Reading and Learning with Any Device

University Content for E-Books and E-Readers

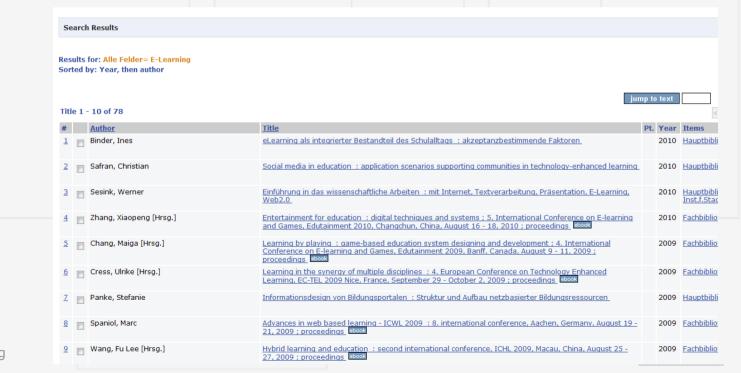
Martin Ebner Walther Nagler Nikolai Scerbakov

E-Books – Definition I

E-books for digital libraries

Includes all readable or download documents (books, online news, papers, magazines ...) offered by an online library portal or similar institution.

- Format usually PDF, other text formats
- Interactivity: restricted by PDF, low or not given
- Multimedia: restricted by PDF
- Advantage: availability, online, can be searched



E-Books - Definition II

E-books for e-readers

Devices for the consummation of special formatted digitalized books.

- Formats: EPUB, Mobipocket, DjVu, others
- Interactivity: Low or not given; EPUB adjusts automatically to display size
- Multimedia: Low; Amazon Kindle can play MP3
- Advantage: display with low energy consumption; EPUB bases on XML



E-Books – Definition III

E-books created with authoring tools

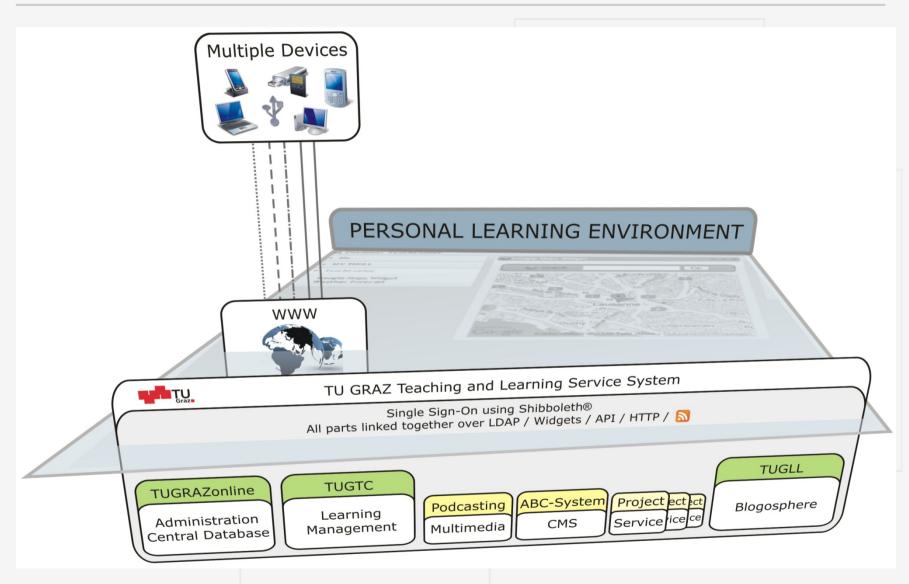
Creation of individual interactive, multimedia content that very often follows didactical backgrounds and course structure

- Formats: For Browsers (HTML, XML ...), SCORM, special formats
- Interactivity: flexible, usually very high
- Multimedia: usually very high
- Advantage: may be converted to other formats inclusively EPUB for e-readers
- Often embedded or part of a LMS (Learning Management System)
- User creates content
- Many possibilities of different authoring tools

