

## UTOPIA OR CHAOS?:

### THE IMPACT OF TECHNOLOGY ON LANGUAGE TEACHING

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#### **Introduction**

Over the past several decades, technology has become a fixture in many homes around the world, and its influence has permeated into all facets of our lives, including educational settings. Such penetration has been hailed by many as the wave of the future in which language instruction will be driven by new advances in computers, the Internet, and mobile technologies. However, how we go about integrating technology into our classrooms can have a huge impact on whether a technologically-driven classroom succeeds or fails, even with low-tech solutions.

So, where lies the praise or blame for the success or failure of technology? Will a Utopian view of pedagogically-sound teaching prevail in our classrooms, or will teachers soon abandon high-tech gadgets and return more to traditional materials? Because the use of the Internet has become so widespread, this article will focus attention on that medium, starting with some historical perspective on computers and then suggest a few practical ideas to improving successful integration of the Internet and language teaching.

#### **Identifying the role of technology in education**

For the past several decades, a great deal of debate has raged on about the pedagogical worth of computers in the classroom. On the one hand, computer and software companies often provide mostly anecdotal evidence as to the usefulness of technology in language instruction, stating heightened student motivation and more engaging learning. However, a number of researchers have suggested that while technology has grown leaps and bounds, teachers' use of it often remains very antiquated, limited to simple writing assignments and Internet searches (Cuban, 2001; MacDonald, 2004; Oppenheimer, 1997, 2003). Some have suggested that this has been due, in part, to educators' limited vision of the role of technology in language instruction. In fact, Garrett (1991, p. 75) pointed this out when she stated that "the use of the computer does not constitute a method" and it is only a "medium in which a variety of methods, approaches, and pedagogical philosophies may be implemented." Although this statement was made a number of years ago, its premise still applies to our learning environments today, especially in light of the

fact that there is a growing disparity between technology and effective classroom implementation of it.

In other words, coming to the false conclusion that computers will do things better and faster for us without our intervention is at the center of this issue. Schrum (2000, para 3), an associate professor in the department of instructional technology at the University of Georgia, describes the historical dilemma well:

We're all familiar with the extravagant promises of technology: It will make our students smarter -- and it will do it faster and cheaper than ever before. Moreover, the promise suggests, this miracle will occur almost by osmosis. We need only place a computer in a room, stand back, and watch the magic take place. If only life were that simple and learning that easy!

Those of us who remember the 1980s, when computers were first making their way into our classrooms, probably also remember a great deal of bad software. As educators, we were unfamiliar with the technology and uncertain about its possibilities. So we stepped back and let software developers, hardware vendors, and other technicians define not only what we could buy but also how those products would be used. In many ways, the technology drove the educational process. And guess what? It didn't work very well!

So where does this leave us? Obviously, program administrators need to rethink specific, realistic goals for what the Internet can and cannot do to help students reach curricula objectives, and then actively support teachers in the process through in-service training. As for teachers, we need to think beyond the box and determine, step-by-step, what technology can do for us to support – not supplant – our teaching goals. Fortunately, educators can be very chameleonic with the right tools and training, and can adapt their teaching styles to new situations.

In the field of language education, a great deal of emphasis now focuses on online learning, and it is touted as the great liberator by freeing students and teachers to accomplish learning in new and exciting ways. Personally, I am sold on the benefits of online teaching and learning from both a pedagogical and technical standpoint (i.e., anywhere, anytime learning, collaboration with worldwide partners, access to native-speaking content, etc.). However, as pointed out earlier, a great deal of the success and failure of any technology rests in sound teaching practices.

Keeping all of this in mind, the next section of this paper will address some basic considerations when working with the Internet in order to maximize learning outcomes.

### **Understanding the Internet**

First, we must understand better how the Internet works ourselves. Although the Internet may appear to be an easy concept to grasp, it can be a very unfriendly jungle out there. In simple terms, the Internet is the telecommunication and computer systems that are linked together, just like a great complex water system. Some of it is new, with big wide robust pipes (high-speed connections); other parts are obsolete, narrow, and even leaking. Some pipes can handle a large

volume of water; others are clogged, and flowing through this pipe system is the content – the files (documents, audio files, graphics, etc.) – that are being requested around the globe. Such a scenario can result in Internet congestion, and going online might be just as rewarding as sucking molasses through a thin straw.

At that point, Internet “rage” sets in, and students (after waiting an astronomically-long 2 seconds) click the stop button in their browser and complain to the teacher that the site does not work. Falconer, a psychologist at Dundee University, has suggested that “feelings of stress and frustration arise when the gap between our expectations and actual experience on the internet is ever widening” (as cited in *BBC News*, 2004, para 8). The phenomenon is indicative of the world we live as pointed out by Telewest (2002, para 3):

With our growing 'needed-to-be-done-yesterday' attitude, patience is no longer a virtue when it comes to getting what we want in a hurry. It was our addiction to living high-speed lifestyles that sparked the onslaught of road-rage and air-rage, but it is today's widespread desire for a life on the internet fast-lane . . .

The end result of these experiences is that teachers and students often remove websites from study lists, when in fact the sites might work just fine. At the same time, there are times when a website really might not be working (e.g., the site is undergoing maintenance, the website owner has closed the site, etc.). Just remember that there are many factors that affect our ability to use the Internet.

