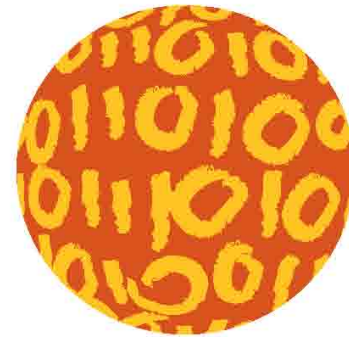


benetech

TECHNOLOGY
SERVING HUMANITY



Social DRM for Accessibility

W3C eBooks Workshop



How Do People with Print Disabilities Read?

- Standards



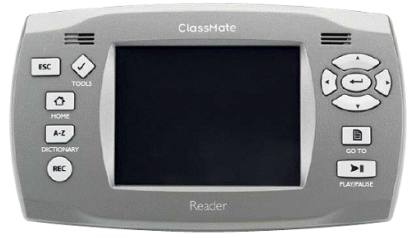
ePUB





How Do People with Print Disabilities Read?

- Hardware - specialized





How Do People with Print Disabilities Read?

- Hardware - mainstream





How Do People with Print Disabilities Read?

- Software





Student Videos

<http://www.youtube.com/watch?v=sUMmzi3nmig>



Bookshare Web Reader Demo

- Based on IDPF's open source Radium project
- Supports EPUB 3
- Uses precursor to Web Speech API in Chrome



How Mainstream DRM Hurts Accessibility

- Text needs to be readable by specialized and niche technologies that can deliver content in alternative modes, such as TTS or digital braille formats
- Packaging needs to be modifiable, so that accessible alternatives can be added by educators, disability support services, volunteers, parents and others to existing content
 - Images (image descriptions, SVG/tactile graphics, alt & longdesc)
 - Math (MathML)
 - Pronunciation (SSML)



Bookshare (a Benetech project)

- World's largest library of accessible eBooks for people with print disabilities
 - Print disabilities include vision impairments, dyslexia, cerebral palsy
 - Over 175K titles
 - Over 230K members
 - DAISY text/audio, BRF, MP3 and now accessible EPUB 3
 - Over 200 publisher relationships
 - Almost all give us worldwide rights
 - Many provide us with EPUB files
- Bookshare uses Social DRM



Our Seven Point Digital Rights Management Plan

1. Qualified Users
2. Contractual Agreement
3. Copyright Notice
4. Encryption
5. Fingerprint
6. Security Database
7. Security Watch Program

https://www.bookshare.org/_/aboutUs/legalInformation



Benefits of Social DRM

- Accountability for Bookshare members
- Ability to Bookshare to monitor compliance and meet our publisher obligations
- Users with disabilities can use Assistive Technologies which meet their **needs** and they **know how to use**
- Ability for educators, parents, volunteers and disability support services to add image descriptions, MathML and links to SVG alternatives for generating tactile graphics
 - Poet from DIAGRAM Center
 - Over 15K image descriptions added by volunteers
 - Toby from DAISY Consortium



My Asks

- Consider Social DRM

Other

- Schema.org accessibility proposal <http://a11ymetadata.org>
- Educate yourself about:
 - Web Speech API by W3C Community Group
 - `longdesc` while we transition to `aria:describedAt` or `epub:describedAt`
 - Image accessibility <http://diagramcenter.org>
 - Radium <http://radium.org>