Reading on e-Readers and tablets
Review of devices for digital literacy

This guide reviews some of the different devices available for e-reading, exploring the advantages and disadvantages of each device for children with reading difficulties.

Digital Reader Features

There are a number of features to look out for when choosing a device for reading. You can either buy a device designed specifically for reading (e-reader) or get a general-purpose tablet. This table shows you the key differences between e-readers and tablets when it comes to reading.

Text to Speech	**Tablets, smartphones**
Change text colours	Tablets, smartphones
Reduced glare	E-readers
Long battery life	E-readers
Video, audio, games, internet	Tablets, smartphones

See http://bit.ly/ereader-guide for a more detailed comparison.

You need to decide which of these features are important. Currently only **tablets (or smartphones)** provide these features.

- Text to speech is very helpful for many children with reading difficulties as it allows them to hear the text being read aloud and read along without having to decode every single word.
- Being able to change the formatting of the text can also be extremely helpful for dyslexic readers as it can be adjusted to a contrast to make it easier for them to read.

E-readers have different advantages.

- They have non-reflective screens which means reading on them causes less eyestrain than devices with backlit screens (like tablets or laptops). Although this also means that the e-readers cannot be read without a light source (much like a book).
- The other significant advantage the e-reader has is that it has a much longer battery life than a tablet.

Most e-readers and reading apps on general-purpose tablets will allow the **highlighting of text**.

Pricing (as of Feb 2015)

The difference in price between tablets and e-readers has changed significantly over the past year. There are now tablets on the market that are around the same price as a mid-range e-reader. For example, the Kobo Glo or Kindle Paperwhite cost around £80-£110 while there are reasonable budget tablets priced around £80 from ACER, ASUS and Levono.

However, the cheapest e-readers (such as the basic Kindle) remain cheaper than most tablets.

Prices vary with retailers and can be significantly lower through promotions.

Tablet Size

If you decide to buy a tablet, you then have to carefully consider what size you want. We would recommend **7 or 8 inch tablets for reading** because the larger tablets tend to be more difficult to hold in the correct position. This is of particular concern for children who struggle to comfortably hold the larger tablets in one hand, which is important when reading for a long time.

It is worth noting that smartphones have increased in size recently. The iPhone and the Google Nexus now come in 5.5 to 6 inch versions. This means that reading on a phone rather than on a dedicated device could be another option – after all, the Kindle screen is only 6inches big.

Some Devices to Consider Buying

Kindle

The Kindle is the original and perhaps best known of the e-readers. It is well integrated into the Amazon eco-system although reading texts from anywhere other than the Kindle store is somewhat difficult.

There are a number of Kindles to choose between:

- **Kindle** (£59) is the cheapest and simplest Kindle. It has a touch screen to turn pages but cannot be used in the dark without a lamp.
- **Kindle Paperwhite** (£99-£109) has a long lasting battery and is extremely light to hold. It has an excellent touch screen and glows in the dark when needed.
- **Kindle Voyage** (£179) is the latest version of the Kindle. The higher price reflects the quality of the screen, which provides a very high contrast. This version is the only Kindle that comes with physical buttons for turning pages.

Kobo

While lesser known than the Kindle, the Kobo comes with many positive reviews. It doesn't connect to the Kindle store but it does support the standard e-book format (ePub). The devices also connect to the WH Smith's e-book store. The Kobo comes in a variety of models:

- **Kobo Glo** (£79) is the cheapest illuminated e-reader
- **Kobo Aura** (£89) provides a higher resolution screen
- **Kobo Aura H2O** (£139) is the only e-reader we are aware of that is waterproof – great if you like reading in the bath.

Acer Iconia B1/B2 (£85-99)

We have used a large number of these tablets for testing literacy games and reader apps. Despite the low cost they provide a fairly solid performance, but do come with a huge amount of preinstalled but often unnecessary apps (these can be removed but takes time) and are noticeably less responsive to touch than the higher end tablets. If price is your main concern, this is the tablet we would recommend.

Hudl2 (£129)

We have recently invested in the Tesco Hudl2 which, while slightly more expensive, provides an extremely good performance. We have been particularly impressed with the quality of the screen which is just over 8 inches, but is still easy to hold while providing a bigger reading area. If you are looking for a slightly bigger value for money tablet, this is the tablet we would recommend.

Reading Apps for Tablets

If you have chosen to purchase a tablet rather than an e-reader you will have to install a reading app. Most apps try to balance usability and functionality, and the selection of a preferred reading app essentially comes down to personal choice.

That said, each app should at least include the following options:

- Change the look of the text in terms of font size, font type, colour contrast and line spacing
- Have text-to-speech functionality
- Load texts from online stores

When buying a tablet you have to decide between an iPad and an Android tablet (see our guide for choosing between the two). Most reading apps will be available on both platforms. Apps we have used include:

- Amazon Kindle
- Kobo
- Google Play
- Aldiko
- FBReader
- Cool Reader
- Bluefire Reader

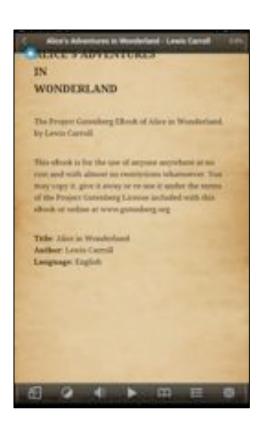Here are reviews of two of our preferred reading apps.

Moon+ Reader

The Moon+ Reader app is a book reader that allows the reading of books of different file types.

It has fully customizable visual options including line space, font scale, bold, italic, shadow, justified alignment. The text-to-speech functionality is very good and it has access to a number of online e-book libraries.

Based on our use of the reader with a number of children with dyslexia, Moon+ is the best reading app we have found.

AutoReader 3D

The AutoReader app is a text reader that flashes words or phrases one by one sequentially on the screen, with regulated speed.

Having chosen a text to read, the app then automatically displays words or phrases on the screen. You can customize the presentation in terms of the number of words displayed or the speed the text is displayed.

The main advantage of using AutoReader is the automatic display of words which increases reading speed. This can be very useful for developing a child's fluency.

Sources of Digital Texts

Purchased books

Most e-readers will only allow books from specific online stores. For example, the Kindle will only allow you to read books from the Amazon Kindle Store. While tablets face a similar problem you are able to install an app for each of the different bookstores.

The reason for these restrictions is **DRM or Digital Rights Management**. This is software used to prevent the copying and sharing of e-books. This means any e-book you buy will only be accessible through the app associated with the online bookstore in which you purchased it.

For example, if you bought an e-book from Amazon, you only have the book in a format which is readable by the Kindle app. Fortunately, Amazon Kindle apps are available on most platforms but if you prefer a different reader (e.g. Moon+ Reader), you cannot load a text from the Kindle Store into that app.

If you bought one book from WH Smith, one from the Kindle Store and borrowed an e-book from a library (such as using Moon+ to read a book from https://openlibrary.org), you will need three different apps on your tablet.

There are ways (described in many online guides) to remove DRM but this is against the terms of use to which you agreed when you purchased the DRM book and the legal position over this within the UK is also uncertain.

Not all purchased books can be read easily using text-to-speech. If this is important to you, ask the book store for advice.

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