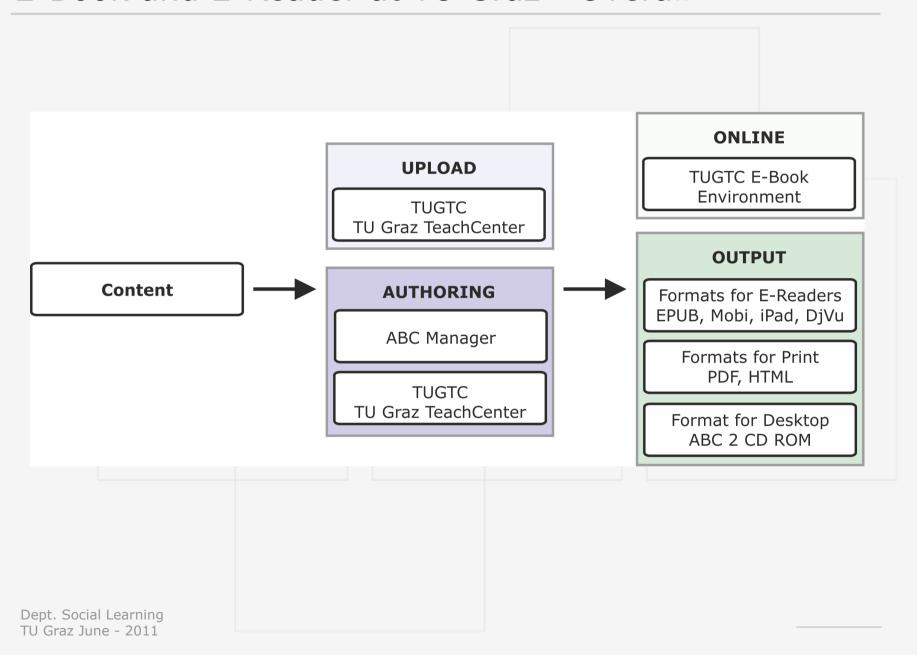
ABC-Manager



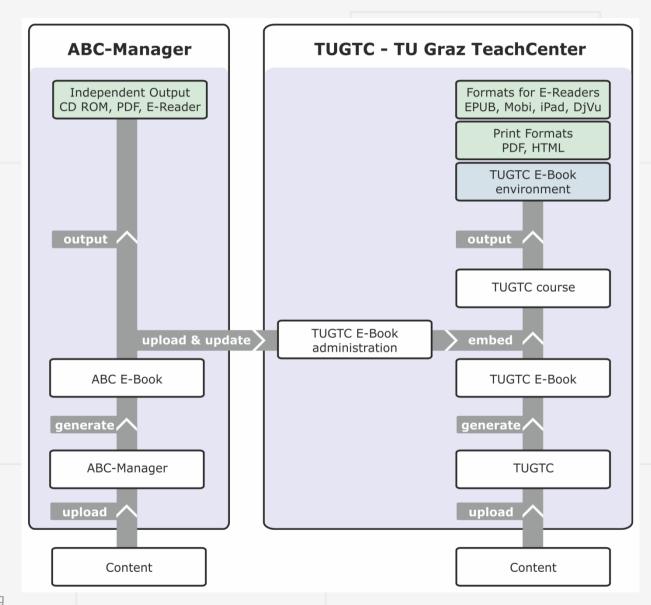
TU Graz Teaching and Learning Service System



