Enabling Smart Media for Digital Publishing in Education

Bill McCoy
Executive Director
International Digital Publishing Forum (IDPF)





 IDPF mission: foster an open, global ecosystem for digital publishing ePUB

Based on web standards





??

Digital Book

??

JOHN SKELTON. Circa 1460–1529.

There is nothynge that more dyspleaseth God, Than from theyr children to spare the rod.¹

Magnyfycence. Line 1954.

He ruleth all the roste.² Why Come ye not to Courte. Line 198.

In the spight of his teeth.³ Cols

Colyn Cloute. Line 939.

He knew what is what.4

Line 1106.

By hoke ne by croke.⁵

Lìne 1240.

The wolfe from the dore.

Line 1531.

Old proverbe says, That byrd ys not honest That fyleth hys owne nest.⁶

Poems against Garnesche.

JOHN HEYWOOD. Circa 1565.

The loss of wealth is loss of dirt, As sages in all times assert; The happy man's without a shirt.

Be Merry Friends.

1 He that spareth the rod hateth his son. — Proverbs xiii. 24.

They spare the rod and spoyl the child. — RALPH VENNING: Mysteries and Revelations (second ed.), p. 5. 1649.

Spare the rod and spoil the child. — BUTLER: Hudibras, pt. ii, c. i. l. 843.

² Rule the rost. — Heywood: Proverbes, part i. chap. v.

Her that ruled the rost. — THOMAS HEYWOOD: History of Women.

Rules the roast. — Jonson, Chapman, Marston: Eastward Ho, act is so. 1. Shakespeare: 2 Henry VI. act is sc. 1.

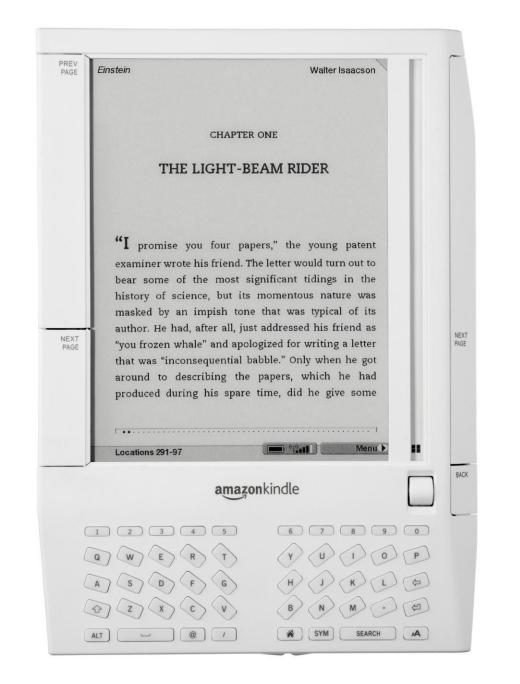
³ In spite of my teeth. — MIDDLETON: A Trick to catch the Old One, act i. sc. 2. FIELDING: Eurydice Hissed.

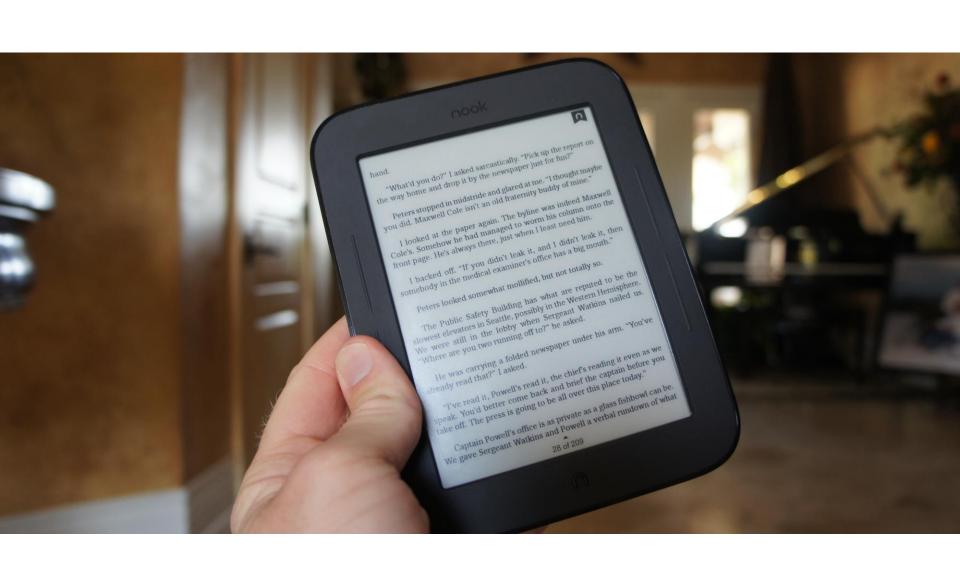
4 He knew what 's what. — BUTLER: Hudibras, part i. canto i. line 149.

