

by John Michael Day

Abstract

The World Wide Web is particularly suited as a communication medium for the deaf community. A wealth of deaf-related online information is available on subject specific, special purpose, and comprehensive sites that provide important resources for deaf people, their families, and involved professionals. Librarians now face the challenge of devising new procedures for teaching users how to search for information and more importantly, how to evaluate the quality of what is retrieved.

Introduction

Established in 1864 and located in Washington, DC, USA, Gallaudet University is the only 4-year liberal arts university for deaf people in the world. The university, funded by Congress, has as its primary mission the education of deaf and hard-of-hearing United States nationals; nonetheless, students come to Gallaudet from countries all over the world. The Gallaudet University Library serves all of the traditional information and research needs of its faculty and student populations as does any other college or university library. However, this library has also developed the world's premier collection of materials on deafness and deaf culture. It has a comprehensive Deaf Collection development policy requiring the subscription to every deaf-related periodical known in the world and the purchase of at least one archival and one circulating copy of every deaf-related book regardless of language. Exceptions are journals and books dealing primarily with the medical aspects of the ear and the physical process of hearing. Such materials are collected and readily available in many national and international medical libraries nationally and internationally. With over 1600 periodical titles and nearly 100,000 volumes, the Gallaudet Library Deaf Collection is unrivaled by any other collection anywhere in the world. The library's catalog may be searched by visiting the Gallaudet University Library homepage at www.gallaudet.edu:80/~library/. Further information about this special collection may be found in "The Deaf Collection at the Gallaudet University Library" by Thomas R. Harrington, Education Libraries, vol. 22, no. 3, 1998.

Understandably, the university, its faculty, students, alumni, and deaf people everywhere are proud of this special collection devoted to deaf people and deaf culture and the library has long recognized its role in combining the development, promotion, and preservation of this unique collection. All along, a central feature of this collection has been that it is comprehensive; as reasonably close as possible and within the scope laid out in the previous paragraph, this collection contains every book and journal on deafness and deaf culture known to the library staff. Within the past 3 to 5 years, a new medium of information storage, retrieval, and dissemination has emerged and grown to enormous proportions. For many years, the Internet functioned solely as a vehicle of information and file exchange between the government and high-level researchers. With the development of the World Wide Web (WWW), electronic information on all subjects has grown at an astounding rate. Information on deafness and deaf culture has been no exception and indeed, may be growing at a particularly fast rate because of the suitability of the WWW as a communication medium among deaf people.

Deaf Culture

The term "deaf culture" is used throughout this article and may be confusing to people who are unfamiliar with the cultural aspects of deafness. Many people who are either born deaf or become deaf before the acquisition of speech, adopt sign language as their primary language and their social interaction is with other people who are deaf. Of those people who are born deaf,

approximately 10% are genetically deaf, i.e., are born of deaf parents and sign language is passed down from parent to child in the same manner as spoken languages. Additionally, many attend special schools for deaf children where sign language is the medium of instruction and, again, the language is passed from one generation to the next. Sign languages are natural languages with their own unique vocabularies and grammars and they differ as much as do spoken languages from country to country. Most people are surprised to learn, for example, that British Sign Language is completely different from American Sign Language. Even though English is the standard spoken language of both the United States and the United Kingdom, their sign languages are not based on English and they developed independently. As a consequence, deaf people have developed their own unique cultures rich in shared language, history, humor, heroes, and villains. For more information regarding deaf culture, please see www.signmedia.com/AboutDeafCulture.html#About.

The World Wide Web

Libraries everywhere are still working to understand the nature of information "on the Web," i.e., on the WWW, and to determine what role they have in relation to such information. At Gallaudet, the library is facing this same issue both in terms of information in general on the Web and, in particular, information related to deafness and deaf culture. This paper looks specifically at the scope and characteristics of the Web's deaf-related information, particularly as a resource for the deaf community.

