



NID- A New Powerful Version of Digital Books

NID is the abbreviation for Networked Interactive Digital Material.

NIDs are books turned into web files that enable interaction with the presented material and communication with other readers, teachers, experts, librarians, etc.

The possibilities of NID:

1. NID is a completely new approach to libraries and e-learning: Up to now, digitized books have remained isolated objects without the possibility of adding to them, adding notes, asking questions or exchanging content with other users or the librarian.
2. With NID, everything that is on the web can be seamlessly included. For example, a few pages of NID text can provide access to and interaction with any number of other sources.
3. NID readers can add notes for themselves, a specific group, or for all or create links to other pages in the book or on the web.
4. NID readers can ask questions, start discussions, or contribute to them. You can give your opinion on the book you read or a specific aspect of it. You can also anonymously send comments to the administration for each position.
5. In a NID library, books can be linked to other books or parts of books, thus creating a network of interactive resources from a static collection.
6. By integrating texts, images, video clips or links, the static internet library becomes a new type of "rich library".
7. It is the first time for librarians to learn what users think or want. The library can react to this or refer to new acquisitions or similar literature in a NID book.
8. When using NIDs in lessons, any existing material can be integrated including E-learning modules, tests etc. Users can support each other or point out important aspects. It is possible to make information visible only for a certain group (e.g. a class). Certain aspects can only be discussed with people you trust or questions can only be asked of a respected person.

The technology of NID

In order to use NID in its current form, books are installed on a WWW server, using PDF or Word files as a starting point, which can also come from scans with subsequent OCR processing.

- Every NID book begins with a bibliographical page (information on title, author, year of publication, etc.).
- Every user can log in and add notes only for himself (private), for a group defined by him or for the public.
- Books can be leafed through page by page, scrolled or pages displayed as “thumbnails”.
- Links in the book are indicated by colored outlines. This enables practically unlimited “wandering” through the digital world and today's digital knowledge.

- ➔ Demo of NID-Books: <https://nid.iicm.tugraz.at/Home/BookDetail/199>
- ➔ Page with Discussion: <https://nid.iicm.tugraz.at/Home/ViewBook/230/8/view>

Further features of the NID system

- ♣ Books can be managed in selectable categories and sub-categories
- ♣ Books can be searched in full text or for “metadata”, including groups of books at the same time, for example all in one category, all by one author, all in a certain language
- ♣ Books can have tables of contents that can be accessed at any point
- ♣ It is possible to change the appearance of a page (brightness, colors, enlargement or reduction, moving a section of the page, etc.) if required
- ♣ You can take an excerpt from each page, for example to send it by mail
- ♣ Two pages from any book in the international IIF standard (also from other libraries) can be placed side by side
- ♣ Links and comments can be pointed out with a border of your choice in color and thickness. Areas marked in this way show information with "mouse-over", e.g. Images, texts or links to any Internet content, including videos, audio files or interactive applications.
- ♣ NID books can also be made searchable for image elements (!). If you then search e.g. after "tie" you get all the pages where a person with a tie can be seen
- ♣ In preparation is the possibility to save books in such a way that pages with concise phrases automatically (!) Refer to pages in other books with similar phrases. This and the

forementioned property is made possible by the use of artificial intelligence methods that are further refined over time.

♣ NID uses the so-called IIIF format, as used by all major libraries in the world (from Stanford to the Bavarian State Library). This allows you to read a page in an NID book on one server while reading a page on another server. In the resulting (up to 4) windows you can scroll, zoom or perform other activities independently.

Two concrete examples of “simultaneous reading” with NID

Fig.1 shows a page from the book “Around the World with Incidents... and more” from a server at TU Graz next to the famous old Portulan world map from the Bavarian State Library.

Fig. 2 shows one and the same book page in two different languages from a translation and that the two parts can be edited independently of each other.

