Annotation as a Tool for Accessibility for Blind and Vision Impaired Students

http://tinyurl.com/annotation4a11y
Annotation can be a powerful tool for addressing accessibility of non-textual content on the web and in eBooks
How Blind & VI Students Read

- Videos of blind students reading
  - http://www.youtube.com/watch?v=fdxL88jXQjE
  - http://www.youtube.com/watch?v=ho-y-5qzWa0

- Bookshare Web reader

- Read2Go

- Kindle
  - http://www.youtube.com/watch?v=fRY7pAa6a_o
Visual Content is Challenging

- Images tend to lack proper descriptions
- Mathematics often rendered via images
  - MathML has poor adoption by web browsers and reading systems
- Video description has even less support
Current State

Blind and vision impaired students often require support to access the knowledge provided by non-textual elements

- Disability Support Services (DSS) offices in Higher Ed
- Teachers and aides
- Parents
- Friends

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Disparate Enabling Tools

- Poet
- YouDescribe
- WebVisum

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Poet – Image Description Tool

http://diagramcenter.org/development/poet.html
YouDescribe – Video Description

Video can be paused for a describer to record a verbal description

http://youdescribe.ski.org
WebVisum – Firefox Add-on

http://www.webvisum.com/
Requirements for Annotations

● Accessible user experiences

● Support for granular image annotation

● Annotations in HTML and MathML markup

● Mechanism to request annotations from sighted users

● Metadata to identify the annotations as alternatives

● Mechanism for original publishers to query, analyze and pull-in "crowdsourced" descriptions and transcriptions

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Conclusion

- Annotation can be a powerful tool for addressing accessibility of non-textual content on the web and in eBooks
- It’s happening today with disparate tools
- We need a unified and standard mechanisms, so that the efforts of a few “Good Samaritans” can have broader impact
- Help move this vision forward at the Dev-Hack Day

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