⁵ In hope her to attain by hook or crook. — Spenser: Faerie Queene, book iii. canto i. st. 17.

6 It is a foule byrd that fyleth his owne nest. — Heywood: Proverbes, part ii. chap. v.

7 The Proverbes of John Heywood is the earliest collection of English colloquial sayings. It was first printed in 1546. The title of the edition of 1562 is, John Heywoodes Woorkes. A Dialogue conteying the number of the effectual proverbes in the English tounge, compact in a matter concernyage two maner of Maryages, etc. The selection here given is from the edition of 1874 (a reprint of 1598), edited by Julian Sharman.





Dear Jennifer,

Kindle is a revolutionary reading device, and we're

Typeface regular condensed sans serif

Line Spacing small medium large

Words per Line fewest fewer default

Text-to-Speech turn on

Screen Rotation













??

Smart Media

??

Anywhere, on any Device

ooks are now available on all kinds of devices























Usable Online and Offline



and



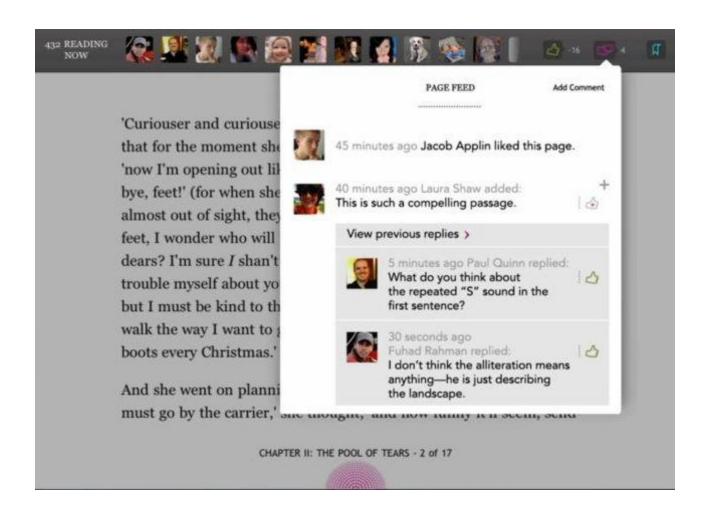
Interactive, Gamified Experiences







Socially Consumed



Created and Remixed by Students and Teachers





How can we structure our content to enable Smart Media?

Three fundamental ways to deliver content experiences

files, apps, and websites

Options for content in 1993...

Files

Apps















Options for content in 1997...

Files

Apps

























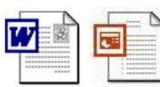




Today's Landscape...

