

# *Creating and Using Digital Textbooks in the Classroom*

Jim Johnson

Director of Instructional & Information Technology Services

Bayh College of Education

Indiana State University



# Why Use Digital Textbooks

- Cost of paper textbooks getting too high
- Ability to customize books for each end-user
- Advanced tools such as highlighting, word definition, text-to-speech, etc.
- Ability to edit and update books without any cost or at a lower cost

# What Devices Can Educators Use?



- Amazon's Kindle Series
- Barnes & Noble's Nook Series
- Apple's iPad, iPhone and iPod Touch
- Various Android-based device tablets and phones that can run e-reader software

# What Software Is Used?

- Two popular e-reader operating systems are:
- Apple iOS
- Android

Both operating systems can run multiple e-reader software packages such as Kindle, Nook, Borders and free e-book programs.

# Current Offerings of E-readers



	Kindle Fire	iPad 2	Nook Color
Price	\$199	\$499-829	\$249
Thickness	11.4mm	8.8mm	12mm
Operating system	Android 2.3	iOS	Android 2.2
Browser	Amazon Silk	Safari	Android (customized)
Weight	414g	601-613g	448g
Display size	7 inches	9.7 inches	7 inches
Resolution	1024 x 600	1024 x 768	1024 x 600
Processor	1GHz TI OMAP 4 (dual-core)	1GHz Apple A5 (dual-core)	800MHz Cortex-A8 (single-core)
Memory	512MB	512MB	512MB
Storage	8GB	16/32/64GB	8GB
Camera (main)	No	0.7 megapixels, 720p	No
Camera (front)	No	0.3 megapixels	No
Wi-Fi	802.11b/g/n	802.11a/b/g/n	802.11b/g/n
Cellular	No	GSM/HSPA and CDMA options	No
GPS	No	On 3G models	No
Bluetooth	No	2.1 + EDR	No
Max run time	8 hours	10 hours	8 hours

Source: <http://osxdaily.com/2011/09/28/compare-ipad-2-kindle-fire/>

# Creating and Managing E-Books

- Software titles such as Calibre or Lulu.com will allow anyone to create a book and even distribute, share and sell them.
- Sites like Flat World Knowledge are allowing experts to share their digital textbooks

# Calibre E-Book Manager

Calibre can import PDF, ePub and even search multiple sources for free or other e-books

The screenshot displays the Calibre E-Book Manager interface. The main window is titled 'calibre - || Calibre Library ||'. A 'Get Books' dialog box is open, showing search results for the query 'dracula'. The dialog box has a search bar with the query 'dracula' and a 'Search' button. Below the search bar is a list of stores with checkboxes and heart icons. The search results are displayed in a table with columns: Cover, Title, Price, DRM, Store, and Dc. Af. The results list several editions of 'Dracula' by Bram Stoker, including 'The new annotated Dracula', 'Dracula, Bram Stoker, Chaz Brenchley', 'Dracula: Bram Stoker, Glennis Byron', 'Dracula, Pauline Francis, Bram Stoker', 'Dracula, Tania Zamorsky, Bram Stoker, Jamel Akob', 'Dracula, Bram Stoker', 'Dracula's Guest, Bram Stoker', and 'Dracula (French Edition), Bram Stoker'. The prices are all \$0.00. The DRM icons are question marks, and the stores are Google Books Unknown and Amazon Kindle Kindle. The dialog box also has a 'Close' button and a 'Books: 108' indicator.

calibre version 0.8.24 created by Kovid Goyal

Jobs: 0

# Lulu.com

Provides a method to publish and sell your e-book even on iTunes

The screenshot displays the Lulu.com website interface. At the top, there is a search bar with 'All Products' selected, a 'GO' button, and a 'Help' link. Navigation links for 'Log In', 'Sign Up', and 'Cart' are visible. A main navigation bar includes 'Publish', 'Buy', 'Services', 'My Lulu', and 'Connect'. Below this, the 'eBooks' section is highlighted. A large banner features the text 'Upload Once, Reach Millions' and 'Publish across multiple devices—absolutely free.' with a yellow button that says 'I'm ready to publish >'. A circular badge on the right of the banner reads 'ePubs made NEW & FREE ePUB Converter'. Below the banner, a horizontal flowchart titled 'How to publish your eBook:' shows six steps: 'Learn More', 'Upload a File', 'Create a Cover', 'Describe Your eBook', 'Pick a Price', and 'Promote Your eBook'. A red callout above the 'Pick a Price' step states 'For a limited time, keep 90% of your revenue.' To the left of the flowchart is a vertical sidebar with icons and labels for various book categories: Books, eBooks, Photo Books, Calendars, Cookbooks, Poetry Books, Yearbooks, Wedding Books, and Portfolios. Below the sidebar, a section asks 'Are you a publisher with 25 or more titles?' and mentions publishing to the iBookstore and Barnes and Noble NOOK. At the bottom, a 'Learn More' button is positioned above a list of steps: 'Upload a File', 'Create a Cover', 'Describe Your Book', 'Pick a Price', and 'Promote Your Book'. To the right of this list is a section titled 'What are eBooks?' with a paragraph explaining that eBooks are electronic, downloadable books accessible on various devices. Below the text is an illustration of a woman sitting and reading a large eBook on a device. At the very bottom, the word 'Think' is partially visible.

