LINGUISTICS DEPARTMENT - STANFORD UNIVERSITY

An Invitation to CALL

Foundations of Computer-Assisted Language Learning

Click here for PDF

An Invitation to CALL

Unit 5: Environments, Tools, Materials, and Activities

OVERVIEW

This unit looks at four dimensions of CALL: the environments in which it is used, the digital tools, the materials available (especially on the Web), and the types of activities. Many of the points here have already been touched on in previous units but we revisit them and explore them in greater depth here. This unit is primarily about exploring, so follow up on links that look interesting.

ENVIRONMENTS

Goal 2, Standard 1 of the TESOL Technologies Standards for Teachers states "Language teachers identify and evaluate technological resources and environments for suitability to their teaching context." Similarly, Goal 1, Standard 2 refers to teachers' knowledge of "a wide range" of technology options and especially their ability to use those options "in a given setting." Indeed, environments determine to a large degree what a teacher or learner can and can't do with technology. This section will discuss different environments for users (both teachers and learners) and how those environments impact the nature of interaction and learning.

- Classrooms. The technology available in classrooms is currently in a state of transition across institutions and in many cases within institutions as well. At Stanford where I teach, I might have one course in a room with an electronic white board and another in a room with only a chalk board. For the foreseeable future, teachers should be aware of the need to be flexible and adapt to the classrooms they find themselves in.

- Computer centers. In some institutions language teachers have access to general purpose computer clusters. In order to make these useful for language teaching, it may be necessary to work with lab coordinators or other IT staff to ensure that items such as headsets and microphones are included, along with language-focused tools like digital recording software and multi-lingual word processors.
- Dedicated language labs. The language lab of the past with networked audio recorders and listening stations has been replaced almost universally by computer clusters specifically for language learning (see for example, Stanford's Digital Language Lab: https://www.stanford.edu/group/ll/cgi-bin/langlab/) The International Association for Language Learning Technologies (IALLT) has published a valuable guide on language center design: http://www.iallt.org/products/publications.
- Homes. Obviously, there is a great deal of variety in terms of what students and teachers have in the way of technology at home. If you intend to assign technology-based homework, it is useful to know exactly what sort of devices, applications, and networks your students have.
- Cafes and similar locales. In some settings the only access some students will have is at Internet cafes and similar venues. It is important to note the limitations of these in terms of bandwidth, security, privacy (noise) and expense to the students. There are also locations, such as many coffee shops, where the wireless connection may be free if students have their own laptops or mobile devices. See https://www.thebalance.com/how-to-find-free-wifi-locations-1358040 for lists.
- Mobile computing. Increasingly, students and teachers are carrying computational devices that greatly exceed the power of desktop computers from a decade or so ago. Smart phones and tablets like offer convenience especially for working with materials like vocabulary that can be handled in short chunks of time. However, they are often used in environments that include other distractions, and students and teachers should take these into account.

Note that increasingly teachers and students are both relying on BYOD--bring your own device--whether it's a laptop, tablet, or smartphone. Teachers need to be aware of what devices their students are using and how they might be different from one another.

The importance of this topic was captured in the volume *CALL Environments* (2nd edition) edited by J. Egbert & E. Hanson-Smith (TESOL).

One particular environment worth discussing is the World Wide Web itself (now increasingly written in lowercase as "the web" as it has become so common). We begin by looking at some disadvantages of the web that can lead to frustration on the part of both teachers and learners before continuing on to advantages.

THE WEB vs. APPS

We can connect to tutors, tools, and resources online in two ways: through web browsers and dedicated apps (short for "applications", what we used to call software programs).

Web browsers like Chrome, Safari, and Firefox connect to sites through their URLs (Uniform Resource Locator) using a normal or secure method to transfer data known as a "protocol". The "http" you see at the beginning of most web addresses (URLs) stands for "hyper-text transfer protocol". When an "s" is added (https) that means it's secure. Most sites begin with "www" for world wide web, but there are other variants increasingly.

Dedicated apps are small programs that connect directly to servers representing their owners. Many tools have both options--you can connect to Facebook, for example, through a web browser (www.facebook.com) or through the dedicated Facebook app and that shows up as an individual icon on your phone screen.

Some websites are programmed to be dynamic in their ability to change their interface to conform to the smaller screens of smartphones. These webapps can sometimes be more convenient than a dedicated app, but they may also lack certain features or connect more slowly.

As part of knowing the device you're working with, you should always be aware of whether you're using an app or a browser, and whether you are online or offline.You need to be sure that your students share that awareness.

TOOLS

- Student learning resources: dictionaries (see http://www.aitech.ac.jp/~iteslj/links/ESL/Dictionaries_and_Reference_Materials/)and other resources. Of particular value for ESL learners are learner's dictionaries, such as the Longman's Dictionary of Contemporary English online: http://www.ldoceonline.com/.
- Automated meaning technologies: Machine translation, e.g. http://translate.google.com and popup online dictionaries like the Chrome extension by Google https://chrome.google.com/webstore/detail/google-dictionary-by-goog/mgijmajocgfcbeboacabfgobmjgjcoja.
- Lexical tools: Tom Cobb's Compleat Lexical Tutor: www.lextutor.ca.
- Media players. Media players have a range of controls that can aid in comprehension, such as the ability to show or even automatically produce captions (see Youtube). Some, like the VLC media player, https://www.videolan.org/vlc/index.html, have sliders to adjust playback speed and controls allowing jumping back 2 seconds to repeat what was just heard {Shift+back arrow}
- Google docs (https://docs.google.com) allow for online writing and multiple-author collaboration through the sharing feature.

