ON THE NET
Interactive Language Exercises on the Web:
An Exemplar

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In an earlier column of LL&T, we discussed the rationale for using the World Wide Web (WWW) and multimedia materials (cf. Using WWW Multimedia in the Foreign Language Classroom: Is This for Me?). For those who wish to undertake the development of multimedia materials, instructions can be found in many places on the Web, and the references in the latter article are a good starting place. But for those foreign language (FL) teachers who agree with the idea of using interactive materials and the Web to enhance their FL instruction but have neither the time nor the inclination to delve into materials development, take heart. Other FL educators have, indeed, made this a priority and many do share their creations on the Web.

The WWW provides a wonderful venue for interactive language learning activities that can serve instructional, enrichment, and review purposes. The present column will describe in detail one such site as an exemplar of different types of interactive activities that language learners can use to assist them in learning the target language (TL). A discussion of some of the technical aspects of this site is also included so that the reader can better appreciate what goes on "behind the scenes" of many Web pages.

The site is hosted by Ursinus College and begins with an introduction and statement of purpose by the author, Juan Ramón de Arana. His main purpose is to provide a variety of "language exercises for the purpose of facilitating the learning and teaching of Spanish in the Internet environment" and to present "different approaches to common language challenges for the foreign student of Spanish." Nevertheless, this site serves as an example to all FL educators for WWW interactivity and language instruction and learning.

The site contains seven different sections: Introduction, News, Instructor check exercises, Self check exercises, FAQs, Comments, and a Copyright proviso. These sections are indicated by and accessible via the menu bar at the bottom of the initial frame:
The author has made a conscientious effort to illustrate his purpose, outline the steps he has taken in constructing this site, justify his choice of activities and subject areas, answer commonly asked questions, provide access to as many learners and instructors as possible, and solicit input in order to improve the site.

In this section, the author enumerates the many updates and corrections that have been made to the site during its existence. Many of the changes are due to comments submitted by online users. The chronological order of the improvements is helpful to a frequent user, who can readily identify a new addition to the site by the date listed.

The Instructor Check Exercises are extensive, covering 27 different grammar points and vocabulary items in a variety of formats. The language points are presented in a table format that indicates the title of the activity, the language area treated, and a description of the activity, including the number of external links present to aid in completing the activity.

<table>
<thead>
<tr>
<th>Title</th>
<th>Language Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentaciones</td>
<td>Verb &quot;gustar&quot;, adjectives.</td>
<td>Small composition (10 blanks) to introduce oneself following a model, 2 brief open questions, 2 external links.</td>
</tr>
<tr>
<td>Colores</td>
<td>Color adjectives.</td>
<td>10 blanks to enter color adjectives that match images of fruits and vegetables.</td>
</tr>
<tr>
<td>Pronombres de objeto!</td>
<td>Indirect and direct object pronouns.</td>
<td>10 blanks to provide the pronouns in a dialog, 5 questions.</td>
</tr>
</tbody>
</table>

The exercises use a wide range of formats (please see the section on "The Technology" for a more detailed explanation of several of these formats): cloze for production of vocabulary and verb conjugations; pull-down menus for recognition of grammar points, dialogues and short stories with fill-in
blanks; authentic materials (texts, maps, audio files); and a PowerPoint presentation on the seasons. Students are asked to understand TL texts and their content, identify and produce correct grammatical answers, compose letters and valentines and short stories. Each of the activities has a provision for students to send their work to the particular professor assigning the task for correction. Students can also receive a copy of their own responses for later verification and correction.

