

ON THE NET

Using WWW Multimedia in the Foreign Language Classroom: Is This for Me?

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This special issue of *Language Learning & Technology* looks at evaluating multimedia software. Where does the Internet fit into this picture? When we talk about multimedia in the foreign language (FL) classroom, we are often primarily concerned with the use of authentic materials that make the target language culture seem more real to students. Digitizing the images, sound, and video that represent multimedia can facilitate their distribution. However, digitized multimedia files tend to be quite large, and on the net, large files mean slow going. Can we really do multimedia on the World Wide Web? How is the quality? Does it require a fast connection or can a dial-up connection suffice? In this column we look at several web sites that are intended to help FL teachers learn about using and even making multimedia materials, and then explore a few sites that use online multimedia. Please note that several of these sites were, in fact, created by the authors, who teach a course in multimedia development.

1. How can the Internet lend itself to the use of multimedia?

The problem with Internet-based multimedia is that images, sounds, and videos need relatively large files that take a long time to download. This waiting period slows down the interactions between the student and the materials, wastes time, and creates an uncomfortable impression. The CD-ROM and DVD are superior media for multimedia distribution because they can hold huge files and display them nearly instantly either on a local machine or over a Local Area Network (LAN). The advantage of the Internet is that it is highly distributed; that is, materials from all over the world can be accessed from anywhere in the world. And in addition to actually transmitting media, we can certainly use the web to learn about multimedia before we actually take the plunge.

To make use of the Internet for multimedia, there are three basic approaches to overcoming the inherent problems. We could distribute a very small number of files and use these extensively so that downloading does not need to take place often. We might use a high speed network at both the sending and receiving ends of the connection so that files are downloaded much faster. Finally, we can use a high level of file compression so that files are smaller and thus load more quickly. None of these solutions is ideal. Limited numbers of files can cramp the presentation style; high speed networks may not be available or network traffic might interfere with transmissions in any case; and compression of media inevitably results in some loss of quality. A balance is required among size, quality, and speed, and in some settings a particular balance may simply not work. Yet with these caveats in mind, we may still use online multimedia to enhance web-based communicative activities. One of the most important warnings, as with any technology, is to be sure to try it out before bringing it into the classroom, and if the results are not satisfactory, fix the problem outside of class time, not in front of 30 students.

2. Where can I find information about multimedia and its uses on the Internet?

Although many articles exist that deal with the uses of multimedia in a classroom setting, the vast majority of these sources are found in traditional hard copy venues: magazines, newspapers, journal articles, and books. Nevertheless, some authors have noted the irony in this and have placed some

discussions of the issues and concerns (noted above in the first section) on the net. Below is an annotated bibliography of sites that will assist you in answering the title question. Several of the sites address the subject of multimedia and the rationale for its use. Others identify specific multimedia software and discuss their merits and disadvantages, particularly in relation to use for FL instruction. A database of multimedia software for FL use is also noted. These sites should give you a better idea of what is meant by multimedia and why you would want to use digital materials in your FL lessons.

["What is Multimedia?"](#) by Antti Peltonen, University of Oulu, Finland.

Defines the nature and functions of multimedia. Continues with discussion of the "why" of using multimedia in the classroom instead of more traditional delivery methods for information.

["The Development, Formative and Summative Evaluation of A Computer Multimedia Tutorial: A Case Study"](#) by Robert D. Stewart, online dissertation.

Not for the faint of heart (it is, after all, a dissertation), but provides some interesting observations about the nature and use of multimedia and problems with the development and implementation of multimedia projects by teaching faculty. Has an extensive literature review that includes many volumes of "how-to" for multimedia.

["Addressing the Need for Electronic Communication in Foreign Language Teaching"](#) by Jean W. LeLoup & Robert Ponterio, SUNY Cortland.

Proposes the use of electronic communications technologies by FL teachers as a natural segue from traditional language instruction to a communicative curriculum. Includes many FL sites that use multimedia applications.

["A Communications Technology Module for the Foreign Language Methods Course"](#) by Jean W. LeLoup, SUNY Cortland.

Offers a rationale for learning to use and then incorporating electronic communications technologies in the FL classroom. Provides a four-part teaching module that develops an understanding of the concepts through FL-specific activities using the applications leading to practical integration of the technologies in the FL curriculum.

["Multimedia in the Foreign Language Classroom"](#) by Barbara Andrews, Maumee City Schools, Toledo, OH.

Underscores the value of using multimedia applications to replace traditional projects in the FL classroom. Addresses several thorny issues such as training in the use of multimedia applications, limited availability of computers in the classroom, evaluation of projects, and eventual disposition of the projects. Concentrates primarily on the use of Hyperstudio as a useful multimedia application for FL instruction.

["Emerging Technologies: Real-time Audio and Video Playback on the Web"](#) by Bob Godwin-Jones, Virginia Commonwealth University.

