

Using Laptops in the Writing Classroom: Applying Technology for Heuristic Learning

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Abstract

It has been argued that there are enormous advantages to integrating laptops into foreign language teaching to help teachers and students become capable of communicating and collaborating with native and nonnative speakers around the globe. This paper aims at underscoring the advantages of using laptops in Teaching English as a Second Language classrooms. It investigates and elucidates different methods and practices that can help English language learners enhance their learning skills through using this technology as well as makes English teachers aware of strategies they can use effectively. Through examining various primary studies and prominent case studies, the paper identifies the shortcomings and inadequacies of the existing conventional English language learning tools. It is necessary for second language teaching to adapt and renew itself in order to be compatible with the globalized world. The paper establishes that the application of laptops is beneficial in providing a wealth of resources that allow students to become active learners by creating content for a worldwide audience.

Keywords: computer laptops, instructional tool, collaborative, computing, technology

Introduction

Though I am what many would consider a “computer geek,” I have never been a strong advocate of using technology in the classroom. Many of my experiences with computers in the classroom have been tedious, with instructors utilizing technology simply because they can and not because they have a logical reason for doing so. For many teachers, any word or phrase involving computers is synonymous with progress. However, there is nothing progressive about sitting one’s students in front of rows of cathode-ray tubes for an hour with no direction. Computers should not be thought of as a replacement for well-planned and pedagogically sound teaching but rather as one tool out of many, which should be used when appropriate.

In the last two decades, the steep rise in technological development has inspired language teachers’ interest in employing laptops as an instructional tool to enhance student learning. We have abundant proof that using technology as a language teaching tool increases student learning and educational outcomes. Previous studies in this area suggest that, compared to their school friends who do not use laptops, learners who employ laptops in the classroom tend to work long hours doing multitasks in their language learning programs and engage in collaborative work. They also play a major part in doing project-based lessons. Moreover, it has been observed that learners who use laptops are able to write longer and better passages or essays than their counterparts who do not use laptops, as seen in their skill at gaining increased access to information, improving their research analysis skills, and spending more time doing homework on computers (Kolesinski, 2014). Subsequent studies on the subject have demonstrated that language learners who use laptops in the classroom develop self-confidence, are more goal oriented, employ active language learning strategies to a greater extent, develop remarkable problem-solving and critical thinking abilities, and are capable of using technology with a flexibility not found in traditional language teaching.

It is an established fact that computer proficiency has now become fundamentally important in language learning. With regard to language learning, certain computer functions like word processing, web browsing, and writing e-mails go a long way in teaching language learners how to type competently and learn fundamental computer operations such as word processing, which gives them a significant advantage over students who essentially have no computer literacy. Allowing laptops in the classroom underlines computer skills and can lead to learners developing the ability to use computers without taking any specific computer classes. Employing laptops for the purpose of note-taking can also be helpful as a good typist can take notes much faster than writing by hand, which can push students to learn to type quickly and accurately (Battro, 2010).

Another possible advantage of using laptops in the classroom is that it can generate entertainment in otherwise dull and dry language learning classes, which are typically guided by traditional classroom teaching. Using laptops is a pleasure for students because it can encourage them to interact and work independently rather than just sitting passively at their desks and listening to a lecture with their notebooks and pens. Laptops can provide a high level of interactivity between students, teachers, and the subject matter (Hamel, 2015). In a language classroom, a Teaching English as a Second Language instructor can assign learners the task of doing an error analysis of a written passage using their laptops online and ask them why they expect the answers they have discovered to be correct. This type of lesson may encourage

learners to discover for themselves the reasons for their answers by searching on their laptops. This activity can infuse in them a freedom to learn on their own with confidence and creativity, and to have fun in learning instead of listening passively to the teacher's lectures on the subject or reluctantly turning the pages of their grammar books in a controlled atmosphere.