E-Book and E-Reader at TU Graz - Overall

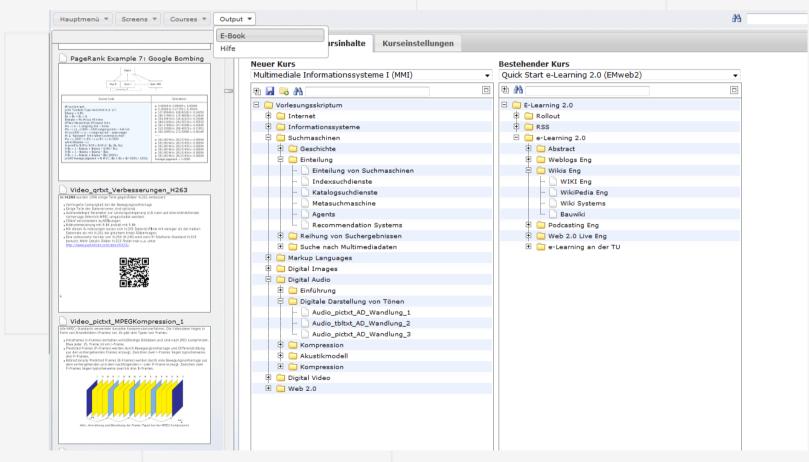


E-Book and E-Reader at TU Graz - Workflow



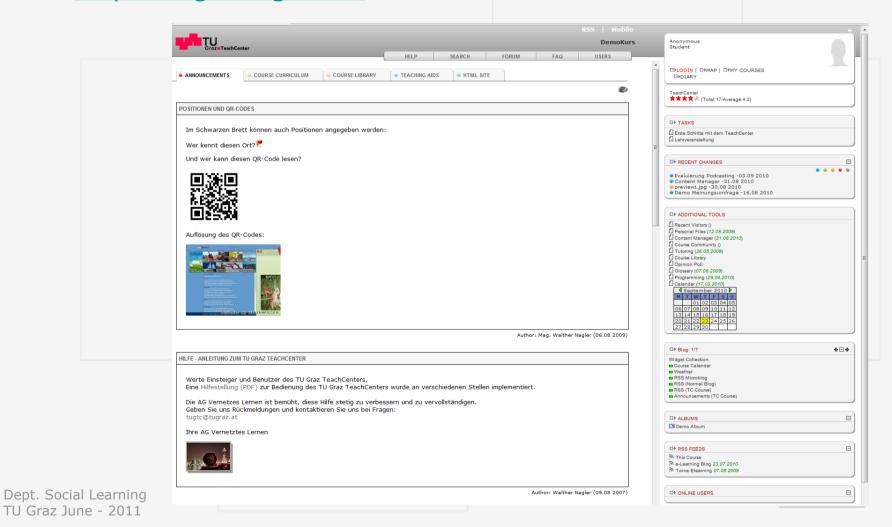
The TU Graz ABC-Manager

- Online authoring tool for e-books
- http://ebook.tugraz.at/abc/

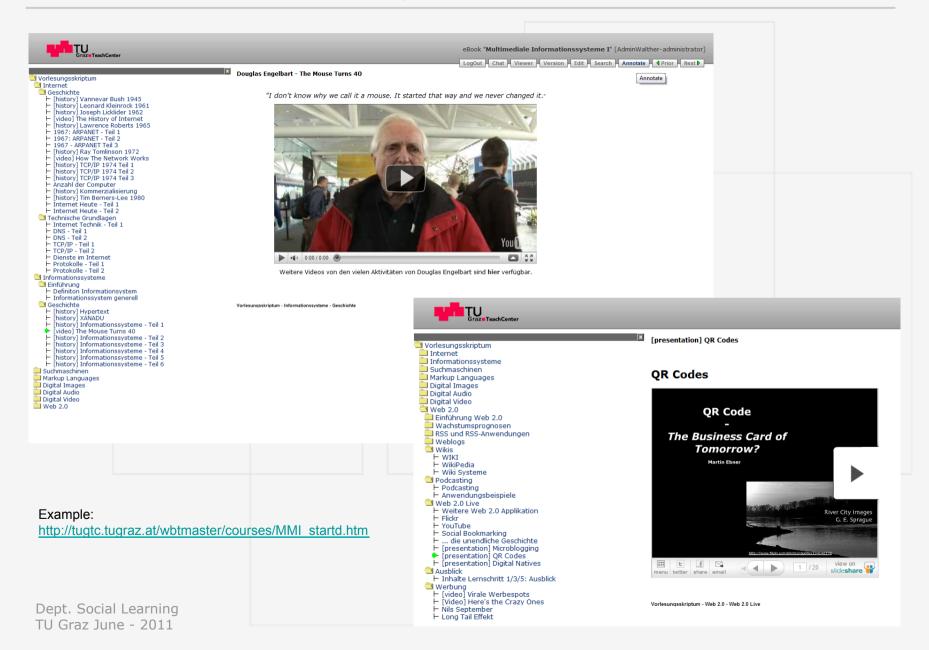


TU Graz - TeachCenter

- LMS of TU Graz (Learning Management System)
- http://tugtc.tugraz.at

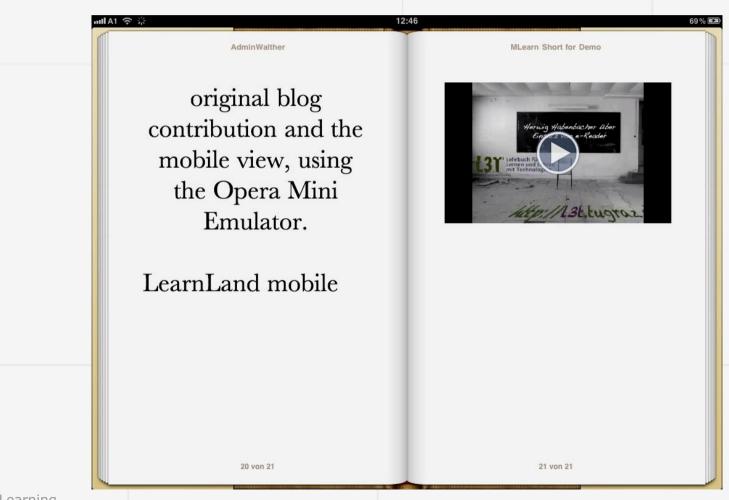


TU Graz – TeachCenter; E-Book Environment

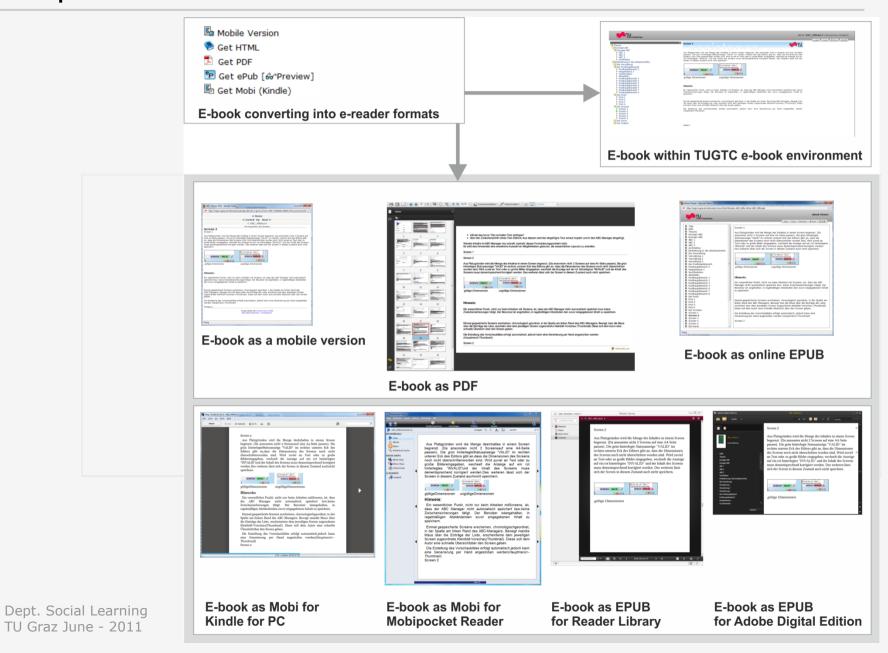


TU Graz –E-Books for Mobile Devices

E-Book example as EPUB on iPad with embedded YouTube



Output variants of content on TU Graz TeachCenter



Online Generation of E-Books using ABC-Manager

Concept

- Splitting content into microcontent = screens
- Saving screens in screen-pools
- Merging screens to courses
- Generating output formats of courses

Didactics

- Preparing content in regard to its importance (ABC-concept)
- Fixed layout (no scrolling, different designs)
- Editing with a WYSIWYG editor (Tiny MCE)
- Structure of three levels

Multiple outputs

- Online: Upload to TUGTC E-Book administration environment
- E-Reader Fromats
- CD ROM Version



Online Generation of E-Books and E-Reader Formats using TU Graz TeachCenter

- ABC E-Books within TU Graz TeachCenter
 - Upload / Update ABC-e-books using E-Books administration environment
 - Online Version = e-book sensus stricter
- E-book generation environment
 - Upload and convert e-books from content from local drive
 - or from content on TUGTC
- E-reader generation environment
