

# **Which E-Reader is Right For Me? A Guide to E-Books and E-Reader Devices**

Accessing Higher Ground  
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# ATRC

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The ATRC ensures equal access to technology and electronic information for CSU students and employees with disabilities.



Shannon Lavey  
Service Coordinator and Provider

Services include assistive technology assessments and training, as well as consultation and education regarding accessibility and universal design of mainstream and instructional technologies.



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# Today's Agenda

- Introduction to E-Books
- Choosing a Device – Questions to Consider
- Types of E-Books
- E-Textbook Accessibility
- E-Reading Apps
- Types of Devices: E-Readers
- Types of Devices: E-Reader Tablets
- Device Product Pages
- Reading App and Web Reader Links
- Other e-Book Resources

# Introduction to E-Books

- No One-size-fits-all solution
- Try before you buy if you can
- Variety of file formats
  - Most common: mobi/azw3, epub, pdf
  - Mobi/azw3: Amazon
  - Epub: Everyone else (Nook, Kobo, Apple, Sony)
- Wide variety of delivery methods / devices
  - e-Readers, tablets, reading apps, web-based
- All have restrictions
  - Not all formats will display well
    - Limitations of the format or device – file type, content type
    - Limitations imposed by the seller / publisher – file source, encryption
    - Even those that all use epub have different encryption methods
  - You cannot simply buy e-books from anywhere and read them on any device

# Publishers and Copyright Concerns

- Variety of Booksellers / Publishers
    - Want to keep their content secure
    - Want you to buy exclusively from their store – both devices and books
    - E-Book ownership is not transferrable
    - Not bound by Section 508
  - Digital Rights Management (DRM)
    - Encryption used by the industry to limit use of e-Books and defend against piracy
    - Files with DRM are “locked” to a specific device or account
    - The device must be registered to “unlock” the file
- This leads to accessibility issues as the text is locked down

# Choosing a Device: Questions to Consider

- What do I want out of the device?
  - Just for reading?
  - Multiple uses? (apps, internet, audio books, video)
  - Textbooks vs. mainstream fiction and nonfiction?
  - Ability to read for a long time without eye fatigue?
  - Ability to read outdoors without glare?
  - Built-in reading light?
  - Ability to sleep after reading at night?
    - Back-lit devices like computers and tablets can make it harder to sleep.

# Accessibility Considerations

- What are my physical needs?
  - Weight of device?
  - Method of turning pages
    - E.g. Buttons? Touchscreen? Swipe or tap? Location?
  - Length of time reading? (possibility for eye fatigue)
    - Does reading on a computer screen for a long time bother you?
  - Screen reader capability?
  - Text-to-speech capability?
  - Audiobooks availability?
  - Zoom levels? In menus?
  - Contrast settings?
  - Type and size of fonts?
  - Line spacing / margin adjustment?
  - How customizable is the device?

# Types of E-Books: E-Textbooks

- Not purely text
- Often have complicated layouts, images, formulas, etc.
- Mostly web or app delivery, sometimes PDF.
- Not a downloadable file you can put on all e-Reader devices
- Need a computer or tablet with a browser or app capability
- No standard encryption method
- Sources of e-Textbooks
  - Directly from the publisher, delivered on their exclusive website
  - From retailers, delivered through reading apps
- It may be easier to gain alternate formats for books purchased directly from the publisher through University bookstore than those purchased from 3<sup>rd</sup> party retailers



# E-Textbook Accessibility Problems

- Degrees of Accessibility
  - Bare minimum: Screen readers can read the basic text in some fashion
  - Other aspects missing: headings, alt text, keyboard navigation, voice navigation, text-to-speech
- Both websites and apps often have limited accessibility
- The books themselves may not be accessible
  - The content is often locked to prevent copying / pasting / exporting, which means text-to-speech is also disabled
  - Onscreen OCR features DO often work for basic text-to-speech (e.g. Read & Write's Screenshot Reader / Kurzweil 3000's Image Reader)
- Interactive features are rarely accessible at all
- Students end up still having to get an alternate version through disability services
  - It is better to assume that e-Textbooks will not be very accessible