### **Sifting through Internet content**

Now, it is time to make the plunge into the somewhat murky and complex world of the Internet. This online playground is home to an extremely vast collection of information, but sifting through it effectively is a more challenging task than we lead students to believe. In fact, just telling students to go to the Internet to search for something is akin to, as several authors put it, “trying to get a drink of water from a gushing fire hydrant” (Warschauer, Shetzer, & Meloni, 2000, p. 85). In other words, the Internet is an almost measureless repository of great content, but it also contains an equal amount of junk, and sifting through this large collection can be daunting. Unfortunately, students latch on to whatever first appears on their screens, whether it is accurate or not.

This is often a quandary for teachers who realize that they need to help students learn to critically examine information on the Internet in terms of credibility, authority, citation, timeliness, and accuracy. Back in the days before the Internet, students' main ally was the library, and searching through volumes on the shelves was just the norm. Unfortunately, because of the free and mostly-unadjudicated nature of the Internet, anyone can self-publish without being held to a high standard of professionalism. Furthermore, students these days have been raised in an online world, and thus, they often do not realize what careful research is all about. With the complex and daunting prospect of analyzing so much content, students tend to gravitate to what is easiest irrespective of quality. With all these challenges, teachers should bare the responsibility of helping students combine both the massive and easily-accessible Internet with conventional research techniques.

## **Installing needed Internet applications**

Besides the issues of questionable authority with online content, Internet users need to be aware that some websites require special additional software (e.g., media players) to be installed to access certain files including audio and video. Having developed multimedia websites since 1997, I cannot count the number of times I have received terse messages from visitors, simply stating: "I can't hear audio." Nothing more. No further elaboration. That is it. Therefore, identifying the issue is very problematic, and both website developers and teachers who introduce these sites share the responsibility for educating students.

First, from a developer's standpoint, instructions on the site should be very clear in terms of letting visitors know what they need to do to listen to or watch the online content. Having an Audio Help page or information for first-time visitors can be extremely important. Furthermore, you should identify your audience and determine the market penetration of the file format you are planning to use (e.g., RealMedia, Windows Media, QuickTime, etc.). In other words, you would not want to use a media format that only ten percent of the world can play unless you only were trying to reach that narrow niche. At the same time, teachers equally shoulder the responsibility for verifying whether their computer labs have such media players installed and if their students can easily download and install the player on their home computers if needed. You will always see a mixed bag of results without teachers' active involvement.

## **Determining learning outcomes**

Even if students have background knowledge on the Internet with the needed applications installed on their computers, they still need guidance on the learning objectives and outcomes for online content. As suggested in Schrum's quote earlier in this paper, some administrators and teachers unfortunately presume that learning with computers will "occur almost by osmosis," and I have witnessed this firsthand in my visits to labs in a number of countries around the world. In the end, without specific pedagogical practices driving the use of technology, computers are often relegated to a secondary or non-existent role and are often abandoned. At that point, debate ensues on the side of administrators and teachers as to why the lab has failed. However, Warschauer (1996) pinpointed both the cause and the solution that is still very much applicable:

As with the audio language lab 'revolution' of 40 years ago, those who expect to get magnificent results simply from the purchase of expensive and elaborate systems will likely be disappointed. But those who put computer technology to use in the service of good pedagogy will undoubtedly find ways to enrich their educational program and the learning opportunities of their students

Thus, with reference to the use of the Internet, rather than allowing technology to drive classroom instruction, teachers must clearly identify specific objectives, procedures, and assessment techniques for using online resources. As with all good teaching, teachers must develop a plan of action for using the Internet. We cannot send our students off without specific goals in mind, training on how to use the sites, procedures on how to accomplish the tasks, and an explanation on how students will be evaluated for the activity.

## Testing websites yourself

Many teachers lament dissatisfaction with the Internet (and computers in general) in such a way that you might conclude that having technical problems is an inherent part of technology. However, most frustration from using technology does not come from the technology itself, but from inadequate training on how to use it. Too often, teachers tell students to visit a website without confirming its objectives, checking instructions on how to navigate it, determining whether the site performs equally well for all browsers, computer platforms, and Internet connection speeds, and reviewing whether students need additional applications or plug-ins to use the online content. Never assume that just because the site works well in your university's computer lab with a high speed connection, students will have the same experience from a dialup connection on their computer at home.

## Conclusion

Without a doubt, technology has revolutionized society in many places around the globe, including how language instruction is taught and delivered. In particular, the Internet has become a conduit where people can learn, share, and collaborate in ways not possible years before. However, a great deal of the success comes from preparing students to interact and learn in this online environment. Never make the assumption that students know what they are doing because there is a huge difference between computer know-how and critical thinking, particularly when it comes to academic research that some of our students need.

Finally, for all our great technological advances, teachers still risk reducing their use of computers to simple tasks that do not maximize its pedagogical potential, particularly with regards to the Internet. In other words, we should ask ourselves if it is possible to extend our normal teaching far beyond simple, monotonous tasks at the computer. That is not to say that elements of past methods that cannot or should not be adopted. In fact, many learning tasks can be accomplished with simple chalk, a blackboard, and a tape recorder. However, although teaching and language-learning theory has evolved during the past 50 years or so, our ability to adapt our teaching styles in line with new technologies has not progressed as quickly. If teachers focus on simple basic ideas as presented in this article, our new, refocused approach to teaching will propel us a long way to making technology and the Internet a more rewarding partner in the teaching and learning process.

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