21st century language teaching: Rich Internet Applications for language learning

by Dennie Hoopingarner

The conventional classroom is not an ideal environment for second language acquisition. There are too many students per class, and never enough time in the day. Under pressure to keep the class progressing according to schedule, students' individual needs and questions can be neglected. Thus, the learning gap between high achievers and low achievers can widen as the course progresses—at the higher levels, achievement gaps can lead to proficiency gaps. There is no single solution to this problem, but technology offers a way to address some of the inherent weaknesses of the classroom language teaching format.

In 2006, CLEAR launched its “Rich Internet Applications for Language Learning” initiative. Web-based tools were designed to offer functionality that is beneficial to language learning, while exploring how technology can enhance language teaching. This article discusses the design principles behind the RIA initiative, explains how the tools are intended to be used, and shares some examples of classroom use.

Why Rich Internet Applications?

The RIA project was informed by research on language teaching and language acquisition. One of the most significant influences was work by Swain (1985), which indicated that receptive language does not necessarily lead to productive ability. In other words, listening alone does not yield improvement in speaking. The Output Hypothesis that developed from this study postulates that in order to improve a language skill, that skill must be practiced. Thus, if we want our students to become better speakers, they need speaking practice. Similarly, reading will not make students better writers; they need writing practice. Responsible teachers would agree that more practice is a good idea, but time is a scarce resource. After taking care of everything else that classroom instruction requires, there is almost no time remaining for speaking practice. This is the language teacher's predicament: learners don't get enough of what we know that they need.

This is one of the arguments for the language lab, which appeared shortly after the invention of the phonograph in the late 19th century (the languages were the first discipline in the humanities to have a laboratory). The equipment in a conventional language lab feeds audio in the target language to individual learners. Special recording functions can mix prerecorded audio with students’ recordings for speaking practice.

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Dear Readers,

Happy Discover Languages Month! This event is part of ACTFL’s Discover Languages...Discover the World! public awareness campaign. CLEAR joins ACTFL in working toward the goal of language promotion, and we encourage you to visit the Discover Languages website (http://www.discoverlanguages.org) to learn more about the language advocacy resources ACTFL has developed.

CLEAR is perhaps best known for its range of products designed to assist foreign language educators with creating fun, interactive lessons that incorporate technology with language learning. This issue’s main article, by CLEAR’s Dennie Hoopingarner, provides background on how technology can help language acquisition, and gives specific examples of free tools you can use to harness the Web to get your students online and engaged.

Spring is a busy time for CLEAR as we prepare for three upcoming conferences. We’ll be in Indianapolis for the Central States Conference on the Teaching of Foreign Languages, right here in East Lansing for World Languages Day, and farther afield for the Computer-Assisted Language Instruction Consortium (CALICO) in Victoria, British Columbia.

The snow is still on the ground here in Michigan, but it’s not too early to start thinking about summer professional development workshops. There are four planned for this summer, with two brand new topics and two encore workshops. Our corps of seasoned workshop leaders looks forward to welcoming you to campus. You can read more on pages 6-7 and apply online at our website.

Everything you do is valuable not only to your students, but to the nation as a whole. I’ll leave you with a few words from Secretary of Education Arne Duncan, from last year’s national Foreign Language Summit: “Our country needs to create a future in which all Americans understand that by speaking more than one language, they are enabling [the United States] to compete successfully and work collaboratively with partners across the globe. So this is our challenge: To expand and improve language instruction at a time when financial resources are tight and the international economic competition is greater than ever. We need to embrace this challenge with all of our collective will and courage—the stakes are too high for the future of our children and our country to ignore it.”

Joy Campbell

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SUGGESTIONS WANTED!

We strive to publish CLEAR News articles that represent current topics in foreign language teaching, and we want to hear from you! If you have an idea for an article or would like to see a particular subject addressed, please let us know at clear@msu.edu. We will consider your idea for future issues of the newsletter.

