# Is EDUPUB for Real?

Paul Belfanti VP, Production, Manufacturing & Content Architecture Ascend Learning March 10, 2017

**EDRLab EPUB Summit 2017** 









#### What is the EDUPUB Alliance?

- A global community for focused coordination of ongoing work among multiple standards organizations and their stakeholders (originally IDPF, IMS Global, W3C, BISG)
- Charged with creating a lightweight superstructure to help ensure that existing widely-adopted standards mesh and meet requirements of next-generation learning content
- <u>EDUPUB</u> = Open Web Standards (inc. next-gen Portable Documents) + Educational Connectivity









## The **EDUPUB** Deliverable

a comprehensive model for the interchange and deployment of educational content

based on the Open Web Platform

expressed as an integrated set of specifications including EPUB 3, LTI, and other emerging standards



# **EPUB-centric Lens on Educational Content**

#### Equip EPUB 3 with everything needed for EDU content:

- Integrate existing IMS standards (LTI)
- Deliver general EPUB capabilities needed for EDU (annotations, widget API, discrete entities)
- Develop EDU-semantic-enhanced profile of EPUB 3

#### **EPUB** adopters in general benefit:

- EDU content pushes the envelope of required capabilities
  - Interactivity
  - Connectivity
  - Complex information design
  - A11Y requirements



## **Global Utility is Essential**

IDPF motto: a11y and i18n = non-negotiable

Different regions/stakeholders have different needs:

- Learning paradigms/styles
- Layout and Styling requirements
  - Reflowable vs Fixed Layout
  - Horizontal vs Vertical Layout
- Broad LMS integration supported (but not required)

EDUPUB must embrace and support these variances



## **Reality: Limited Adoption**

#### Reasons:

- Publishers prefer rich content distribution via proprietary white label platforms
- 3<sup>rd</sup> Party Readers lack support for rich, interactive content
- Unclear ROI to justify investment
- Further development halted due to ongoing EPUB 3.1 efforts and W3C-IDPF combination process



# **Publisher Adoption**

#### **Pearson**

- 4600+ titles converted
- US Higher Ed and School
- Canada
- Internal interchange format for ingest to proprietary LMS
- Standard distribution format for 3<sup>rd</sup> party channels
- Core component of Accessibility standard going forward

#### **Houghton Mifflin Harcourt**

- Began with EPUB3 in 2012; since 2015 all core digital components are delivered as EPUB3
- Over 1000 titles in flight in 2017; beginning to incorporate EDUPUB specs to support features including content launching, analytics, interactions and annotations
- Internal eReader system being developed to provide early support for a number of services
- Delivery to 3rd party platforms
  - via eReader apps for offline
  - via cloud-based eReaders for 3rd party LMSs via IMS Common Cartridge

# **Publisher Adoption**

#### **Macmillan Learning**

- Over 150 EPUB for Education titles
  - Sole go-forward format for digital distribution (no ePDF)
  - Fully accessible
- Standard format for 3<sup>rd</sup> Party distribution (Amazon, etc.)
- Enhanced versions delivered through LaunchPad LMS
  - VitalSource is ebook platform

#### **Ascend Learning**

- 120 titles since August 2016
- Go-forward standard for all 3<sup>rd</sup> party ebook distribution
- Core component of Content Management roadmap



## **VitalSource**

- Started in 1994, first delivery in 1999 with custom XML
- Now deliver XML, PDF, and EPUB... migrating all XML to EPUB
- Early adopter of EPUB2 and involved in the EPUB3 workgroups (and board member of IDPF)
- First customer shipment of EPUB3 7 years ago
- Major provider of LTI integration to education customers
- Early promoter of EDUPUB

#### Inventory

- 1.25+ million titles
- 40% are EPUB
- 1000+ publishers

During 2016 they had 5,714,178 users in 241 countries and territories, that opened 250,533 different books a total of 234,959,157 times (46,512,953 of those times were thru an LTI integration), where they viewed 2,391,882,932 pages

Most used	EPUB	PDF
Top 25	24	1
Top 50	46	4
Top 100	77	23
Top 250	141	109
Top 500	233	267



## VitalSource European Users in 2016

4,500	Italy	33,172
10,122	Latvia	1,807
2,634	Lithuania	1,110
1,588	Luxemborg	2,369
2,199	Malta	1,027
3,434	Netherlands	39,370
7,254	Poland	12,472
480	Portugal	4,926
4,047	Romania	5,053
47,802	Slovakia	1,467
59,364	Slovenia	940
23,562	Spain	23,663
4,102	Sweden	8,733
14,022	UK	273,006
	10,122 2,634 1,588 2,199 3,434 7,254 480 4,047 47,802 59,364 23,562 4,102	10,122 Latvia 2,634 Lithuania 1,588 Luxemborg



# So, Is EDUPUB Real? YES! But it needs to get Real-er



### **Proposal: Reboot EDUPUB**

#### **EPUB for Education in 2017+**

Relaunch "EDUPUB Alliance" under the auspices of W3C and in close collaboration with IMS Global

- Rebase EPUB for Education profile off EPUB 3.1
  - Accessibility features of 3.1 inherited as a MUST
- Finalize vocabularies
- Tie in LTI/Caliper integration
- Pursue Readium baseline reference implementation

Focus on integration frameworks, including aligning internal infrastructures

- Educate publishers on how to prepare content
- Guide Reader developers how to architect platforms

Execute through WG within W3C Publishing Community Group

# **Thank You**

pbelfanti@ascendlearning.com

https://twitter.com/soxionado

https://www.linkedin.com/paul-belfanti



# **Appendix**



# Benefits of next-generation learning content The Publisher

- Achieve economies-of-scale in:
  - o design
  - development
  - o distribution
- Greater sourcing flexibility
- Enable consistency of presentation and functionality
- Ensure highest quality across multiple platforms and devices
- Avoid overhead from needless output variants
- Drive product/service innovation



# Benefits of next-generation learning content The Platform Provider

- Develop features and support based on a known,
   consistent content format
- Increased volume of educational content from publishers
- High quality products expand markets for eBooks and other learning content





# Benefits of next-generation learning content The Educator

- Content is easily:
  - o integrated with LMS and other services:
    - assessments, outcomes
    - teacher-student, peer exchanges (annotations)
    - analytics
  - trackable through metadata-driven services to enable adaptive learning, efficacy reporting
  - repurposed by teachers
- Proprietary vendor solutions are avoided:
  - Content is easily retrieved from multiple sources
  - Content can be **seamlessly deployed** on multiple devices and platforms
- Affordable



# Benefits of next-generation learning content The Learner

- Responsive to the Learners:
  - learning style
  - o personal preferences
  - ability/disability
- **Richer** learning experiences (rich media, interactivity)
- Adaptability and accessibility improving learning outcomes
- Faster subject mastery and increased retention
- Flexible: use in both classroom/off-campus and online/offline environments, on mobile devices and PCs
- Affordable

