

## The Potential of Technology in Language Acquisition

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We have not exploited the most obvious and inexpensive uses of technology in language education, but are instead encouraged to spend substantial amounts of money using ineffective and even untested commercial programs. None of these programs that we have seen makes a serious attempt to provide language students what they need the most: compelling comprehensible input. We present here some promising attempts to use technology in an inexpensive and still very helpful way.

**Keywords:** compelling and comprehensible input, inexpensive technology, language experience, language acquisition

### INTRODUCTION

We present here several promising ways of using technology to enhance language acquisition. All are inexpensive, all are consistent with language acquisition theory, and there is suggestive evidence supporting their efficacy. For the beginning level, we present four possibilities: (1) comprehensible and interesting texts created with the help of students and shared for free; (2) narrow listening, input recorded by acquirers themselves on topics of interest to them; (3) movie talk, combining the compelling visual input from movies and the comprehensible input of teachers, and (4) VoiceThread, an online tool that may help make story input more comprehensible with the use of visual aids. For intermediates, possibilities include (1) free voluntary surfing, in which intermediate students follow their own interests with freely selected input from the internet, (2) blogging by acquirers in which they share suggestions for improvement as well as share reflections for comprehensible and interesting pleasure reading and (3) ESLPod, a commercial but very inexpensive product that supplies intermediates with a wide range of comprehensible reading material.

## **BEGINNING LEVEL**

### **Reading: from Language Experience to the Great Mandarin Reading Project**

Those familiar with the history of language education may recall Language Experience. Language Experience was used decades ago for first graders in the United States for English literacy development, but it is not mentioned much these days, possibly because there is no chance for publishers to make money from it.

In most versions of language experience, reading materials are created by the teacher writing down what children dictate. The stories children dictate are usually about themselves, their interests, and their lives, which helps ensure they will be interesting for other students.

Current research and theory predicts that language experience will work because it provides comprehensible input. In addition, consistent with current hypotheses, the input it provides is "compelling," or highly interesting. One of the most powerful ways of doing this is personalization: with language experience, the input is about the students themselves. Language experience thus has a strong similarity to TPRS (Teaching Proficiency through Reading and Story Telling), a method of teaching second languages that relies on stories co-constructed by teachers and students (Ray & Seely, 2015). In several studies done in the 1960's, language experience was compared to traditional basal methods; differences on tests of reading comprehension were small, with a slight advantage for language experience students (Krashen, 2016).

The idea behind Language Experience has been applied to help close one of the the largest gaps we have in the language teaching profession: interesting and comprehensible written texts for beginners and low intermediates, especially in languages other than English.

There has been an effort to do this with beginning level Mandarin, where there is an obvious lack of easy and interesting texts. Teachers involved in this project are all practioners of TPRS. The team of teachers is sending some of the more interesting stories from their classes to one website, and teachers from ANY Mandarin class can use them, without asking for permission. It is all for free. The project has been underway for only a few months and there already is a substantial collection<sup>1</sup>.

This very simple application of technology can make a huge contribution in a very short time: We only need to collect stories from classes around the world, to be shared with classes everywhere.

### **Narrow Listening**

Narrow listening was introduced 20 years ago (Krashen, 1996) as an extension of narrow reading (Krashen, 1981, 2000), and took advantage of the technology that was available at that time. In narrow listening, language students record proficient speakers discussing a topic of interest to the student. The students can then listen to the recordings as often as they like, and ask similar questions of other speakers. Repeated listening, interest in the topic, and familiar context help make the input comprehensible. In Rodrigo (2004) fifth semester college students of Spanish listened to short (one to three minutes) recordings of native speakers of Spanish talking about topics of interest to the students; 80% said that this kind of listening was better than other kinds of listening activities they had done, and none thought it was worse. Also, 95% thought it was useful in helping them acquire Spanish. We suspect that narrow listening is even more powerful when students choose their own topics, and ask their own questions; that is, when it is more personalized. Of course narrow listening can easily develop into narrow viewing, adding the advantage of visual context to make input more comprehensible.

### **Movie Talk**

TPRS has taken advantage of technology by adopting Movie Talk: The idea, developed by Ashley Hastings, is simple – play the visual of a real movie with the sound off, and the instructor supplies narration and sometimes dialog to assist comprehension. Movie talk is very popular among TPRS teachers, experienced at making stories comprehensible and engaging.

There is evidence that movie talk provides much more comprehensible input than a regular movie sound track. Murphy and Hastings (2006) randomly selected one-minute samples from 15 movies and first calculated the number of words that were used during the minute that had visible referents; that is, that could be understood because of what was seen on the screen. They reported that an average of 2.1 words per minute were spoken with a visible referent. They then supplied movie talk, making a deliberate effort to use words with contextual support. The average number of words used with a visible referent was 18.5 words per minute, far greater than that found for the original script of the movie. This suggests that the instructor made gave the one-minute sample the potential for more vocabulary acquisition.