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The US Department of Education awards grants through Title VI funding to a small number of institutions for the purpose of establishing, strengthening, and operating language resource and training centers to improve the teaching and learning of foreign languages. There are currently fifteen Language Resource Centers nationwide: the Center for Advanced Language Proficiency Education and Research (CALPER) at the Pennsylvania State University; the Center for Advanced Research on Language Acquisition (CARLA) at the University of Minnesota; the Center for Applied Second Language Acquisition (CAELR) at Indiana University; the Center for Educational Resources in Culture, Language and Literacy (CERLL) at the University of Arizona; the Center for Language Education and Research (CLEAR) at Michigan State University; the Center for Open Educational Resources and Language Learning (COERLL) at the University of Texas at Austin; the Language Acquisition Resource Center (LARC) at San Diego State University; the National African Language Resource Center (NALRC) at the University of Wisconsin-Madison; the National Capital Language Resource Center (NCLRC), a consortium of Georgetown University, the Center for Applied Linguistics, and the George Washington University; the National East Asian Languages Resource Center (NEALRC) at the Ohio State University; the National Foreign Language Resource Center (NFLRC) at the University of Hawai‘i at Manoa; the National Heritage Language Resource Center (NHRLC), at the University of California-Los Angeles; the National Middle East Language Resource Center (NMELRC) at Brigham Young University; and the Slavic and Eurasian Language Resource Center (SEELRC) at Duke University.

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Teachers can monitor students' work, and give them instant feedback. Although sometimes criticized for being uninteresting, when used by a resourceful teacher, the language lab can be used for many interesting and useful activities. There are logistical difficulties with a language lab, however. Large language programs put a strain on this resource. It can be difficult for a teacher to schedule enough time in the language lab to gain meaningful and effective benefits. The language lab is a valuable and beneficial asset to language instruction, but integrating it into the curriculum can be complicated.

One possible solution is to give speaking homework to students. This idea is not new. Some language instructors used to have students record themselves on cassette tapes and then turn in the tapes. The teacher would then listen to the tape, and perhaps record some feedback to the student. This approach offered some benefit, but the process was cumbersome. A later approach was to have students record digital audio files with their computers, then email the files to the instructor (this approach presented a data-management problem to teachers, especially high school teachers, who would suddenly have over 100 recordings in their inbox).

**Enter the web**

Web technology offers a more convenient way to achieve the same results. Commercial products like Wimba (www.wimba.com) and VoiceThread (www.voicethread.com) offer the ability to record and submit audio directly in a web page. Online audio recording is one of the most powerful and useful aspects of the RIAs. The most widely-used RIA is Audio Dropboxes. This small and simple program implements online audio recording with a minimalist approach. Students are presented with a simple audio recording interface consisting of *record, stop, play, cancel* and *save* buttons (see Figure 1). Students record themselves, and when they are ready, save the recording. Recordings are then available to the owner of the dropbox (usually the teacher). Teachers can create any number of dropboxes, and submissions to a dropbox are available only to the teacher.

Pedagogically, this approach is not new. What is new is the ease with which students can create output, and with which teachers can assess student work. The program is easy to learn, and with just a few minutes of preparation, a teacher can create a speaking assignment. Recordings are collected by the web program automatically, and presented to the teacher in a web page (see Figure 2).

This tool naturally encourages students to take more ownership of their learning. Interactionist approaches to second language acquisition (e.g., Gass 1997) emphasize attention and feedback as key factors in shaping learning. Self-monitoring is a form of feedback. After recording themselves, students should be encouraged (or even required) to listen to their recordings and identify aspects of their output that could be improved. Since it is easy to re-record, students can (and should) make several versions before submitting a final recording. This recording technology encourages us to see speaking as a process just as we treat writing as a process. When teaching writing, we instruct students to go through a write-and-revise cycle, treating every version as a draft that can be improved upon. The word processor made it easy to make revisions to a draft of a paper. Online recorders should be used in a similar way. When using the recording tool, teachers should make it clear what they expect from students: not a rough draft, but a polished representation of their speaking ability.

In addition, teachers should remember that the RIAs are tools, and as such, there is no one, best way to use them. A speaking tool can be used for regular homework, but also for ad hoc diagnosis or test preparation. Prompted speaking exercises can be combined with a picture or video clip to do a picture description or video narration task. This flexibility is an advantage of using a tool: it can fit with a variety of language teaching tasks. Methodological principles of interactionist language teaching (Doughty and Long 2003) and instructed second language acquisition (Chapelle 1998) give some examples of how technology such as RIAs can become part of the language teaching ecosystem.
RIAs and active learning

Two other RIAs that are both interactive and can foster active learning are Conversations and Server-Managed Interactive Learning Exercises (SMILE). Conversations is a simulated interview program. The program plays a series of prompts, and records students’ responses (see Figure 3). Similarly to Audio Dropboxes, students’ responses are placed in the teacher’s account automatically, and teachers can retrieve the recordings at their convenience (see Figure 4).

