

eBooks: Great Expectations for Web Standards

Position Statement

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I am a Professor of Computer Science at Monash University, Australia and lead the Adaptive Diagrams and Documents Lab.

Our view is that eBooks should not be digital copies of print books but instead that we have an opportunity to radically rethink what we mean by a “book. “

Over the last couple of years we have been exploring the new capabilities that electronic documents offer for scientific documents. These include:

- *Dynamic content*: Electronic documents can contain interactive diagrams, videos, RSS feeds etc.
- *Customised content*: The content can be customized, based on the interests and needs of the viewer.
- *Navigation*: New kinds of navigation (not just search & links)
- *Responsive presentation*: Documents can be viewed on a wide variety of electronic and print devices with very different characteristics and capabilities. The document’s presentation should automatically adapt to take into account viewing device characteristics while preserving the basic layout and style.
- *Accessibility*: Better support for blind and vision-impaired users to access on-line material including graphics.
- *Collaborative, continuous authoring*: Electronic documents allow collaborative authoring on a scale we have never seen before. Furthermore, documents can now be annotated and modified throughout their lifetime.

I would like to attend the workshop in order to explore what eBooks could be and to identify missing technologies that are required to make this happen.

My research is in automatic layout techniques for responsive document layout, HCI, information visualization and accessibility. I am particularly interested in automatic document layout and have developed automatic layout algorithms for table layout and float placement.