Initially, many people saw the Web only as a novelty because, although the information one could find on the Web was colorful, much of it lacked important content. And, since anyone who put information on the Web could also take it off, much of what was able to be found one day was gone the next. However, individuals, corporations, and institutions everywhere quickly learned that the Web had a tremendous potential for storing and disseminating information much more effectively and inexpensively than the traditional methods and the Web began to mature as a serious information and research resource. The expression, "information explosion" has certainly been overworked; yet it does describe the massive increase in information on the Web in just the past 3 to 5 years.

Certain areas of information have grown faster than others for a variety of reasons. Information about computers, computing, hardware, and software has grown much faster than, for example, information about gardening. Although no studies have been done comparing the rates of growth and breadth of coverage by subject area on the Web, it appears that there may be an unusual wealth of deaf-related information. If this is true, there may be a few readily identifiable potential causes. In many areas of the world, there has been an increased emphasis on the rights of minority groups. Likewise, there has been a similar growth in the focus on

the rights of and accommodations for persons with disabilities. Consequently, deaf people have received attention from both angles since deafness has been traditionally viewed as a disability. Recently deaf people have been increasingly recognized as a cultural minority, due in part because of the recognition, in many countries, of sign language as a distinct cultural language.

Further, deaf people appear to have a particular affinity for the WWW. Although sound has now certainly emerged as a feature on the Web, the Web began as a wholly graphic interface. That feature allowed people who are deaf access to everything the Web had to offer and on a level equal to that held by people who can hear. Alone, that characteristic would make the Web attractive to deaf people. However, the Web is not only a source of stored information, it is also an effective medium of visual communication. The combination of those two aspects, graphic interface and effective medium of visual communication, has led to a particularly rich body of deaf-related information available on the Web. An examination of information on deafness, deaf people, and the deaf culture does show the WWW as an important resource for deaf people, their families, and involved professionals.

Online Resources

In reviewing online deaf-related resources, the Web sites appear to fall into three loose categories: subject specific, special purpose, and comprehensive collections. As the purpose of this paper is to provide but an introduction to the wealth of deaf-related information online, only a few examples in each category will be shown. Nonetheless, it is hoped that this introduction will be sufficient to inform libraries about the great variety of information available and the value in using the Web reach to serve people who are deaf.

Subject Specific Sites

More often than not, subject specific sites provide information about the medical or physical aspects of deafness or simply provide information about a specific organization, service, or company. An example is the Web site of the Nationwide Flashing Signal Systems corporation (www.nfss.com/). NFSS uses its Web presence to provide information about its products for deaf and hard of hearing people. Wholly different yet falling into the same category, is the Kwa Zulu Natal Deaf Association's home page devoted to the betterment of the Kwa Zulu Natal deaf population on the east coast of the Republic of South Africa (www.tradepage.co.za/kznda/) (Figure 1).

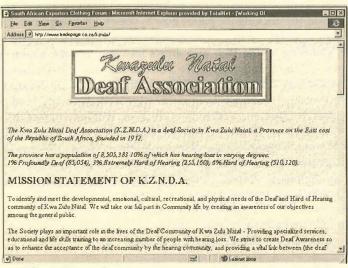


Figure 1

Special Purpose

Somewhat broader in scope is the Better Hearing Institute's "Hearing Help-On-Line" site (www.betterhearing.org). The same holds true for Advanced Otolaryngology Services (www.aos-jax.com/) although it does limit itself to the purely medical aspects. These special purpose sites serve to provide comprehensive information within a specific range of interest. For both the subject specific and special purpose types of sites, the fastest way to locate them is to use any one of the Web search engines that provide Boolean search capabilities and to search using the general term, "deaf," limiting the search with "AND" terms such as "assistive", "Africa", or "medical" as were used in these examples or with others depending on the desired results.