The frame option provides a menu tree that lists the various topics, grammatical points, and vocabulary exercises:

<table>
<thead>
<tr>
<th>Title</th>
<th>Directory &amp; Language Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condiciones irreales</td>
<td>If Clauses: expressing hypothetical situations from the past. Pluperfect Subjunctive and Conditional Perfect.</td>
<td>Five sets of multiple choice questions. Three options in each set. Feedback for each option is displayed in a text area box.</td>
</tr>
<tr>
<td>Colores</td>
<td>Adjectives: color adjectives.</td>
<td>Eight color adjectives to type in blanks refer to a Picasso painting. If the answer is wrong, the object in the painting changes providing the correct answer.</td>
</tr>
<tr>
<td>Ni (ni...ni)</td>
<td>Conjunction &quot;ni&quot; as &quot;nor.&quot;</td>
<td>Five sets of multiple choice questions.</td>
</tr>
</tbody>
</table>
This section also offers some activities incorporating art and literature. Notably, Goya, Picasso, Sorolla, and Velázquez are treated in the portion on art. In the literature section, a sonnet by Garcilaso de la Vega is featured, along with interpretive exercises and a syllabification task. *Lazarillo de Tormes* is the subject of another series of activities.
The FAQ (Frequently Asked Questions) section is a helpful addition to the site and will answer most queries a user might have. As always, the author has included an additional provision for contacting him with any other questions that might arise.
The final portion of the site is a section on copyright. This is particularly important as the Internet has made it even easier for people to "borrow" large portions of others' work and labors and present it without proper documentation or credit. The author here is merely requesting that users abide by fair use practices, give credit where credit is due, and adhere to the spirit in which these pages were created: educational enhancement, improvement to FL instruction and learning, and no commercial use. The copyright notice on this site was adapted from that of Institute for Learning Technologies at Columbia University.

**The Technology Behind the Site**

Sites like this one require a considerable amount of time and effort on the part of the creator. Designing a site, making it freely available, and maintaining it represents a very generous contribution to the profession. To give the reader an introductory idea of the work involved behind the scenes, we offer the following brief description of some of the technical aspects of these pages.

The self-check exercises, touching on a wide range of grammatical topics, make good use of simple Javascript utilities to go beyond the basic HTML format to integrate interactive components in pages and allow students to receive immediate feedback. Several different types of Javascript procedures are used in the site, some created by the author and others borrowed from sites and software that support interactive WWW development.

In many of these self-check exercises, each question uses a drop down box to give the student several possible choices. The Javascript utility verifies the student's selection and then tells the student the answer is right or explains why the answer is wrong.

```
1. En mi casa mi padre  
   comidaición después de  
   trabajar.  
   cocin en cocina  
   cocin  

Respuesta correcta.
```

```
2. Yo siempre le  
   ayuda.  
   cocin as  
   cocin  

No. El sujeto no es "tu".
```

Although the multiple choice format of this activity, [http://mld.ursinus.edu/~jarana/Ejercicios/Self-Check/AR-verbs.html](http://mld.ursinus.edu/~jarana/Ejercicios/Self-Check/AR-verbs.html), does not permit the inclusion of open ended questions (such as those in the instructor-check exercises) that are much better for checking the students' ability to use the language, it makes excellent use of the current state of the technology and recognizes the limits of that technology for language teaching activities. The simple Javascript utilities are well suited to multiple choice verification, whereas analysis of open-ended natural language responses is more appropriately done by the teacher because a program capable of accomplishing this task satisfactorily (if one could even be written) would by its very nature be an enormous undertaking.

The fill-in-the-blank activities make use of exact pattern matching in their Javascript infrastructure to determine whether or not the student's response is exactly the same as the expected answer.
Even such elementary pattern matching demands a significant amount of programming to produce the required functionality. In the case of the sample shown above, http://mld.ursinus.edu/~jarana/Ejercicios/Self-Check/Prejava2.html, the Javascript program represents about 90% of the actual WWW page. For example, the script behind the single blank for fuimos in the example above is:

```javascript
function checkAnswer1(respuesta) {
    if (respuesta != "") {
        if (respuesta == "íbamos") {
            alert("nNo, es Pretérito: acción concluida.")
            document.forms[0].Ir.focus()
            document.forms[0].Ir.select()
        } else {
            if (respuesta == "fuimos") {
                alert("nMuy bien. Continúa.")
                document.forms[0].Salir.focus()
            } else {
                if (respuesta == "fui") {
                    alert("nNo, el sujeto es "nosotros").
                    document.forms[0].Ir.focus()
                    document.forms[0].Ir.select()
                } else {
                    alert("nComprueba la conjugación y/o la ortografía.")
                    document.forms[0].Ir.focus()
                    document.forms[0].Ir.select()
                }
            } else {
                alert("nCompleta este espacio.")
                document.forms[0].Ir.focus()
            }
        }
    } else {
        alert("nCompleta este espacio.")
        document.forms[0].Ir.focus()
    }
}
```
Thus, one might say that 90% of the effort the author put into developing the page is completely hidden from the user.