Deals with multimedia formats of audio and video streaming files. Addresses instructional uses of these multimedia in the FL classroom. Discusses specific applications necessary to play these files. Offers extensive listing of streaming formats and sample sites where FL teachers can obtain the software and subsequently access such media as live radio and television broadcasts.

["Multimedia Authoring for Foreign Language Faculty: The Libra Authoring System"](#) by Robert Fischer, Southwest Texas State University & Mary Ann Lyman-Hager, The Pennsylvania State University (*Abstract of a paper given at the Joint International Conference of the Association for Computers and the Humanities and the Association for Literary & Linguistic Computing, Queen's University, Kingston, Ontario, Canada; June 3-7, 1997*).

Discusses the use of the Libra authoring system, underscoring the theoretical basis for implementing this software in developing multimedia FL activities. In particular, the authors argue for the realization, in actual FL lessons, of the theoretical principals involved in FL listening comprehension.

"Using Multimedia LIBRA to Enhance Learning and Teaching in Foreign Language Classes" by Travis Bradley & Lara Lomicka, The Pennsylvania State University.

Online PowerPoint presentation that presents a hypercard-based authoring template (LIBRA) for use in the creation of interactive FL lessons that include many different types of multimedia. Discusses a study carried out using the LIBRA multimedia authoring system and offers pedagogical conclusions based on the study's outcome.

"German Studies on the Internet: Enhancing Foreign Language Acquisition through Multimedia" by Andreas Lixl-Purcell, University of North Carolina at Greensboro (*Presentation at the AATG Summer Workshop in 1995 on German Teaching and Technology*).

Discusses the rationale for teaching German with multimedia technologies and offers sample activities at graded levels; also mentions several technologies and links to sites with more in-depth information.

[Foreign Language Multimedia Evaluation Project](#) by the National Foreign Language Resource Center, University of Hawai'i.

Goal is to establish a database of information about FL multimedia programs available for implementation. Requests reviewers for many different multimedia software applications; some are reviewed, but many more are without comment presently. Includes an extended taxonomy of features for developing and evaluating FL multimedia software.

3. How might one go about learning how to create materials?

The authors of this article recently taught a course in "Multimedia Materials Development for International Communication" for which the syllabus and the complete set of instructional materials may be found online at: <http://www.cortland.edu/flteach/mm-course/mm-syl.html>.

Working through these lessons, one can learn the fundamentals of creating and editing images, sounds, and videos, as well as how to pull them all together in presentation formats such as HyperStudio, PowerPoint, or web pages. Individual topics include using accents, searching the net, copyright, scanning, flowcharting and storyboards, clip art, digital cameras, sound recording and editing, photo editing, stylistic considerations, digitizing recorded video, editing video shots, publishing web pages with FTP, file compression, and client-side image maps. Taken together, these topics provide the basics of multimedia development.

The lessons walk the learner through the steps required to accomplish the specific tasks leading to successful completion of the lesson objectives and course assignments. Illustrations and screen shots are provided to show examples of the images and sounds that may be generated. Of course, to accomplish these tasks the learner does need to have access to the necessary software. Most of the lessons also include links to online supplementary materials related to the topics, though generally not from an FL perspective.

Why bother learning about multimedia development? It certainly is not for everyone, but some teachers may enjoy creating digital classroom materials. Others may want to use this format for student projects, and those seeking to purchase multimedia CD-ROMs may simply want to know more to become a more informed buyer. In any case, it is wise not to try to learn too many things at once. It may be preferable to go slowly, becoming proficient in using a few tools at first before adding more to one's bag of classroom tricks.

4. Some examples of multimedia use in an FL instructional context on the Internet

Now you have read about the what, why, and how of integrating multimedia into the FL curriculum. All that remains is to view a few examples of net sites that have put multimedia to use in activities meant for the FL classroom.

The sites below incorporate many of the multimedia applications (e.g., audio, digitized video) and have links to others (e.g., streaming audio and video) mentioned above. These sites were also constructed within a sound pedagogical framework and aim to use the multimedia software to its best advantage for FL instruction and learning. Explore these sites, evaluate them from your own particular perspective as an FL educator, and feel free to offer comments and feedback to the respective authors of the sites.

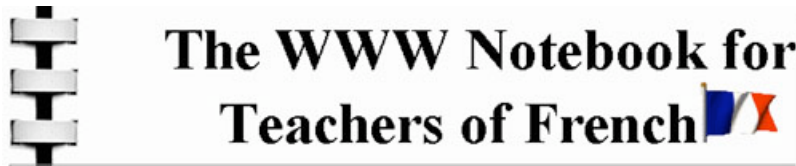


Figure 1. [The WWW Notebook for Teachers of French](#) by Sonja Moore, Virginia Commonwealth University

Site for French language instruction. Offers resources, activities, and links that parallel a thematic index of topics. Has sections on media and interactivity, grammar, dictionaries, and creating your own web page, among others.

