Expanding Pedagogical Options:

A Pilot Test of Horizon Wimba’s Voice Tools

CAC Priority
2nd Priority: Innovative Proposals with Student Involvement

Proposing Unit
Department of Foreign Languages and Literatures, LAS

Reviewing Unit
College of Liberal Arts and Sciences

Participants
Randal F. Dalhoff, Assistant Director, ITS
Niki Davis (Curriculum and Instruction)
Julia Dominguez (Foreign Languages and Literatures)
Chad Gasta (Foreign Languages and Literatures)
Neysa Goodman (Foreign Languages and Literatures)
Connie Hargrave (Curriculum and Instruction)
Volker Hegelheimer (TESL/Applied Linguistics)
Leeland L’Hote (Foreign Languages and Literatures)
Beth Martin (Foreign Languages and Literatures)
Aili Mu (Foreign Languages and Literatures)
Kristin Pesola (Foreign Languages and Literatures)
Marcia H. Rosenbusch (Curriculum and Instruction – Foreign Languages and Literatures)
Mehmet Sahin (Graduate Assistant, Foreign Languages and Literatures)
Allan Schmidt (Assistant Director, Center for Excellence in Learning and Teaching)
Ann Thompson (Curriculum and Instruction)

Project Leader
Julio C Rodriguez (Director, Foreign Language Learning Resource Center, Department of Foreign Languages and Literatures, 294-3415, jcesar@iastate.edu)

Signatures
Project Overview and Expected Benefit

This pilot test is intended to explore the pedagogical potential of Horizon Wimba’s Voice Tools. The Voice Tools will expand the capabilities of WebCT, a course management system that has been in use in ISU since 1998, and that has already been widely adopted by the university community. The Voice Tools are a promising extension of the capabilities of WebCT that may enhance the pedagogical possibilities of this environment. The following are the four tools included in this software package: 1) voice e-mail, which allows users to easily add sound to their messages in addition to text; 2) threaded voice boards, which enable asynchronous discussions using sound, text, or a combination of both; 3) live voice chat, which allows users to hold one-on-one or group discussions; and 4) voice recorder, which allows instructors to easily add voice messages to WebCT pages. The Voice Tools additionally include other features such as audio import/export using popular formats (e.g., mp3, wav, etc.), which enables the use of existing audio files.

The purpose of this pilot is to provide an opportunity to ISU instructors and students to use these tools and to gather information on their use and potential to improve teaching and learning at ISU. In order to do this, the Voice Tools will be licensed on a limited scope (50 simultaneous connections) for one year and will be deployed in a selected number of courses that comprise a wide spectrum of pedagogical contexts, including graduate and undergraduate classes, modern and ancient language learning and content classes, as well as face-to-face and distance courses. Approximately 4 summer WebCT-enhanced courses, and 20 fall and spring courses will incorporate the voice tools. The participants in this grant who teach classes (see Appendix 1) have already agreed to pilot test the Voice Tools. One quarter-time FTE during this time, managed by the project leader, will provide instructors assistance with technical and instructional aspects of the tools, especially at early stages of deployment. The assistant will subsequently coordinate and participate in a variety of tasks intended to document the use of the tools and build an active community of early adopters. For example, one of the assistant’s tasks will be to document the ways in which the tools are being used in all participating classes and to create conduits to gather and share this information.

As the rationales offered by the participants in this grant indicate (Appendix 1), these tools have the potential to improve learning and teaching at ISU. The use of Voice Tools has an enormous potential to enrich language learning environments through spoken interactions. Asynchronous voice communication, for example, opens up possibilities for collaborations and exchanges using spoken language with universities abroad without the limitations imposed by different world time zones. Similarly, the tools would enable foreign language instructors to maximize opportunities for their students to be exposed to the target language since the technical requirements to use WebCT and these tools are considerably low.

Besides the opportunities this tool affords for language instruction, it may also be advantageous for a variety of other contexts. For example, adding audio to a distance learning mode may help create a sense of proximity with other course participants that would otherwise be difficult to achieve. Likewise, these tools may help diversify learning activities so that a wider range of learning styles can be addressed. For this pilot of the tools, courses in both distant and face-to-face mode as well as courses with content other than world languages have been included.