In a few of these activities, the Javascript utilities used to animate the pages were provided by Macromedia Dreamweaver. Such is the case for a relative pronoun activity, http://mld.ursinus.edu/~jarana/Ejercicios/Self-Check/relativos1.html, in which sentence parts move around the screen to illustrate pronoun placement in relative clauses. http://www.developer.com was the source of scripts used to animate several hangman games used for vocabulary practice, as in, for instance, a dentist vocabulary activity, http://mld.ursinus.edu/~jarana/Ejercicios/Self-Check/Horca1/dentista.html.

In addition to the grammar activities, a few of these activities present literature topics, notably Lazarillo de Tormes, http://mld.ursinus.edu/~jarana/Ejercicios/Self-Check/Lazarillo/, and a sonnet by Garcilaso de la Vega, http://mld.ursinus.edu/~jarana/Ejercicios/Self-Check/Garcilaso/. These pages make use of Dynamic HTML, primarily Layers and Cascading Style Sheets, to enhance the presentation of the text and an interactive vocabulary gloss. DHTML Layers allow an area of a page to be positioned or moved as desired and make it possible to easily place one area of a page behind another. In this case, the text scrolls across the screen from the left. Although this does not seem to be very important, it does allow different texts to move into one place on the page as appropriate. This may sometimes be a neater solution than placing text in a long page or in several smaller pages. In this way it can be easier for the student to navigate through a text without losing his or her place. In addition, it allows quick changes to parts of a text, such as a change of color at the ends of lines of the Garcilaso verse to highlight the rhyme scheme.

<table>
<thead>
<tr>
<th>Soneto XXIII</th>
<th>Soneto XXIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>En tanto que de rosa y azucena se muestra la color en vuestro gesto, y que vuestro mirar ardiente, honesto, enciende el corazón y lo refrena;</td>
<td>En tanto que de rosa y azucena se muestra la color en vuestro gesto, y que vuestro mirar ardiente, honesto, enciende el corazón y lo refrena;</td>
</tr>
</tbody>
</table>

The use of Cascading Style Sheets (CSS) makes it possible to define the format for a particular type of text throughout a page. In this case, the author has been able to format links to vocabulary glosses so the characters in the text do not appear underlined or colored as is usually the case for hyperlinks. This is an advantage because the normal hyperlink format alters the appearance of a text and focuses too much attention on the link. This may not be a problem in a text whose purpose is primarily to convey information, but such distractions detract from the normal process of reading a work of literature. The CSS allows the links to be discreet and so not interfere with the reading of the text. The student can find out if a word is glossed by passing the cursor over the word. If the cursor changes to a hand, a gloss is available by clicking the mouse.

In his site, Spanish Language Exercises, Juan Ramón de Arana has provided a creative and useful set of language exercises that can be used by instructors and learners alike. He has paid attention to the current tenets of second language acquisition in constructing activities using authentic materials, TL input, and language in context. Grammar and vocabulary are clearly at the fore, but cultural information, art, and literature are also present in several activities.

This site serves a dual purpose for FL educators. First, it offers ready-made activities that can be used in Spanish language learning by a wide variety of language learners at many different levels. Second, it serves as an excellent model for those FL educators who wish to delve more into the realm of interactive
materials development for use on the web. We hope that Professor de Arana continues to share his efforts and that others follow his lead in developing similar sites on the WWW for other FLs.