 - Upload and convert content from local drive for e-reader output
 - E-reader converter for any content

Output variants of content on TU Graz TeachCenter

- Basic and special print functionalities
 - Button "Get PDF and Mobi/Kindle" as a standard print functionality
 - Button "Get EPUB"
- Extended print functionality
 - Embedded within E-book generation and administration environment
 - Embedded within E-reader generation environment
 - Formats:
 - PDF
 - HTML (for offline version)
 - E-reader Version 1: EPUB (iPad)
 - E-reader Version 2: Mobipocket (Kindle, ...)
 - Mobile Version (iPhone, ...)

Do you see the difference? - From 5GB to 8MB

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Dept. Social Learning	

From 5GB to 8MB - Special interest on format DjVu

Format DjVu

DjVu (pronounced "déjà vu") is a digital document format with **advanced compression technology** and high performance value. DjVu allows for the distribution on the Internet and on DVD of very high resolution images of **scanned documents**, digital documents, and photographs. DjVu viewers are available for the **web browser**, **the desktop**, **and PDA** devices.

- Compatible with Windows, Apple and Android Systems
- •Learn about:

http://djvu.org/

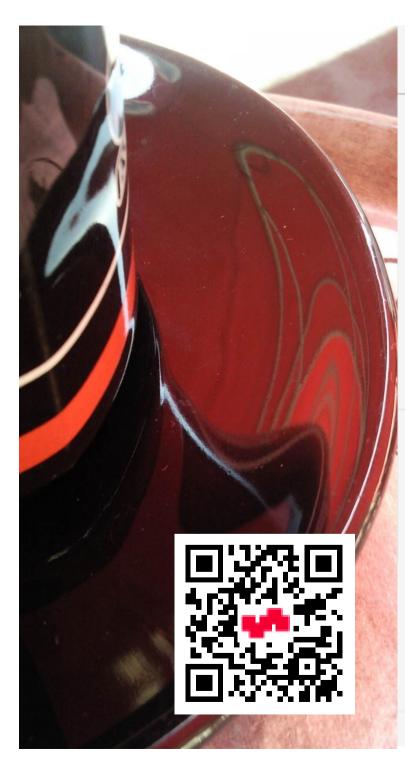
Viewer and Converter:

http://home.arcor.de/mag12/computer/DjVu.htm

Future aspects on e-books and e-readers

- Evaluate habits of students according to e-readers
- Optimize output for different e-reader versions
- Optimization of ABC-Manager
- More open content e-books





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