, is a popular way of involving young children in reading at school. The term ‘paired reading’ is sometimes used to refer to adult–child reading, but here I use it to refer to child-with-child reading. Buddy reading in the classroom has different dynamics from paired reading between adults and children. In addition to reading skills, buddy reading allows children to practise social skills such as listening, respect and mutual encouragement and also practical skills such as turn-taking and exploration of the digital page.

Buddy reading within the same class, that is with children of the same age, typically occurs with mixed ability pairs. Teachers pair up children according to their reading levels and each pair reads the same book. In buddy reading with digital books, teachers need to be aware of different levels of digital literacy among children when pairing up children. A child may be a strong reader but less familiar with a tablet, whereas another child may be proficient at digital storytelling but not at reading whole sentences. You can have each child in the pair read a different

book, according to their level and preferences. The reading of text is typically led by the more advanced reader, who helps his/her reading buddy with difficult words. Teachers and teaching assistants offer help to pairs who struggle with specific words or can't agree on a shared strategy to read the book. In some schools paired reading has grown into community reading programmes in which one school sends older children to read with younger children, or adult volunteers visit the school to read with the children. Thus far, the focus of paired reading has been on print books but many schools have begun exploring buddy reading with digital books.

Christ, Wang and Erdemir (2018) have introduced buddy reading with digital books to primary schools in the US, Turkey, Greece and, most recently, Malta. The researchers report that the children engaged in a collaborative rather than tutor-tutee style of interaction when reading digital books together in pairs. They noted that in some pairs the children focused more on the interactive features in the book ('hot-spot-centric reading style'), whereas other pairs focused on the text. The researchers suggest that an integrated approach, which combines text- and hotspot-focused interaction, is the most effective. According to this research, teachers may wish to steer children in a specific direction if they aim to support children's integrated reading of digital books. For instance, they can encourage children to explore the hotspots if they notice that children are not interacting with the story characters. For example, the teacher could ask the children, 'Have you tried knocking on Grandma's door? What happens if Little Red Riding Hood knocks on the door?' Similarly, teachers can encourage more text-focused behaviour if they notice that children are mainly tapping hotspots and listening to, rather than reading, the story. For instance, the teacher could suggest, 'Now it's Mario's turn to read. Jack, listen carefully to see if Mario can read the next page.'

Large-group reading

The classroom environment is uniquely positioned for group-based reading led by the teacher and focused on one book title. This form of reading engagement is in alignment with strong socio-cultural theories of early childhood education which emphasise the importance of dialogue in making meaning from texts. With print books, however, the format of the book is an essential ingredient of group reading sessions: print books have a rich tradition of so-called 'big books', which can be usefully shared

with a circle of young readers. In contrast, many current digital books (such as iPad and Google Chrome ones) are designed for individual or small-group reading and are therefore less suited to large-group reading sessions.

Researchers are curious to find out how dialogue-based group reading with digital books might unfold. A research project that explores the utility of such an approach is currently being conducted in Norwegian kindergartens, led by the University of Stavanger. For teachers interested in following the Norwegian model, regular updates on the project are available from the Stavanger University website. (If you don't read Norwegian, you can open up the website in the Google Chrome web-browser, click on the 'translate' feature and Google will automatically translate the page for you.)

<http://lesesenteret.uis.no/>

Small-group reading

Small-group reading is often perceived as a midway house between individual and whole-classroom reading arrangements. Small-group reading is a useful strategy to prepare children for paired reading by teaching them the rules of listening, expressing meaning or taking turns in tapping the screen. Teachers are best positioned to make decisions about the size of a reading group, the book title and the grouping of children. A typical arrangement with print books is mixed-ability groups of five children, with frequent opportunities for all children to share views and ask questions. A similar arrangement can be pursued with digital books. The key difference with digital books is the size of the display screen: while print books come in various sizes and shapes, the screen is the same for all digital books. A maximum of four children will work for a group with a digital book. Teachers who use digital books for small-group reading sessions often change the positioning of the book and adjust the seating arrangements to allow all the children to access the book. For example, placing the iPad in the middle of a table and sitting around the table on small chairs may be more suitable than holding the book up to avoid screen glare. A digital book placed on a sturdy surface also makes it easier for children as well as the teacher to interact with the hotspots.