Civilisation française

Figure 2. [Civilisation française](#) by Marie J. Ponterio, SUNY Cortland

Site for French instruction. Addresses many different cultural topics and provides a variety of activity formats, using audio with video support to be added soon. Also includes a "Voyage virtuel" through France with numerous corresponding links to francophone information.

GERMAN FOR BEGINNERS

Figure 3. [German for Beginners](#) by Peter Gölz, University of Victoria, Canada

Site contains lessons for beginning German students, native speaker audio files, and links to other German exercises on the web.



Figure 4. [Hebrew Exercises](#) by Judith Rudnick, Center for Advanced Research on Language Acquisition (CARLA), University of Minnesota

Site offers several types of interactive lessons in Hebrew. Must have Hebrew fonts installed on computer and as web browser default font to read exercises. Includes instructions for obtaining fonts and RealAudio Encoder, necessary to hear the audio files. Also contains list of computer vocabulary in Hebrew.



Figure 5. [Hindi Exercises](#) by Gabriela Nik. Ilieva, CARLA, University of Minnesota

Site contains beginning and intermediate supplemental and review exercises to accompany basic Hindi language courses. Exercises use audio files. Must have Hindi script font installed to use exercises.



Figure 6. [Taller hispano](#) by Jean W. LeLoup, SUNY Cortland

Site for Spanish language instruction. Offers web-based lessons using video and centered around ten themes basic to a FL curriculum. Uses authentic materials.

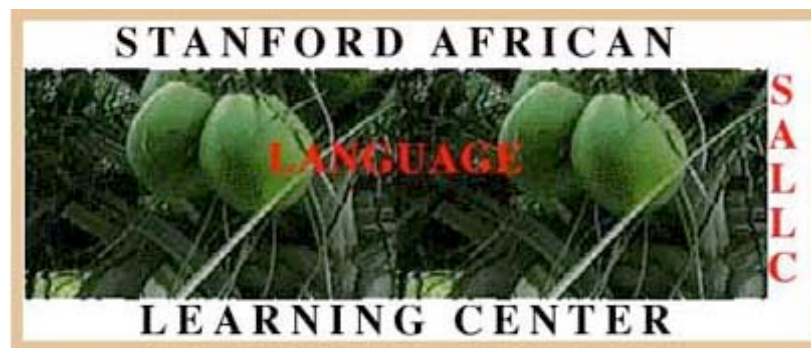


Figure 7. [Stanford African Language Learning Center](#) by John Mugane, Stanford University

Site is a customized web browsing environment used in Swahili classes taught by the author. Many sound files accompany the Swahili text, which narrates photos as well as cultural stories.

5. More sites including multimedia for less commonly taught languages

While the sites below were not necessarily constructed with specific FL instruction purposes in mind, they do include multimedia and could be useful in FL classes. The predominant medium here is audio transmission, although several Quicktime movies are represented also. Possible uses include demonstration of native speaker pronunciation, cultural references, and techniques of mastering difficult non-Roman scripts.



Figure 8. [Gahoh](#) page by Masayoshi Kanai

Site has many Quicktime movies showing how to write in several Japanese scripts, including Hiragana, Katakana, and Kanji.



Figure 9. [Kabuki for Everyone](#) by Ichimura Manjiro

Site includes many vocal and musical sounds of traditional Kabuki. Can be viewed in English or Japanese. Includes Quicktime morphing movie.

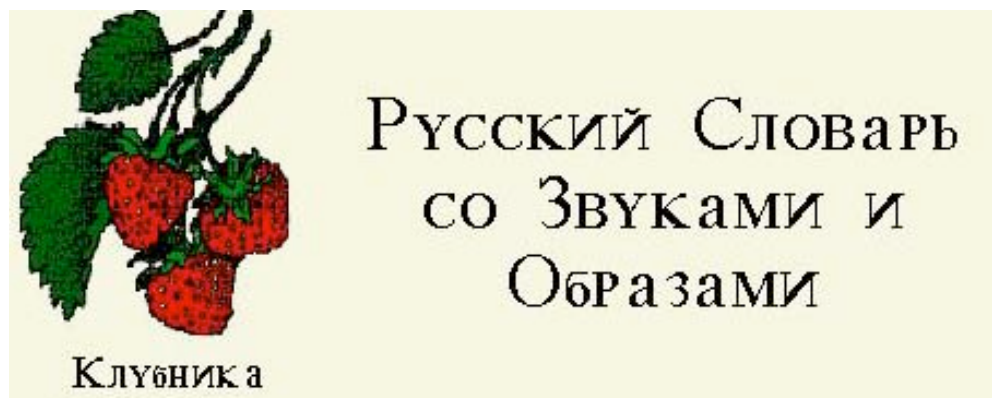


Figure 10. [Russian Dictionary](#) by Sarah Withee

Site offers Russian dictionary with sounds and still images. Includes native speaker sound files in AIFF format to present vocabulary.