

Texas ETD Association
ETD 2010 Pre-conference Workshop
Innovation vs. Preservation -- Together



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Key Concepts

- ◆ Computational thinking
- ◆ Epublishing, DLs
- ◆ Formats, standards, multiple versions
- ◆ Core, appendices
- ◆ Take control of your portfolio for the long term



Computational Thinking

- ◆ Computer science, related disciplines
- ◆ NSF CPATH: Living In the KnowlEdge Society (LIKES), AP CS
- ◆ 1) algorithms, automation, problem solving, programming
- ◆ 2) games, graphics, interaction, virtual environments/reality
- ◆ 3) knowledge, information, data (sets, bases), representation, structure, organization, multimedia, hypermedia
- ◆ 4) modeling and simulation
- ◆ Methods, tools, and techniques for scholarship and publishing

Epublishing, Digital libraries

- ◆ Research takes shape when documented
- ◆ Research includes communicating results
- ◆ Graduates should be prepared for future work with ePublishing and digital libraries
- ◆ Why not take advantage of latest methods?

Formats, Standards, Multiple Versions

- ◆ Formats: documents, files, websites, packages/collections, media
- ◆ Multimedia: AVI, JPEG, MP3, MPEG, TIFF
- ◆ Docs: Word, XML, PDF, LaTeX, Unicode
- ◆ Have both original and a standard form

Core, Appendices

- ◆ Thesis on Authorware for multimedia
- ◆ Dissertation on chemicals in SGML, VRML
- ◆ Main part of work, preserved
- ◆ Appendices, preserved as much as possible
- ◆ Supplemental files, with original and std versions
- ◆ Packaging preserving links (HTML5), provenance

Take Control for Long Term

- ◆ Authors should understand preservation
- ◆ Authors then have best chance to aid it
- ◆ Education and economics point to authors
- ◆ Have your cake and eat it too:
communicate innovatively and preserve too

Summary

- ◆ Computational thinking
- ◆ Epublishing, DLs
- ◆ Formats, standards, multiple versions
- ◆ Core, appendices
- ◆ Take control of your portfolio for the long term





Share your innovative research for the long term !

Supplemental slides

For debate questions

Education

- ◆ Curriculum
 - ◆ <http://www.dlcurric.vt.edu>
- ◆ ETD Guide
- ◆ Training
- ◆ Mandatory part of ETD Programs

Standards

- ◆ Work with preservation teams to list stds
- ◆ Specify methods to migrate to them
- ◆ Update these on a regular basis
- ◆ Make sure provenance explains this