



Technology for providing materials in 94 world languages: a partnership for user-driven learning, and improved awareness of the people and events that shape our world

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ABSTRACT:

An academic library partnership with SCOLA, a non-profit global television broadcaster, results in low-cost access to a wealth of library and instructional materials in over 90 languages. Academic libraries can provide multimedia resources to complement and extend traditional classroom and lab instruction. Libraries of all types can reach underserved communities and help their patrons learn more about the world's cultures, languages and ideologies. Technology is used to create a "second life" for language resources in the library.

The importance of language learning and past difficulties for libraries in supporting language learners.

The challenge of providing highly interesting and easy-to-use foreign language materials can be met by providing authentic resources in a visual and engaging manner made possible by the use of technology. It has long been appreciated that it is vitally important to study the languages of the world, and it has long been a challenge for libraries and our education systems in general to support that study.

Language is the gateway to understanding and appreciation of culture, which is intrinsically important and can have profound effects on mutual understanding and appreciation. Knowing each other's languages helps to break down barriers between people, and offsets the forces of fear and distrust that can lead to conflict. Language barriers sometimes prevent people from one culture from seeing just how alike they are to people from another culture. Bi-directional language skills promote understanding and the willingness to work together as people. Today's increasingly global economy

demands better language skills to support not only commerce but the distribution of critical information on agriculture, technology and health.

The role of libraries has been limited in the past by several key factors including cost, availability, authenticity and interest. As a practical first consideration, the expense of acquiring and maintaining materials in many languages represents a substantial obstacle. Decisions on appropriate development of collections would necessarily exclude some languages even though they might be of interest to a small group of library users. The availability of appropriate materials has been another barrier. Library materials in many of the world's languages are difficult to find and expensive to acquire. Language instructors sometimes refer to LCT (less commonly taught) languages and VNTLs (virtually never taught languages) for which library materials are very scarce. However, it is precisely these languages such as Tausug spoken in the Southern Philippines, or the Dari and Pashto of Afghanistan, that can be of critical importance in understanding today's world.

Libraries have also been hindered by the scholarly and traditional style of available materials. Texts and supporting resources are based on an academic approach to learning and a linguistic context. Success in acquiring and improving language skills, however, has been shown to be directly related to the authenticity of the immersion experience. There is no substitute for experiencing the culture first-hand and for hearing natural patterns of speech, in the vernacular, from native speakers. Finally, libraries and educators alike have faced the obstacle that many consider the study of language difficult and uninteresting. The challenge of providing highly interesting and easy-to-use foreign language materials can be met by addressing the above points, and by the use of technology.

The Internet makes it possible to deliver much more content at a much lower cost, and as a result many high-quality materials can now be made available for use in the library and elsewhere. While English still dominates the worldwide web, many other languages are now available and are beginning to have a substantial impact. So much so that translation engines have begun to be featured by Google and on specialized sites such as BabelFish. Information in more languages is also presented more authentically, by bloggers, webmasters, and other linguistic "amateurs" as opposed to professional educators. Combined with the multimedia capabilities of the Internet, these factors allow access to language materials that are far more available, and more engaging, than in the past. Librarians are now in a position to support language learning in very effective ways that were not possible before. They can do this by fulfilling their traditional role of assuring the diversity and quality of materials available, and in the process create unique learning environments for their patrons.

Objectives and implementation of a library-based language center

The idea for a library-based language learning center arose from conversations between the authors of this paper, and the shared perception that technology could be used to greatly enhance the language learning experience. A partnership between the University

of Nebraska at Omaha's Library and the non-profit broadcaster SCOLA was first suggested by Senator David Karnes, serving in his capacity as Chair of SCOLA's board of directors. From the beginning, several objectives were clear. There should be “low barriers to entry” for the user. That is, the center should be attractive and visually appealing; no registration would be required to begin using the resources; the center should be available whenever the library was open; and a comfortable setting would invite exploration and experimentation with language.



Figure 1. The language center in use

As plans progressed, some additional objectives were identified. The design should allow for social opportunities that extend the experience of language immersion. Comfortable seating areas would allow conversations and interaction between native speakers – primarily overseas students – and language learners. In this way, the center would be a venue for research on, and direct experience of, social learning. The unique features of the design would also help researchers learn more about language acquisition, visual literacy and media literacy.

Since the center is intended to complement and extend formal classroom training, different types of language materials – distinct from those commonly used in class – are made available. Language laboratories and the classroom tend to focus on audio recordings, speaking, reading, and writing with very little visual support. The language center uses live streaming video and visually-oriented software as the main mode of involvement. This use of media is intended to provide a more immersive environment of sights, sounds, and interaction.

The center is located in an open and very visible location in the library. Large LCD monitors continuously display four SCOLA channels carrying local language news, cultural, educational, and entertainment programming from every continent. Wireless headphones for each channel can be picked up and used without delay. While a great deal

of more serious programming is available, users often show particular interest in lighter fare such as “soap operas”, comedies, and cartoons. Content is broadcast on a schedule that includes 94 languages. Internet workstations located nearby provide access to reading, writing, listening, viewing, and game playing exercises plus a variety of visually-oriented language acquisition software. The current software allows creation and downloading of portable lessons for iPod[®] and other MP3 players. Software for 40 languages is pre-loaded on the workstations, so it is not uncommon to see a user working on an Arabic crossword puzzle, next to someone downloading Japanese vocabulary drills, next to yet another watching a French variety program.