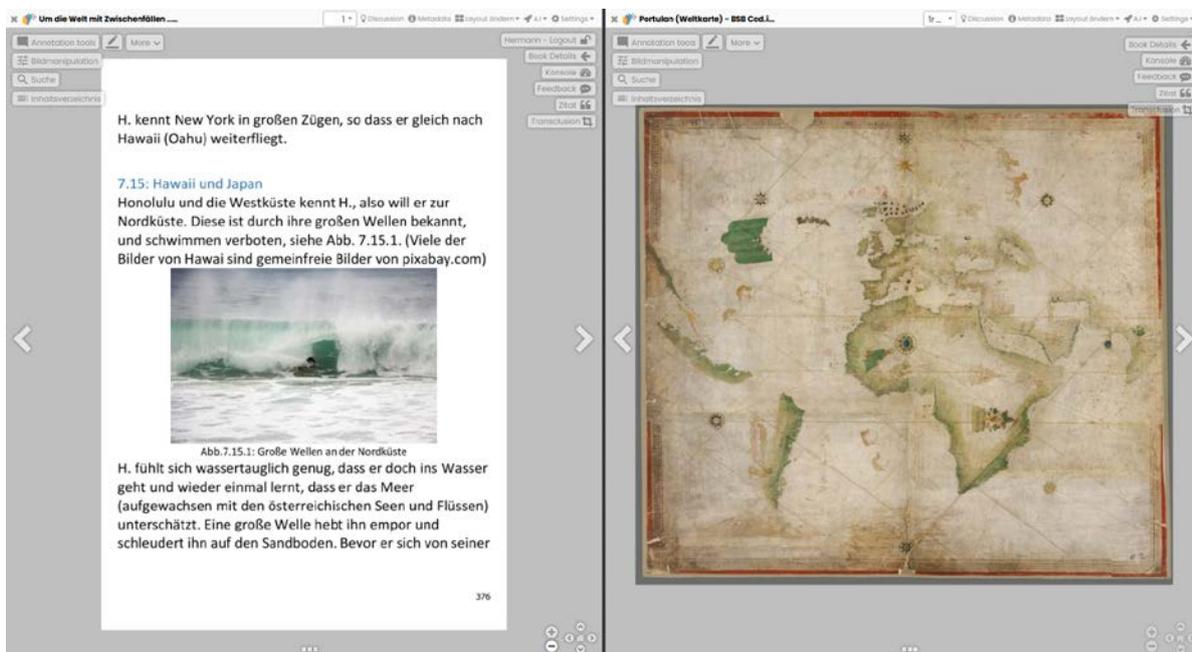


Fig.1: Two book-pages from two different servers that can be manipulated independently.

NID is revolutionizing library practice

Digital library operators repeatedly regret that they do not receive any feedback from users. In a library that uses NID, readers can send messages (even anonymously) to the administration, point out errors or additions, or invite a discussion on any page.

Conversely, users can also create notes and notes for themselves or a group of their choice, initiate a discussion, ask a question on each page, etc.

NID can be used for small libraries up to huge book stocks.

NID improves internal flow of information

An organization can offer materials that are only accessible to members of the organization or only for parts of it, so that members can help each other through questions, tips or discussions.



Fig.2: Pages of two different books with different parts and different zoom-factors

NID complements distance learning

Lecturers offer material that they can supplement with explanations (e.g. through video clips).

Learners can ask questions that are professionally answered, which benefits all other learners. Learners can supplement the material with their own research for themselves or for others. In the "seminar mode", such services can be used for the assessment.

NID also provides several types of quizzes: those that point out weaknesses in order to explain how they can be remedied, but also those that test understanding and are therefore also used to assess the performance of the learners can.

NID offers even more ...

Books can be provided with reviews. Registered users can contact others via selected emails. The system also allows simple Word documents to be imported without any changes, whereby these can refer to books or vice versa.

A test run with NID is easy and inexpensive.

If there is a server that can be reached via the Internet (a better PC is sufficient), it is installed NID for 500 euros the software and up to 30 books.

Further additions and improvements are in preparation and can then be installed without any other changes. Contact: hmaurer@iicm.edu

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