**Key Terms:**

* *Digital Rights Management (DRM)* – A combination of software and encryption to prevent the un-licenced copying of a rights-protected file such as an e-book.
* *ePub* – An open standard e-book file format that allows for a range of DRM options.
* *Portable Document Format (PDF)* – An electronic document format that retains formatting, layout and font information regardless of the device on which it is displayed.

**1. Overview of CCN e-book holdings and the current e-book market**

**Current CCN holdings:** The Information Store currently has approximately 4,000 e-books from Ebrary, MyiLibrary and DawsonEra, covering a wide range of subject areas and levels. These are integrated with our physical book stock on the Heritage Online catalogue, and can easily be accessed from any CCN campus PC or at home via an Athens log-in (available to all CCN students).

A large number of these titles are also available for download in PDF format (using the Adobe Digital Editions DRM software) for access at home and on some compatible e-reader and tablet computer devices.

**E-readers:** The current market leaders are the Amazon Kindle and Sony Reader.

The Kindle is currently heavily locked into Amazon’s proprietary file format and DRM software, and has only limited support for other formats. Notably, it does not support any other forms of DRM protected material. However, a large range of e-books are available through Amazon.

The Sony Reader has support for a broader range of formats, and supports files using the Adobe Digital Editions DRM, used by two of CCN’s current e-book suppliers. However, it does not support the Kindle file format, meaning that you cannot use e-books purchased via Amazon this device, limiting you to sourcing from other e-book suppliers.

**Tablet devices:** Both the Android (used on a range of tablets and smartphones) and Apple iOS (used on the iPad, iPhone and other Apple devices) operating systems have a wide support for e-book formats through a range of Apps, and offer good support for a range of DRM (including Adobe Digital Editions). The smartphone application makes it potentially easy for students to access e-books in a highly mobile environment, although they are limited by their smaller screen sizes.

Microsoft Windows-based devices also support the majority of e-book formats through a range of software, although the Windows tablet market is largely waiting for the release of Windows 8.

Amazon has recently released the Kindle Fire tablet in the US (although there is currently no UK release date). This runs a variant of Android, allowing it to support a wider range of e-book formats, although third-party software is required to support the popular ePub format and Adobe Digital Editions.

**Availability of academic materials:** The availability of academic books is very patchy on all e-book platforms. Most e-books are currently focused on fiction and biography, and coverage of academic texts is far from comprehensive. Many academic publishers also delay the release of e-book versions of new editions for several months (up to a year) to maximise their sales of paper copies. This may make it challenging to meet the needs of the curriculum and exam boards.

In addition, many textbooks or technical texts contain complex tabulated data, diagrams and figures which most e-book formats struggle to accurately reproduce. The PDF file format preserves a great deal of such complex formatting, but some e-reader devices (particually the Kindle) offer only limited support for the format.

**Suitability for a library environment:** The Kindle does not currently support the lending of e-books to multiple devices in the UK, although there is support for this through Overdrive (an e-book distributor) in the US.

Overdrive does offer a substantial range of titles for loan to e-readers compatible with Adobe Digital Editions DRM in both the US and UK, although there are still some substantial licencing issues with publishers. A high-profile example is HarperCollins, who have placed a 26 loan limit on their e-books before requiring the library to repurchase a new copy.

**2. The current picture for students – advantages, developments, and UK trials**

**Accessibility:** Most e-book platforms offer some accessibility functions, with scalable text and adjustable contrast screens. The Kindle offers some limited text-to-speech functionality. Many tablet devices support screen-reader (text-to-speech) software, and scalable user interfaces.

However, many e-reader and tablet devices may prove challenging for students with visual impairments to use, as their navigation is done mainly through a touch-screen interface.

**Portability:** E-reader devices are small and light, and allow a large number of books to be available in an easy to transport device.

**Trials and Projects in other colleges:** South Staffordshire College has made good use of the JISC e-Books for FE project (provided by Ebrary, which CCN subscribes to) by embedding e-books into the reading lists and having tutors introduce e-books early in each student’s course. This has met with success due to a high level of buy-in from academic staff to publicise the available resources to students.

Somerset College has done a trial project, loaning out four Kindles from their library to a limited number of students and staff in their Technology department. This was received well, and they have subsequently added another two Kindles to their stock with a range of fiction titles.

City of Bristol College also undertook a similar trial scheme to Somerset College. They found that their students still preferred print books, but could see the value of e-books as supplementary resources. The 24/7 availability of their online e-books through Ebrary was also noted as a very positive feature, and all of their trial users said that they will use e-books in future.

However, JISC Legal has a note of caution on lending e-readers pre-loaded with third party content, as it may be contrary to the “personal use” aspect of the terms and conditions under which these devices are supplied. While Somerset and City of Bristol Colleges both received permission from Amazon directly, JISC Legal has advised that this should be taken as permission for those colleges only and any other institutions should seek advice from Amazon.

**3. Recommendations for our students – what would be their best options?**

For a budget option, either the Kindle or the Sony Reader are available at comparatively low price points for their basic models (£89 Kindle, £129 Sony Reader).

For a broader range of functionality, there are a wide range of tablet devices currently on the market, including the Apple iPad, Samsung Galaxy, and soon a range of Windows devices. However, these tend to be notably more expensive than dedicated e-readers, potentially putting them outside the reach of some students.

**4. What product would be best for us to buy if we were going to supply students with an e-book reader?**

The Information Store has yet to directly test any of these devices, and a fully informed decision would require testing the hardware in a working environment.

The e-book market is still a developing one, with a range of competing formats and compatibility issues. There is a risk that investing in hardware linked to a specific supplier (as all current e-readers are to some extent) may leave us with obsolete equipment in only a couple of years’ time.

For a tablet device, the market has still to mature. The iPad is the current market leader, but the release of Windows 8 devices later this year will probably have a significant effect on the market as a whole.

For a dedicated e-reader, one of the Sony Reader range would currently be the best option. With support for the ePub format and a range of DRM options, it allows for a wider range of e-book suppliers than the Kindle. In addition, it is also compatible with a number of our existing online e-book holdings.

Note This report was prepared by Graham Denny, Learning Resources Adviser of City College Norwich Information Store for the Senior Leadership team (SLT) of City College