Moreover, using laptops in the classroom can help learners in a significant way to work systematically by themselves or with their classmates in the classroom. This approach can also jog, refresh, and strengthen their memory. Typically, worksheets and notebooks can be easily misplaced and homework assignments left unnoted. But the digital distribution of assignments and classwork can help students shore up their work in a file, to which they can return whenever they need to do so. In addition, it can also motivate them do their work neatly because they can edit it without destroying the text. Using laptops can be practical and effective for language instructors too. They can easily encourage learners to receive their tasks and assignments through e-mails or any of the digital functional units on their laptops for reading, writing, storing, and manipulating information, and send them feedback through the same sources without having to store stacks of notepads and worksheets. Moreover, digital assignments can become an interesting and relaxed via media for language learning as it gives the learners the freedom to send in their assignments remotely if they are forced by unexpected circumstances to miss their language class. As a result, the use of laptops prevents any unfairness on the part of language instructors, who in the past might have had to extend the assignment dates for the absent learner. Another issue is that sometimes, the instructor's handwriting may be illegible, which can hinder the learner from doing assignments on time, or in contrast, the learner himself or herself oftentimes scrawls down his assignments in handwriting that is impossible for the instructor to read. Digital assignments can facilitate a comfortable and fast way of learning a language, eliminating situations that can impede the learning process.

The global and exponential use of information technology has made it pertinent and practical for language instructors and learners alike to explore its vast potential and adopt it as a basic and standard learning model, using its vast learning to formulate and improvise learning tasks pertaining to all necessary language skills. "Using multimedia to create a context to teach English has its unique advantages. Technology, when used appropriately, can help the English and language classroom a site of active learning and critical thinking" (Pandey, 2014 p. 1). Teachers can adopt technology resources to develop and tailor instructional materials to better meet individual student needs. In language teaching and learning, we have a lot of options to choose from in the world of technology: radio, television, CD-ROMs, computers, Computer Assisted Language Learning (CALL), the Internet, electronic dictionaries, e-mail, blogs and audiocassettes, PowerPoint, videos, DVDs, or VCDs. As a result, technology plays a critical role in English teaching. Using multimedia to create a context for teaching English has unique advantages.

Literature Review

Instructors often take an extreme position when computers are mentioned. They are asked to be either for or against them, as if computers can simply be "completely good or completely heinous" (Duffelmeyer, 2002, p. 364). Supporters on both sides of the debate are frequently guilty of contributing to polarizing the discussion, though for different reasons. Those who

push for extreme use of computer-aided learning (CAI) often do so only to add variety to the classroom, or because it seems fashionable (Daiute, 1985; Healey, 2000). Ironically, CAI extremists tend to be those lacking a great deal of knowledge about technology, perhaps using computers in their classroom as a personal learning experience, often at the expense of their learners. Additionally, computing carries with it a sense of prestige. Extreme advocates of CAI may be commended, or in some cases encouraged to utilize computers despite the practicality of doing so, and those most likely to believe in the myths and absolute beneficence of computers are often those with the least experience using them (Brady, 1990; Chen, 1988; Herrmann, 1987; Johnson, 1988; Nash, Hsieh, & Chen, 1989; Phinney & Mathis, 1990; Warden, 1995). In fact, when students are more computer literate than their teachers, the students may be the best judges of how and when CAI should be used. Computer-literate students are able to give honest feedback, informing the instructor as to whether CAI is aiding their learning or is only a more technologically advanced form of busy work.

On the other side of the argument are teachers who refuse to see any benefit in computers. These instructors may lack experience in CAI and therefore fear implementing it in any form (Pennington, 1991; Thiesmeyer, 1989). They may also perceive computers as lower in cultural value when compared to more traditional media, such as books, equating computers with popular culture, video games, or time wasting in general. Michael Heim's book *Electric Language: A Philosophical Study of Word Processing* reinforces such negative views, according to Hodgkin: "[Heim] offers a pessimistic critique of today's technology. Word processing is seen as regularizing, algorithmic, automatic, and formulaic, public, evanescent, and intrusive" (Hodgkin, 1988, p. 166). A common statement among many teachers who hold this position is "I just hate computers!" Comments like these are interesting because one would rarely say, "I just hate books" or "I can't stand overhead projectors!" The latter comments may suggest the instructors or learners are behind the time and betray their ignorance.