Files

Apps



























The Open Web Platform

Files

Apps



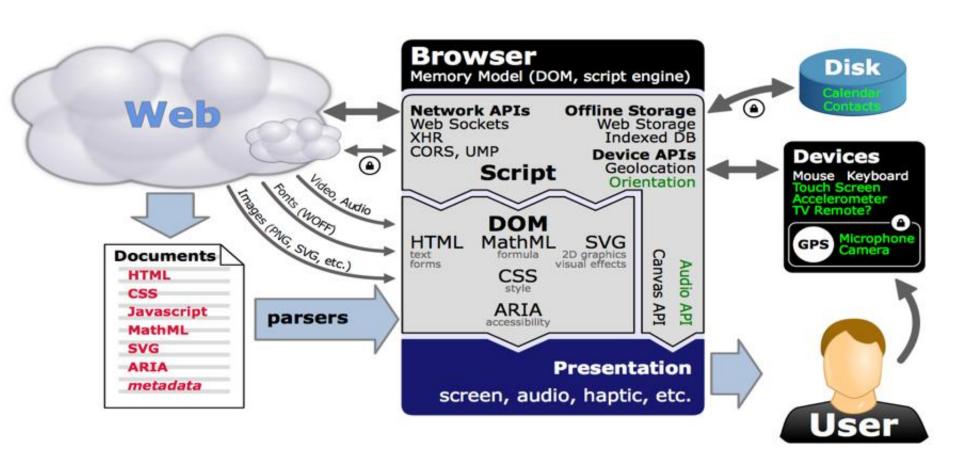




HTML



The Open Web Platform Technology "Stack"



Open Web Platform Specifications

- HTML 5
- CSS 2.1
- CSS 3 Selectors
- CSS 3 MediaOueries
- CSS 3 Text
- CSS 3 Backgrounds and Borders
- CSS 3 Colors
- CSS 3 2D
 Transformations
- CSS 3 3DTransformations
- CSS 3 Transitions
- CSS 3 Animations
- CSS 3 Multi-Columns
- CSS Namespaces

- SVG 1.1
- WAI-ARIA I.0
- MathML 2.0
- ECMAScript 5
- 2D Context
- WebGL
- Web Storage
- Indexed Database
- Web Workers
- Web Sockets Protocol/API
- Geolocation
- Server-Sent Events
- Element Traversal
- DOM Level 3
 Events
- Media Fragments

- XMLHttpRequest
- Selectors API
- CSSOM View Module
- Cross-OriginResource Sharing
- File API
- RDFa
- Microdata
- WOFF
- HTTP I.I part I to part 7
- TLS 1.2 (updated)
- IRI (updated)
- • •





EPUB beyond HTML5

- Specifies minimum required functionality (profile of Web Stds.) for
 - Global language support
 - CSS layout and fonts
 - Core media types
- Defines additional capabilities for content to be structured, semantically enhanced, interoperable, offline-usable
 - Packaging
 - Logical structure and navigation
 - Metadata (publication- and element-level)

EPUB 3 beyond EPUB 2

- Styling & layout improvements for reflow content
 - CSS 2.1 + Select CSS 3 Modules
 - Embedded fonts
 - Alternate stylesheets (day/night, etc)
 - MathML
- Fixed-layout content
 - Pages via CSS, SVG, images
- Interactivity and rich media
 - Scripting support
- Global Language support
- Accessibility support

Growing Industry Support for EPUB 3

















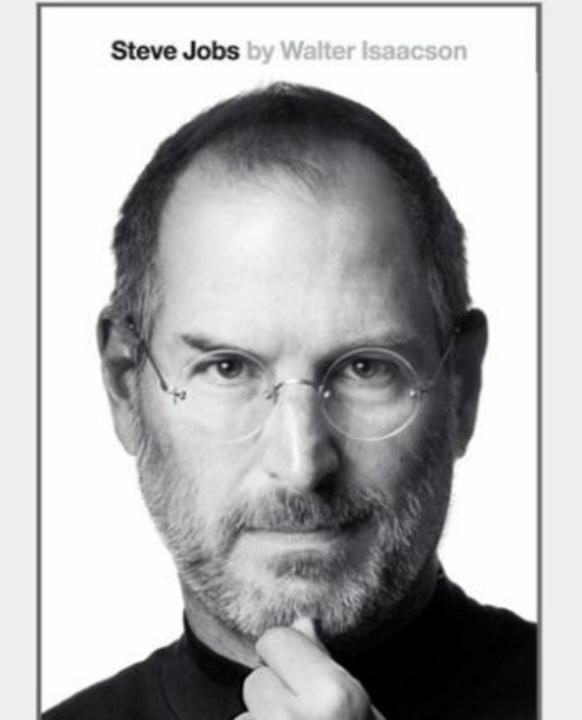












CARACHRIC .

the professionals."

For Jobs, belief in an integrated approach was a matter righteousness. "We do these things not because we are control freaks," he explained. "We do them because we want to make great products, because we care about the user, and because we like to take responsibility for the entire experience rather than turn out the crap that other people make." He also

















Thank You!

- Bill McCoy
 - bmccoy@idpf.org
 - @billmccoy