Implementation

Horizon Wimba seamlessly integrates with both WebCT CE 4.1 (currently under use in ISU) and Vista 4.0 (to be deployed Fall 2006). When the PowerLink is activated, the Voice Tools are used as any other tool within the WebCT environment. The necessary hardware (headsets and microphones) is available in the 3 buildings where the pilot courses are likely to be taught. Students attending these classes also have access to the necessary hardware in other facilities at
times when other computer facilities are closed or scheduled for other activities (e.g., Center for Online Learning in Carver Hall).

Horizon Wimba’s Voice Tools can be hosted by the vendor or the purchasing institution. Following recommendations from the Purchasing Department and ITS at ISU, a server will be purchased from the vendor ($4,000) in order to host the Voice Tools locally, thus avoiding security concerns and reducing hosting costs significantly (currently $2,750/year) if the license is renewed.

Dissemination
The graduate assistant and undergraduate student workers will work with the Foreign Language Learning Resource Center (FLLRC) and other campus units (e.g., CELT) to coordinate one show-and-tell event in the Fall 2006 and one in the Spring 2007. The FLLRC will create a website for the community of early adopters of this technology to share information on their use experiences with the rest of the university community. For example, information shared during show-and-tell events will be made available through this website.

Sustainability
All the instructors who participate in this pilot are aware of the possibility of losing access to these tools beyond the duration of this pilot. In order to assess the impact of the Voice Tools, a survey will be constructed by the research assistant in collaboration with the FLLRC and will be administered to all Voice Tool users at the end of each semester. Toward the end of January 2007, the Department of Foreign Languages and Literatures (FLL) will share the results of this survey and will consult with the participants involved. If there are evident pedagogical advantages to using these tools, FLL will approach the participating departments to explore the possibilities of renewing licensing for a second year with advisement from ITS and ISU’s Purchasing Department. An unlimited license for these tools at this moment would not exceed $18,000.-

Courses
An overview of the courses that will initially pilot the Voice Tools as well as the instructors’ rationale for incorporating these tools is provided in Appendix 1.
### Table 1. Full Itemized Budget
(Costs for the Entire Project)

<table>
<thead>
<tr>
<th>Description of Item</th>
<th>Number</th>
<th>Unit cost</th>
<th>Total Cost by Funding Source</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Central Pool</td>
</tr>
<tr>
<td>Server (includes building and shipping the server by vendor)</td>
<td>1</td>
<td>4,000.00</td>
<td>4,000.00</td>
</tr>
<tr>
<td>Software License (50 concurrent-user license; includes 24/7 remote technical support)</td>
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<td>7,700.00</td>
<td>7,700.00</td>
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<tr>
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<td>¼ FTE Research Assistant (x 12 months)</td>
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<tr>
<td>Online Survey Tool Subscription (Surveymonky $19.95x2months = $39.90)</td>
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<td>39.30</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>$ 22,437.00</strong></td>
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Table 2. Minimum Feasible Itemized Budget  
(Costs for Minimum Feasible Part of the Project)

<table>
<thead>
<tr>
<th>Description of Item</th>
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<tr>
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<tr>
<td><strong>Total</strong></td>
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<td></td>
<td>$20,547.00</td>
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Appendix 1: Some Courses for 2006-7 Pilot

CHIN 301 - Advanced Chinese
This course focuses on cultural literacy through a variety of texts from the humanities, social sciences, mass media and business. The lack of the necessary aural-oral environment has presented the largest obstacle in the study of Chinese language on ISU campus. Students who have reached the advanced level (with sound knowledge of grammar and vocabulary) need this environment especially to achieve the required level of communicative proficiency. I have been using WebCT in my classes for a few years, including the Chinese platform. I believe that the implementation of all four Wimba tools (voice email, voice bulletin board, page sound recording, and voice chat) in WebCT helps create the much needed aural-oral environment. In the past I have dreamed of pedagogical tools like Horizon Wimba’s Voice Tools.