While this paper addresses some of the points made above, my main concern is how CAI relates to the ideas of Brazilian educator Paulo Freire. As someone who has been greatly influenced by Freire's work, I have always wondered how to integrate his educational philosophies with CAI. At the same time, I fear that computers, due to their mechanical nature, can be in conflict with the extremely humanistic principles that Freire advocated.

Some of the points address are the following: How can computers be used to help students express their diverse personal interests? How do computers weaken dichotomies of high/low culture? And how does one use computers to create a classroom dialogue where "the teacher of the students and the students of the teacher cease to exist?" (Freire, 1970, p. 67). After reviewing these questions, I provide some practical examples of how to integrate Freire's ideas in the writing classroom.

Discussion

(a) *Expression of Diverse Personal Interests/Equalizing Student-Teacher*

Authority

In a traditional writing classroom, students tend to write with the teacher in mind, picking topics and taking stances they believe will result in a high grade. Rather than pursue a subject of personal significance, many students stay within safe zones, choosing nonoffensive and

oftentimes overly discussed topics. The standard writing assignment is thus artificial. Rose (1989) stated that a student cannot truly express his or her emotions and beliefs if only one individual dictates its worthiness. In this scenario the student is constrained by the desire to please his or her instructor and by nothing else. In contrast, Elbow (1998) and Macrorie (1984) indicated that when a person writes in real life, he or she is in full control of whom he or she is writing to, even if it is an audience consisting of only three to four people, and even if the audience is only the writer him- or herself.

As with all disciplines, the gap between classroom practice and real-life application is inevitably wide. What motivates students in real life is not a final grade but rather interest and pride in their work. Therefore, the more control students are given over their writing, “the more ownership they will sense and, consequently, the more energy and enthusiasm they will bring to the project” (Bicknell, 2003, p. 25). With the emergence of the Internet, traditional media gatekeepers have lost total control of peoples’ sensory. If a writer wants to publish his or her novel online, there is nothing preventing him or her from doing so. A person’s ability to promote him or herself is only limited to his or her energy. A publisher, television station, or newspaper is no longer the sole determiner of what is “worthy” for public consumption.

Computers can be an extension of traditional peer editing and evaluation. For example, two classrooms in distant parts of the world can collaborate on peer editing, evaluation, and even idea generation. Additionally, the Web provides a more authentic audience: writing online means that a student will not only be evaluated by his or her instructor but also by any potential visitor to the student’s site.

The option of perceived anonymity online may help learners be less fearful of experimentation. It aids in removing the presence of the teacher’s ego, allowing students to focus instead on the ego of the writer, which is “the only ego that should be of interest in the teaching of writing” (Emig, qtd. in Logan, 1990, p. 6). For many introverted students, working in front of a computer screen and keyboard is “less threatening than having to speak out loud in front of peers and instructors,” and students are no longer, “silenced because they [have] differing opinions [than] those of the teacher, the traditional ‘expert’ and authoritarian figure of the classroom” (Sullivan, 1993, pp. 34–35).

Last, a computer lab designed specifically for writing can provide an environment ideal for brainstorming and group encouragement. Whereas writing has traditionally been something done in isolation, computer-assisted writing labs can potentially transform writing into a more social activity. Admittedly, most computer labs on college campuses encourage isolation, with signs asking individuals not to speak or eat. Tables are often placed as if in a classroom, with all students facing the chalkboard. A more ideal writing lab would create a lounge-like atmosphere. Instead, of cold tile and brick walls, it would resemble a café. Students would be encouraged to communicate, and if a student encountered writer’s block, he or she could sit in another section of the room with similarly frustrated individuals. The idea is to keep students in the lab, help them feel comfortable about writing, and encourage them to feel as if writing is a social experience. In an environment like this, students may not feel as if it is them against the computer screen. They can ideally ask a peer for advice and consultation, lessening the need

for an overworked lab/writing assistant. Selfe (1988) warned against the idea of computer-centered classroom:

Machine centered computer classrooms that focus on individual drill work and are arranged in rank-and-file rows limit, rather than encourage, the sharing and exchange of information. Such classrooms are not designed as writers' environments; they inhibit rich collaborative exchanges among writers and readers, the sharing of electronic drafts and texts, and the valuable discussions of purpose and audience which mark the interaction of writers functioning as peer groups (p. 70).

