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Angela Barth-Küpper and Isabell Leibing. 2014. Vom "Living Lab" hinaus ins wirkliche Leben: Blended Library an der Bibliothek der Universität Konstanz. 103. Deutscher Bibliothekartag, Bremen, June 2014.



www.blendedlibrarv.org/facetsearch/



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X Integrative Workplace

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Project Partners















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Hyper Grid X

Hans-Christian Jetter, Jens Gerken, Werner König, Christian Grün, and, Harald Reiterer. 2006. HyperGrid - Accessing Complex Information Spaces. People and Computers XIX - The Bigger Picture, Proceedings of HCI 2006, Springer London, 349-364.



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Web Search & Fact Finding

While Lena is creating the mind map, the others search for facts about Caesar and the Rubicon in the World Wide Web. Before they start their individual searches, they



collect and create clusters of keywords with *Twister Search*, which is now running on the interactive table. These clusters usually group semantically coherent keywords with which a cluster defines one search topic. Amelie, Sebastian, and Johannes divide topics among each other by placing physical tokens on clusters. A token acts as a tablet proxy, which distributes the keywords of a cluster to that tablet. Then, they search individually on their tablets using the keywords. When they find interesting and relevant information, they send it to the table to share it with the others. Lastly, they take the mind map and the Web search results and summarize it in their presentation.

Literature Search

Amelie, Lena, Johannes, and Sebastian meet in the Living Lab of the Blended Library to work co-operatively on their presentation for the history class on the topic "Caesar and the Rubicon." They start by initiating a literature



search using *Facet Search* on the interactive table. All have vague knowledge about Caesar and only know that Rubicon is a river but do not know what happened to Caesar at Rubicon. In contrast to a literature search at a desktop computer, the interactive table supports their discussion of relevant search keywords, and the visual pipe-and-filter concept of Facet Search helps keep them aware of the search history. At any time they can search individually and merge their results with the group at a later stage.

Knowledge Work at a Digital Desk

Having found both books, Lena returns to the Living Lab, sits at the digital desk, and starts reading the book. She hopes to find information in the book that is relevant for her group's presentation. Once she finds something in the book, she simply puts it on the digital desk, which automatically starts the *Integrative Workplace*. In the book, she selects the region of interests using a digital pen. The desk provides immediate feedback on her actions by digitally highlighting the selected text in the book. Using the drag & drop function, she extracts the now digitized text into a mind map. Without the digital desk, she would need to transcribe text or scan book pages manually. She repeats this process each time she finds interesting and noteworthy information in the book.



Reality-based Exploration of On-line Book Repositories

In the meantime, Sebastian browses through a book collection with the *Blended Shelf*. Its virtual 3D and reality-based interface allows him to explore on-line book repositories as known from their physical counterparts but with the benefits of the digital world. He instantly sees loaned books through their semi-transparent rendering. Also, filtering the shelf by



adding a keyword or sorting its contents by subject allows him to reorder books. Using these functions, he makes a serendipitous discovery and finds a book that was not in the earlier Hyper Grid search result. He immediately sends this book signature to Lena, who has already arrived at the physical shelf to get the other book.

Search Results & Details on Demand

The results of their literature search are displayed in the *Hyper Grid* on a large interactive wall. At first, the results are shown in a list. Sebastian wants to have detailed information about the loan status of a book. By touching the book item in the list, he can enlarge the item and reveal information specific



to the book and also the loan status as well as its signature. The latter indicates the location of the book in the library. Lena memorizes this signature and leaves the Living Lab to get the book.



Usage Scenario

The *Blended Library* supports research and knowledge work in physical libraries with help of information technology and modern visualizations. A scenario exemplifies the use of the Blended Library by telling a story of four students, Amelie, Lena, Johannes, and Sebastian working within the context of a history class. In this class, they have to give a presentation on the topic "Caesar and the Rubicon." The scenario starts with them preparing for the presentation in the *Living Lab* of the Blended Library.



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Baden-Württemberg

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