# Other Publishing Methods

- Any program that create a PDF or ePub can be uploaded to an e-reader. Most e-readers use these common formats

# Publishers Providing Free Textbooks

- [CK-12.org](http://CK-12.org) – Flexbooks
- [Digital Textbook Initiative](http://DigitalTextbookInitiative.org) – State of California
- [Flat World Knowledge](http://FlatWorldKnowledge.com)

The screenshot shows the CK-12.org website interface. At the top, there's a navigation bar with 'Browse All FlexBooks' and 'Free SAT Prep' links. Below that is a search bar. The main content area is titled 'CK-12 FlexBooks Library' and features a grid of subject categories: Mathematics (35), Science (35), and Other Subjects (23). Each category has a list of specific textbook titles and levels, such as 'Math - Grade 8 Student Edition SE' and 'Earth Science - HS SE'. On the right side, there are promotional banners for 'Free SAT Prep' and 'Open Content Calculator'.

The screenshot shows the Flat World Knowledge website. The header includes the logo and navigation links for 'Our Catalog', 'Educators', and 'Students'. The main heading is 'Browse Our Free and Open Textbooks'. Below this, there's a search bar and a paragraph stating the site's commitment to rigorous standards. The content is organized into five categories, each with a representative image and a 'Browse Books' link:

- Business & Economics**: 42 books. Description: Flat World was founded on books for the B-school. You'll love our authors and our books with titles ranging from Accounting to Marketing.
- Humanities & Social Sciences**: 19 books. Description: Our MIYO customization platform and reasonable price points make this our fastest growing publishing area. Check out our super star authors and great texts.
- Science**: 5 books. Description: We are publishing as fast as we can for the sciences. The demand is high, and you'll see why from the great authors and titles we have listed here today.
- Professional & Applied Sciences**: 1 book. Description: Books for courses like the "Freshman Experience" and "Career Success" - free online and fully customizable. Finally, perfect books.
- Mathematics**: 2 books. Description: Kicking off Mathematics with Algebra texts, online homework and testing software, we're quickly progressing to Calculus and other math courses.

# Trends in Digital Textbooks

- Keep watching as more publishers support digital textbooks and more states adopt them
- Open Source Textbooks like free software will become more popular and available.

The screenshot shows the Barnes & Noble website's eTextbooks section. At the top, there's a navigation bar with 'BARNES & NOBLE BN.com', a search bar, and a shopping bag. Below the navigation, there's a 'Browse Textbooks' sidebar with categories like Home, New Textbooks, Used Textbooks, Rental Textbooks, eTextbooks, and Sell Your Textbooks. The main content area features a 'SEARCH FOR eTEXTBOOKS' section with a search bar and a 'FIND TEXTBOOKS' button. Below this, there's a 'Discover eTextbooks' section with a 'Instantly Download Your eTextbook' button and a 'No Heavy Books to Carry' button. At the bottom, there's an 'Introducing NOOKstudy' section with a '7-DAY FREE TRIAL' button and a 'Try Before You Buy' button.

The screenshot shows the Open Text Book website. The header features the title 'Open Text Book' and the tagline 'A registry of textbooks that anyone can access, reuse and redistribute'. Below the header, there's a navigation bar with 'HOME', 'ABOUT', 'PARTICIPATE', and 'REPOSITORY'. The main content area is divided into three sections: 'P2PU', 'High School Planning its own Textbooks', and 'Book Sprint'. The 'P2PU' section includes a paragraph about the initiative, a link to a blog post, and a comment section. The 'High School Planning its own Textbooks' section includes a paragraph about the school's initiative, a link to a blog post, and a comment section. The 'Book Sprint' section includes a paragraph about the process and a link to a blog post. On the right side, there's a 'Subjects' sidebar with a list of subjects and a 'Browse all' section with a list of projects.

# E-Reader Demonstration

Pass around the e-readers and  
feel free to ask questions

# Questions & Thank You!

If you wish to participate in any of my research please contact me at:

Jim Johnson, Director of IITS

Email: [jim.johnson@indstate.edu](mailto:jim.johnson@indstate.edu)

Phone: 812-237-2921