(b) *Weakening High/Low Cultural Dichotomies*

One of the goals of an introductory writing class is to prompt students to think analytically about issues. Unfortunately, this usually results in students writing simplistic "for" or "against" papers. However, polarized thinking is not a sign of critical thinking and does little to aid one in a modern world. I believe the wide variety of sources on the Internet can provide a steppingstone for important questions about validity and, ultimately, lead students to question sources traditionally considered "authentic" as well. Just as statements made on every website are not true, information originating from other sources, such as television, radio, or print are not necessarily authentic either. In fact, it is rare that any piece of information is wholly authentic, or inauthentic, no matter where it originated from. I believe the hypernature of the Internet can accelerate students' ability to read between the lines and help some students feel less vulnerable to deception.

An example of an activity that focuses on authentic and inauthentic information might involve testing students' knowledge of history. The instructor gathers different URLs professing to provide an accurate account of different historical or political events. While the teacher is fully aware of the validity or invalidity of these articles, he or she pretends to be unaware. It is then the job of the students in the class to determine why certain articles are true or not, relying not only on their intuition and personal knowledge but also on their ability to research and confirm the truthfulness of said articles. While researching, students write on the class website about their opinions and findings, collaborating in some instances and possibly debating in others. The final product consists of a short group paper.

Activities such as the one described above attempt to show that information found on the Internet is no less valuable than information found at a library. In other words, personal learning done through the Web is no less authentic than learning done with a textbook. In fact, one might argue that exposure to incorrect ideas gives one a broader understanding of the subject at large and an ability to synthesize good and bad. This is a tool that is invaluable in writing. Furthermore, online it is possible to explore any topic of interest, allowing a student to participate in web discussions or chats. Using online tools provides a reason for writing when many students may have felt no need at all. Unlike television and print, the Web provides two-way interaction with information. Being able to interact with the Web beyond primitive pointing and clicking necessitates learning to write effectively.

(c) *Practical Examples of Computing in a Writing Classroom*

I would like to preface the section below by stating my own opinion about computers in the classroom. Although this paper focuses primarily on computers, I never expect to become a

teacher who utilizes computers only. In fact, if one takes nothing else from this paper, it should be that computers are tools and that, like any tool, they can be used or abused. With that said, I would like to reiterate the words of Freire, who believed that “experiments cannot be transplanted” and “must be reinvented” (qtd. in Wallerstein, 1983, p. 12). The following activities are only suggestions, and an instructor should consider whether they are appropriate for his or her classroom—not just blindly accept them because technology or computers are involved.

(d) Technology Autobiography

On the first day of class, students are prompted to think about their relationship to and assumptions about technology. The instructor raises some key questions, such as “how computer technology coupled with capitalism may widen the socioeconomic gap between haves and have-nots in our society, and how computers may be overused or misused in elementary schools” (Duffelmeyer, 2002, p. 367). Students give their impressions of computers: Do they believe that technology has lived up to many of its promises? Has it truly made our lives easier? How do they personally feel about computers?

Between the first class meeting and the second, students begin preparing their technology autobiography. The biography first asks students to recollect their history with computing. Some starter questions ask students to think of the first computer they used, why they used it, and how literate they now are in computing. Students are also asked to describe how they believe computers influence the writing process. Last, the autobiography provides students with an opportunity to personally elaborate on some of the questions raised in class. The purpose of the autobiography is to encourage students to become “technology critics,” not merely assuming a hegemonic position where “they simply accept computers as inevitable and natural” (Takayoshi, qtd. in Duffelmeyer, 2002, p. 359).