Whatever the spatial arrangement and group set-up, teachers need to be clear about the skills and knowledge they want to foster with digital books. Here are a few points to help teachers craft their rationale.

Examples from UK teachers

I outline two examples, which focus on two digital books, both of which were selected by a group of UK teachers as the best digital books produced in 2015 (the books were awarded the UKLA Digital Book Award). These two examples are described in full detail by Walker, Kucirkova and Gould (2016).

Example 1: Flip Flap Safari

Flip Flap Safari is a digital book developed by Nosy Crow and available to download for iPads only, from the App Store:

<https://itunes.apple.com/gb/app/axel-schefflers-flip-flap/id897563148?mt=8>

This digital book doesn't follow a narrative but it can be linked to several stories read in the classroom and can be used as part of guided reading sessions, group reading sessions or one-to-one reading experiences. Here, the 'read to me' feature is especially helpful. Interactive features of the book enable the children to create several imaginary animals. For example, they can combine a zebra with a tiger and create a 'ziger'. There are up to 121 combinations of funny animals' names and noises. The Flip Flap series is a well-known set of books by Axel Scheffler, including *Flip Flap Dogs*, *Pets*, *Farm*, *Ocean* and *Jungle*. The app is advertised for pre-schoolers but can be effectively used in primary schools, as attested by UKLA teachers. The fun part is decoding the words and finding new names for the animals. In doing this, children practise letters, phonological awareness and word meanings in an interactive and enjoyable way. *Flip Flap Safari* lends itself to small- and large-group reading sessions and can be usefully integrated into the English curriculum.

Example 2: Dino Tales

Kuato Games' *Dino Tales* is available for download from Google Play for all Android devices:

<https://play.google.com/store/apps/details?id=com.kuatostudios.dinolife1&hl=en>

as well as from Apple's App Store:

<https://itunes.apple.com/gb/app/dino-tales-literacy-skills-from-creative-play/id923963949?mt=8>

A unique feature of this digital book is that it contains the so-called 'tale-making engine' developed by Kuato Games. This engine runs in the background while children engage with the app, and can generate a

customised version of the book for each child. As the users progress through the fictional world of their favourite dinosaur, the app registers their activity and at the end of the adventure generates a digital story based on the places the children visited with their dinosaur. Such an experience can be used in the classroom to discuss story-sequencing and story comprehension but also digital skills such as coding, data use and algorithms. Although the technology embedded in the app is complex, discussion of its impact on the child can be broken down into the key elements used by the app to customise the narrative (e.g. story characters, story locations and story paths). This activity can be used not only for reading and story-making but also story-writing and text composition. This digital book is particularly suitable for one-to-one reading sessions and golden time reading activities.

Swapping digital books and peer recommendations

As adult readers, we get books recommended by friends or by commercial sites such as Amazon ('If you bought this book you might also like ...' or 'Other people interested in this book also bought ...'). As parents, we follow peer recommendations to download digital books for our children, and teachers similarly recommend titles to each other. Peer recommendations are one of the most powerful predictors of readers' choice of another title. For children, peer recommendations are equally powerful. You can encourage in your classroom a culture of peer recommendations of digital books in two ways: you can actively solicit children's tips by asking them directly to name a digital book they like and to share it with the class. Many teachers do this already with print books, not only to validate children's reading outside the classroom but also to find out children's interests. Another way of encouraging peer recommendations is to ask children to swap books among each other. This can happen in a very structured way if you ask them to rotate the digital books they have read or swap them with their partner. It can also happen in a less structured way with older children, who can directly send each other digital books via digital library systems (see more about digital libraries and how your school could subscribe to one in Chapter 9).