# Mainstream Retailers of e-Textbooks

- E-Textbooks only work on tablet apps or computer apps
  - Check the return policy before you buy in case the book does not work with Assistive Tech
  - Rentals are often available for e-Textbooks
  - Copy and paste ability usually indicates text-to-speech capability
- Amazon e-Textbooks
  - Check “Available only on these devices” in the Edition Info
  - Check text-to-speech availability on each book’s Product Details
  - Kindle Fire, Kindle for iPad/Android, Kindle for PC/Mac
- Barnes & Noble
  - Requires special textbook app for PC or Mac called “Nook Study”
- Apple iBooks
  - VoiceOver works with the app, but the books themselves may not work
- Google Play Textbooks
  - Allows highlight, notes with export, dictionary, search

# Textbook Apps – Other Retailers

- Check that an app is available for your device before purchase
- Check the return policy before purchase
- [CourseSmart.com](https://www.coursesmart.com)
  - Allows copy & paste
  - Claims accessibility in both web and apps (visual and hearing technology)
  - Rentals available
- [eCampus.com](https://www.ecampus.com)
  - Allows copy & paste, search, highlight, notes
- [Chegg.com/etextbooks](https://www.chegg.com/etextbooks)
  - Web only (html5-based)
  - Search, highlight, notes
- [Kno.com](https://www.kno.com)
  - Does not allow copy & paste
  - Search, highlight, notes, flashcards

# Types of E-Books: Mainstream Fiction & Nonfiction

- These e-books are the kind of books generally sold at retailers such as Amazon or Barnes & Noble
  - Buy a dedicated device from the retailer and register it to your account
  - Download a reading app and login with your account
- Buy books from that same retailer or a retailer with compatible encryption
- The most common retailers for e-Books in the U.S. are:
  - Kindle by Amazon
  - Nook by Barnes & Noble
  - Kobo by Kobo

# E-Reading Apps (Mainstream Books)

- Each of the major e-Book retailers has free apps for both mobile devices and computers (not every platform)
  - Amazon has a PC app that is accessible to screen readers. This is a separate download from the main app
- Other mobile reading apps include
  - iBooks
  - eBooks.com
  - Stanza
- If you already have a mainstream tablet (iPad or Android), apps may be a more flexible option
- Apps for borrowing public library books
  - Adobe Digital Editions
  - OverDrive Lending Library

# Adobe Digital Editions (ADE)

- ADE is for epub compatible devices only (no Kindle)
- Software installation for PC or Mac
  - Free Adobe ID required to register the software
  - Download epub (or pdf) books from e-Book store or public library
  - When prompted, open the .acsm file using ADE (other software will not be able to unlock the contents)
  - Transfer encrypted books from computer to e-Reader via USB
  - Read books directly within the ADE software on PC or Mac
- e-Book stores use ADE to deliver purchased books
  - Barnes & Noble, Kobo, Sony (built-in to devices & proprietary software)
  - Google Play eBookstore
  - eBooks.com
  - Textbooks.com
- Public Library Lending (OverDrive) uses ADE to deliver e-Books
  - The file locks after the borrowing period expires – no late fees
  - Note: Kindle devices borrow through logon to Amazon & wireless delivery

# OverDrive Lending Library

- OverDrive also has its own apps aside from ADE for borrowing books wirelessly
  - Wireless delivery to the device
  - Uses the same encryption & expiration system as Adobe Digital Editions
  - Local library account login is required
  - Search for your local library - not all libraries offer OverDrive books
- E-Readers
  - Direct download from OverDrive is a feature on some devices
  - Not an app that you install, but included on the device
- App for E-Reader Tablets
  - Free OverDrive account required to register device (instead of Adobe ID)
  - Up to 6 devices – syncs progress & bookmarks
  - iOS, Android, Windows Phone/Tablet, PC, Mac
  - Audiobooks and videos are also available

