

# Understanding Target Users of an Online Digital Reference Library

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## ABSTRACT

Through an investigation of the needs and practices of researchers in the humanities and social sciences, we identify key issues in the use of an online digital reference library, the Electronic Cultural Atlas Initiative's "Support for the Learner: What, When, Where and Who." In this poster we present an examination of results from survey data and user tasks, and discuss implications for future design and implementation based on our findings.

**General Terms:** Design, Human Factors

**Categories and Subject Descriptors:** H.3.3 Information Search and Retrieval; H.3.7 Digital Libraries, User Issues; H.5.2 User Interfaces, User Centered Design.

**Keywords:** Evaluation, Educational Digital Libraries, Digital Reference Libraries, Search Engines, User Studies, Information Literacy

## 1 INTRODUCTION

The poster reports the results of a recent needs assessment of potential users of the Electronic Cultural Atlas Initiative's online digital reference library "Support for the Learner: What, When, Where and Who." This online tool is being developed for academic researchers to access diverse collections online, including Wikipedia, Library of Congress, Ethnologue, CIA Fact Book, and the Metropolitan Art Museum [1].

## 2 METHODOLOGY

### 2.1 Experiment

To better understand how the "Support for the Learner" website's target users currently do research online, we designed an online questionnaire to investigate their tools, practices and values while conducting research tasks. Questions included frequency of Internet use in conducting academic research, importance of trustworthiness of an information source, and expectations for the ease, speed and access to information sources. In addition to this survey, we ran a user study in which we asked subjects to conduct a series of four tasks, using a think-aloud protocol. Subjects conducted three of the tasks using the "Support for the Learner" website, and one task using other online sources. The tasks included finding the birth and death dates of a specific San Francisco settler, locating an image of East Asian artwork, and researching a topic of the subject's choosing, preferably related to his or her current research.

### 2.2 Participants

We administered our online survey to a total of 30 subjects. The subjects were a snowball sample of academic researchers in the humanities and social sciences. A total of 8 subjects participated in the user study. The subjects were a convenience sample of full-time academic researchers conducting their research in the humanities or social sciences at different universities in the San Francisco Bay Area. Most subjects from the survey and user tests recently completed their doctoral degrees or were current doctoral students.

## 3 RESULTS

Our survey subjects were all Internet users, with 77% reporting that the Internet was essential to their research. 68% reported use of Library catalogues, and 56% reported use of Wikipedia. 74% of subjects felt trustworthiness on the Internet is important while conducting research, but over 60% of subjects noted that it is relatively unimportant to know what others think about a source. Before beginning a search, a majority of respondents reported knowing the kind of document (75%) or the specific documents or collections (56%) for which they search. Interestingly, photographs seem to be an important research source for our subjects but are rarely searched for online relative to other documents. This point would benefit from additional survey respondents and further exploration.

The results from our user studies reflected many of the findings from our survey. Our user study subjects preferred to search rather than browse for material. They also appeared to develop their search strategies on their own: subjects found keywords central to searches, and continuously varied and refined their search terms and queries. Depending on their research needs, subjects used both general or specialist resources. More generally, they reported that no single source served their needs, but different resources served different purposes. Large popular resources like Wikipedia and BBC country were useful to components of their search, but were likely to be of more use in conjunction with more specialized collections.

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## REFERERNCES

- [1] Buckland, M. *The Digital Difference in Reference Collections*. Available online at <http://sunsite.berkeley.edu/Literature/Library/Redesigning/html.html> Visited February 5, 2007.