Supporting language and literacy skills with digital books

Children enjoy reading digital books because they grant them multiple entry points into a story. Children who are beginning to read,

children who have language difficulties or children who speak a language different from the language of instruction, can access digital stories through spoken text, pictures or interactive characters. Children who can't read can listen to the story and see how it unfolds. This is enabled with the 'read to me' feature, but some stories also include help features such as explaining a difficult word when it's tapped or extra hints and tips provided by the onscreen character when children can't progress from one page to another. These features provide immediate and targeted help and also introduce children to the conventions of reading on screen.

Knowing how to access the built-in help features in digital books can be beneficial not only for children's immediate reading but also for their later independent study or reading of more complex texts. Different layers of digital texts relate not only to language support but also to language exploration and interaction. For instance, members of the Pottermore Book Club can enter an interactive forum where they can discuss their favourite parts of Harry Potter stories. In such interactions, reading and writing are visibly intertwined and children's communication skills are directly applied and refined in the interaction. Reading on screen thus provides a unique stage on which children can form, formalise and play out their reader and writer identities. Teachers who introduce digital books to their classrooms can thus introduce children to interactive story spaces.

Digital books available in the form of apps and eBooks do not allow one to add explanatory notes for individual words. However, in digital books read on Kindle desktop software, teachers can add notes to any words they think the children may find difficult. You can download the Kindle desktop software for free on any computer you have access to and display the digital books on the interactive whiteboard. Hundreds of titles are available for children's reading in the Kindle Store. Bear in mind that Kindle digital books contain text and illustrations but rarely any other media or interactive features. To support children's language and literacy skills, you can point them to specific sections of the book by adding bookmarks and also use the automatic word definitions provided by Kindle. Children will then be able to access these annotated versions on their own digital books (provided you have synched your account with theirs). Another advantage of Kindle digital books is that they can be displayed in different background colours and with various font sizes. This is especially useful for children with specific visual processing disorders, such as dyslexia or visual stress.

Supporting digital literacies

As alluded to in Chapter 2, digital literacies are differently defined by different groups of researchers, but, broadly speaking, they include: ‘the creation of images, audio files, movies, gaming, and a host of other activities. They also include reading a PDF on a smartphone or reading a website from a personal tablet. Finally, they include a host of other activities and ways of using digital technologies that are in the nascent stages or will soon be created’ (Massey, in Heafner 2014, p. 69). According to this definition, knowing how to read a digital book is in itself a digital literacy skill. Knowing how to create one’s own version of a digital book is another important digital literacy skill, which Chapter 6 discusses in detail. It follows that supporting digital literacies is more than handing over a digital book for the child’s independent use. It involves teachers’ active mediation of the interaction and this mediation needs to be informed by existing best practice and innovative approaches. Teachers too need to be digitally literate. It is beyond the scope of this small textbook to outline the range of digital literacy skills that today’s teachers need to develop in parallel with the children they teach. In the spirit of agency and reciprocity, it is clear that digital literacy skills cannot be imposed on teachers but can instead be crowdsourced and discussed in a community of digital users. As for the specific digital literacy skills connected to digital books, insightful advice and recommendations on effective pedagogic strategies with digital books are available from various teacher-oriented websites. Some of these websites are curated by teachers and some are set up by publishers who work in collaboration with teachers. I include a selection below.