# Types of Devices: E-Readers

- E-Readers are dedicated reading devices
- Designed to replicate the experience of reading a paper book
- E-Ink technology
  - The page looks just like a paper book with grey-scale ink
  - You have to see it to believe it
- Best for mainstream fiction & nonfiction books – text only
- Limited internet
- No apps



# Pros of E-Readers

- Less eye fatigue
  - Not like reading on a screen
  - Screen only refreshes on page turns
  - No flicker
  - No back-lighting
- Front-lit screen – the light shines down at the text
  - Some options without any light at all
- Much lighter weight than tablets
- Dedicated reading device – no distractions
- Long battery life

# Cons of E-Readers

- Very inaccessible for visual impairments
  - No audio capability at all
  - No changeable contrast settings
  - Large font sizes are available within books, but not in menus
- Do not display PDFs very well
- Text-only
- No textbook capability

# Top 3 E-Readers Currently Available

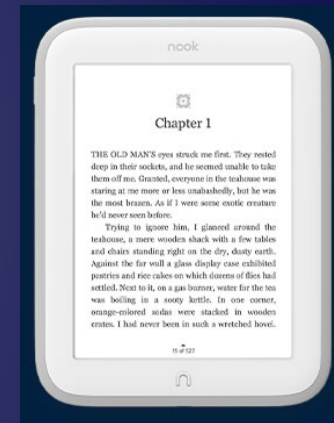
- Amazon Kindle

- Touch
- Paperwhite
- Voyage



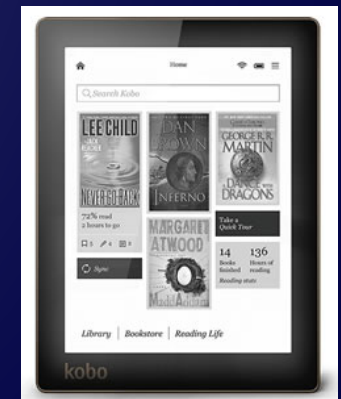
- Barnes & Noble Nook

- GlowLight



- Kobo

- Mini
- Touch
- Glo
- Aura / Aura HD
- Aura H20 (waterproof)



# Shared Features of All E-Readers

- There are minor differences that set e-readers apart from each other, but they all have these basic features in common
  - E-Ink Screen
  - 6" Screen Size (except Kobo Mini – 5")
  - Weigh 6-7 oz
  - 6-10 different fonts
  - Font sizes up to about 24pts
  - Touchscreen navigation and page turns
  - Sync across devices and apps
  - Highlighting, notes, bookmarks, and dictionary lookup

# Standout Features of Kindle E-Readers

## Cost

- \$79-\$269

## Pros of Kindle E-Readers

- Highest quality e-ink technology
  - Best contrast
  - Most responsive touchscreen
- Voyage model – page turn sensors
- Model without light is available
- Best selection / price of books
- Family library sharing

## Cons

- Not customizable
- Includes the heaviest e-Reader (Paperwhite at 7.3 oz)
- Light is adjustable but always on
- Screensaver shows either ads or random images