Murphy and Hastings (2006) also provided evidence for the effectiveness of movie talk. They presented a comparison of a class focused primarily on movie talk and a traditionally instructed class for university ESL students. All movie-talk students were at the lowest level of the program and were thus assigned to a listening comprehension class. Comparisons were at a similar level.

Movie talk students made significantly more progress on a test of listening comprehension, gaining an average of 5.6 points per week over four weeks, while comparisons gained only one point per week over six weeks (Murphy & Hastings, 2006). Movie talk students also made slightly better progress on a reading test (1.5 points gained per week, compared to 1.3 points gained), even though there was no focus on reading in their class (Hastings, 1995).

### **VoiceThread Stories**

The VoiceThread is a device that allows us to add the voice to pictures and other visual aids. It can also be used to direct student attention to specific words or pictures in the story. Lee (2012) used VoiceThread to make English stories more comprehensible to 20 Taiwanese EFL students in grades 2 through 6 with "learning problems" in nearly all subjects. The students "tended to be uninterested and unmotivated in learning English. They had rarely been read to either in English or Mandarin, and many of their parents were not readers" (Lee, p. 300). Most pupils exhibited behavioral problems, low motivation and poor attitudes, while others were indifferent.

Sessions were held once a week for 35 minutes for two semesters, during which English majors at a university in Taiwan read stories to the students in three session cycles, for a total of eight stories during the academic year.

During the first session, the storytellers told a story using slides, explaining the story, words or expressions using drawing, translation, or body language. In the second session, storytellers did activities related to the story with the children, using songs, games (puzzles, Q & A, TPR, etc.), drawing, story chains (short sentences using key words), and roleplay (reader theatre). In the third session, the children listened to the story again as well as short sentences that summarized the story on the VoiceThread page<sup>2</sup>, and with storytellers' help some of the upper grade children were able to begin reading the summary sentences out loud.

Surveys of students and teachers were done at the end of the first and second semester. At the end of the second semester, a larger percentage of students felt that listening to stories helped them learn new words and sentences. In this study, technology was used to boost children's motivation in the storytelling sessions and to engage students more in the stories, but it is believed that children became more enthusiastic as a result of their better comprehension of the material with the support of technology as well as of the storytellers who presented the stories with passion.

Lee points out that the results are suggestive, as no comparison group was used, but they are certainly consistent with what we know about the impact of

storytelling, and provide a promising example of the use of straightforward technology in language education.

## **INTERMEDIATE LEVEL**

Intermediates are language acquirers who have reached the stage where they can understand at least some "authentic" input (made for native speakers).

### **Free Voluntary Surfing (FVS)**

Free Voluntary Surfing (FVS) means simply following one's own interests in reading on the internet, a form of narrow reading. Readers are free to wander from site to site. FVS enables intermediates to take advantage of the vast amount of reading material available on the internet, while ensuring that the input is comprehensible and interesting, because it is self-selected.

Suggestive evidence supporting FVS comes from a first language study. Jackson, von Eye, Biocca, Barbatsis, Zhao and Fitzgerald (2006) provided 140 children from low-income families, most between ages 12 and 13, with computers with internet access. Jackson et al. reported that more internet use resulted in improved reading, as reflected by grades and standardized tests. The improvements were present after six months of internet use for test scores and after one year for grades. The data did not support the hypothesis that better readers used the internet more; rather, internet use improved reading.

The children in this study clearly liked web-surfing: When asked what their main activity on the computer was, 33% said it was "web search" (Jackson, von Eye, Biocca, Barbatsis, Zhao, & Fitzgerald, 2005, p. 263).

Wang and Lee (2015) studied the effect of a year of websurfing on second year university students in Taiwan who were not English majors. Students surfed for 20 minutes at a time at least once a week for one academic year.

The surfers made better gains than comparisons on a test of vocabulary due to their superior performance on portions of the test probing knowledge of infrequently occurring words (those appearing once every 10,000 words in texts) and academic words. The difference between surfers and comparisons was statistically significant for words at the 10,000 level and approached significance for academic words ( $p = .08$ , one-tail). Surfers also made better gains on a cloze test, and the difference between surfers and comparisons was significant.

As expected, surfers followed their own interests when surfing, doing "narrow reading," which they clearly appreciated: *"I think I can really pick what I like and disregard my dislikes. Then, I'll choose what I really want for sure. I definitely won't choose something I'm not interested in."* (Sally)

There was no attempt to read broadly. Moreover, because of the frequent and constantly interesting and compelling input, one of the interviewees, Willy, believed that his reading ability had improved because of his growing familiarity with the sports terms that he encountered repeatedly in his narrow reading of NBA news.

The case for free voluntary surfing is not air-tight: Wang and Lee were unable to control for out-of-school surfing. There is, however, reason to hypothesize that second language acquirers do not usually surf very much in their second language until they become quite proficient. A survey done with 2000 adults (over age 18) in Taiwan in 2000 (Liu, Day, Sun & Wany, 2000) concluded that about 25% of those interviewed were internet-users. Most of this use, however, was on Chinese-language websites, with 84% of users' time on Taiwanese websites and about 6% on overseas Chinese websites. Liu et al. cite a previous survey done by Yams (a search engine used in Taiwan) that found similar results. According to the Yams study, about 70% of the time spent on websites using other languages was with English language websites. We can thus estimate that only 7% of users' time on the internet involved English.