(e) Class Website and Content

To lessen student-teacher tension, students post their drafts and final papers on a class website, where not only fellow students can view and critique their work but also the public at large. The instructor does not, unless explicitly asked, ever delete student submissions in the future, and the class’s site remains archived well after the semester has ended. This approach serves an additional purpose: it reinforces to students the permanency of web publishing. What is written on the Web cannot be easily retracted.

There are very few assigned readings for the course. Instead, content focuses primarily on the students’ own creations. Rather than assign traditional textbook readings, students are asked to read all of their peers’ writings online before class and bring printouts of their own work for group discussion. The class is not primarily held in a computer lab but rather in a classroom with chairs arranged in a circle. Students are asked, however, to participate in out-of-class group writing sessions in specified (and previously reserved) labs on campus. Ideally, these labs would be accessible until the late hours of the night and provide an atmosphere where students could socialize during the writing process. The goal is not to simply plop students in front of cold machines or to dehumanize the learning process by replacing the instructor with a computer! Students who feel more comfortable writing by themselves are allowed to do so, but the instructor should request that they attempt to attend the group sessions at least once.

(f) *Online Short Stories*

Using the course website, students are asked to compose a collaborative short story. The instructor, to encourage the participation of others, may if necessary write the first sentence, to which an additional student adds a sentence. Throughout the week each student adds a sentence until a page-long story is completed. The content of the story is not judged; however, those students who do not participate in its creation are penalized.

After the story has been completed, each student prints out a copy and brings it to class. The students and teacher discuss why certain decisions were made and investigate how the story could be improved. Just as the story was collaboratively composed, it can be edited collaboratively as well. The class appoints a group of perhaps four or five students who serve as editing ambassadors, ensuring that the entire class's suggestions are implemented as closely as possible. The purpose of this activity is to ease students into the process of editing their own work, making them aware of multiple audiences. I believe the fractured nature of the group's short story can reinforce the importance of editing to clarify one's meaning by showing that what may have been clear to one member of the class while composing, may have been totally unclear to another.

(g) *Student-Authored Web Pages*

Student-authored web pages allow students to gain not only writing literacy but also computer literacy. In the early weeks of the course, the class meets perhaps once or twice a week to learn basic web authoring. This activity provides students with enough background knowledge to begin creating their own personal website. Students are asked to keep a weekly journal or blog of their thoughts—either about this course, their personal interests, or even current events. The day before the class meets, the teacher looks through everyone's journal and brings a few to class that he or she thinks are worth discussing. Alternatively, students can mention pieces they believe are important. Blogs and class discussion are reciprocal: something said in class may prompt students to write extensively on their blog, and something mentioned in a student blog may generate classroom debate. Class discussions allow less introverted students to participate, while shyer students may feel more comfortable expressing their feelings and responses online.

Those who created personal websites ideally work more enthusiastically knowing that their page can be viewed by anyone in the world, long after completing the course. It is established early on in the class that personal sites should not simply be a picture of oneself, a few paragraphs, and some outside links. Personal sites, rather, should include authentic and meaningful writing. This might mean a detailed autobiography or the expansion of a journal entry into a well-composed essay.

Conclusion

Before implementing computers in the classroom, instructors should be skilled in the use of this technology and subsequently “able to develop curriculum that reflects student needs and proficiency, and stimulates students' interest at the same time” (Suh, 2002, p. 677). The use of computers should never be a way to avoid actually teaching. No piece of software exists, nor will one ever exist, that can replace an adequately skilled teacher who not only understands but is also aware of classroom dynamics. Introducing technology to the classroom means more

than transplanting traditional techniques to an electronic form. Asking students to write and post journal entries online is not inherently superior because it is done digitally, unless there is a sound reason for doing so. Finally, instructors unfamiliar with computers may find it useful to seek feedback from more technologically literate students, ensuring that activities are not merely an extension of busywork.

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