Tips and ideas for using digital books to support digital literacies

Scholastic

Scholastic and its Book Club are very popular in the US and offer a range of free lesson plans and tips that teachers can explore for inspiration:

<https://www.scholastic.com/teachers/lessons-and-ideas/>

Teacher Toolkit

Practical teaching strategies and teachers’ own experiences of using digital books are available on individual teachers’ blogs. For example,

Teacher Toolkit is a website run by an award-winning headteacher and his blog contains freely downloadable resources on a range of topics:

<https://www.teachertoolkit.co.uk/resources/>

ETEC 510

ETEC 510 is a wiki page curated by students of the Design of Technology-Supported Learning Environments Course (ETEC 510) run by the University of British Columbia. The students on this course are aspiring teachers. The site offers a rich compilation of materials relevant to matters of digital literacy and digital books.

http://etec.cilt.ubc.ca/510wiki/Main_Page

UCL Digital Education team blog

This blog, as its authors indicate, ‘provides updates on institutional developments, projects we’re involved in, updates on educational technology, events, case studies and personal experiences (or views!)’. You will find some thought-provoking posts by teacher educators, including musings on digital literacy, which may resonate with your own pedagogy and can be converted into teaching ideas.

<http://blogs.ucl.ac.uk/digital-education/>

Reading for Pleasure Open University

This website is run by the Open University in the UK and is focused on reading for pleasure with any books, print or digital. A key asset of the website are teachers’ own contributions of effective practices and classroom examples. There is a section dedicated to digital books and reading on screen. If you are based in the UK and wish to share your experiences with digital books, this website may be a suitable platform.

<https://researchrichpedagogies.org/research/reading-for-pleasure>

In conclusion, it is worth highlighting that digital books that do not lend themselves to curriculum activities can be included in free choice activities. Remember the importance of playful learning and fostering children’s wonder and delight in the classroom, as the researchers on Project Zero at Harvard University have proved (<http://www.pz.harvard.edu/>). For example, digital books that support the exploration of a digital narrative with several game elements may not be immediately about decoding text and making meaning of stories, but they may encourage children’s motivation and participation in a reading activity. If children are to be

able to make their own digital books and make discerned choices about others' digital stories, then they need opportunities to develop their agency. I therefore encourage you to think of digital books as a means to foster children's enjoyment of stories, build up their confidence and empowerment in the classroom and, through this process, engage in reading for pleasure.

Chapter summary

According to the classroom context, technical possibilities and the children's response, teachers have to decide how they will introduce digital books into the classroom. Digital books can be used to support children's language and literacy skills as well as digital literacies and social skills. Digital books are appropriate for one-to-one reading with or without direct adult stimulation, as well as buddy reading and small-group reading. Digital books have been introduced into the classroom with whatever technology is available to teachers, including PCs and interactive whiteboards (e.g. Kindle desktop software) and iPads (e.g. iBooks). Regardless of how and which digital books teachers choose to use in their classrooms, the message of this chapter is to encourage teachers to make the most of digital books to gradually apprentice children into the community of readers and digital citizens.

Reflection point

I like to compare the holiday season with the way a child listens to a favorite story. The pleasure is in the familiar way the story begins, the anticipation of familiar turns it takes, the familiar moments of suspense, and the familiar climax and ending. (Fred Rogers)

When you read this quote, think about the value a digital book might have in a child's life. How might the combination of familiarity, digital screen and story impact on children's reading enjoyment? How do digital books foster children's sense of belonging in our media-saturated world? How does children's familiarity with the interactive screen foster their sense of agency?

Further reading

These two readings may be of interest to teachers who are keen to reflect on their pedagogical practice and the ways in which the online learning environment influences their pedagogy.

Salmon, G. (2002) *E-tivities: The Key to Active Online Learning*. London: Kogan Page.

Zeichner, K. and Liu, K. (2010) 'A critical analysis of reflection as a goal for teacher education', in *Handbook of Reflection and Reflective Inquiry: Mapping a Way of Knowing for Professional Reflective Inquiry*, edited by N. Lyons, 67–83. New York: Springer.

If you are interested in how story-sharing can connect young children across the world, make sure you check Project Zero's initiative Out of Eden, at the Harvard Graduate School of Education:

<http://learn.outofedenwalk.com/>