In this implementation, the video streams are received both by conventional Internet and by Internet2 multicasts. The multicast video has the advantage of high resolution images and is very reliable for around-the-clock viewing. However, not every library will have access to the high data rates available via Internet2, so some attention was given to testing implementations ranging from small scale, inexpensive options to options that stretch the limits of available technology.

A basic implementation with a full range of SCOLA content over conventional high speed Internet and software for several languages might fit budgets of a few hundred Euros. Such an installation is easy to maintain on a personal computer workstation or two and needs very little space. A medium-scale implementation might receive SCOLA direct by satellite in addition to Internet, and offer software from additional vendors for more languages. A few pieces of comfortable furniture and the addition of audio, video and print support materials from existing collections would enable most of the advantages of much larger implementations.

Regardless of scale, a language center provides a social learning space within the library, where native speakers and language students interact. Visually-oriented language resources, opportunities for unscheduled and non-linear learning, and an easy “no barriers to entry” language experience result in increased interest and use. Examples of increased engagement include increased registration of (non-academic) community users, increased circulation of foreign language films, use of the center in recruitment of new students and faculty, and an increase in library-based assignments from classroom instructors in a number of departments. University administrators frequently cite the language center as an example of innovation in educational technology, increasing visibility and support for the library across campus.

Library and non-profit organization partnership: SCOLA content in the library setting.

The language center has increased the use of the library in general and foreign language materials in particular. The greatest strength of the center, however, is the unique set of multimedia materials available from SCOLA. As a non-profit educational organization, SCOLA receives and re-transmits television programming from around the world in nearly one hundred native languages and dialects. Content selected for current news

value, language study and cultural enhancement is available to Universities, Colleges, primary and secondary schools, cable systems, government language schools, individuals and libraries of all types. Virtually all of the materials most useful in the library setting are available via Internet.



Figure 2. Arrays for satellite communication are sometimes called “dish farms”. SCOLA maintains its global presence via satellite and Internet from a true farmland setting in Iowa.

Streaming video is available on five continuous channels. Future plans include expansion to eight simultaneous streams, and regionalizing each stream. One currently available stream, for example, is entirely in Chinese. Future channel expansion will consolidate all programming in African languages on one stream, Latin American broadcasts on another, and so on. Services include a downloadable archive of the last six days’ programs in addition to the live broadcasts. In addition to video, there is an international radio feed, including some virtually never taught languages, in MP3 format that can be downloaded to mobile devices if so desired.

The most frequently used content in the language center is Insta-Class. This service provides readymade language lessons that include videos with transcript, translation, vocabulary reviews and self-tests. Insta-Class is currently limited to 25 languages, but the files are stored as MP4 video and MP3 audio and PDF documents. Teachers and students with the requisite technical ability can easily store and manipulate the content. This helps assure more permanent availability of lessons, and can lead to a personal library of material for future review.

SCOLA produces its own “on the street” videos that feature specific dialects and vocabulary on unusual topics. The library language center has found this service mainly of interest to advanced learners who can benefit from the extended vocabulary and

patterns of authentic native speech. The videos put unfamiliar vocabulary in context and aid in comprehension. Another valuable resource is the large amount of text in PDF format excerpted from newspapers, periodicals, and other documents.

Future plans for expanding the content available to libraries include a permanent archive of broadcasts and in-depth video supported dictionaries. The archives will allow new areas of scholarship such as tracing language evolution over time, and cross-language comparison of reporting on world events and cultural phenomenon. Dictionaries supported by video-in-context could prove to be a very powerful learning tool. Libraries will also be interested in following research which is just beginning that may result in simultaneous translation and archives of materials that can be accessed by searching audible language and visual images.

Conclusion

This example of partnership between an academic library and SCOLA, a non-profit media organization has demonstrated new ways to support students and researchers in language study. The library has found many audiences for these non-English materials. Naturally, beginning and advanced language students are the primary beneficiaries. The center has also helped involve and socialize international students, and in a public library might offer the same benefit to recent immigrants. The broader base of community users for libraries will include those with language interests related to family history, or just a fondness for a culture other than their own. In this particular case, important parts of the audience have been the foreign language faculty and the university administration. Both of these important groups have increased their interest in, and support of, the library.

SCOLA's mission is to help the people of the world learn about one another; their cultures, their languages and their ideologies. SCOLA emphasizes the importance and effectiveness of modern information technology as a tool in overcoming barriers to global understanding and makes every effort to be at the forefront of its application.

Libraries share in the obligation to help overcome barriers to global understanding. Effectiveness of modern information technology, both in delivering content in more languages than previously possible, and in meeting a diversity of learning styles, is one way that librarians can contribute. By creating an inviting and visually intriguing environment, we can make learning languages and educating oneself about foreign cultures and people less daunting, more current and fun. In the process, we can enhance the student learning experience while breathing new life into our existing facilities and collections.