# Standout Features of Nook E-Readers

## Cost

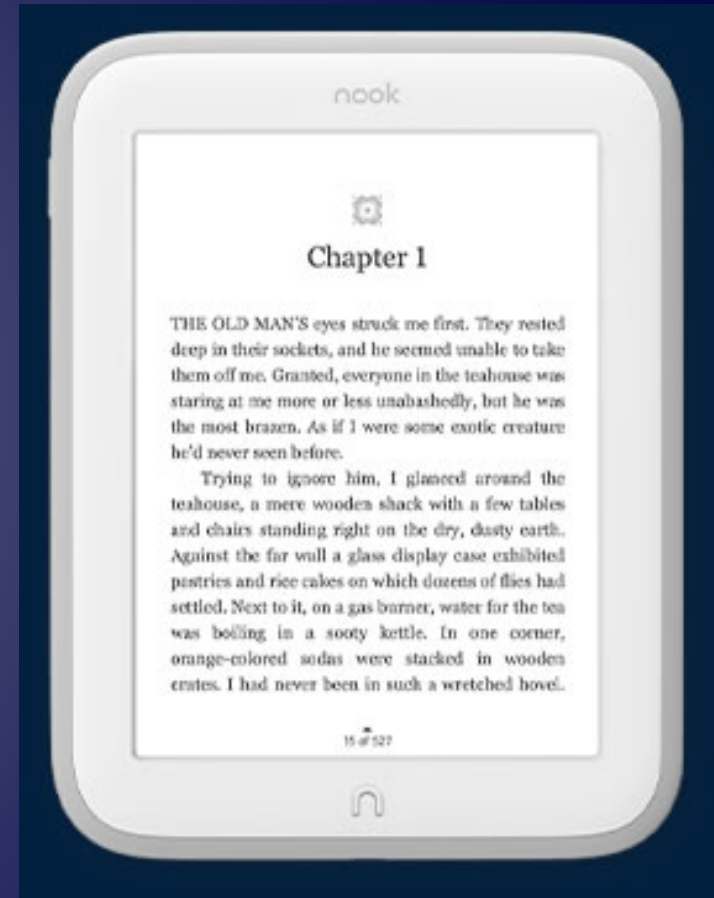
- \$119 (Comparable to the Kindle Paperwhite)

## Pros of the Nook Glowlight

- Light can be turned on /off as well as adjusted
- Progress indicator – Page of Pages
- No ads
- Simple – not a lot of catchy features
- Very hackable

## Cons

- Only one model
- Off-white case (could be a pro)



# Standout Features of Kobo E-Readers

## Cost

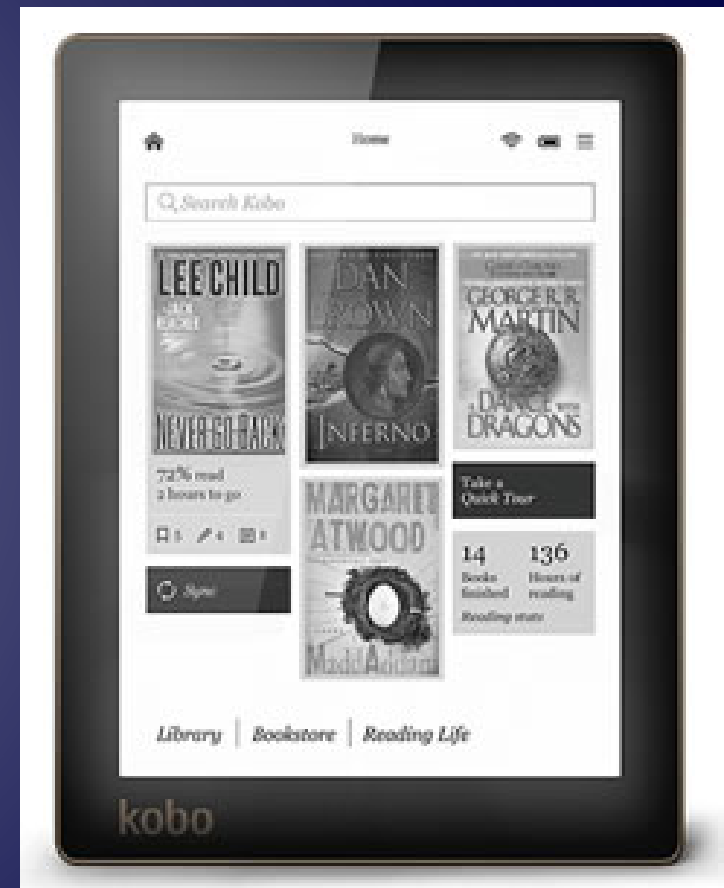
- From \$99-\$179

## Pros of Kobo E-Readers

- Light can be turned on / off as well as adjusted
- Customizable zones for page turns
- More models available
  - Without light, Smaller screen, HD & Waterproof versions
- Lightest weight e-Reader
- More fonts and font sizes, line spacing & margin settings
- Screensaver is “currently reading” book cover
- Progress: Page of Pages, Percentage or Time remaining
- Reading stats on home screen
- No ads