SMILE is a tool for creating text-based language practice exercises. By itself, SMILE is not innovative or visually interesting (see Figure 5). Text manipulation exercises such as fill-in-the-blank and drag-drop matching were old news in the 1980s. Two innovations breathe new life into this genre. The first is the ability to combine these exercises with other media. An RIA called Mashups makes it easy to pull content from different sources onto the same web page. Combining a video clip from YouTube with a SMILE exercise, for example (see Figure 6), both contextualizes the SMILE exercise and enhances the utility of the video clip with a pedagogical task.

The other innovation is the ease of creation. SMILE is built on a template system. Creating a new exercise is as simple as typing (or pasting) content into the template (see Figure 7). No programming is necessary to create exercises. This is a design feature of RIAs. Teachers can focus on content and instruction, because the interactivity is automated by the RIAs.

As language teachers, we are accustomed to being the leaders of instruction and directors of learning. We are certainly responsible for teaching, but technology may provide new opportunities for active learning on the part of the students.

The learning theory of constructivism as advocated by Piaget (1954) suggests that learning is more effective and lasting when learners are actively engaged. The examples presented thus far assume that the teacher is creating the materials for students to use. There is a role that teacher-created materials can play in the language classroom. There is also another possibility: student-created materials. The RIAs are easy to learn, and materials can be created in very little time. In addition to the teacher creating material for students to learn, students could be assigned the task of creating materials themselves. The idea of learning through the process of creating learning materials may be counterintuitive to some, but there is research that suggests that students who create learning materials actually learn more than students who simply use the same learning materials (Harel 1991, Jonassen and Wang 1993, Kafai et al 1997). Putting technology tools into students’ hands for creating learning materials—not merely consuming them—may in fact yield better results.

The RIAs have the capacity to be social and collaborative. For example, SMILE has the function to “share” a question item. One possible use of this function could be for teachers to assign every student to create a few review questions for test preparation, and to share them with the teacher. The teacher could then review all the students’ questions for accuracy, and then assemble them together for all the students to use. Another possibility would be to divide the class into groups, and have each group create a set of interview questions in Conversations. The Conversation can then be shared with the entire class. Groups could respond to other groups’ questions. Group work like this has been shown to be effective (Long and Porter 1985), and has the benefits of active learning on the part of the students, additional speaking work, and constructivist learning.

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This article highlights just a few of the RIAs, but there are other tools available. A popular activity in language classrooms is to use presentation software to play games. A tool called QuizBreak takes that function to the next level, adding multimedia elements like pictures, audio, and video to question elements. Scribbles is a writing recorder that allows teachers to model handwriting, and to view students’ handwriting. Handwriting is especially important when teaching languages that have a different writing system, such as Japanese, Greek, or Hindi. Being able to see not just the finished product of writing, but the process of writing, is impossible to do in print but easy to do with a computer. Visit the RIA website to see all of the tools that are available, and to read documentation on each tool.

The overarching goal of the RIA initiative is to enhance language teaching and learning with technology. The RIAs combine new technologies with language pedagogy. We are delighted with the response to this project, and we plan to continue offering this service to language teachers and learners across the country.

References


Dennie Hoopingarner is CLEAR’s Associate Director for Technology and also serves as Director of Michigan State University’s Language Learning Center.
RIAs for Language Learning: Introductory Techniques
JULY 18-20, 2011
Workshop Leaders: Dennie Hoopingarner, Associate Director for Technology, CLEAR; Vineet Bansal, Information Technologist, CLEAR
This workshop is for language teachers who want to learn how to use CLEAR’s free tools for creating interactive web-based multimedia language materials. The only computer skills that these tools require are point and click, copy and paste, and drag and drop. You get to concentrate on teaching, and don’t have to worry about programming, uploading, downloading, or installing. The tools can be used with any language, any textbook, and any level. Learn how to make web pages where your students can record audio files that are automatically uploaded to your virtual dropbox. Make a “mashup” that combines your text, pictures, video, and interactive language exercises into one web page. Create virtual conversations for your students where they listen to questions and the program captures their responses automatically. All of these functions are available to you from within a web browser, with no special hardware or software needed. Come and experience the next generation of web-based language teaching.

