

# **Accessibility Workshop**

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#### **Agenda**



- Importance of ePub to Learning
- Accessibility Progress since EDUPUB1
- Introduce our accessibility panelists
- Panel Discussion and questions

### Importance of ePub to Accessible Learning



- Leverages Open Web Technology designed to support accessibility standards now and in the future used in browsers
  - Now: WAI-ARIA, HTML5
  - Future World Wide Web Consortium
    - SVG2
    - Canvas
    - ARIA ePub structural semantics
    - ARIA Graphics
    - IndieUI device Independence
    - Indie UI Context
    - Cognitive Accessibility Advancements
  - Future
    - Accessible test assessment
    - Accessible shared annotations and assessments across your cloud
    - Personalized access essential for cognitive impairments
    - Inclusive access to Digital Math
- Accessible book solution that will operate on mobile devices as well as desktop
  - Mobile devices are becoming the preferred device for access to ICT by people with disabilities

### **Accessibility Efforts since EDUPUB1**



- LRMI and Accessibility Integration into EPUB3
  - New <u>Draft</u> by Matt Garrish, Madeleine Rothberg, and Michael Jay integrating Accessibility Meta from schema.org and LRMI packaging meta data into ePub
- Readium Implementation of an accessible Reading System
  - Talks now with members to produce a white paper accessibility guide for ePub reader developers
- Open Annotations Markus Gylling W3C Digital Publication Interest Group Conducted accessibility review within the Digital Publishing Interest Group
- Forum on Assessment/STEM Rich/Mark Hakkinem
  - Discussing Establishment of WAI-ARIA subteam to support semantic assessment (QTI, etc.)
  - Discussed possible addition of STEM-related graphics for ARIA graphics module
  - ETS will commit resources

## **Accessibility Efforts since EDUPUB1 (cont.)**



- W3C WAI-ARIA Standards effort
  - WAI-ARIA 1.0 now advanced to Proposed Recommendation
  - Addition of aria-describedat for Diagram project in ARIA 1.1
  - Development of a new module on ePub structural semantics
  - Development of a new module on graphic semantics (Including STEM)
- Accessibility Meta data from schema.org is also being harmonized into Access4All from IMS along with APIP
- W3C SVG 2.0 now supports WAI-ARIA and keyboard support
  - Greater Integration with HTML5 (Events, scripting support, etc.)
  - New User Agent Implementation Guide to be done for SVG
- IBM/IDPF Announcement: ePub going to broader adoption in enterprise
  - Mobile
  - Cross-platform, rich Web accessibility
  - Interactive documents portable across your social cloud

Advantages of ePub are too compelling Like IBM, industry should make the switch

## **EDUPUB2 Accessibility Discussion Panelists**



- Gerardo Capiel VP Of Engineering, Benetech
- Anastasia Cheetham, Software Developer, Inclusive Design Research Center
- Matt Garrish, Electronic Publishing and Accessibility Consultant
- Mark Hakkinen, Researcher ETS
- Rock Mathis, VP Architecture Pearson Education
- Madeleine Rothberg, Project Director WGBH NCAM
- Christen Vinten-Johansen, Manager, Accessibility Team, Teaching and Learning with Technology, Penn State University
- Paul Schroeter, Director of Content Operations, CourseMart

#### **Panel Main Topic Discussions**



- Discuss Accessibility and innovative Assessment/STEM and ePub: Mark Kakkinen
  - Discuss Use Cases
  - widget library
  - APIP that brings in TTS Assessment
- Math Accessibility: Gerardo Capiel
  - Discuss the current work under way and how can get involved.
  - Discuss Google Math spoken rendering add-on for Readium.
  - Discuss MathJax conversion to SVG
  - Discuss MathML embedding in SVG renderings and discussions with Freedom Scientific and MathJax people on how best to do this.
- A11y Metadata next steps
  - Driving new a11y meta data adoption of schema.org, Madeleine Rothberg, Gerardo Capriel,
    Matt Garrish
  - APIP Integration -
  - Authoring Tools and OER Authoring Tools Anastasia Cheetham
  - LRMI and A11y metadata integration (Madeleine, Matt Garrish)