CI 501 - Foundations of Instructional Technology (Connie Hargrave)
The purpose of CI 501 is to introduce the theoretical and philosophical foundations of instructional technology to the students and assist them in developing theoretical and practical knowledge about the implications of technology in teaching and learning. CI 501 is also taken by students outside of Curriculum and Instruction (majoring in a wide variety of disciplines) who are interested in teaching and learning in general and the integration of technology into teaching and learning. Nearly 40% of course time is spent in discussions where students debate and deliberate about theories and current practices in instructional technology. In recent years, CI 501 has been offered online or in a blended format where students use technology to facilitate communication. Wimba has the potential to streamline online discussions and ease the process of collaboration among students. Furthermore, Wimba will allow students to further explore the implications of technology in teaching and learning.

CI 505 – Introduction to Using Technology in Learning and Teaching (Ann Thompson)
This course will be offered next spring for students enrolled in the Master of Education Degree at a distance. The course is taught via WebCT and is structured using a combination of lecture/discussion and laboratory experiences. The purpose of the course is to acquaint the student with current educational applications of computers in teaching and connections of these applications to current learning theory. Emphasis are placed on both the "how" and "why" of using computers in classrooms. Horizon Wimba will enrich the online discussion as well as help intensify the instructor presence in the online environment.

CI 511 - Technology Diffusion, Leadership, and Change (Niki Davis)
This course is designed to examine strategic change in education and various aspects of technology diffusion for successful learning within and across disciplines. The course will be offered via WebCT to a cohort of students enrolled in the Master of Education at a Distance program. Because students are at a distance, instructors try to offer students different ways to communicate and actively participate in the course. The Horizon Wimba voice recording tool, will be one more way to meet diverse teaching and learning needs as well as to model new possibilities of technology use in k-12 environments.

ENGL 099L – Academic listening strategies for non-native speakers of English (Volker Hegelheimer)
This course focuses on enhancing the listening skills of international students who did not achieve the required score to test out of this requirement. While the main focus is on listening, students have repeatedly demanded more practice with oral production of language as well. I use a course management system to house a companion web site for the course, effectively delivering homework assignments to the students. However, it is currently not possible to provide students with the opportunity to record their own utterances for review by either the instructor or by other students in class. The Voice Tools would fill this void.
ENGL 510 – Computer methods for applied linguistics (Volker Hegelheimer)
This is a prerequisite course in the M.A. program in Teaching English as a Second Language. The programmatic focus is on the effective use of technology in language instruction. As such, numerous courses utilize course management systems such as WebCT and others (e.g., Moodle) to engage students in online discussions. However, technical limitations curtail the coverage of how oral language can be taught through the use of technology. The Voice Tools would enable us to do so by allowing users to listen to and record spoken language. Horizon Wimba’s Voice Tools are currently being used in language instruction and access to this product would significantly help us prepare our students for their teaching responsibilities after they graduate from ISU with their M.A. in TESL or the Ph.D. in Applied Linguistics and Technology.

F LNG/CI/LING 486 Methods in Foreign Language Instruction: Elementary School (Marcia H. Rosenbusch)
This course is taught each Fall with an enrollment of approximately 14 students. In this course I have been conducting Action Research on the integration of technology since 2002 on the use of Synchronous Chat using the WebCT3 Chat function. I arrange the half hour Chat between a small group of 2-3 students and a practicing elementary school classroom teacher in the U.S. The Chat is focused on a topic students have been studying in the course, such as strategies for classroom management in a foreign language at the elementary school level. For the topic, small groups of students each view a unique streamed video clip of a master teacher in a classroom management situation, dialogue about it together, answer guiding questions defined by the instructor, and report to the class on their observations and conclusions. The Chat teacher sees the same video clip and reviews the guiding questions students answered prior to the Chat on classroom management. I am very interested in exploring the use of an audio Chat experience for this course instead of the traditional Chat, for which both students and teachers have noted limitations.