Note: there are many more tools for collaboration and learner production on the web...

MATERIALS.

Authentic Language Materials. There are many, many options for this--here are just a few (some have been discussed previously).

- General news sites such as CNN (www.cnn.com) and the New York Times (www.nytimes.com/) have rich Web presences. The News Hour (https://www.pbs.org/newshour/) from PBS and CNN Student News (www.cnn.com/cnn10) include scripts and audio or video together.
- Podcasts at http://www.scientificamerican.com/podcast/60-second-science/ and many news and entertainment sites
- Online video banks: www.youtube.com
- Google news: http://news.google.com. An excellent technique for more advanced students is to have them go to Google News for their own language, find an interesting and read it, and then follow up by reading three or more versions of the same story in English from different online sources.
- Scripts and transcripts from SimplyScripts (http://www.simplyscripts.com/tv_all.html) for movies and TV shows--great for building vocabulary of English in context. See also http://www.eslnotes.com/ for vocabulary support for a number of movies (up to around 2003).

Dedicated Language Materials & Exercises

- Using tutorial software on the Web, like Randall's Cyber Listening Lab (www.esl-lab.com/) and English, baby! (www.englishbaby.com)
- ESL podcasts: www.eslpod.com/website/index.php#
- Commercial course sites like Global English (www.globalenglish.com/) and EF English Live (https://englishlive.ef.com/en-us)
- Major publishers increasingly have Websites that complement their textbooks, like Longman (https://www.pearsonelt.com/professional-development/resources.html)
- Online learning communities and social networks, like www.italki.com/.

Collecting, Tagging, and Curating Materials

There is a growing need to provide students with more direction in terms of selecting content at an appropriate language level for learners, especially authentic materials. Some of this may be automated, for example, using the reading level function in Google advanced search (http://www.google.com/advanced_search) or the captioning function in advanced video search (https://www.google.com/advanced_video_search). Collaboratively produced collections include those at http://www.openculture.com, including their sub-site for language learning http://www.openculture.com/freelanguagelessons, http://iteslj.org and http://www.diigo.com/user/call_is_vsl. Curating, in the sense used here, involves collection and interpretation of stable online content by human experts, much as a museum director organizes and interprets the collected artifacts in museum exhibits, which goes beyond simple linking and tagging. This is an underdeveloped area: for an example of TED Talks curated for an advanced listening class, see http://web.stanford.edu/~efs/693b/TED1.html.

ACTIVITIES

Lesson Plans & Projects

- Finding content for projects, both individual and group. Note the importance of balancing seeking and production time with language learning and practice time. See http://iteslj.org/links/ESL/Student_Projects/
- Ideas and lesson plans for Internet, Web, and class activities: Sources such as www.tefl.net/esl-lesson-plans/, http://iteslj.org/Lessons/. Better still, do a Google search!
- Making resource pages for specific classes. You can use FrontPage, Dreamweaver, or even MS_Word to produce Websites. See my Websites for EFS 693B, http://www.stanford.edu/~efs/693b (Advanced Listening) for example. You can also make your own site easily, hosted by Google, at http://sites.google.com/.
- Sending your students out on WebQuests: http://www.world-english.org/webquests.htm

Other Resources

- Online journals like Language Learning and Technology (http://www.lltjournal.org)and the Internet TESL Journal (http://iteslj.org) have articles about using the Internet for teaching and learning, as well as other CALL fare.
- Some CALL experts have Websites with useful links: try Claire Bradin Siskin (http://edvista.com/claire/) or Deborah Healey's Attic (http://www.deborahhealey.com/)

The key to using online resources is to be prepared. Know what the objective of your lesson is and try to make sure students are trained in what they need to know to accomplish that objective. Try to build some flexibility into the assignment or activity so that if something isn't working as expected the task can still go on.

Here are a few tasks to help you connect the material here to your language teaching:

1. The Web can be a resource for both classroom and online lessons: take a look at two or three of the lesson plans on the Web (Use Google (www.google.com) to find "ESL lesson plans" if none of the sites above has what you're looking for). Do you think they represent activities that are consistent with your language teaching approach? Is there anything obvious you could do to improve them?
2. Meaning technologies like Google translate and online scripts for audio and video can hinder as well as help, since they can interfere with normal language processing. What are some ways to use them positively and to train learners in their use? See https://web.stanford.edu/~efs/phil/MT.pdf for an early discussion of this issue.
3. Try three or four of the sites listed above that you haven't visited before. Note ways you might use them in current or future classes.
4. Increasingly, the term "Web 2.0" is appearing on the Web and elsewhere. What is Web 2.0? (and what was/is Web 1.0?) There are examples of it here, such as www.youtube.com If you don't know what it is, go to a manifestation of it at www.wikipedia.org and look up the term. How do you think Web 2.0 is changing language teaching? What about Web 3.0?

Last modified: February 12, 2020 by Phil Hubbard