More people are surfing now than were in 2000, but there still appears to be reluctance to surf in the second language. S.Y. Lee recently interviewed 31 university students in Taiwan with good proficiency in English. In contrast to the 2000 study, all except one were regular surfers, surfing an average of about three hours a day. But when asked which language they used and for what purpose, most of the participants reported that they usually used Chinese for fun and used English for school assignments.

A plausible reason for the lack of English surfing is the fear that authentic texts will be incomprehensible. These students may be unaware that narrow reading on familiar and compelling topics and that giving up on the belief that one has to know every word will contribute to making these texts comprehensible and thereby contribute to language acquisition.

It seems to be that once students of English as a foreign or second language try surfing, they like it: Wang (in progress) interviewed 55 non-English majors in a university in Taiwan who participated in regular surfing sessions in which they were encouraged to follow their own interests. Fifty-one out of the 55 students said that FVS increased their interest in learning new information and 53 out of the 55 said that they preferred FVR over textbooks for acquiring English. If this interest continues, it means that these students have a pleasant and effective tool for continuing to develop in English.

## **Blogging**

In two studies, Lee (2014, 2015) investigated the potential of blogging among student readers in English as a second language. In Lee (2014), subjects were fourth year English majors at a university in Taiwan who were doing self-selected reading for the first time as part of a class in which they also discussed reading theories and research. In Lee (2015), students were first year university students also doing self-selected reading for the first time. Students were asked to do self-selected reading and post their reading reflections, in English, on a Reading Blog. They were also encouraged to read and respond to others' blogs.

Blog discussions included the following:

- Bloggers shared strategies with each other, ways of overcoming difficulties in reading. The students had a number of interesting recommendations, including reading on in a novel to see if the plot offers more clues to what has happened in the story. Of great interest is the fact that readers also noticed that they were developing efficient strategies as they read more, such as skipping some unknown words to maintain the reading flow, noticing details that were usually ignored, and making connections between texts.

- Bloggers noted that reading helped them improve. One student (Hank, in Lee, 2014), for example, wrote that "Reading a 20-page introduction to WWII for a presentation assignment for another course was not a drudge as I had expected." Another said "I have learned that reading extensively has helped me read much faster and comprehend better when I read. Now I can count on extensive reading to help me keep improving my English without attending formal classes while majoring in law" (from Lee, 2015).

- Readers discovered that writing blogs and reacting to each others' blogs helped them develop new and deeper understandings of the text, resulting in cognitive growth, and also lowered anxiety: One blogger (Grace) wrote that blogging helped her "clear her mind."

- Bloggers suggested books to each other, and came to realize that some suggestions were right for them, but others were not. Our paths in reading are unique to our own interests. Thus, bloggers grew to appreciate the importance of self-selection.

- Readers reported that blogging helped create a kind of community and "a reading atmosphere" (Lee, 2015) in which readers assisted, motivated, and supported one another along their path to develop higher levels of competence in English.

While blogging itself does not directly provide a great deal of comprehensible written input, this initial study indicates that it has the potential of making indirect but important contributions in several ways.

### **ESL Pod**

ESLpod (ESLpod.com)<sup>3</sup> is a commercial enterprise. (None of the authors are financially associated with it any way.) It uses a simple but we think very effective approach: ESLpod provides access to a wide variety of aural English texts that are appropriate for low intermediate students, especially those who have studied English as a foreign language in school but lack the confidence and often the competence to use English in the real world.

Much of the ESLpod virtual library is written by the owners of ESLpod, both experienced teachers and accomplished scholars in language education. ESLpod offers access to its entire extensive library for a modest fee, and also makes transcripts of texts available, as well as cultural notes, "tips on improving your English," a glossary with sample sentences, and a discussion of idioms. ESLpod is constantly adding to its highly interesting repertoire.

### **CONCLUSIONS**

We have focused here only on straight-forward uses of technology as a means of providing comprehensible input. All the suggestions presented here are inexpensive (mostly free), and are easy to use. More ideas for the use of technology to supply comprehensible input are emerging constantly. In fact, it is likely that we are about to see an explosion of compelling comprehensible input in many beginning and intermediate language classes.

### **NOTES**

1. The current "Great Mandarin Reading Project" team consists of Haiyun Lu, Pu-Mei Leng, Diane Neubauer, and Linda Li. S. Krashen is an honorary member. Guidelines for those wishing use the website and/or contribute are at: <http://www.ignitechinese.org/project>.

Chinese can be written in one of three ways: The traditional system, used in Hong Kong and Taiwan, the simplified system, used in China, and "pinyin," a romanized version. The reading project accepts stories in any of the three systems.



2. VoiceThread has been widely used in education or personal learning. For use with larger groups of students or larger storage of recording files, a fee is required: <http://voicethread.com/>

3. ESLPod is a very popular language website, with participation from all over the world: <https://www.eslpod.com/website/>

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