## Cons

- Touchscreen is sometimes unresponsive
- E-Ink screen has less contrast than Kindle
- More expensive than Kindle or Nook



# Types of Devices: E-Reader Tablets

- E-Reader Tablets are designed to be more versatile than dedicated e-Readers
  - Books (text-to-speech capability if publisher allows)
  - Audio books (human narrator)
  - Textbooks
  - Magazines
  - Videos, Music, Games
  - Apps
  - Web browsing
  - Screen sizes vary from 7-10" (compare to e-Readers at 6")
  - Weight varies from 11-22oz (compare to e-Readers at 6-7oz)
- Similar to mainstream tablets such as iPads, but more limited
  - Kindle Fire – Limited to Kindle apps
  - Nook Samsung Galaxy & Kobo Arc – Android-based with Google Play



# Pros of E-Reader Tablets

- Audio options are available
  - Text-to-speech (if allowed by publisher)
  - Audio books
  - Screen readers available (varying levels of accessibility)
- Generally more accessibility features (although limited)
- Contrast options
- Textbooks with print layout
- Can install other apps
- Color screen

Check the Text-to-Speech setting on each Amazon book page

## Product Details

**File Size:** 1346 KB

**Print Length:** 353 pages

**Page Numbers Source ISBN:** 0451417550

**Publisher:** NAL (March 4, 2014)

**Sold by:** Penguin Group (USA) LLC

**Language:** English

**ASIN:** B00DMCV160

**Text-to-Speech:** Enabled

**X-Ray:** Enabled

**Lending:** Not Enabled

**Amazon Best Sellers Rank:** #1,638 Paid in Kindle St

#11 in [Books > Mystery, Thriller & Suspense >](#)

#16 in [Kindle Store > Kindle eBooks > Mystery,](#)

# Cons of E-Reader Tablets

- More eye fatigue than E-Readers
  - Back-lit screen
  - Screen refreshes constantly
  - Like reading on a computer screen
- Glare – makes it difficult to read outdoors
- Heavier than e-Readers
- More possible distractions while reading
- May only be able to use apps from the retailer's app store (e.g. Amazon apps on Kindle Fire)
- More limited than mainstream tablets such as iPad

# Top 3 E-Reader Tablets Available

- Amazon Kindle Fire

- HD 6 & 7
- HDX & HDX 8.9



- Barnes & Noble Samsung Galaxy Tab 4 Nook

- Samsung Nook 7
- Samsung Nook 10



- Kobo Arc

- Kobo Arc, Arc 7
- Kobo Arc 7 HD, 10 HD



# Standout Features of Kindle Fire Tablets

## Cost

- \$99-\$379

## Pros of the Kindle Fire

- Magnification in menus as well as books
- Screen reader – with IVONA voice, 5 rate options
- Bluetooth keyboard or braille display capable
- Simultaneous reading and listening with Audible (have to purchase both e-book and audio book)

## Cons

- Only Apps from the Kindle app store – limited selection



# Standout Features of Nook Tablets

## Cost

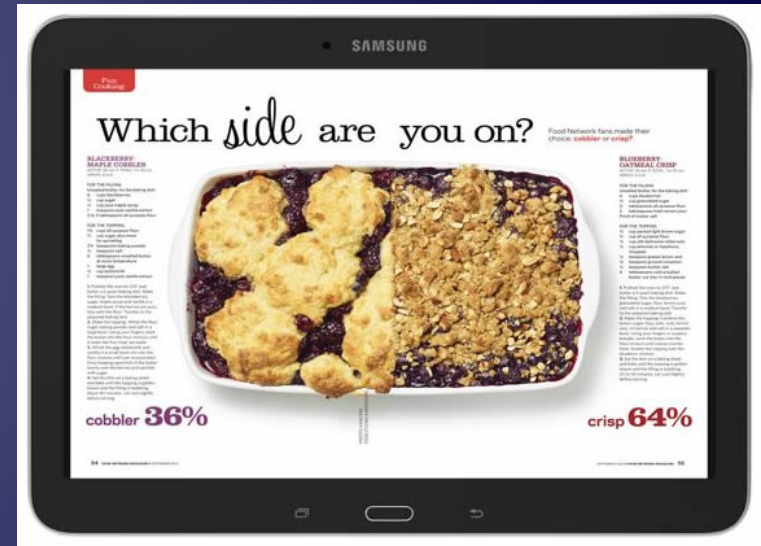
- \$179-\$319

## Pros of the Samsung Nook Tablets

- Samsung Galaxy / mainstream tablet base
- Google Play for apps
- Large font in menus
- TalkBack works (with nonstandard, limited controls)