Adding Variety to Reading and Vocabulary Lessons
JULY 21-23, 2011
Workshop Leader: Charlene Polio, Associate Professor in the Department of Linguistics & Languages, MSU
Most language textbooks, in their reading sections, offer some schema-building and vocabulary exercises followed by comprehension questions. This workshop will suggest a much wider variety of activities—focusing on both language and content—that can be completed before, while, and after reading. In addition, we will look at way to supplement your texts with authentic materials, even for beginners, and how to teach vocabulary for use and retention, not just to help students understand reading material. Finally, we will examine methods for encouraging learner independence through extensive reading and strategies for vocabulary learning. The use of technology in all of these areas will be demonstrated.

Project-Based Learning in the Language Classroom
JULY 25-27, 2011
Workshop Leader: Senta Goertler, Assistant Professor in the Department of Linguistics & Languages, MSU
Are you bored with the same textbook activities? Are your students laughing at the outdated pictures in the book? You can spice it up or even replace the textbook with project-based learning. Students are engaged, learn teamwork, develop their computer and technology literacy, and develop their language skills while engaged in fun projects. Projects can be short-term or long-term, involve written and/or oral language production, be completed individually or in teams. In this workshop you will learn how to design good projects, how to structure project presentations, and how to evaluate the project and the language learning during project-based learning. The introduction to project-based learning will include many example projects (with assignment sheets, sample student work, and evaluation criteria). Participants will also design their own project ideas and create a sample project for their students. Basic computer skills are a must for this course.
Using Video to Promote Language Development in the Classroom  
**JULY 28-30, 2011**  
**Workshop Leaders:** Angelika Kraemer, Coordinator of Co-Curricular and Outreach Activities at the Center for Language Teaching Advancement, MSU; Dennie Hoopingarner, Associate Director for Technology, CLEAR

Enhance your learning environment with the rich, contextualized input that video materials can provide. The combination of aural and visual cues naturally makes video input more comprehensible, but video can be used for much more than listening comprehension. You can also use it to teach sociolinguistic competence and to promote output (both oral and written). This workshop will consider multiple uses of video as well as techniques for adapting authentic materials to learners of various proficiency levels. Participants will learn how to locate, identify, and select appropriate video, and explore the relative advantages and appropriate use of authentic and scripted video materials. The workshop will also introduce methods for creating video-based lessons, including pre-viewing, during viewing, and post-viewing activities, top-down and bottom-up activities, selective listening activities, and interactive and communicative uses of video. Finally, topics in the practical use of digital video recorders and computers to shoot and edit video projects will be covered. Topics include camera techniques, dubbing audio and adding subtitles, and output options.

Learn more about all of these workshops and find information about accommodations, costs, and discount plans by visiting our website. Go to [http://clear.msu.edu](http://clear.msu.edu) and click on “Professional Development.” You can apply right online! You can also print a PDF application from the website, or contact CLEAR to receive an application in the mail.

**Early application deadline:** May 6, 2011  
**Regular application deadline:** June 1, 2011

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**ANNOUNCEMENTS AND RESOURCES**

**Get Help, Give Help**  
Are you one of the 14,000 teachers using CLEAR’s Rich Internet Applications? Highlighted in our main article, the RIAs are powerful and useful tools for enhancing your language classes. There is a discussion forum dedicated to sharing tips and information for getting the most out of the tools. Feel free to ask questions, answer others’ questions, and share your experiences in using the tools. You’ve joined our community; now add your voice to the conversation! Go to [http://ria.clear.msu.edu](http://ria.clear.msu.edu) and click on the “forums” link.

**Language Resource Centers**  
CLEAR is one of 15 Language Resource Centers (LRCs) funded by grants from the US Department of Education. The LRCs recently published a comprehensive booklet for the 2010-2014 grant cycle that gives information about the projects in which they are engaged as well as an overview of each individual LRC and some of its key initiatives. You can download the full booklet at [http://clear.msu.edu/clear/otherlrcs/lrc_broc_full.pdf](http://clear.msu.edu/clear/otherlrcs/lrc_broc_full.pdf), or simply visit CLEAR’s website and click on the “Other LRCs” tab. You’ll learn about numerous free and low-cost resources as well as exciting programs happening at LRCs around the country.

**Calendar Feature on LRC Website**  
There is a helpful calendar feature on the LRC website. In general, this website offers a central location to learn about products and professional development offered by CLEAR and the other fourteen LRCs nationwide. The calendar feature includes local, regional, and national events of interest to foreign language educators, and allows users to browse by topic, location, date, and sponsoring LRC. Visit [http://nflrc.msu.edu/](http://nflrc.msu.edu/) and click on the calendar icon to learn what’s going on in your area.
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