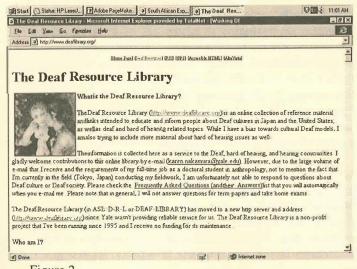


Figure 2

Comprehensive Collections

Comprehensive Web sites attempt to provide access to the universe of deaf-related information and organizations. Two of the best are The Deaf Resource Library (www.deaflibrary.org/) (Figure 2) and the Deaf World Web (www.deafworldweb.org/) (Figure 3). For people who are unfamiliar with the range of deaf-related information available and the search terms to use, these sites may well be the best places to initiate a search.

The Deaf Resource Library, created in 1995 by Karen Nakamura who is a doctoral candidate in the Department of Anthropology at Yale University, provides reference material focusing primarily on deaf-related information and deaf culture in the United States and Japan. This site is a collection of Web links and is organized in linear fashion; i.e., the homepage consists of a series of section headers and each section header is followed by a set of related links. The user navigates the site by scrolling down the homepage through the various headers, e.g., Deaf Bibliographies, Deaf Community Resources, Deaf Related and Network Resources. This is a very useful resource, especially for those looking for cultural and education-related information.

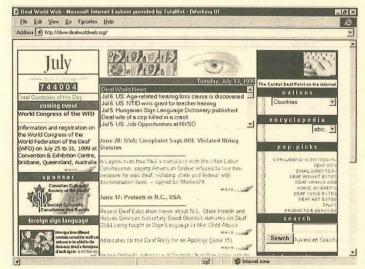


Figure 3

Also established in 1995, the Deaf World Web was created and is maintained by Jolanta Lapiak of Alberta, Canada. She received the Canadian Association of the Deaf "Award of Merit" in 1998 for her efforts. The Deaf World Web appropriately bills itself as the "largest and leading multipurpose deaf-related Website, providing information on all subjects from sociocultural resources to references around the world." (dww.deafworldweb.org/info/dww.html) WhiletheDeaf Resource

Library has a linear organization, the Deaf World Web presents one, well-organized homepage with hyperlinks to various collections of information. The homepage also includes Deaf World News with links to recent articles or other news items of interest to the deaf community. One of the most useful features is the online encyclopedia of deaf-related information. While both the Deaf Resource Library and the Deaf World Web sites provide site-specific searching, the Deaf World Web site provides advance search capabilities to help focus searches by using Boolean operators, sub-string matching, and date limitations.

Implications

In looking at the information found on the WWW related to deafness and deaf culture, it can be seen that there is an extensive electronic resource on this subject for librarians, for deaf people, and for persons desiring information ranging from the purely medical, across the range of social, national, and reference, to the personal information offered by individual deaf people. This constitutes a broad source of information able to be tapped by anyone with an Internet connection and standard search software. Most indications regarding the future direction of the Web show that it will continue to grow at a phenomenal rate and continue to stabilize, thereby enabling it to be used more and more as a standard medium of communication, publishing, and reference.

Although it is clear that the Web has a great value as a current resource, what is not clear is how to answer the traditional questions of information quality, e.g., a collection of "selected" information,

and information preservation. Librarians will have to address these issues and help define new protocols and procedures and new means for teaching the public how to search for information and how to weigh the quality of what is retrieved. The emergence of publishing on the Web also draws into question the notion of complete or comprehensive collections, such as Gallaudet University's Deaf Collection. In conjunction with librarians everywhere and especially those who work with any kind of special collections, Gallaudet's librarians will have to face these questions and devise the new paradigms for collection building and preservation. At the same time, the Gallaudet University Library continues to add to this wealth of deaf-related information by digitizing selections from its collections and making them available on the World Wide Web.

John Michael Day is the University Librarian and Associate Professor of Business Administration at Gallaudet University, Washington, DC. At Gallaudet, he has established a faculty, staff, and student technology training program, a faculty Technology Fellows Program, and has encouraged campus-wide intiatives to incorporate technology into the curriculum.

E-mail: john.day@gallaudet.edu