## Cons

- TalkBack – Explore by touch does not work



# Standout Features of Kobo Tablets

## Cost

- \$139-\$399

## Pros of the Kobo Arc Tablets

- Google Play for Apps – Samsung Apps
- Some magnification in menus (not in store)

## Cons

- Only 3 fonts
- TalkBack is available, but does not read books



# Questions / Comments / Discussion

- Based on your needs or students' needs
  - What would you recommend or choose?
    - e-Reader
    - e-Reader Tablet
    - Mainstream tablet
    - Computer with browser or app
  - What features are deal breakers for you?
- What have your experiences with e-Books or e-Textbooks been?
- Do you have any tips or observations that might help others?
- Chance for hands-on with devices

# Device Product Pages

- Kindle e-Readers

- [http://www.amazon.com/dp/B00115SB16/ref=fs\\_kb](http://www.amazon.com/dp/B00115SB16/ref=fs_kb)

- Kindle Fire Tablets

- [http://www.amazon.com/dp/B00KC6I06S/ref=fs\\_far](http://www.amazon.com/dp/B00KC6I06S/ref=fs_far)

- Nook Glowlight

- <http://www.barnesandnoble.com/u/nook/379003208>

- Nook Samsung Tablets

- <http://www.barnesandnoble.com/u/nook-tablets/379004191>

- Kobo e-Readers

- <http://www.kobo.com/devices#ereaders>

- Kobo Tablets

- <http://www.kobo.com/devices#tablets>



# Reading App and Web Reader Links

## Amazon Kindle

- [Amazon Kindle Apps](#)
  - ([https://www.amazon.com/gp/digital/fiona/kcp-landing-page?ie=UTF8&ref=sv\\_kstore\\_3](https://www.amazon.com/gp/digital/fiona/kcp-landing-page?ie=UTF8&ref=sv_kstore_3))
- [Kindle for PC with Accessibility Plugin](#)
  - (<http://www.amazon.com/gp/feature.html?docId=1000632481>) (“Reading on Kindle” at the bottom)
- [Kindle Cloud Reader](#)
  - (<https://read.amazon.com>)

## Barnes & Noble Nook

- [Nook Apps](#)
  - (<http://www.barnesandnoble.com/u/nook-mobile-apps/379003593>)
- [Nook for Web](#)
  - (<https://mynook.barnesandnoble.com/index.html>)

## Kobo

- [Kobo Apps](#)
  - (<http://www.kobo.com/apps>)
- [Kobo Instant Reader](#)
  - (<http://read.kobobooks.com>)

## Other Reading Apps

- [Adobe Digital Editions](#)
  - <http://www.adobe.com/solutions/ebook/digital-editions/download.html>
- [OverDrive Lending Library](#)
  - <https://app.overdrive.com/>

# Other e-Book Resources

## General Info on E-Readers – Blogs, Reviews, News

- The eBook Reader.com
  - <http://www.the-ebook-reader.com/>
- MobileRead
  - [www.mobileread.com](http://www.mobileread.com)

## Reviews and Comparisons of Various E-Readers

- Top Ten Reviews eBook Reader Comparisons
  - <http://ebook-reader-review.toptenreviews.com>
- CNET Best e-book readers of 2014
  - <http://www.cnet.com/topics/ereaders/best-e-book-readers/>
- National Federation of the Blind Kindle Fire HDX Review
  - (<https://nfb.org/blog/atblog/kindle-fire-hdx>) (2013 Model)

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