FRNCH 310 — French Pronunciation and Phonetics (Neysa Goodman)
This is an upper-level course, required for French majors at Iowa State University. Through this course, our students master and use the International Phonetic Alphabet as a means to the end goal of improving their French pronunciation. As this is a course that focuses on speaking, oral and aural exercises and assessments are absolutely required. With Horizon Wimba’s Voice Tools, the administration of these tasks would be more easily and efficiently done as outside-of-class tasks, thus creating time and allowing for more opportunities in the actual classroom. Oral comprehension and progress checks could be assigned more frequently as homework because of the efficiency and accessibility of these tools, thus yielding greater and more rapid improvements in our students' pronunciation. The capacity to send out voice emails to address homework errors is ideal, as this is a task that currently takes up several class-time minutes. Students could dialogue, practice with, and provide feedback for each other, which would add another important human dimension to their language learning. Horizon Wimba’s Voice Tools would not only create a space outside of the French 310 classroom to be used as an improved and interactive learning tool, but also it would open up time inside the classroom for additional developmental and interactive activities.

SPAN 303B - Spanish for the Professions (Chad Gasta)
This course prepares business, engineering and other students for effective communication in the professional world by building upon existing cultural knowledge and perfecting grammar and vocabulary related to a variety of areas: legal, economic, medical, social, business, scientific, etc. With the assistance of WebCT and, in particular, innovative language tools such as the Voice Tools, this course will allow students to exchange meaningful information in the target language while simulating professional contexts. Horizon Wimba’s recording and playback tool would allow students to create meaningful dialogue in Spanish, engage in debate-based activities, and take part in guided on-line discussions dealing with professional cultural topics in the Spanish-speaking world in a less-threatening environment. The Voice Tools will enable students to participate in weekly oral discussions dealing with professional topics, listen to a variety of native speakers and mimic their dialects in order to get accustomed to the great variety of customers they will meet in the real world, give brief and informal oral presentations, and ask the professor and other students questions in Spanish via recordings on WebCT. Students can also respond to oral exercises posted by the professor, and even submit their homework in oral form. Activities that incorporate
the use of the Voice Tools will promote the exchange of points of view, stimulate critical and creative thinking and encourage role-play and debate.

**SPAN326 (Studies in Hispanic Art and Film) - (Lee L'Hote)**
This course surveys particular currents and figures in Spanish and Latin American cinema. The course teaches students how to view and critique film through a culture-based exploration of Hispanic cinema. Frequently the course focuses upon a particular era, topic, or national cinema. Because roughly ½ of class time each week is devoted to the screening of films, students have fewer opportunities to discuss the material than in another type of Spanish class. As such, WebCT's threaded discussion component has become a valuable tool for student learning. Students use the discussion board to ask questions, make comparisons between films, follow up on previous class discussions, suggest areas of exploration for the next class period, comment on each other's ideas, etc. Students are required to post in Spanish at least twice a week. The implementation of this new software in future SPAN 326 course will be quite beneficial for students. Currently the threaded discussion list only permits written discussion between students. This new software will allow students to improve further their oral and aural proficiency skills—always a primary focus in any Spanish course—while still making up for lost class time due to film screenings.

**SPAN352 – Introduction to Spanish Phonology - (Julia Domingues)**
Spanish 352 is an intermediate-advanced level course designed to introduce students to the many facets of Spanish phonology. We will study articulation, classification, distribution, and regional variations of the sounds of Spanish. Material covered will include basic linguistic concepts, terminology, articulatory description, and phonetic transcription. Special attention will be given to the particular problems native speakers of English encounter while learning Spanish. Using Horizon Wimba’s Voice Tools, samples of target language sounds (including dialects) can be presented and it would be possible to create online assignments and evaluate those easily. Students can have permanent access to the target language forms focusing on manner of articulation, place of articulation and sonorization. The Voice Tools would also allow the instructor to provide personal feedback for each student assignment highlighting the strengths and the aspects to be improved.

**SPAN 445 - Seminar on the Cultural Legacy of the Mexican Revolution - (Kristin Pesola)**
This seminar focuses on the study and analysis of the diverse cultural production that was created in response to the Mexican civil war. In this course I use many different cultural texts, including film, murals, literature, and cartoons, and I would like to be able to incorporate music, which has until now only been possible within the context of the classroom. The audios tools would enable me to assign music as part of their homework through WebCT. Since the seminars tend to have a full enrollment, I would also like to provide an opportunity for students to practice their speaking skills outside of class through the use of a threaded discussion and audio chat. Finally I want to experiment with using audio voicemail to comment on student writing, which would allow me to give more comprehensive and efficient feedback, thus making it possible to incorporate more writing assignments into the course.